

INTRODUCTION

This section provides introductory information about the Lower Minnesota River Watershed District (District), including the history, location, boundaries, unique characteristics, and how the District is managed.

I1. HISTORY

In 1955, the Minnesota State Legislature enacted the initial Minnesota Watershed Act, previously called Minnesota Statute (M.S.) Chapter 112. Pursuant to this statutory authority, five counties (Hennepin, Ramsey, Dakota, Scott, and Carver) petitioned for the establishment of a watershed district. On March 23, 1960, the Minnesota Water Resources Board, now the Board of Water and Soil Resources (BWSR), established the Lower Minnesota River Watershed District.

The District was originally petitioned for in 1957, the first such petition in Minnesota. However, the petition was challenged and defeated in the courts. Meanwhile, on the national stage, the U.S. Congress ordered the U.S. Army Corps of Engineers (COE) to deepen the Minnesota River channel from four to nine feet from the confluence with the Mississippi River to river mile (R.M.) 14.7 in Savage, Minnesota. The congressional order required the COE to partner with a local regulatory entity to serve as the local sponsor. The District's original practitioner re-petitioned for the formation of a watershed district and added to the petition the role of local sponsor to the COE for the 9-Foot channel. The re-petition was successful, establishing the District in 1960, making it the second watershed district in Minnesota.

Minnesota state statutes and rules affecting watershed districts (WDs) and water management organizations (WMOs) have broadened the role of WDs in water management, especially in the Twin Cities metropolitan area. The statutes affecting WDs and WMOs in the metropolitan area were recodified to M.S.103D and M.S.103B, respectively. One requirement of the statutes is that WDs and WMOs, complete watershed management plans and update them every ten years. The District adopted its first Plan in 1961, and updated it in 1973. The next Plan, drafted in 1989 was never adopted or implemented in the District because of the extended length of time review agencies took to provide comments and because the rules governing Plan development were in flux. On August 25, 1999, BWSR approved the second generation plan, which was officially adopted by the Board of Managers (Managers) on September 14, 1999. This represents the third generation Plan.

I2. LOCATION AND BOUNDARIES

The District is located in the southwest part of the Twin Cities metropolitan area along the Minnesota River. The District encompass an area of 80 square miles of Carver, Hennepin, Dakota, Scott, and Ramsey counties, which includes the Minnesota River valley from Fort Snelling, at the confluence of the Minnesota and Mississippi rivers, upstream to Carver,

Minnesota. The width of the District includes the bluffs on both sides of the Minnesota River within this reach of the river. Portions of the communities of Mendota Heights, Mendota, Lilydale, Eagan, Bloomington, Burnsville, Savage, Shakopee, Eden Prairie, Chanhassen, Chaska, Chaska Township, Jackson Township, Louisville Township, and Carver are located within the District's boundaries. The legal description is in Appendix B.

I3. DISTRICT CHARACTERISTICS

The goals, policies, strategies, implementation plan, and capital improvements program set forth in this Plan reflect the specific characteristics of the District. The features of the District include:

- The District boundary generally follows the Minnesota River watershed up to the bluff line.
- Both quantity and quality of surface water resources are very closely tied to groundwater.
- Unique and rare water resources in the District include floodplain wetlands, calcareous fens, and trout waters.
- The District plays a critical role in commercial navigation, as stated in the original order creating the District.
- The District contains the upper reaches of the navigation pools created by Lock and Dam No. 2 on the Mississippi River at Hastings.

I4. DISTRICT MANAGEMENT

The affairs of the District are administered by five Managers appointed by County Commissioners from the county in which he or she resides. Presently, two Managers are appointed by Hennepin County. And one Manager each is appointed by Carver, Dakota, and Scott counties. (Ramsey County is no longer represented on the Board; since only a small uninhabited area of the county is the District's boundaries.) Appointments are for staggered three-year terms and each Manager is eligible for reappointment. Table I-1 lists every Manager who has served, their term of office, and county of residence.

Since 1960, the Managers have met regularly each month. The Managers currently meet in the evenings on the third Wednesday of each month. Public notice is provided for all meetings, and all are open to the public.

Financial records are provided monthly to the Managers. Annually, the Managers authorize and obtain financial audits of the District's books and records. In addition, the Managers review and propose a budget, initially prepared by the District administrator, for the following year. After a public hearing, the budget is approved for implementation.

