

Lower Minnesota River Watershed District

Third Generation Watershed Management Plan 2011 - 2020

September 2011

Prepared by



LOWER MINNESOTA RIVER
WATERSHED DISTRICT



and

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**Watershed Management Plan
for the
Lower Minnesota River Watershed District
2011 - 2020**

**Approved
September 13, 2011**

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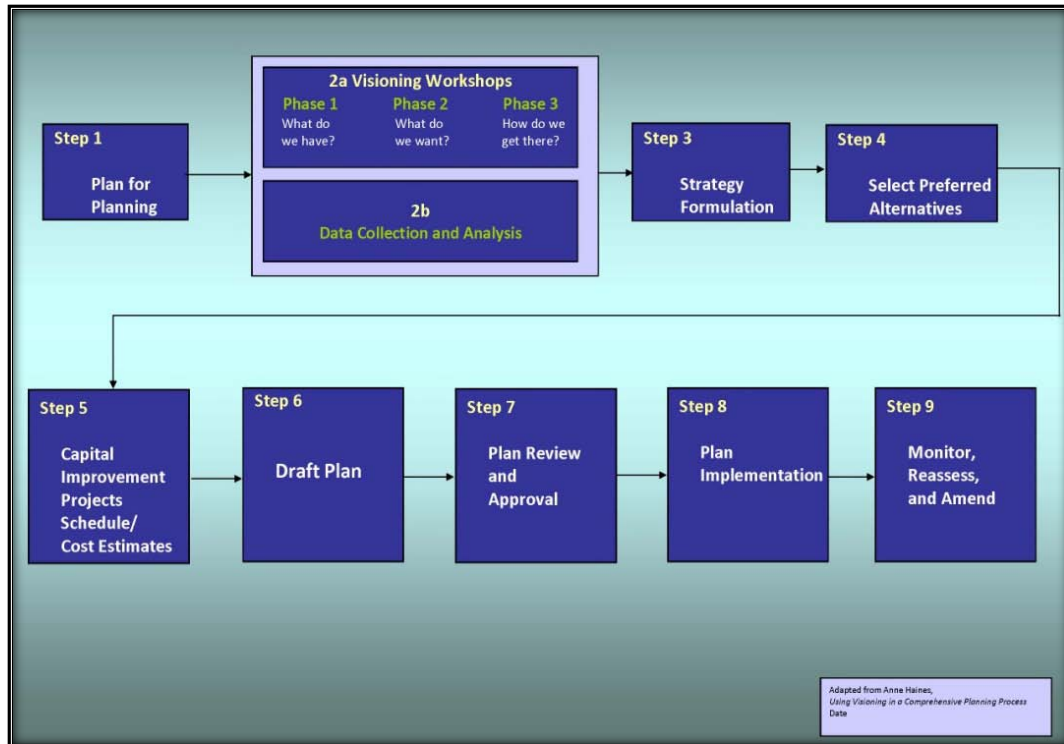
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Foreword

The following Third Generation Watershed Management Plan (Plan) of the Lower Minnesota River Watershed District (District) is a comprehensive account of the body of work that began in 1960 when the District was formed, and continues today. Over the 50 year history of the District, the Plan had been updated four times. In December 2008, the District managers embarked on the fifth update of the plan. This foreword provides an overview of the planning process used to review and update District goals, policies, and strategies, and to set the direction of the District for the next decade.

The District’s approach to this Plan update was to invite members of their advisory committees (Technical and Citizen) to participate in its development, specifically through visioning workshops. The District’s process, shown below in Figure F-1, was adapted from *Using Visioning in Comprehensive Planning Process* (Haines, 2001). The visioning process contains three phases: 1) What do we have? 2) What do we want? 3) How do we get there? The advisory committees focused on phases 2 and 3 during four workshops. The decision to focus on those two phases was based on the premise that the District already has a good understanding of phase 1, the resources they are responsible for managing.

Figure F-1: Lower Minnesota River Watershed District – Watershed Management Planning Process



On January 28, 2009, the District hosted its first Technical Advisory Committee (TAC) visioning workshop at the Chaska Community Center. The workshop focused on tackling Phase 2, through addressing the question: What issues/items should the District address over the next 10 years? The following overarching issues/items emerged:

- Partnering and coordination
- Resource management
- Protection and restoration of water quality
- Channel maintenance
- Education and outreach
- Overarching programming
- Assessment inventory and monitoring
- Rules and regulations

Subsequent to this meeting it was decided not to address the issue of rules and regulations as a standalone item, but as a component of each of the other seven issues, since during prioritization it received no votes (Appendix A for documentation). Addressing the education and outreach component was then delegated to the assistant District administrator and the Citizen Advisory Committee (CAC), while the administrator and the TAC addressed the other six issues. These issues/items form the foundation on which this Plan is built.

After the first workshop, the District created and distributed a survey to the TAC. The survey captured specific actions the District could take over the next 10 years to address the overarching issues. Three additional TAC meetings were held (February 25, March 17, and April 8, 2009) focused on gathering information about the issues list and using the knowledge of the group to identify strategies for addressing each of them. April 8, 2009 was the last time the TAC convened formally as part of the planning process. However, TAC members were contacted on two occasions to solicit projects for the District to include a part of their capital improvements projects and to review a draft of the Plan.

