City of Ramsey
Agenda
City Council Work Session
Tuesday, February 23, 2021
5:30 pm
Lake Itasca Room, 7550 Sunwood Drive NW

This meeting is being held in accordance with Minnesota Statutes 13D.021. Due to the COVID-19 Pandemic, it is not practical and prudent for all members of this board to attend in person. Current Minnesota law requires certain social distancing standards that impacts the capacity of the Council Chambers. For those at highest risk, it is advised to isolate themselves from the general public. For these reasons, it is not practical and prudent to have this meeting exclusively in person. Members of the public are welcome to attend in person or remotely.

Remote Attendance available at www.cityoframsey.com/meetings. To maximize social distancing due to the COVID-19 Pandemic, those that can join remotely are encouraged to do so. Those joining remotely and requesting to speak are asked to use a webcam when speaking.

1. Call to Order

2. Topics for Discussion

1. [Council Committee Appointments: This case has been rescheduled to March 9, 2021]

2. Discuss LRRWMO 4th Generation Watershed Management Plan

3. Review Draft Ordinance 21-04, Critical Water Deficiency Regulations

4. Overview of Emergency Management Role for Elected Officials

5. Review City Meeting Security Procedures (**Portions of this discussion may be closed to the public).**

3. Topics for Future Discussion

1. Review Future Topics/Calendar

4. Mayor/Council/Staff Input

5. Adjournment

CC Work Session **2. 2.**

Meeting Date: 02/23/2021

Information

Title:

Discuss LRRWMO 4th Generation Watershed Management Plan

Purpose/Background:

The Lower Rum River Watershed Management Organization (LRRWMO) is currently in the process of finishing their 4th Generation Watershed Management Plan in accordance with state rules for surface water management. Cities within the management area and other agencies are given a 60-day review period to provide comments on the proposed plan.

The LRRWMO was formed by a Joint Powers Agreement (JPA) entered into in the Summer of 1985 for the purpose of preparing a water management plan to meet the requirements of Minnesota Statutes Sections 473.875 to 473.883.The current 3rd Generation plan was updated in 2011 and adopted in 2012

Every 10 years, watershed districts, watershed organizations and Cities are required to update their Watershed Management Plans. The purposes of the watershed management programs required by state statute (Sections 103B.205 to 103.255) are as follows:

- Protect, preserve, and use natural surface water and groundwater storage and retention systems.
- Minimize public capital expenditures needed to correct flooding and water quality problems.
- Identify and plan for means to means to effectively protect and improve surface water and groundwater quality.
- Establish more uniform local policies and official controls for surface water 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 water and groundwater.

As required by state statute the LRRWMO is currently in the process of finishing up on the draft plan. Once the plan has been approved by the MN Board of Water and Soil Resources (BWSR), the member Cities (Anoka, Andover and Ramsey) will be required to update their local water resource management plans within 2 years of the completion of the LRRWMO approved plan. The LRRWMO 4th Generation Plan is due to be completed by December 2021. As of right now it appears that the LRRWMO will meet that deadline date.

The proposed WMO plan consists of the following contents:

Executive Summary This describes the administration and cooperative roles, programs, and projects by the LRRWMO for the various sections of the plan.
Section 1 (Introduction): This section summarizes the ;location and history for the LRRWMO as wel as its purposes, authorities and management structure.
Section 2 (Land and Water Resource Inventory): This section contains information such as climate, precipitation, topography, drainage, land use, geology, groundwater, surface waters, natural areas, habitat, rare species, recreation, and pollutant sources.
Section 3 (Issues Assessment): This section summarizes the priority issues identified by the LRRWMO during the development of the plan.
Section 4 (Goals and Policies): This section has established goals to address the water and natural resource management issues described in Section 3.
Section 5 (Implementation): This section summarizes the activities the WMO plans to perform over the next 10 years. The implementation program includes administrative activities, programs, studies and projects necessary to

pursue WMO goals. Methods for prioritizing and funding programs and projects necessary are also discussed in this section.
Section 6 (References): This is currently being drafted by the engineering consultant.
Appendix A (Joint Powers Agreement): Establishes the LRRWMO to plan, control, and provide for the development of the WMO.
Appendix B (Grading, Stormwater Management and Erosion/Sediment Control Permit Application)
Appendix C (Application for MN Wetland Conservation Act Decisions and Procedure Requirements
The LRRWMO ensures that member cities are complying with the LRRWMO plan by requiring a permit for any project disturbing more than 1 acre. The WMO Engineer reviews the grading, drainage and erosion control plans to ensure they meet the stormwater design requirements (which include infiltration) are being mean and erosion control measures are in place to minimize erosion to water resources such as wetlands, streams, rivers and lakes. The City of Ramsey Engineering department reviews plans before they are forwarded to the WMO engineer.

The LRRWMO is the designated Local Government Unit (LGU) for all 3 cities (Anoka, Andover and Ramsey) when administering the Wetland Conservation Act (WCA). All proposed impacts to wetlands on projects must be reviewed and approved by the WMO.

This item is for information and discussion purposes only. After input is provided by the City Council, staff will prepare the formal response to the draft LRRWMO 4th Generation Watershed Management Plan.

Timeframe:

Approximately 20 minutes has been reserved for this case. Approximately 5 minutes is planned for presenting information with another 15 minutes for questions and answers after Staff's presentation.

Funding Source:

The Watershed Management Plan must be updated every 10 years. The LRRWMO is funded by annual assessments to the member cities. Several years ago the Board voted to increase the annual assessments over normal assessments and set the additional amount aside to fund the 4th generation plan. This reserve fund has been used to pay for the work on the 4th generation plan.

Responsible Party(ies):

The Civil Engineer IV will present the case and will field questions during and after the presentation.

Outcome:

Staff recommends forwarding comments on the plan to Staff who will then compile and forward the comments to the LRRWMO Engineer for updating the plan.

Attachments

4th Gen Plan

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	02/18/2021 11:13 AM
Len Linton (Originator)	Len Linton	02/18/2021 11:36 AM
Bruce Westby	Bruce Westby	02/18/2021 01:50 PM
Kurt Ulrich	Kurt Ulrich	02/18/2021 02:40 PM
Form Started By: Len Linton		Started On: 02/12/2021 02:32 PM
Final Approval Date: 02/18/2021		

Watershed Management Plan

2021-2030

Prepared for the
Lower Rum River Watershed Management Organization

February 2021 – 60 Day Review Draft

Watershed Management Plan

2021-2030

Prepared for the
Lower Rum River Watershed Management Organization

February 2021 – 60 Day Review Draft

Barr Engineering Co.

Watershed Management Plan

February 2021 **DRAFT**

Contents

Executive Summary ES-1

1 Introduction 1-1

1.1 The Role of Watershed Management Organizations 1-1

1.2 LRRWMO Location and History 1-2

1.2.1 Location and Boundaries 1-2

1.2.2 History 1-2

1.3 Management Structure, Power, and Duties 1-3

2 Land and Water Resource Inventory 2-1

2.1 Climate and Precipitation 2-1

2.1.1 Precipitation-Frequency Data (Atlas 14) 2-2

2.1.2 Climate Trends and Future Precipitation 2-3

2.2 Topography and Drainage 2-5

2.3 Land Use 2-7

2.4 Soils 2-10

2.5 Geology 2-13

2.5.1 Surficial Geology 2-13

2.5.2 Bedrock Geology 2-13

2.6 Groundwater 2-14

2.6.1 Groundwater Recharge 2-15

2.6.2 Drinking Water Supply, Wellhead Protection, and Pollution Prevention 2-16

2.6.4 Groundwater Monitoring 2-20

2.6.5 Groundwater Quality 2-20

2.7 Surface Water Resource Data 2-20

2.7.1 LRRWMO Priority Waters 2-24

2.7.2 Wetlands 2-24

2.7.3 Surface Water Monitoring and Modeling 2-26

2.7.4 Water Quality and Impaired Waters 2-31

2.7.4.1 Watershed Restoration and Protection Strategies (WRAPS) 2-33

2.7.5 Stormwater Systems 2-33

2.7.6 Flooding and Floodplain Management 2-34
2.7.7 Shorelands an Shoreland Management 2-37
2.8 Natural Areas, Habitat, and Rare Features 2-37
2.9 Open Space and Recreation Areas 2-40
2.9.1 Wild, Scenic, and Recreational River District 2-40
2.9.2 Mississippi National River and Recreational Area (MNRRA) 2-41
2.10 Potential Pollutant Sources 2-43
3 Issues Assessment 3-1
3.1 Issue Identification and Prioritization 3-1
3.2 Resource Issues 3-3
3.2.1 Stormwater Runoff Management 3-3
3.2.2 Surface Water Quality 3-3
3.2.3 Flood risk and water quantity issues 3-5
3.2.4 Erosion and Sedimentation 3-6
3.2.5 Wetlands, Shoreland, and Natural Areas 3-6
3.2.6 Groundwater Contamination and Supply 3-7
3.3 Organizational Issues 3-8
3.3.1 Efficacy of the LRRWMO Permit Program 3-8
3.3.2 Funding and Capacity 3-9
3.3.3 Education and Engagement 3-9
4 Goals and Policies 4-1
4.1 Goals 4-1
4.2 Strategies and Policies 4-1
4.2.1 Strategies and Policies: Cooperation 4-1
4.2.2 Strategies and Policies: Education 4-2
4.2.3 Strategies and Policies: Regulation 4-3
4.2.4 Strategies and Policies: Operations 4-5
5 Implementation Program 5-1
5.1 Implementation Plan Structure 5-1
5.2 Prioritization and Targeting 5-1
5.3 Implementation Categories 5-3
5.3.1 Administration 5-3
5.3.2 Engineering, Permitting, and Planning 5-3
5.3.2.1 LRRWMO Permit Program 5-3