**Table I-1: Lower Minnesota River Watershed District Board of Managers
(1960 - Present)**

Manager	Term of Office	County Represented
Kenneth W. Westerberg	1960 – 1966	Scott
Charles H. Bingham	1960 – 1968	Ramsey
Alfred W. Hubbard	1960 – 1972	Hennepin
Casimir A. Lubansky	1960 – 1981	Carver
Jens A. Caspersen	1960 – 1984	Dakota
Merrill M. Madsen, Jr.	1966 – 1978, 1984 – 1994	Scott, Dakota
William J. Jaeger, Jr.	1968 – 1977, 1983 – 1994	Ramsey, Hennepin, Hennepin
Paul G. Fallquist	1972 – 1983	Hennepin
Russell A. Sorenson	1977 – 1992	Hennepin
J. William Kennedy	1978 – 1981	Scott
Russell K. Heltne	1981 – 1987	Scott
Cyril B. Ess	1981 – 1996	Carver
Jim A. Kephart	1988 – 1999	Scott
Edward A. Schlamp	1992 – Present	Hennepin
Wallace E. Neal	1994 – 2002	Hennepin
Eugene A. DePalma	1995 – 1999	Dakota
Terry L. Schwalbe	1996 – 2002	Carver
Glenda Spiotta	1999 – 2002	Scott
Ronald Kraemer	2001 – 2008	Dakota
Stephen B. Dalsin	2002 – 2003	Hennepin
Lawrence Samstad	2002 – 2011	Scott
Leo Forner	2003 – 2006	Carver
Leonard Kremer	2003 – Present	Hennepin
Kent Francis	2006 – Present	Carver
Don McCready	2009 – 2010	Dakota
Carla Shutrop	2011 - Present	Scott
Yvonne Shirk	2011 – Present	Dakota

The District maintains a Citizen’s Advisory Committee (CAC) as an advisory committee to the managers. The CAC meets quarterly to:

- Act as liaison between the District and residents.
- Increase public awareness by educating District residents about actions to protect and improve water resources and habitat within the District.
- Advise the managers and staff on issues important to residents.

The District will consult with some or all of the Technical Advisory Committee (TAC), whose current members are listed in the Foreword of this Plan, on an as-needed basis, no less than twice a year to assist with the following activities:

- Preparing a governance study to research the options of expanding or contracting the District’s boundary.
- Perform the District’s biennial program review
- Implement Goal 9 of this Plan which is to increase public participation and awareness of unique natural resources and the Minnesota River

I5. 1999 TO 2010 ACCOMPLISHMENTS

The District has been invaluable in managing and protecting the Minnesota River, lakes, streams, wetlands, groundwater and unique resources and responding to the needs of their constituents and partners. A review of the District’s performance in carrying out implementation activities specified in its 1999 Second Generation Watershed Management Plan (Second Generation Plan) was performed and is presented in Table I-2 below.

Table I-2: Lower Minnesota River Watershed District - Second Generation Plan Evaluation

ID Number	Planned Implementation Activity (Table 6-1, Second Generation Plan)	Accomplishments to Date
1	Acquire dredge material disposal sites.	In 2006, the District acquired the 18 acre River Mile (R.M.) 14.2 site. This site meets the COE needs for a dredge material disposal site above the I-35W river crossing. The District now has the task of acquiring a site to service dredge material disposal from the Minnesota and Mississippi River confluence upstream four miles. The District has been in contact with COE, DOT, USFWS, and the USAF to locate potential sites in the area. This effort has been temporarily suspended as the District awaits a COE cost/benefit analysis comparing the cost of dredge disposal site acquisition in the lower reach to transporting the material to an existing site in St. Paul.
2	Acquire permanent road access to dredge material disposal sites.	Permanent road access was acquired for the R.M. 14.2 site in 2010.
3	Manage dredge material disposal sites.	In 2001 and 2005, the District removed material from its previous leased disposal site at a cost of \$240k. The costs were associated with the terms of the lease. The lease was not renewed in 2007 due to the District's acquisition of the RM 14.2 site in 2006.