As mentioned the education and outreach component was delegated to the CAC. At the time, the District did not have a CAC. The District placed articles in local newspapers read by residents in the watershed soliciting their participation in the CAC and inviting them to a CAC Town Hall meeting to learn about the District and meet the manager. As a result of those actions, the CAC was established. A series of meetings were held to educate the CAC on the District and the Plan writing process, and to develop education and outreach goals, policies, and strategies the District could implement. As a part of their activities, the CAC contacted municipalities within the District to learn how the District could partner with them on educational initiatives. The work of the CAC is on-going and the official launch of the education and outreach program will occur at the time of adoption of this Plan.

The District would like to thank the following individuals for their participation in the Plan development process as part of the TAC and CAC.

Technical Advisory Committee

- Allen Dye, Metropolitan Airport Commission
- Bill Monk, City of Chaska
- Brad Wozney, Board of Soil and Water Resources
- Brooke Asleson, MN Pollution Control Agency
- Daryl Jacobson, City of Burnsville
- Ellen Sones, Hennepin County
- Greg Genz, Upper Mississippi Waterway Association.
- Eric Macbeth, City of Eagan
- Jack Frost and Judy Sventek, Metropolitan Council
- James Fallon, US Geological Survey
- Jim Bodensteiner, Xcel Energy
- Kevin Bigalke, Nine Mile Creek WD
- Laura Jester, Dakota SWCD
- Leslie Stovring, City of Eden Prairie
- Lisa Lund and Paul Machajewski, US Army Corps of Engineers
- Bryan Gruidl, City of Bloomington
- Mark Nemeth, Tamara Simonich, Molly Shodeen and Mark Cleveland, MN Dept of Natural Resources
- Melissa Bokman, Scott WMO
- Mike Kinney and Stacy Sass, Prior Lake – Spring Lake WD
- Nick Tiedeken, Wesley Saunders-Pierce, and Beth Neuendorf, Mn Dept of Transportation;
- Paul Nelson, Scott WMO
- Peter Beckius, Scott SWCD
- Sam Lucido, City of Savage
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- Terry Jeffery, City of Chanhassen
- Tim Sundby and Greg Arndt, Carver County
- Charles Blair US Fish and Wildlife Service
- Warren Formo, MN Ag Water Resources Coalition
- Lawrence Samstad

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List of Acronyms and Abbreviations

Term	Definition
AC	Acre
BMP	Best Management Practice
BOD	Biochemical oxygen demand
BWSR	Board of Water and Soil Resource
CAC	Citizen Advisory Council
CAMP	Citizen Assisted Monitoring Program
CCP	Minnesota River Valley National Wildlife Refuge Comprehensive Conservation Plan
CFS	Cubic feet per second
CHL-A	Chlorophyll-a
CIP	Capital Improvement Projects
CLP	Closed Landfill Program
CMMP	Channel Maintenance Management Plan
COE	U.S. Army Corps of Engineers
CSMP	Citizen Stream Monitoring Program
CSTS	Community Sewage Treatment System
CWA	Clean Water Act
CWCS	Comprehensive Wildlife Conservation Strategies
DMMP	Dredge Material Maintenance Plan
DNR	Minnesota Department of Natural Resources
DOH	Minnesota Department of Health
DOT	Minnesota Department of Transportation
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Maps
FIS	Flood Insurance Study
FT	Feet
ISTS	Individual Sewage Treatment System
ITPHS	Imminent Threat to Public Health and Safety
LGU	Local Government Unit
LID	Low Impact Development
LMRWD	Lower Minnesota River Watershed District (District)
LUST	Leaking Underground Storage Tanks
LWP	Local Water Plan
LWPA	Local Watershed Plan Authority
M	Meter

Term	Definition
M.S.	Minnesota Statute
Managers	District Board of Managers
MCBS	Minnesota County Biological Survey
MCCC	Minnesota Civilian Conservation Corps
MCES	Metropolitan Council Environmental Services
MDA	Minnesota Department of Agriculture
MG/L	Milligram per liter
MLCCS	Minnesota Land Cover Classification System
MN	Minnesota
MnRAM	Minnesota Routine Assessment Methodology
MOU	Memorandum of Understanding
MPCA	Minnesota Pollution Control Agency
MRBJPB	Minnesota River Basin Joint Powers Board
MRCC	Midwestern Regional Climate Center
MS4	Municipal Separate Storm Sewer System
MSP	Minneapolis-St. Paul
MUSA	Metropolitan Urban Services Area
NFIP	National Flood Insurance Program
NGO	Non Government Organization
NO3	Nitrate
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NURP	National Urban Runoff Program
NWI	National wetland inventory
OHWL	Ordinary High Water Level
PLP	Permanent List of Priorities
QA/QC	Quality Control Quality Assurance
R.M.	River mile
RCRA	Resource Conservation and Recovery Act
SDS	State Disposal System
SDS	State Disposal System
SFHA	Special Flood Hazard Areas
SNA	Scientific and Natural Area
SSC	Suspended Sediment Concentration
SSL	Suspended Sediment Loads
SSTS	Subsurface Sewage Treatment System

Term	Definition
SWCD	Soil and Water Conservation District
SWPPP	Storm Water Pollution Prevention Plan
TAC	Technical Advisory Committee
TDP	Total Dissolved Phosphorus
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TSD	Treatment , Storage and Disposal
TSL	Total Suspended Load
TSS	Total Suspended Solids
UAA	Use Attainability Analyses
USAF	United States Air Force
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
VIC	Voluntary Investigation Cleanup
WCA	Wetland Conservation Act
WD	Watershed District
WMO	Water Management Organization
WOMP	Watershed Outlet Monitoring Program
WWTP	Waste Water Treatment Plant
µG/L	Microgram per liter
MRB	Minnesota River Board