5.3.3 Education Program 5-4
5.3.4 Monitoring Program 5-4
5.3.5 Projects and Capital Improvements 5-5
5.3.6 Grant Programs 5-5
5.4 Funding Mechanisms 5-7
5.4.1 LRRWMO General Fund 5-7
5.4.2 LRRWMO Improvement Fund 5-7
5.4.3 LRRWMO Permit Application Fees and Escrow 5-7
5.4.4 Ad Valorem Taxing Authority 5-7
5.4.5 Member City Funding 5-7
5.4.6 Grand Funding and Partner Cost-share 5-8
5.5 Plan Reporting and Assessment 5-8
5.5.1 Annual Reporting 5-8
5.5.2 Progress Assessment 5-9
5.6 Plan Amendments and Updates 5-9
5.7 Local Controls and Water Management Plans 5-10
5.7.1 Local Water Management Plans 5-11
6 References 1

List of Tables

Table 2-1 Climate and Precipitation Data 2-2
Table 2-2 Selected Rainfall Events Used for Design Purposes 2-3
Table 3-3 MDNR Level 8 Watersheds within the LRRWMO 2-5
Table 3-4 Existing Land Use (2016) 2-7
Table 3-5 Bedrock geology characteristics 2-14
Table 3-6 Major Public Waters within the LRRWMO 2-22
Table 3-7 Anoka Conservation District (ACD) surface water monitoring in LRRWMO 2-26
Table 2-8 Impaired Waters within the LRRWMO 2-32
Table 2-9 State water quality standards applicable to LRRWMO Priority Waterbodies 2-32
Table 2-10 Pollutants Commonly Found in Stormwater 2-44
Table 3-1 Summary of Priority Issues and Resources 3-2
Table 4-1 LRRWMO goal statements and associated metrics 4-2
Table 4-2 LRRWMO Education Policies 4-3
Table 4-3 LRRWMO Regulation Policies 4-4
Table 4-4 LRRWMO Operations Policies 4-6
Table 5-1 LRRWMO 2021–2030 Implementation Plan 5-6
Table 5-2 Local Water Plan Status 5-12

List of Figures

Figure 1-1 Location of the LRRWMO ES-5
Figure 2-1 Trends in Average Annual Precipitation (Twin Cities Region) 2-4
Figure 2-2 Topography and drainage patterns 2-6
Figure 2-3 Existing Land Use (2018) 2-8
Figure 2-4 Estimated Future Land Use (2040) 2-9
Figure 2-5 Hydrologic Soil Groups 2-12
Figure 2-6 Sensitivity of the water table to pollution 2-18
Figure 2-7 Drinking waters supply management areas 2-19
Figure 2-8 Public waters and ditches within the LRRWMO 2-23
Figure 2-9 National Wetland Inventory 2-25
Figure 2-10 Monitoring Locations 2-28
Figure 2-11 HSPF Estimated Total Phosphorus Loading 2-29
Figure 2-12 HSPF Estimated Sediment Loading 2-30
Figure 2-13 FEMA Floodplains 2-36
Figure 2-14 Sites of Biodiversity Significance 2-39
Figure 2-15 Open Spaces and Recreational Areas 2-42
Figure 2-16 Potential Pollutant Sources 2-45

List of Appendices, Attachments, or Exhibits

Appendix A	Joint Powers Agreement
Appendix B	Grading, Stormwater Management and Erosion/Sediment Control Permit Application
Appendix C	Application for Minnesota Wetland Conservation Act Decisions and Procedure Requirements
Appendix D	Plan Development Gaps Analysis
Appendix E	LRRWMO Stormwater Management Performance Standards
Appendix F	LRRWMO Wetland Protection Standards

Certifications

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the Laws of the State of Minnesota.

	date
Sterling G. Williams Jr. PE #: 47642	Date

Acronyms

ACD	Anoka Conservation District
AIS	Aquatic Invasive Species
APM	Aquatic Plan Management
BMP	Best Management Practice
BWSR	Minnesota Board of Water and Soil Resources
CAMP	Citizen Assisted Monitoring Program
CCWD	Coon Creek Watershed District
CIP	Capital Improvement Program
CLMP	Citizen Lake Monitoring Program
CWA	Clean Water Act
DWSMA	Drinking Water Supply Management Area
ECWMC	Elm Creek Watershed Management Commission
EPA	Environmental Protection Agency
FAW	Functional Assessment of Wetlands
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FWPCA	Federal Water Pollution Control Act
JWC	Joint Water Commission
LA	Load Allocation
LGU	Local Governmental Unit
LID	Low Impact Development
LiDAR	Light Detection and Ranging
LOMA	Letter of Map Amendment
MCES	Metropolitan Council Environmental Services
MCM	Minimum Control Measure
MCWD	Minnehaha Creek Watershed District
MCSC	Minnesota Cities Stormwater Coalition
MNDNR	Minnesota Department of Natural Resources
MDH	Minnesota Department of Health
MGS	Minnesota Geological Survey
MIDS	Minimal Impact Design Standards
MLCCS	Minnesota Land Cover Classification System
MnDOT	Minnesota Department of Transportation
MnRAM	Minnesota Routine Assessment Method
MPCA	Minnesota Pollution Control Agency
MRCC	Midwestern Regional Climate Center
MRCCA	Mississippi River Critical Corridor Area

MS4	Municipal Separate Storm Sewer System
MSP	Minnesota/St. Paul International Airport
NAPP	National Aerial Photography Program
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NHIS	Natural Heritage Information System
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRMP	Natural Resources Management Plan
NURP	National Urban Runoff Program
NWI	National Wetland Inventory
OHWL	Ordinary High Water Level
P8	Program for Predicting Polluting Particle Passage through Pits, Puddles and Ponds
PWI	Public Waters Inventory
RR1W1P	Rum River One Watershed One Plan
SCS	Soil Conservation Service
SSURGO	Soil Survey Geographic Dataset
SSTS	Subsurface Sewage Treatment System
SWCD	Soil and Water Conservation District
SWMP	Surface Water Management Plan
SWPPP	Storm Water Pollution Prevention Program
TAC	Technical Advisory Committee
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TSS	Total Suspended Solids
URRWMO	Upper Rum River Watershed Management Organization
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VIC	Voluntary Investigation and Cleanup
WCA	Wetland Conservation Act
WHPP	Wellhead Protection Plan
WLA	Waste Load Allocation
WMO	Watershed Management Organization
WOMP	Watershed Outlet Monitoring Program
WRAPS	Watershed Restoration and Protection Strategy
WWTP	Wastewater Treatment Plant

Executive Summary

The Lower Rum River Watershed Management Organization (LRRWMO) Watershed Management Plan (Plan) provides a framework for the protection, restoration, and management activities of the LRRWMO over a 10 year period. The Plan provides resource data and background information, prioritizes natural resource management issues, establishes measurable goals, and details policies, regulations, and implementation activities intended to achieve those goals. The Plan implementation program describes the administrative and cooperative roles, programs, and projects carried out by the LRRWMO.

The Plan is organized into five major sections, summarized as follows:

Section 1 – Introduction

Section 1 of this Plan summarizes the LRRWMO's location and history, purpose, and management structure. Like all watershed management organizations (WMOs), the LRRWMO is a special purpose unit of local government that manages water resources on a watershed basis. The LRRWMO's jurisdiction covers approximately 57 square miles in Anoka County and includes the City of Anoka, the City of Ramsey, and a portion of the City of Andover. The LRRWMO was formed in 1985. This watershed water management plan replaces the *2011 LRRWMO Water Management Plan* (2011 Plan).

The purposes of the LRRWMO, consistent with Minnesota Statutes 103B.201, include:

- 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; and
- Secure the other benefits associated with the proper management of surface and groundwater.

The Board of Commissioners of the LRRWMO consists of three commissioners and three alternates appointed by the member cities. The powers of the Board are detailed in the most current iteration of the LRRWMO Joint Powers Association (JPA, see Appendix A).

Section 2 – Land and Water Resources Inventory

Section 2 of this Plan contains information on the presence and condition of natural resources within the watershed, as well as the impact of human development. Information is provided as text, tables, and maps; topics presented include:

- Climate and precipitation
- Topography and drainage
- Land use

- Soils
- Geology
- Groundwater
- Surface water resources
- Natural areas, habitat and rare features
- Open space and recreational areas
- Potential pollutant sources

The Rum River is the defining hydrologic feature of the LRRWMO, although many other lakes, ponds, streams, and wetlands are presented within the watershed. Information about the waters and other resources in the watershed is important as is affects and resource management priorities and decisions of the LRRWMO, its member cities, and other partners.

Section 3 – Issues Assessment

This section of the Plan presents and discusses the priority issues to be addressed by the LRRWMO over the life of this Plan. As part of Plan development, the Board solicited input on issues relevant to the Lower Rum River watershed through a variety of stakeholder engagement and data review activities, including:

- Public kickoff meeting hosted on June 26, 2019
- Citizen Advisory Committee (CAC) issue identification meeting on August 28, 2019
- Technical Advisory Committee (TAC) issue identification meeting on October 29, 2019
- Analysis of potential 2011 Plan gaps (Gaps Analysis, see Appendix D)
- Review of responses to the Plan notification letter

With consideration for the stakeholder engagement and data review activities, the Board identified the following as the most relevant issues including:

- Adverse impacts from **stormwater runoff**
- Degraded **water quality** of lakes, streams, and rivers

Additional water and natural resource issues that were identified as important:

- **Flood risk and water quantity** issues
- Excessive **erosion and sedimentation**
- Integrity of **wetlands, shoreland, and natural areas**
- **Groundwater contamination**

In addition to natural resource issues, organizational and/or administrative issues were also identified during Plan development; these include:

- Efficacy and efficiency of the **LRRWMO permit program**
- Limited **funding and capacity**
- Opportunities for increased **education and engagement**

The priority issues areas and associated specific issues identified by the Board are described in greate detail in Section 3 and are summarized in Table 3-1. Many of the priority resource issues are interrelated. Thus, many of the goals, policies, and activities included in this Plan address multiple resource issues.