ID Number	Planned Implementation Activity (Table 6-1, Second Generation Plan)	Accomplishments to Date
4	Develop and implement public/private dredge material management plan (DMMP).	Although the District did not formally develop a DMMP, steps were taken by the District to manage dredge material. In 2006, the District lobbied the State Legislature to modify state statute which allows the District to receive material from private river dredging and charge for this service.
5	Complete and revise joint resolutions with local governments regarding water management responsibilities.	Joint resolutions with all local governments were completed in 2001.
6	Maintain active citizen and technical advisory committees.	A citizen's advisory committee and technical advisory committee were established as part of the 3rd Generation Management Plan process.
7	Participate in discussions regarding possible expansion/contraction of the District boundaries.	In 2000, the District expanded its boundaries to include a portion of the Metropolitan Airport Commission's (MAC) Minneapolis-St. Paul Airport. Currently, 80% of the MAC's land is within the District with 100% of its storm water draining into the District.
8	Project/plan review.	The District reviews projects and plans as requested by LGUs per the joint resolutions with those entities. In addition, the District performs an annual informal audit to ensure that the joint resolutions with the LGUs are enforced.
9	Inspect projects.	The District inspects projects as they occur and contracts with SWCD's for inspection services when necessary.
10	Administer the District's floodplain regulations during interim period between its plan approval and local plan/ordinance approval.	Most LGUs within the District currently have floodplain ordinances. The District has administered floodplain regulations when appropriate as in the case of the Huber Park redevelopment in the City of Shakopee.
11	Publish and distribute annual newsletter.	From 2000 to 2003, the District published an annual newsletter. In 2004, the District began placing quarterly articles on its webpage in addition to articles, reports, and meeting minutes.
12	Identify and inventory the District's resources, distribute map to local units of government.	In 2004, the District adopted the Guidance to Implementation in order to move their implementation agenda forward. The document included identification and inventory of resources managed by the District.

ID Number	Planned Implementation Activity (Table 6-1, Second Generation Plan)	Accomplishments to Date
13	Collect existing water quality, biological and physical data for priority resources.	In the early 2000's, the District began monitoring East and West Chaska Creeks, Assumption, Spring, Willow and Eagle Creeks and Unnamed Trout Stream 7, along with extensive fen groundwater monitoring, including Nicol's, Fort Snelling, Quarry Island and Savage fens. In November 2005, the district adopted and began implementation of a groundwater monitoring strategy for the calcareous fens and trout streams in the District. The District also works with Carver County and the City of Chaska on monitoring and reporting of the three quarry lakes (Fireman's, Clayhole and Courthouse) in Chaska.
14	Assess priority resources and report results - Phase 1: data collection.	In 2004, the District adopted the Guidance to Implementation in order to move their implementation agenda forward. As part of the study, a comprehensive survey and review of ongoing resource management and monitoring efforts in the watershed was performed in an effort to assess critical areas. This included a written survey and follow-up discussions with the multiple cities, counties, agencies and individuals working on resource management in the watershed. The implementation strategy in the District's Second Generation Plan was then reviewed in the context of the resource management assessment. Specific activities in the Second Generation Plan were refined and prioritized, and additional activities were added based on discussions with stakeholders in the watershed. The result was a prioritized Implementation Guidance table, to allow the District to move forward in a proactive, systematic fashion.
15	Assess priority resources & report results - Phase 2: data and watershed analysis.	See comment for ID #14.
16	Lead consensus effort to develop goals for priority resources; assist (technically and financially) with development of resource plan for priority resources; publish plan.	See comment for ID #14.
17	Implement resource plan: undertake petitioned projects, provide financial support for capital projects, and public information efforts.	See comment for ID #14.

ID Number	Planned Implementation Activity (Table 6-1, Second Generation Plan)	Accomplishments to Date
18	Review local water management plans for conformance with the Second Generation Plan.	The District has reviewed the following local water management plans: City of Bloomington, City of Burnsville, Black Dog Watershed Management Organization (WMO), City of Carver, City of Chanhassen, City of Chaska, City of Eagan, City of Eden Prairie, City of Lilydale, City of Mendota Heights, City of Savage, City of Shakopee, Carver County WMO, Scott County WMO, Riley-Purgatory-Bluff Creek Watershed District (RPBCWD), Nine Mile Creek Watershed District (NMCWD), Gun Club Lake WMO, and the City of Mendota Comprehensive Plan.
19	Minnesota River floodplain redefinition study.	This study was completed in 2003 and the results have been shared with the DNR. The report has been used for the redefinition of floodplains in all counties within the District.
20	Collect and distribute hydrologic information pertaining to the Minnesota River and needed by communities for planning and resource management.	The District continues to collect and distribute data on its website in cooperation with the DNR, MCES, USGS, COE, counties and cities.
21	Identify, inventory, and map gully erosion and resultant siltation sites in the District. Add information to database.	In 2006 and 2007, the District hired the Minnesota Civilian Conservation Corps (MCCC) to inventory gullies within its boundaries. The inventory identified gullies with current and potential erosion and pollution issues. Cities then reviewed the information and chose the top 3-4 public sites in each that needed immediate attention. Feasibility analyses were completed by the Cities. As a result, four cooperative projects with the cities of Eden Prairie and Bloomington have been completed: Bloomington Parkers Picnic Area, the District contributed \$22,265 for the restoration of a ravine including fill, grading, plantings and erosion control; Bloomington Minnesota River Valley Washout, the District contributed \$98,214 for stream bank restoration on an unnamed stream near Lyndale Avenue and the Minnesota River; Eden Prairie Area 4, the District contributed \$40,412 for stream bank restoration on Purgatory Cree; Eden Prairie Area 3 River Bank failure, the District contributed \$78,704 for a feasibility study of this area of concern at R.M. 19.6 on the left descending bank.