Section 4 – Goals and Policies

Section 4 describes the goals and policies for water and natural resource management within the LRRWMO. LRRWMO goals are aligned with the broad statutory purposes listed in Minnesota Statues 103B.201 but are more specific in their application to LRRWMO resources. LRRWMO goals are presented in Table 4-1. Goals are grouped according to issue area (see Section 3) although many of the goals address multiple issues. Where appropriate, goals contain measurable quantities to evaluate progress (see Section 5.5.2). The Plan establishes the following key water quality goals:

- Maintain or improve existing water quality in non-impaired priority LRRWMO waters:
    - Grass (Sunfish) Lake (TP= 14 ug/L, Chl a = 5.8 ug/L, SD = 1.3 m)
    - Rogers Lake (TP= 59 ug/L, Chl a = 19.7 ug/L, SD = 1.1 m)
    - Round Lake (TP= 31 ug/L, Chl a = 7.9 ug/L, SD = 2.9 m)

- Reduce phosphorus loading to the Rum River by 800 lbs/year through implementation of the LRRWMO permit program, and by 100 lbs/year through non-structural and structural improvements (e.g., streambank stabilization)

- Reduce sediment loading from streambank erosion along the Rum River by approximately 75 tons/year through streambank stabilization and restoration actions over an estimated 500 feet.

- Manage stormwater runoff with practices that mimic natural hydrology by retaining a volume equivalent to 1.0 inches over new and redeveloped or existing impervious surfaces

The LRRWMO has also adopted policies to support the achievement of LRRWMO and partner goals. These policies include requirements for member cities, as well as performance standards for projects implemented within the LRRWMO. Policies are subdivided into the following strategies:

- Regulation
- Education
- Cooperation
- Operations

Generally, these strategies include all of the LRRWMO's activities, and are described in greater detail in Section 4.2.

Section 5 – Implementation Program

Individual LRRWMO implementation activities are described in Section 5. Estimated costs, year(s) of implementation, partners, and priority level of each activity are presented in Table 5-1. For assessment

and reporting purposes, the LRRWMO cross-references all activities in the implementation plan to applicable LRRWMO goals (see Table 4-1).

The LRRWMO implementation plan includes the continuation of ongoing activities as well as new activities to address emerging issues and changing priorities. Activities included in Table 5-1 are categorized as:

- Administration
- Engineering, Permitting, and Planning
- Education Programs
- Monitoring Programs
- Projects and Capital Improvements

A significant portion of the LRRWMO resources are invested in the continued implementation of the LRRWMO project review permitting programs (see Section 5.3.2.1). The LRRWMO stormwater performance standards (see Appendix E) have contributed to pollutant reductions of 175 lbs/year of total phosphorus and 18 tons of sediment per year through over 40 LRRWMO-reviewed projects reviewed in 2019 and 2020.

The 10-year implementation schedule (Table 5-1) includes planned capital improvements planned in cooperated with Anoka Conservation District (ACD) and funded by anticipated watershed-based implementation funding (WBIF).

Section 5 describes the funding mechanisms used and available to the LRRWMO, self-assessment and reporting practices, and procedures for amending this Plan. Section 5 also details requirements for City local water management plans consistent with Minnesota Statutes 103B.235 and Minnesota Rules 8410.0160.

1 Introduction

The Lower Rum River Watershed Management Organization (LRRWMO) *Watershed Management Plan* (Plan) provides guidance for managing the water and natural resources within the jurisdiction of the LRRWMO. This section summarizes the location and history of the LRRWMO, as well as its purposes, authorities, and management structure.

1.1 The Role of Watershed Management Organizations

Like all watershed management organizations (WMOs), the LRRWMO is a special purpose unit of local government that manages water resources on a watershed basis. Watershed management organization boundaries generally follow natural watershed divides, rather than political boundaries. Thus, they may include several municipalities and counties.

Recognizing that water does not follow political boundaries, the State of Minnesota established the Watershed Act (Minnesota Statutes 103D) in 1955, which provided for the creation of watershed districts anywhere in the state. In 1982, the Minnesota Legislature enacted the Metropolitan Surface Water Management Act (Minnesota Statutes 103B.201 – 103B.255). This act required the formation of a WMO, and the development and implementation of a watershed management plan, for each of the watersheds in the seven county Twin Cities metropolitan area. WMOs can be organized as joint powers agreement organizations among municipalities (e.g., LRRWMO), as watershed districts (e.g., Coon Creek Watershed District – CCWD), or under county government.

Per Minnesota Statutes 103B.201, the purposes of WMO water management programs are as follows:

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

1.2 LRRWMO Location and History

1.2.1 Location and Boundaries

The Lower Rum River watershed is located entirely within Anoka County, in the northwest portion of the Twin Cities Metropolitan Area (TCMA). Figure 1-1 shows the location and boundaries of the LRRWMO and other local units of government. The LRRWMO is adjacent to the following watershed management authorities:

- Upper Rum River WMO (URRWMO) – along northern boundary
- Coon Creek Watershed District (CCWD) – along eastern boundary
- Elm Creek Watershed Management Commission (ECWMC) – along southern boundary (across Mississippi River)
- Sherburne County Soil and Water Conservation District (Sherburne SWCD) – along western boundary

The jurisdictional boundary of the LRRWMO includes all or part of three cities:

- Andover
- Anoka
- Ramsey

The limits of Anoka County form the jurisdictional boundary of the LRRWMO to the north and to the west. This boundary does not follow hydrologic divides (i.e., water flows in and out of the LRRWMO across the county boundary). The Mississippi River forms the southern boundary of the LRRWMO, while the eastern boundary generally follows the watershed divide separating the Rum River watershed from the watershed of Coon Creek. The total drainage area of the LRRWMO is 56.9 square miles (~36,400 acres).

Most of the LRRWMO watershed drains towards the Rum River and its tributaries, although some areas are directly tributary to the Mississippi River. The LRRWMO is moderately developed with generally suburban land use (see Figure 2-3).

A legal description for of the boundaries of the LRRWMO is included in Appendix A.

1.2.2 History

The LRRWMO was formed by a Joint Powers Agreement (JPA) signed by the Cities of Andover, Anoka, Coon Rapids, and Ramsey in the Summer of 1985. The LRRWMO was formed for the purpose of preparing a water management plan to meet the requirements of Minnesota Statutes Sections 473.875 to 473.883, the Metropolitan Water Management Act (MWMA). The powers and duties of the LRRWMO are outlined in the JPA.

The JPA was revised in 1995 to include recent changes in state statutes, Minnesota Rules 8410 Rules, and the Wetland Conservation Act (WCA). The JPA was again revised and approved in 2007 to address cost-sharing for WMO projects.

At its inception, the LRRWMO included a portion of the City of Coon Rapids – this area was transferred to the Coon Creek Watershed District via a 2014 revision to the JPA and legal boundary. The most current JPA and legal description are included in Appendix A.

The LRRWMO adopted its first watershed management Plan in 19XX. Second- and third-generation watershed management plans were adopted in XXXX and 2011, respectively. This document, adopted by the LRRWMO in 2021, is the fourth-generation LRRWMO Plan.

1.3 Management Structure, Power, and Duties

The Board of Commissioners of the LRRWMO consists of three commissioners and three alternates appointed by the member cities. Each of the three member cities appoints one commissioner and one alternate. Alternate commissioners are voting Board members when the primary commissioner is absent. The JPA gives each member city the responsibility to determine the eligibility or qualifications of its representative (commissioner) on the Board.

As identified in the JPA, the Board has the authority to employ persons as it deems necessary, conduct studies, fund improvements, and operate and maintain improvements constructed by the Board. Procedures have been established to finance capital improvement projects in such a manner that costs can be equitably distributed to benefited members for projects of benefit to more than one member. Where only one member community is benefited, that community will be responsible for the entire cost.

The powers and duties of the LRRWMO, as enacted by the Board, are listed in Section VI of the JPA and include, briefly:

1. Have the powers and duties set in the JPA and prescribed by law as it relates to flood control, water quality, groundwater recharge, water conservation, construction of facilities, and other duties set forth in Minnesota Statutes 103B
2. Employ persons or contract with consultants as necessary to accomplish its duties and powers (any such persons or consultants shall be considered LRRWMO staff)
3. Contract for space, materials, and supplies to carry on its activities with a member city or elsewhere
4. Acquire necessary personal property to carry out its powers and duties
5. Develop an overall plan (watershed management plan) containing a capital improvement program that shall meet the requirements of Minnesota Statutes 103B
6. Make necessary surveys or use other information and develop projects to accomplish the purposes for which the LRRWMO is organized.
7. Enter into contracts or cooperate with governmental agencies, private/public organizations, or individuals to accomplish the purposes for which the LRRWMO is organized.
8. Order any member city to construct, clean, repair, or otherwise alter any ditch, drain, storm sewer, of watercourse in the LRRWMO as necessary to implement the Plan

9. Order any member city to acquire, operated, construct, or maintain dikes, dams, and reservoirs as necessary to implement the Plan
10. Regulate, conserve and control the use of stormwater, surface water and groundwater within LRRWMO.
11. Contract for or purchase insurance, as needed.
12. Establish and maintain devices for acquiring and recording hydrological and water quality data within the watershed.
13. Enter upon lands to make surveys and investigations to accomplish the LRRWMO's purposes.
14. Provide any member city with technical data or other information to assist the city in preparing its local watershed management plan.
15. Provide legal and technical assistance in connection with litigation or other proceedings between one or more of its members and any other unit of government relating to drainage or water quality within the LRRWMO.
16. Accumulate reserve funds and invest funds not currently needed for LRRWMO operations.
17. Collect money from the LRRWMO member cities, Anoka County, and from any other approved by the majority of its Commissioners
18. Accept gifts, apply for, and use grants or loans of money or other property.
19. Make contracts, employ staff or consultants, incur expenses and make expenditures.
20. Obtain an annual audit of the BCWMC books and accounts.
21. Make its books, reports, and records available for and open to inspection by its member cities.
22. Recommend changes to the joint powers agreement to its member cities.
23. Exercise all other powers necessary and incidental to the implementation of the purposes and powers set forth in the joint powers agreement and state law.
24. Cooperate with the Minnesota Department of Natural Resource (MDNR) in obtaining protected waters permits and complying with Minnesota law regarding protected waters.
25. Member cities may conduct separate or concurrent studies on any matter under study by the LRRWMO.
26. Establish a procedure for establishing citizen or technical advisory committees and to provide other means for public participation.

Figure 1-1 Location of the LRRWMO

Figure Pending

2 Land and Water Resource Inventory

This section summarizes the land and water resources located within the LRRWMO. It contains information on climate and precipitation, topography and drainage, land use, soils, geology, groundwater, surface waters, natural areas, habitat, and rare species, recreation, and potential pollutant sources. Land and water resource information is important because it describes the condition of the watershed and how those conditions impact decisions about infrastructure, development, and resource management.

2.1 Climate and Precipitation

The climate of the seven county Twin Cities Metropolitan Area is a humid continental climate, characterized by moderate precipitation (normally sufficient for crops), wide daily temperature variations, large seasonal variations in temperature, warm humid summers, and cold winters with moderate snowfall. Climate data is often presented according to 30-year "climate normal" periods, the most recent spanning the period from 1981-2010. Several of the wettest years on record have been observed since 2010. Deviation from climate normal and data since 2010 are discussed in Section 2.1.2. Climate data presented in this section is based on the 10-year period from 2010 through 2019, unless otherwise noted.

The mean annual temperature in the LRRWMO is 43.6°F, as measured at Andover 1N station (2010-2019). Mean monthly temperatures vary from 12.4°F in January to 71.9°F in July (2010-2019). For the 1981-2010 climate normal period, the average frost-free period (growing season) is approximately 157 days.

Table 2-1 summarizes monthly precipitation data near the City of Anoka based on the Minnesota Climatology Working Group gridded precipitation dataset for the most recent complete climate normal period (1981-2010) and 10 year period (2010-2019). Average total annual precipitation is 34.3 inches (2010-2019). The mean monthly precipitation varies from 4.4 inches in July to 0.7 inches in February (2010-2019). From May to September, the growing season months, the average rainfall (2010-2019) is 22.0 inches, or about 65% of the average annual precipitation. Snowfall averaged 59.4 inches annually at the Cedar, MN station during the 1981-2010 climate normal period.

Additional information about local and regional climate is available from the Minnesota Department of Natural Resources (MDNR) State Climatology office and NOAA at:

- Minnesota State Climatology Office: https://www.dnr.state.mn.us/climate/index.html
- National Oceanic and Atmospheric Administration (NOAA) National Climatic Data Center (NCDC): https://www.ncdc.noaa.gov/cdo-web/

Table 2-1 Climate and Precipitation Data

Month	1981-2010 Mean Temperature (F)	2010-2019 Mean Temperature (F)	1981-2010 Precipitation (inches)	2010-2019 Precipitation (inches)
January	13.9	12.4	0.60	0.83
February	19.2	15.2	1.15	0.71
March	31.4	30.4	1.41	1.71
April	46.4	42.9	3.30	2.75
May	58.1	56.9	5.23	3.60
June	66.3	66.9	4.72	4.36
July	70.9	71.9	4.88	3.92
August	68.6	68.8	3.98	4.22
September	60.2	61.2	3.18	3.50
October	47.7	47.1	2.85	2.57
November	32.2	31.3	1.50	1.77
December	18	19.4	1.51	1.07
Total	**44.4**	**43.6**	**31.01**	**34.31**

Source: Minnesota Climatology Working Group gridded precipitation dataset (precipitation); NOAA normal summaries, Cedar, MN station (1981-2010 temperature); NWS, Andover 1N station (2010-2019 temperature)

2.1.1 Precipitation-Frequency Data (Atlas 14)

The amount, rate, and type of precipitation are important in determining flood levels and stormwater runoff rates. While average weather poses little risk to human health and property, extreme precipitation events may result in flooding that threatens infrastructure and public safety. NOAA published Atlas 14, Volume 8, in 2013. Atlas 14 is the primary source of information regarding rainfall amounts and frequency in Minnesota. Atlas 14 provides estimates of precipitation depth (i.e., total rainfall in inches) and intensity (i.e., depth of rainfall over a specified period) for durations from 5 minutes up to 60 days. Atlas 14 supersedes publications Technical Paper 40 (TP-40) and Technical Paper 49 (TP-49) issued by the National Weather Bureau (now the National Weather Service) in 1961 and 1964, respectively. Atlas 14 improvements in precipitation estimates include denser data networks, longer (and more recent) periods of record, application of regional frequency analysis, and new techniques in spatial interpolation and mapping. Comparison of precipitation depths between TP-40 and Atlas 14 indicates increased precipitation depths for more extreme (i.e., less frequent) events. Table 2-2 lists selected rainfall events for the District.

Runoff from spring snowmelt is not provided in Atlas 14 and current regional snowmelt runoff data is not available (Minnesota Stormwater Manual, 2019). However, snowmelt and rainstorms occurring during snowmelt in early spring are significant in this region. The volumes of runoff generated, although they

occur over a long period, can have significant impacts where the contributing drainage area to a lake or pond is large and the outlet is small.

Table 2-2 Selected Rainfall Events Used for Design Purposes

Type	Frequency	Duration	Depth (in)
Rainfall	2-year	24 hour	2.80
	5-year	24 hour	3.49
	10-year	24 hour	4.18
	25-year	24 hour	5.29
	50-year	24 hour	6.29
	100-year	24 hour	7.40
	10-year	10 day	6.62
	100-year	10 day	9.95

Source: NOAA Atlas 14 – Volume 8. Station: Saint Paul – Station 21-7377.
These depths reflect the 50% exceedance limit.

2.1.2 Climate Trends and Future Precipitation

There are typically wide variations in climate conditions in the District. However, climatologists have found four significant recent climate trends in the Upper Midwest (NOAA, 2013):

- Warmer winters—decline in severity and frequency of severe cold; warming periods leading to mid-winter snowmelt
- Higher minimum temperatures
- Higher dew points
- Changes in precipitation trends – more rainfall is coming from heavy thunderstorm events and increased snowfall

According to NOAA's 2013 assessment of climate trends for the Midwest, annual and summer precipitation amounts in the Midwest are trending upward, as is the frequency of high intensity storms. Annual precipitation at the University of Minnesota-Saint Paul averaged 35.9 inches from 2010-2019, a 3.7 inch increase over the 1981-2010 climate normal. Annual precipitation exceeded the 1981-2010 climate normal average (32.2 inches) in 7 of 8 years since 2010.

Higher intensity precipitation events typically produce more runoff than lower intensity events with similar total precipitation amounts; higher rainfall intensities are more likely to overwhelm the capacity of the land surface to infiltrate and attenuate runoff. Climate normal data available from the Minnesota Department of Natural Resources indicates annual precipitation is increasing within the Minneapolis-Saint Paul metropolitan area by approximately 0.31 inches per decade (see Figure 2-1).

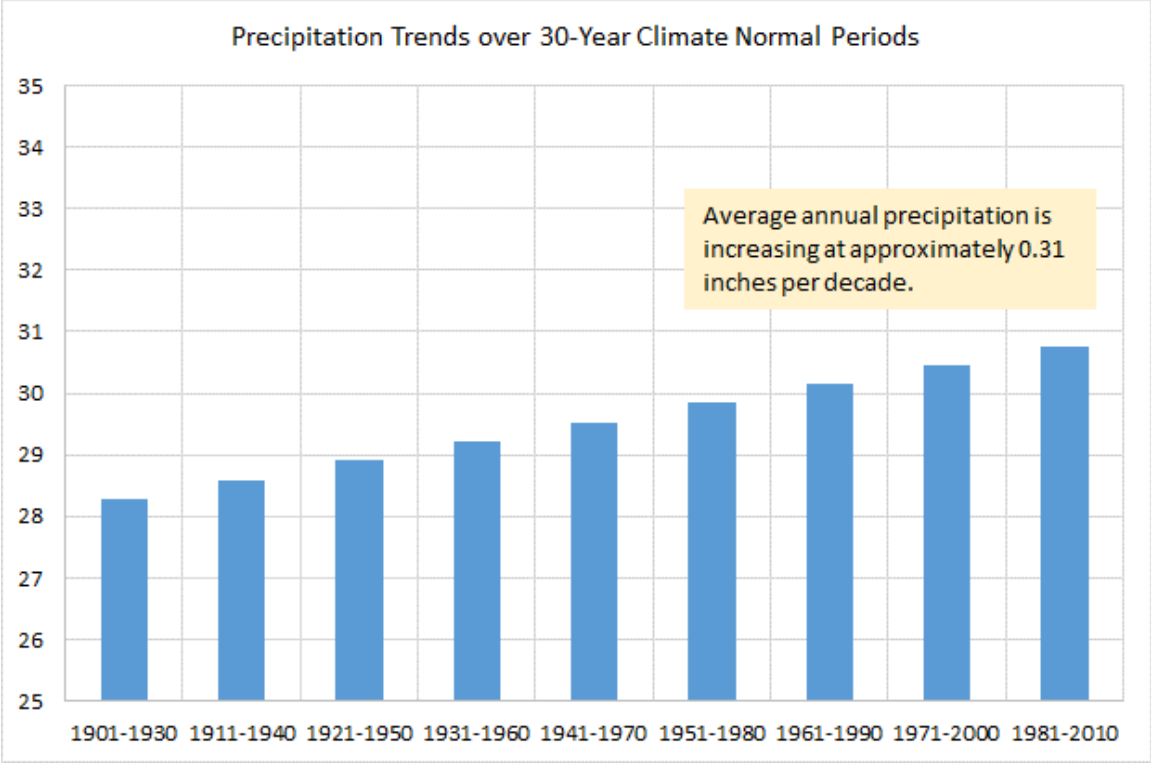


Figure 2-1 Trends in Average Annual Precipitation (Twin Cities Region)

The study of long-term extreme weather trends found that precipitation amounts are predicted to increase significantly over what is historically used in floodplain assessments and infrastructure design. Recent work completed by the University of Minnesota (Moore et al., 2016) provides information useful to consider long-term extreme weather trends in the region. A range of estimates for the mid-21st century 100-year 24-hour rainfall event were identified. The lower estimate for the mid-21st century 100-year, 24-hour rainfall estimate was approximately 7.3 inches, which is similar to the current mean 100-year rainfall depth published in Atlas 14 (7.8 inches). The middle estimate is 10.2 inches, which is similar to the upper limits of the Atlas 14 90-percent confidence limits for the 100-year rainfall depth (10.4 inches). Upper estimates of mid-21st century 100-year 24-hour rainfall exceed the 90-percent confidence limits of Atlas 14.