ID Number	Planned Implementation Activity (Table 6-1, Second Generation Plan)	Accomplishments to Date
22	Participate in Metropolitan Council's Watershed Outlet Monitoring Program to monitor stream outlets into the Minnesota River.	The District, in cooperation with the Met Council, DNR, Scott SWCD, Dakota SWCD, and Carver County Environmental Services monitor the following streams: Chaska Creek, East Chaska Creek, Assumption Creek, Eagle Creek and Willow Creek. Thermal monitoring of Unnamed Trout Stream #7 is also being carried out.
23	Undertake petitioned bank erosion control projects for bank control measures on the Minnesota River.	As a result of the 2006/2007 gully inventory, the City of Eden Prairie petitioned the District to investigate an area of severe erosion near R.M. 19.6. The District hired a consultant to do further investigation of the site and offer 3 alternatives to solve the issue. The alternatives proposed to correct the situation range from \$1 - \$3 million. In consideration of the costs associated with the project, the District managers believed that funding should be provided by the state instead of a District wide or project levy.
24	Undertake petitioned bank erosion control projects for bank control measures on tributaries of the Minnesota River.	Three gully inventory projects in Eden Prairie and two projects completed in Bloomington, described above under implementation item 21, address bank control measures on tributaries to the Minnesota River.
25	Greenbelts - acquire conservation easements for stream buffers, shorelands, and other sensitive natural areas.	The District worked closely with the DNR and the Minnesota Legislature for the acquisition of private land at Seminary Fen for a Scientific and Natural Area (SNA) and the expansion of Raguay Wildlife Management Area (WMA) in 2008. The District provided in-kind services to acquire these areas. Currently, the District continues to work with the DNR, Chaska, Chanhassen, and the private land owners in the area of Seminary Fen for acquisition of those parcels identified as critical for protection of the Fen.
26	Develop public access to, and facilitate public enjoyment of, the District's resources.	The District provided \$70k in funding of the Kraemer Nature Center in the City of Burnsville. The District provided \$30k in funding of and relocation of the Shakopee boat launch site which is dedicated to longtime District consultant and manager Lawrence Samstad (Sam's Landing). The District provided \$30k to the USFWS for two demonstration projects consisting of 1) construction of vernal ponds at the Bloomington Visitor Center and 2) conversion of the existing parking lot storm sewer system to a rain garden system. The District also provided in-kind services with these projects.

Below are additional items accomplished by the District:

- Introduced a Bill to create a Minnesota River Basin Commission. This should provide capital to assist with dragged material management and water quality.
- Collaborated with the Metropolitan Council and USGS on a water quality study of the Lower Minnesota River.
- Assisted the city of Eden Prairie with resolving flooding at the Charleston Road Development.
- Funded the watershed outlet monitoring program (WOMP), in cooperation with Scott Dakota and Carver Counties soil and water conservation districts (SWCD's) and the city of Chaska for Eagle Creek, Willow Creek, and east and west Chaska Creek
- Revised the District's boundary near the Minneapolis/St. Paul (MSP) International Airport.
- Served as a mediator between DOT and the Minnehaha Creek Watershed District in matters surrounding the re-design of highways 55 and 63 and the historic Camp Cold Water Springs. As a result of the District's participation in the matter, BWSR authorized the incorporation of approximately 3,500 acres near MSP airport.
- Ongoing services:
 - Fen wells monitoring in cooperation with SWCD for Scott and Dakota counties since 2007.
 - WOMP Streams
 - District Project Reviews: The District provides comments to cities regarding needed best management practices (BMPs) flooding concerns and other water management issues. In addition, the District follows up on those reviews with inspections to determine if recommended suggestions were implemented.

Based on the results of this comparison, it can be concluded that the District adequately addressed planned implementation activities. A major step towards reprioritizing implementation actions was the District's 2004 Guidance to Implementation document which is described above in Table I-2 under ID #14. Table I-3 shows the District's efforts to implement the activities listed in this document. Since 2004, the District has addressed nine of the fourteen implementation actions in the 2004 Guidance to Implementation document.