Additional information about climate change is available from the Minnesota Department of Natural Resources (MDNR) at: https://www.dnr.state.mn.us/climate/climate_change_info/index.html

2.2 Topography and Drainage

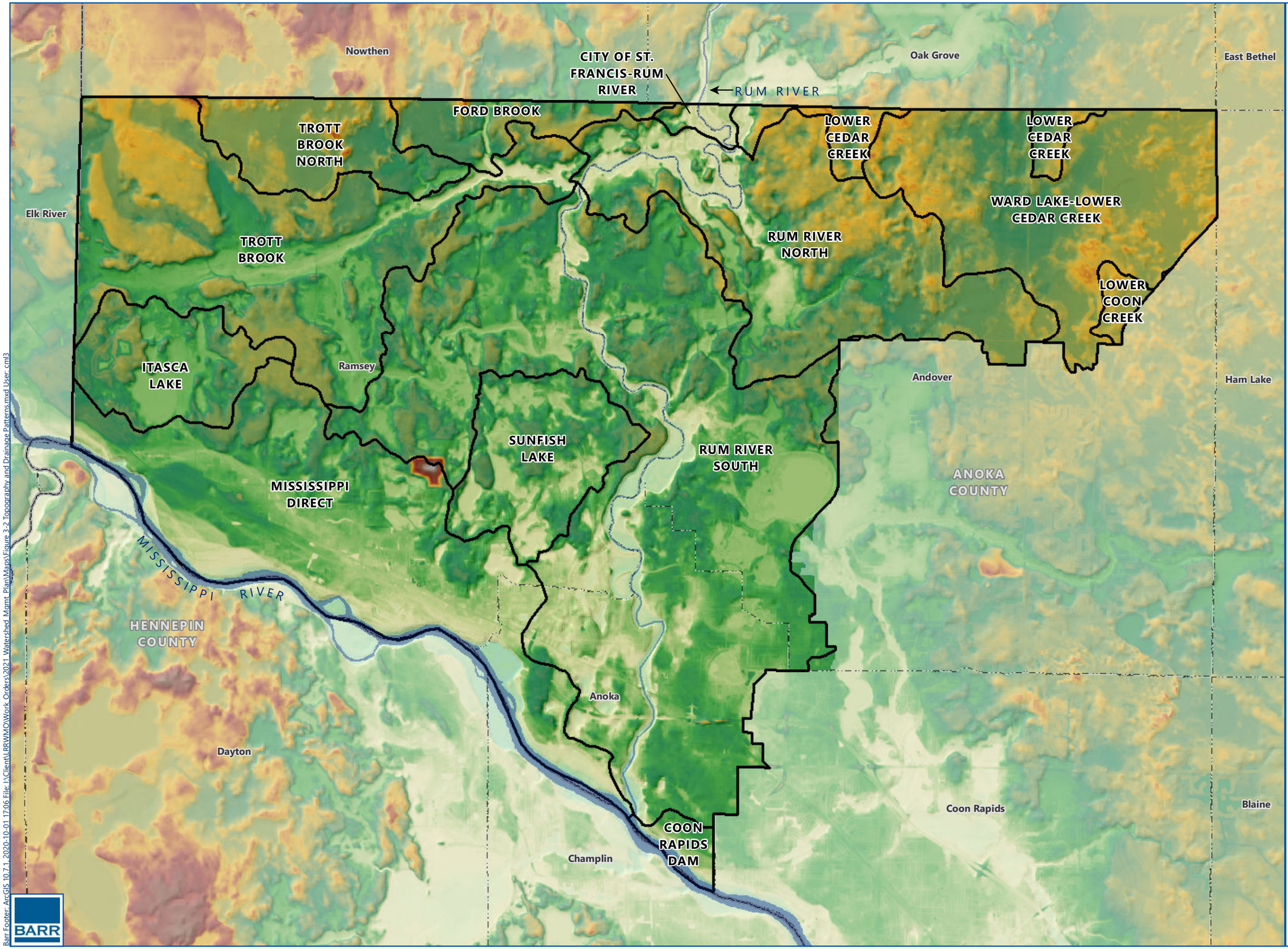
The topography of the watershed is gently rolling to flat. There are many shallow lakes, ponds, and wetlands in the watershed owing in part to a surficial water table that is generally close to the ground surface (see Section 0). The local topographic gradient slopes from the northwest and northeast portions of the watershed towards the Rum River, and from the northeast to the southwest towards the Mississippi River. High ground in the northwest and northeast portions of the watershed reach heights of approximately 920 feet MSL. The minimum elevation of approximately 830 feet occurs the downstream boundary with the Mississippi River. LiDAR elevation data collected in 2011 by the MDNR is presented in Figure 2-2.

The LRRWMO includes portions of 13 MDNR level 8 watersheds. MDNR level 8 watersheds located within the LRRWMO are shown in Figure 2-2 and summarized in Table 3-3. The Plan name refers to the name assigned to each level 8 watershed for LRRWMO resource management purposes; the HUC12 name assigned to each level 8 watershed is also noted. These watershed divides are generally consistent with those used for water quality modeling document in the Rum River WRAPS study (see Section 2.7.4.1).

Table 3-3 MDNR Level 8 Watersheds within the LRRWMO

Plan Watershed	Area within LRRWMO (acres)	Catchment ID	HUC12 Name
Mississippi Direct	5,437	2004100	City of Anoka-Mississippi River
Itasca Lake	1,373	2004101	
Coon Rapids Dam	250	2005600	Coon Rapids Dam-Mississippi River
Lower Coon Creek	183	2005800	Lower Coon Creek
Trott Brook	4,993	2105200	Trott Brook
Trott Brook North	1,313	2109400	
Ford Brook	733	2109300	Ford Brook
City of St. Francis-Rum River	164	2109500	City of St. Francis-Rum River
Lower Cedar Creek	547	2109700	Lower Cedar Creek
Ward Lake-Lower Cedar Creek	3,739	2109900	
Rum River North	4,432	2110000	Rum River
Rum River South	11,418	2110100	
Sunfish Lake	1,677	2110101	

Source: MNDR level 8 watersheds (area reflects area within LRRWMO legal boundary)


Nowthen
CITY OF ST. FRANCIS-RUM RIVER
RUM RIVER
Oak Grove
East Bethel
FORD BROOK
TROTT BROOK NORTH
LOWER CEDAR CREEK
LOWER CEDAR CREEK
Elk River
TROTT BROOK
WARD LAKE-LOWER CEDAR CREEK
RUM RIVER NORTH
LOWER COON CREEK
ITASCA LAKE
Ramsey
Andover
Ham Lake
SUNFISH LAKE
RUM RIVER SOUTH
ANOKA COUNTY
MISSISSIPPI DIRECT
MISSISSIPPI RIVER
HENNEPIN COUNTY
Anoka
Dayton
Coon Rapids
Blaine
COON RAPIDS DAM
Champlin
County Boundary
Municipal Boundary
River
Watershed Boundary
Elevation (m)
High (315 m)
Low (250 m)
Topography Source: USGS National Elevation Dataset 1-arc second DEM.
N
0
2,500
5,000
Feet
TOPOGRAPHY AND DRAINAGE PATTERNS
2021 LRRWMO Watershed Management Plan
FIGURE 2-2
BARR
Barr Footer: ArcGIS 10.7.1, 2020-10-01 17:06 File: J:\Client\LRRWMO\Work Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-2 Topography and Drainage Patterns.mxd User: cml3

2.3 Land Use

The Lower Rum River Watershed, in south-central Anoka County, is on the northern edge of the metropolitan area. Land use within the watershed (2016 data provided by the Metropolitan Council) is summarized in Table 3-4 and Figure 2-3.

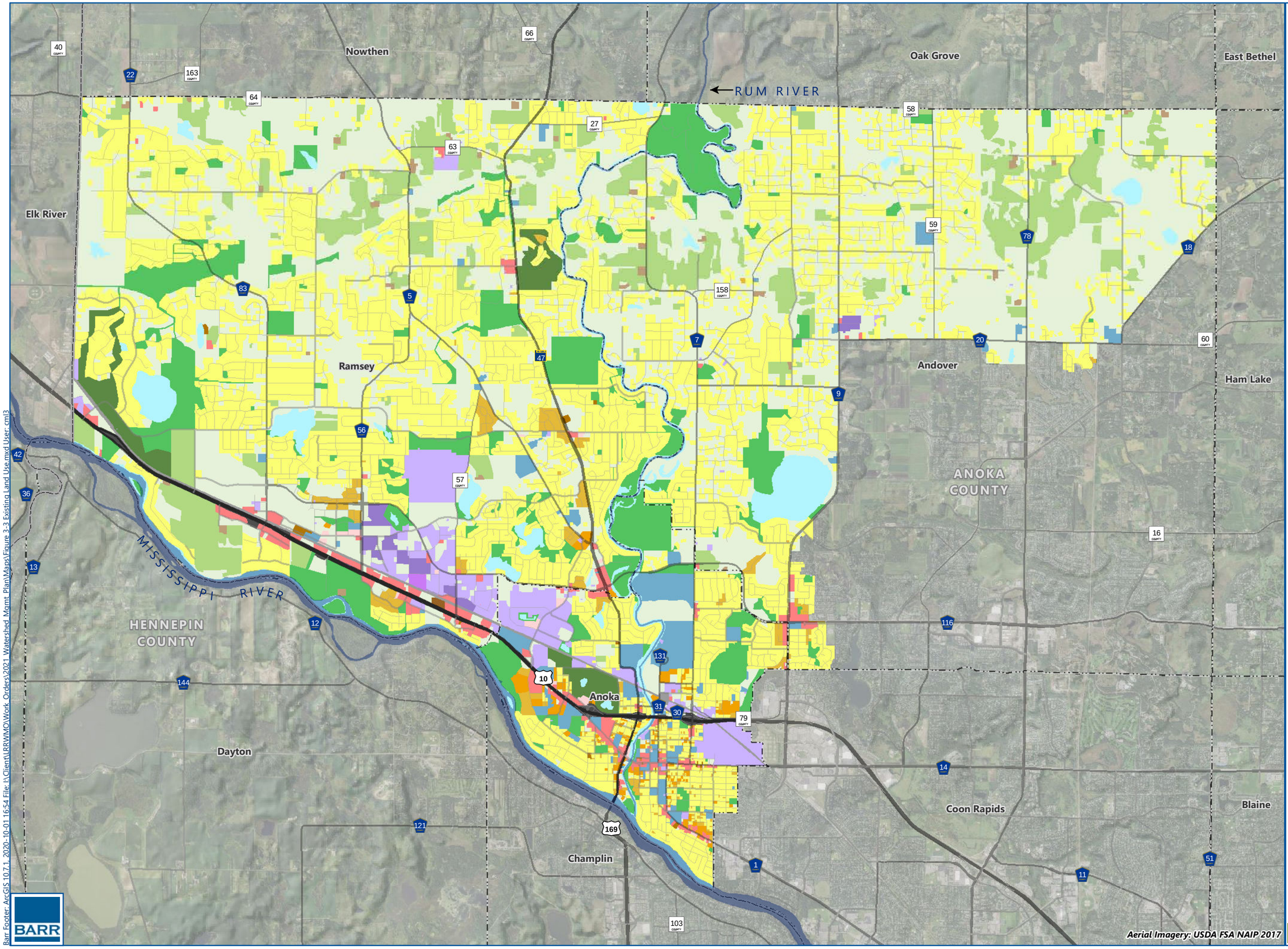
The development that has occurred within the LRRWMO boundary has generally consisted of from agricultural to rural residential land use. Agricultural land use now occupies less than 10% of the watershed, while single family residential land use occupies approximately 40% of the watershed. A significant portion (about 33%) of the watershed remains undeveloped.

Continued development of open space for residential, commercial, and other uses is anticipated over the next twenty years; additional information is available in the 2040 comprehensive plans for the cities of Andover, Anoka, and Ramsey. Estimated 2040 land use available from the Metropolitan Council is presented in Figure 2-4. The development of open space for residential or other land uses typically increases the amount of impervious surfaces (i.e., surfaces through which water cannot infiltrate), increasing the volume of stormwater runoff and associated pollutant loading. Thus, the continued implementation of stormwater performance standards for development (see Appendix E) continue to be an important means of mitigating future water quality and water quantity issues (see Section 5.3.2.1).

Table 3-4 Existing Land Use (2016)

Land Use	Acres	Percent Area
Agricultural or Farmstead	2,976	8.2%
Commercial or Retail	478	1.3%
Golf Course	466	1.3%
Industrial and Utility	1,006	2.8%
Institutional	669	1.8%
Mixed Use	168	0.5%
Open Water	1,425	3.9%
Park, Recreational, or Preserve	2,955	8.1%
Residential, Single Family	13,582	37.3%
Residential, Multifamily	183	0.5%
Transportation (Highway, Rail)	389	1.1%
Undeveloped	12,019	33.0%
Other	78	0.2%
Total	**36,394**	**100.0%**

Source: Check with Eddie



County Boundary
Municipal Boundary
River

Existing Land Use

- Farmstead
- Single Family Detached
- Manufactured Housing Park
- Single Family Attached
- Multifamily
- Retail and Other Commercial
- Office
- Mixed Use Residential
- Mixed Use Industrial
- Industrial and Utility
- Extractive
- Institutional
- Park, Recreational or Preserve
- Golf Course
- Major Highway
- Railway
- Agricultural
- Undeveloped
- Water

Data Source: Generalized Land Use 2016, Metropolitan Council, 2016.

Aerial Imagery: USDA FSA NAIP 2017

N

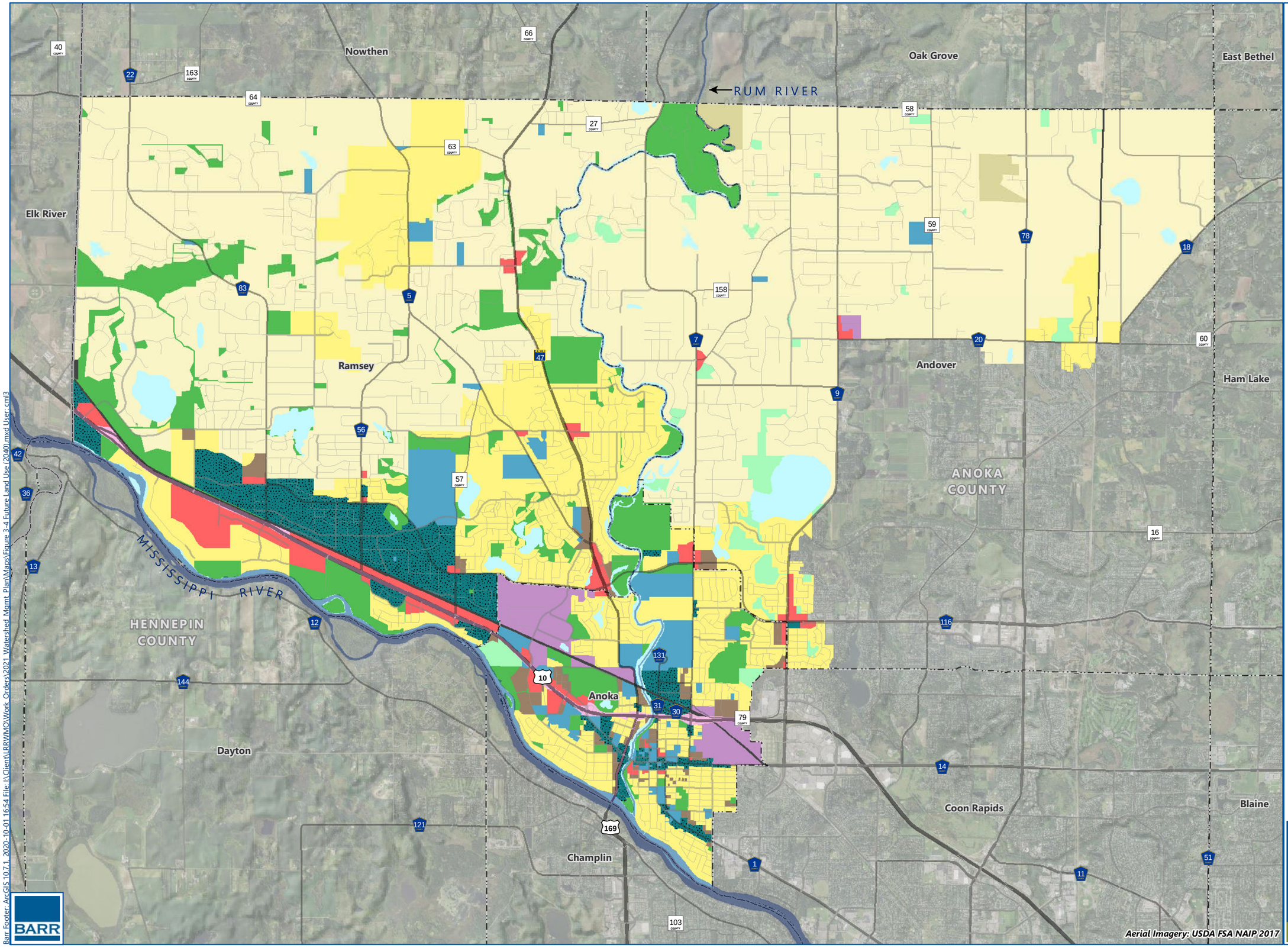
0 2,500 5,000
Feet

EXISTING LAND USE
2021 Watershed Mgmt Plan
LRRWMO

FIGURE 2-3

Barr Footer: ArcGIS 10.7.1, 2020-10-01 16:54 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Maps\Figure 2-3 Existing Land Use.mxd User: cmj3

BARR



County Boundary
Municipal Boundary
River

Future Land Use

- Agricultural
- Rural or Large-Lot Residential
- Single Family Residential
- Multifamily Residential
- Commercial
- Industrial
- Institutional
- Mixed Use
- Multi-Optional Development
- Park and Recreation
- Open Space or Restrictive Use
- Rights-of-Way (i.e., Roads)
- Railway (inc. LRT)
- Open Water

Data Source: Regional Planned Land Use - Twin Cities Metropolitan Area, Metropolitan Council, 2020.

N

0 2,500 5,000
Feet

Aerial Imagery: USDA FSA NAIP 2017

FUTURE LAND USE
2021 LRRWMO Watershed Management Plan

FIGURE 2-4

BARR

Barr Footer: ArcGIS 10.7.1, 2020-10-01 16:54 File: I:\Client\LRRWMO\Work_Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-4 Future Land Use (2040).mxd User: cml3

2.4 Soils

Soil composition and slope are important factors affecting the rate and volume of stormwater runoff. The shape and stability of aggregates of soil particles—expressed as soil structure—influence the permeability, infiltration rate, and erodibility (i.e., potential for erosion) of soils. Slope is important in determining stormwater runoff rates and susceptibility to erosion.

Soils present within the watershed generally belong to the following associations, as described in the Anoka County Soil Survey (There are two general soil associations in the watershed (Source: Anoka County Soil Survey), a description of each association follows.

The **Hubbard-Nymore association** is a nearly-level to gently sloping outwash plain which covers most of the watershed. The association is dissected by well-defined drainageways. Because it is sandy throughout, the association is well suited for urban development; in fact, most of the area covered by this soil is already developed.

The **Zimmerman-Isanti-Lino association** is level to undulating and dominated by fine sands. This association generally covers the City of Andover northeast of Round Lake. The sandplain has a naturally occurring high water table. Most of this association is urbanized, although the high water table has limited uses in some areas.

Soil infiltration capacity affects the amount of direct runoff resulting from rainfall. Higher infiltration rates result in lower potential for runoff, as more precipitation is able to enter the soil. Conversely, soils with low infiltration rates produce high runoff volumes and high peak discharge rates, as most or all of the rainfall moves as overland flow. The Natural Resources Conservation Service (NRCS – formerly the Soil Conservation Service) has established four general hydrologic soil groups (HSGs). These groups are:

Hydrologic Soil Group A—(Low runoff potential): Group A soils have a high infiltration rate and are typically composed of more than 90% sand and gravel.

Hydrologic Soil Group B—(Moderately low runoff potential): Group B soils have a moderate infiltration rate and are typically composed of 50-90% sand.