Table I-3: Assessment of Lower Minnesota River Watershed District's Performance executing the 2004 Guidance to Implementation

<i>Number</i>	<i>Action</i>	<i>Accomplishments to Date</i>
1A	Develop management plans for Courthouse Lake, Firemen's and Clay Hole Lake that outline strategies for protection and/or improvements as may be appropriate for each waterbody.	Completed in November 2004.
1B	Outline the watershed, identify stakeholders and initiate efforts for the development of a management plan for Assumption Creek and watershed.	This is an ongoing project. The District is currently working a "Stewardship Plan" in cooperation with the Met Council, DNR, and the cities of Chaska, and Chanhasen. The Met Council is taking the lead on this effort as they were given a grant by the 2010 legislature to lead this effort.
1C	Keep the integrity of Dean Lake intact by maintaining existing conditions. Work with City and Prior Lake/Spring Lake Watershed District (PLSLWD) to maintain a wildlife corridor around lake.	The District has been and continues to work with the City of Shakopee and the PLSLWD for the protection of this waterbody.
1D, 1E	Work with the Minnesota River Board (MRB) to compile loading comparisons / summaries for monitored tributaries as data allows (MRB takes technical lead).	The District continues its aggressive stream monitoring program and posts the unchecked information on its web page on a quarterly basis.
1F	Act as a facilitator to bring together various stakeholders in Nicols Fen, Harnack and Kennealy Creeks (and possibly unnamed trout stream #1)	The district has developed a monitoring plan for these resources and has partnered with the Gun Club Lake WMO and developed a monitoring plan for Nichols fen. The district also coordinated the repair of storm water erosion problem created by drainage from DOT right-of-way.
1G	Assist City of Burnsville in assessing and possibly devising approach to remediate bank erosion problems along Minnesota River.	The District initiated talks with the COE for the repair of and or protection of the river banks adjacent to Black Dog Road. The COE stated the only funds available for this type of project were for areas which have infrastructure which was damaged as a result of erosion and nothing available for preventative measures. We then approached the City of Burnsville and due to budget issues they had no interest in participating in a project.
2A	Support City of Eagan in implementation of infiltration features in Cedar Grove.	No action. The project has been delayed due to economic conditions which have placed redevelopment in this area on hold.
2B	Assist in implementing Credit River Erosion Control Plan.	The City of Savage completed this Plan with grant monies from the State.
-	Develop overall TMDL strategy for all impaired reaches within the District.	No action.

<i>Number</i>	<i>Action</i>	<i>Accomplishments to Date</i>
2C	Assist in design/construction of stormwater quality retrofit improvements in downtown Chaska.	The District has worked closely with the City on redevelopment projects in the old town area of the City. As a result of this cooperation the City has installed several BMPs (sumps, proprietary devices, etc.,) when reconstructing streets and other infrastructure.
2D	Assist City of Burnsville in assessing restoration potential of unnamed trout streams 4 and 7.	The District has installed thermal monitoring on unnamed trout stream 4.
2E	Conduct lake and watershed assessment for Black Dog Lake.	No action. Xcel energy owns the lake and is planning extensive alterations to their cooling operations
2F	Develop linked P8 model for that portion of the Black Dog watershed within the District.	No action. See number 2E above
-	Evaluate further potential implementation opportunities for Wedgewood Marsh, Blue Lake, Coleman Lake, Nine Mile Lake, Gun Club Lake, Fisher Lake, Nyssens Lake, Gillford Lake, Cyess Lake, Rice Lake, Long Meadow Lake, Snelling Lake, Riley Creek, Bluff Creek, Carver Creek, East Chaska Creek, and Chaska Creek.	<p>Due to the frequent flooding of these floodplain lakes the District has chosen not to spend large amounts of money on these lakes.</p> <p>The District has worked with the DNR on a potential evasive control on Snelling Lake but this project has been deferred until completion of a MAC storm sewer project which impacts the lake is completed.</p> <p>Coleman Lake has been placed on hold due to the discovery of the Northern Cricket Frog. This frog is on the Minnesota Endangered Species List.</p> <p>All of the creeks listed have minor portions within the District. The District continues to work with d WMO's and WDs with the monitoring and TMDL development for these streams.</p> <p>The District plans to update resource inventories and assessments to identify potential implementation activities during the first two years after adoption of the 3rd Generation Watershed Management Plan.</p>