Hydrologic Soil Group C—(Moderately high runoff potential): Group C soils have a slow infiltration rate and are composed of less than 50% sand.

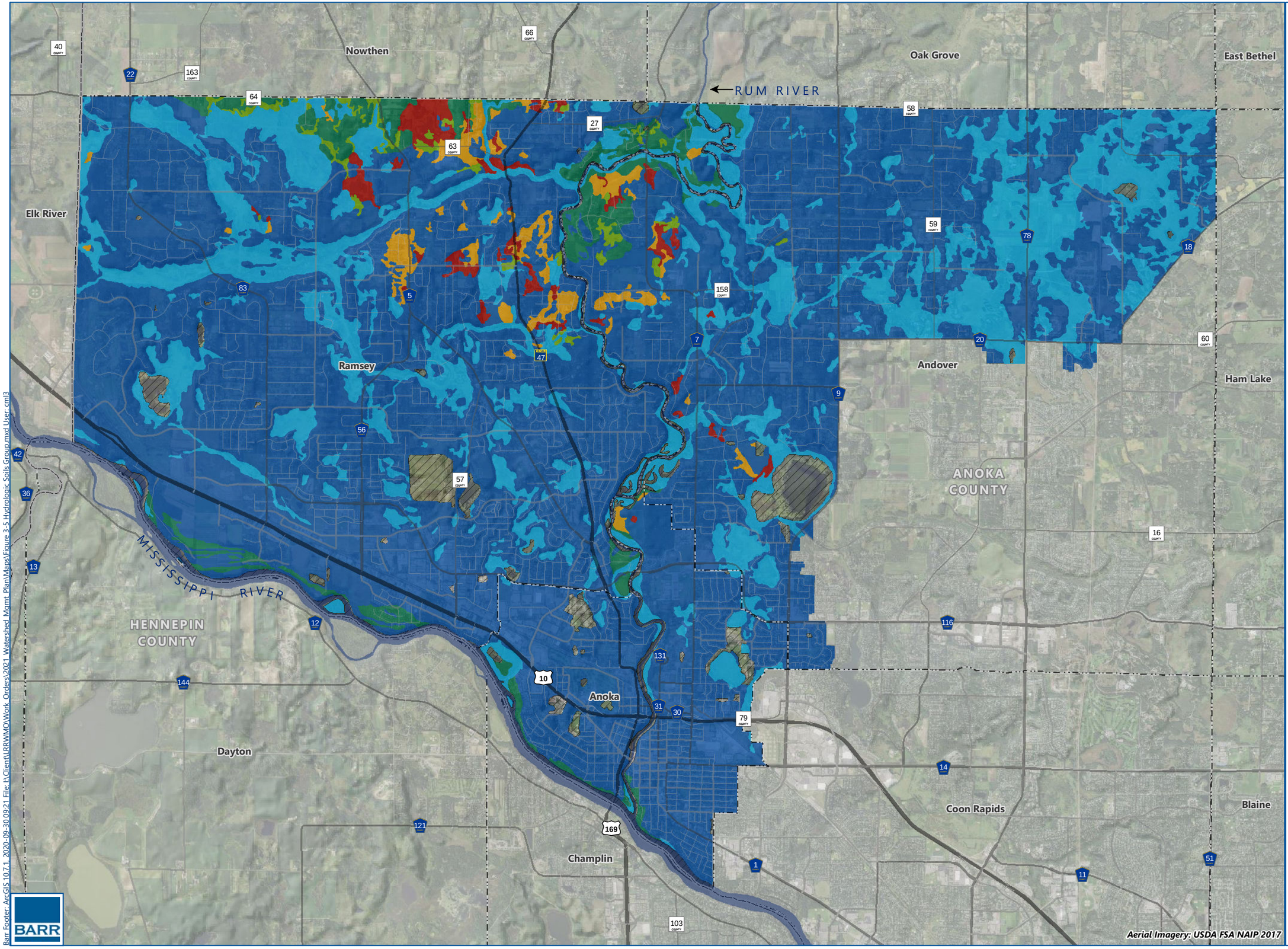
Hydrologic Soil Group D—(High runoff potential): Group D soils have a very slow infiltration rate and are composed of more than 40% clay. These soils have a combination of high swelling potential, a permanently high water table, and a clay layer at or near the surface.

Dual HSGs (types A/D, B/D, and C/D) are soils that are considered D soils primarily because of a high water table. However, if the soil were drained it would be classified into a different group. The second group listed for dual HSG soils is for an undrained condition. For the purpose of evaluating infiltration

capacity, dual HSGs are usually considered as D soils. The most current soils data within the watershed are based on the Soil Survey Geographic dataset (SSURGO) from the NRCS and are presented in Figure 2-5.

Portions of the watershed are not rated with respect to HSG. The "Not Rated/Not Available" classification is typically assigned to areas where development has altered the existing soil, or data were unavailable prior to development. Development may increase the potential for high volumes of runoff. As land is developed for urban use, much of the soil is covered with impervious surfaces, and soils in the remaining areas are significantly disturbed and altered. Development often results in consolidation of the soil and tends to reduce infiltration capacity of otherwise permeable soils, resulting in significantly greater amounts of runoff. Grading, plantings, and tended lawns tend to dominate the pervious landscape in urbanized areas and may become more important factors in runoff generation than the original soil type.

Figure 2-5 provides general guidance about the infiltration capacity of soils. Site specific data such as geologic borings, piezometers, and other engineering studies are necessary to evaluate soil infiltration capacity for individual project sites.



HYDROLOGIC SOIL GROUPS
2021 LRRWMO Watershed Management Plan

FIGURE 2-5

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-30 09:21 File: I:\Client\LRRWMO\Work Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-5 Hydrologic Soils Group.mxd User: cmj3

2.5 Geology

2.5.1 Surficial Geology

The geology of the watershed includes consolidated bedrock formations overlain by unconsolidated glacial sediments (also known as quaternary deposits). Unconsolidated glacial sediments are from glacial deposits left from the quaternary geologic period and modified by post-glacial erosion and soil formation processes. Most of the quaternary deposits in the watershed were deposited approximately 12,000 to 20,000 years ago by the Des Moines lobe (Grantsburg sublobe) of the Wisconsin Glaciation (the most recent local glacial episode) (Meyer and Swanson, 1992). The Grantsburg Sublobe deposited a silty till that was reworked by glacial meltwater over much of the watershed into sand plain, sandy lacustrine and valley train deposits. These glacial deposits, along with older, buried glacial deposits, range from 100 to 250 feet in thickness within the watershed. The watershed is almost entirely located within the Anoka sand plain, a flat, sandy lake plain and terraces along the Mississippi River. This is a highly permeable sand layer with generally high water table.

More information about the surficial geology of the LRRWMO is available from the Anoka County Geologic Atlas at: https://conservancy.umn.edu/handle/11299/116119

2.5.2 Bedrock Geology

Consolidated bedrock formations (bedrock deposits) are much older and lie below the glacial deposits. They include overlapping sequence of sandstones, limestones, dolostones, and shales. Most bedrock units in the watershed were deposited during the Paleozoic era marine environments about 450 to 530 million years ago. The uppermost layer of bedrock varies with location but is generally belongs to the St. Lawrence formation or Tunnel City group (formerly Franconia formation). Buried bedrock valleys that cut down to the Wonewoc sandstone and Eau Claire formation occur in the north and southeast portions of the watershed (reference geologic atlas). The Eau Claire Formation acts as a confining unit between the overlying Wonewoc sandstones and the underlying Mt. Simon Sandstone-Hinckley Sandstone aquifer.

Table 3-5 Bedrock geology characteristics

Geologic Unit	Approximate Thickness (feet)	Description	Water-Bearing Characteristics
Glacial Drift	100-250	Till, sand, gravel, lake deposits	May yield small supplies for domestic use
St. Lawrence Formation	40-50	Dolomitic siltstone and sandstone	Confining bed with little yield
Tunnel City Group	140-180	Fine to very fine grain	May yield small supplies for limited use
Wonewoc Sandstone	50-60	Fine to coarse grain, moderately sorted sandstone	A significant aquifer within the LRRWMO watershed
Eau Claire Sandstone	75-80	Fine grained sandstone, siltstone and shale	Confining bed with little yield
Mount Simon Sandstone	125-200	Medium to coarse grain	A significant aquifer in the Twin Cities metropolitan area

Source: Anoka County Geologic Atlas

More information about the bedrock geology of the LRRWMO is available from the Anoka County Geologic Atlas at: https://conservancy.umn.edu/handle/11299/116119

2.6 Groundwater

The glacial and bedrock deposits form layered sequence of aquifers and confining unit. An aquifer is a geologic formation capable of supplying sufficient quantities of water to a well. A confining unit is a geologic deposit that impedes the flow of water between aquifers (see also the *Anoka County Geologic Atlas* (Setterholm, 2013)).

The uppermost aquifers in the LRRWMO are glacial deposits. Glacial aquifers (also known as surficial aquifers) include the water table and buried glacial aquifers, which are primarily used for domestic purposes. Glacial aquifers are variable in location and yield. Groundwater quality in glacial aquifers is often correlated to the quality of the water that is infiltrating at the surface. The regional groundwater flow within the surficial aquifers and glacial drift is generally to the south, except near the Rum River where ground water tends to flow toward these surface waters. The Rum River is predominately a discharge area for groundwater. Areas not near the Rum River are predominately groundwater recharge areas (see Section 2.6.1).

Most high-capacity wells draw water from bedrock aquifers. The bedrock aquifers within the District include the following:

- **Tunnel City-Wonewoc Aquifer** (formerly Franconia-Ironton-Galeville Aquifer) – This aquifer includes three hydrogeologically connected layers. Groundwater flow in this aquifer is generally from towards the Mississippi River. Within this aquifer, the hydraulic conductivity is variable. This

aquifer generally has moderate to low yield; wells completed within this aquifer may be capable of producing up to several hundred gallons of water per minute. Many wells within the LRRWMO utilize this source (MDNR, 2016), including some municipal wells.

- **Mt. Simon-Hinckley Aquifer** – This aquifer underlies all of Anoka County and is composed of fine- and coarse-grained sandstone. Groundwater flow is generally south towards a cone of depression formed by pumping in Hennepin County. The aquifer has moderate to high yield, low vulnerability to contamination, and is used in the watershed for municipal drinking water supplies. The MDNR has placed restrictions on the placement of wells within the Mt. Simon in the Metropolitan Area.

The Metropolitan Council completed the Regional Water Supply, Enhanced Groundwater Recharge, and Stormwater Capture and Reuse Study for the Northwest Metro Study Area in 2018. Groundwater modeling performed as part of the study estimates future impacts to local aquifers from continued development of groundwater sources, including up to 30 feet of decline in the Tunnel City-Wonewoc aquifer by 2040 that may limit the availability of groundwater resources in the future. Users of groundwater meeting certain use criteria are required to obtain a water appropriations permit from the MDNR; more information is available from: https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/index.html

Additional information about the aquifers within the watershed is available from the following sources:

- Regional Hydrogeologic Assessment (RHA) of the Anoka Sand Plain (MDNR, 1993), available at: https://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platesum/rha_asp.html
- Anoka County Geologic Atlas, Part B – Hydrogeology (MDNR, 2016), available at: https://www.dnr.state.mn.us/waters/programs/gw_section/mapping/platesum/anokcga.html
- Metropolitan Council Water Supply Planning, available at: https://metrocouncil.org/Wastewater-Water/Planning/Water-Supply-Planning.aspx

2.6.1 Groundwater Recharge

Recharge to groundwater occurs throughout the watershed. The local surficial geologic characteristics affect the rate, volume, and distribution of recharge. Water infiltrates most rapidly into sandy deposits and flows easily through sandy materials; clay deposits tend to slow and impede infiltration and subsurface flows. Relative to natural conditions, impervious surfaces (e.g., buildings, streets, parking lots) in developed areas have reduced the amount of open space and decreased the amount of land available to infiltrate runoff and recharge groundwater.

Surficial aquifers usually have higher static water levels than deeper aquifers, indicating that water flows downward into the aquifer system and that surficial aquifers help recharge deeper aquifer systems. Deeper bedrock aquifers are recharged through bedrock valleys, leakage through confining layers, fractures in tills and confining layers, improperly constructed wells, and other areas where good hydraulic connections and unforeseen flowpaths exist with upper aquifer units.

Groundwater recharge reaches the water table (i.e., quaternary or surficial aquifer) at a fast rate through sandy geologic deposits. The location of the watershed within the Anoka sand plain creates the potential for high infiltration rates throughout the LRRWMO and associated groundwater contamination from pollutants carried from the ground surface. The sensitivity of the surficial aquifer to contamination was assessed as part of the MDNR's 1993 Regional Hydrogeologic Assessment (RHA) and is presented in Figure 2-6. Management of stormwater runoff in the watershed must consider and the ease with which contaminants will enter the system and be transported through it.

2.6.2 Drinking Water Supply, Wellhead Protection, and Pollution Prevention

Residents within the LRRWMO obtain their drinking water from municipal groundwater wells and private domestic wells. Approximately 50% of the cities of Andover and Ramsey, and all of Anoka, are served by municipal systems. Most private wells are located in the surficial aquifer, which is sensitive to contamination within the watershed (see Figure 2-6). Municipal wells within the LRRWMO tap the Mt. Simon aquifer, Tunnel City-Wonewoc aquifer, and as well as the surficial aquifer.

In 1989 the state of Minnesota instituted the Minnesota Groundwater Protection Act, which identified the Minnesota Department of Health (MDH) as responsible for the protection of groundwater quality. Through its wellhead protection program, the MDH administers and enforces the Minnesota Water Well Code, which regulates activities such as well abandonment and installation of new wells. The MDH also administers the Wellhead Protection Program, which is aimed at preventing contaminants from entering the recharge zones of public well supplies. In 1997, the Wellhead Protection Program rules (Minnesota Rules 4720.5100 to 4720.5590) went into effect.

Some public water suppliers are required to prepare wellhead protection plans (WHPPs), including the Cities of Andover, Anoka, and Ramsey. Through these wellhead protection plans, public water suppliers delineate drinking water supply management areas (DWSMA) for groundwater wells, assess the water supply's susceptibility to contamination from activities on the land surface, and establish management programs, such as identification and sealing of abandoned wells and education/public awareness programs. The DWSMA represents the boundaries of the recharge area to the well and is the area to be protected and managed by the wellhead protection plan. DWSMAs located within the LRRWMO are presented in Figure 2-7.

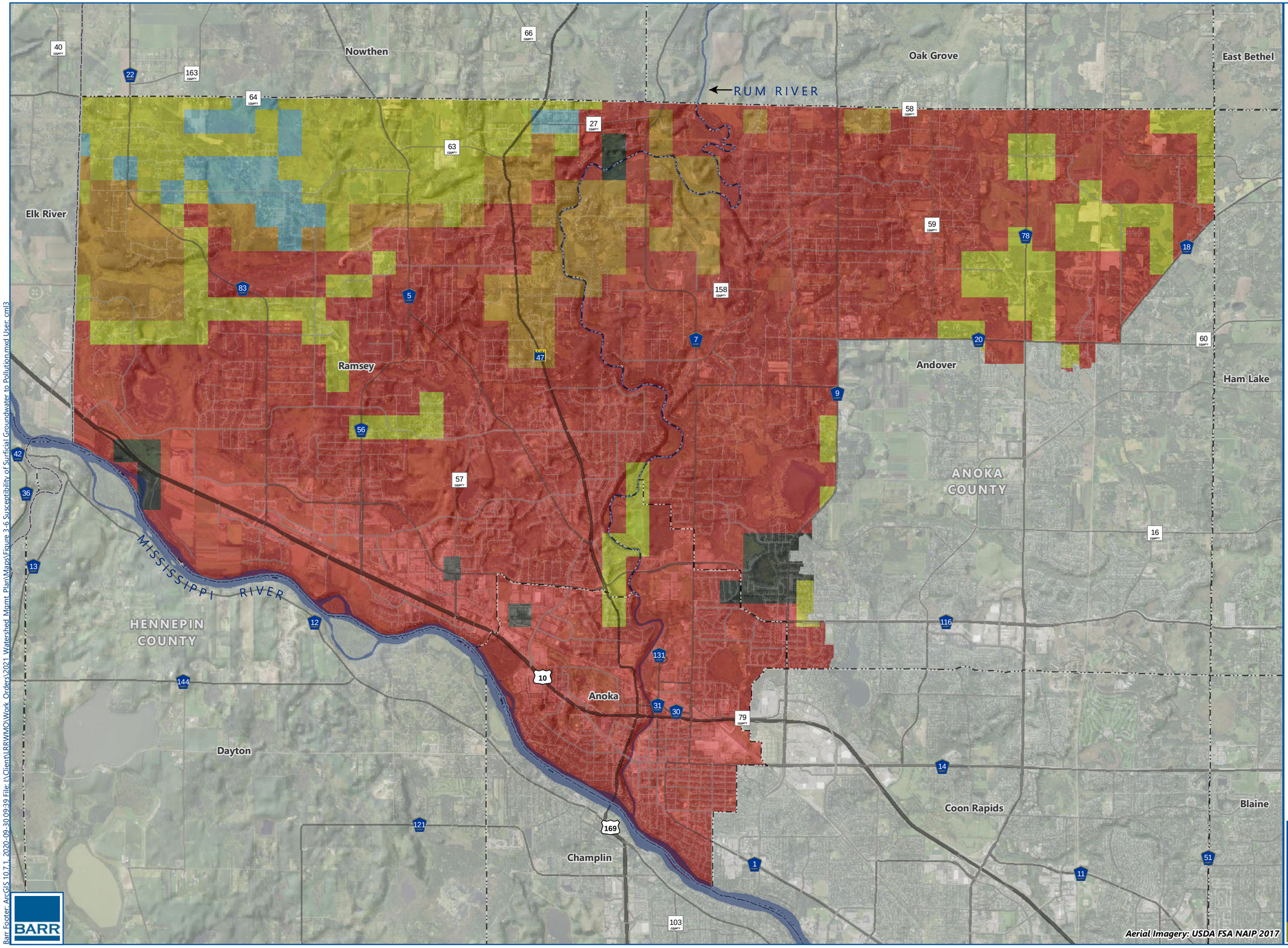
The LRRWMO and its cities rely on infiltration practices to improve water quality and reduce stormwater volumes. Thus, the LRRWMO will continue to consider the possible impacts of infiltrated stormwater on groundwater quality. The MDH and MPCA also provide guidance for evaluating infiltration projects in areas with vulnerable groundwater supplies; the guidance considers the presence of wellhead protection areas, aquifer characteristics, land use, and other factors. This guidance is available from the MPCA website: https://stormwater.pca.state.mn.us/index.php/Stormwater_and_wellhead_protection

The LRRWMO is located within the source water protection area of the cities of Minneapolis and St. Paul. These cities draw drinking water from the Mississippi River approximately 16 miles downstream from the LRRWMO. Source water protection planning for these cities is being coordinated by the Minnesota Rural Water Association (MRWA). The cities of Andover, Anoka, and Ramsey are members of the MRWA. The

LRRWMO, through its policies, regulations, and implementation actions will continue to promote the protection and improvement of water drinking supplies downstream of the LRRWMO.

Additional information regarding groundwater resource protection and management is available from the following sources:

- 2020 Anoka County Water Resources Report, available at: https://www.anokacounty.us/DocumentCenter/View/5631/Water-Resources-Report-2020
- Metropolitan Council Water Supply Planning, available at: https://metrocouncil.org/Wastewater-Water/Planning/Water-Supply-Planning.aspx



County Boundary

Municipal Boundary

River

Groundwater Contamination Susceptibility

- Lowest Susceptibility
- Low Susceptibility
- Medium Susceptibility
- High Susceptibility
- Highest Susceptibility
- Insufficient Data to Rank

Data Source: Ground Water Contamination Susceptibility in Minnesota, Minnesota Pollution Control Agency and Land Management Information Center, 1989.

N

0 2,500 5,000

Feet

Aerial Imagery: USDA FSA NAIP 2017

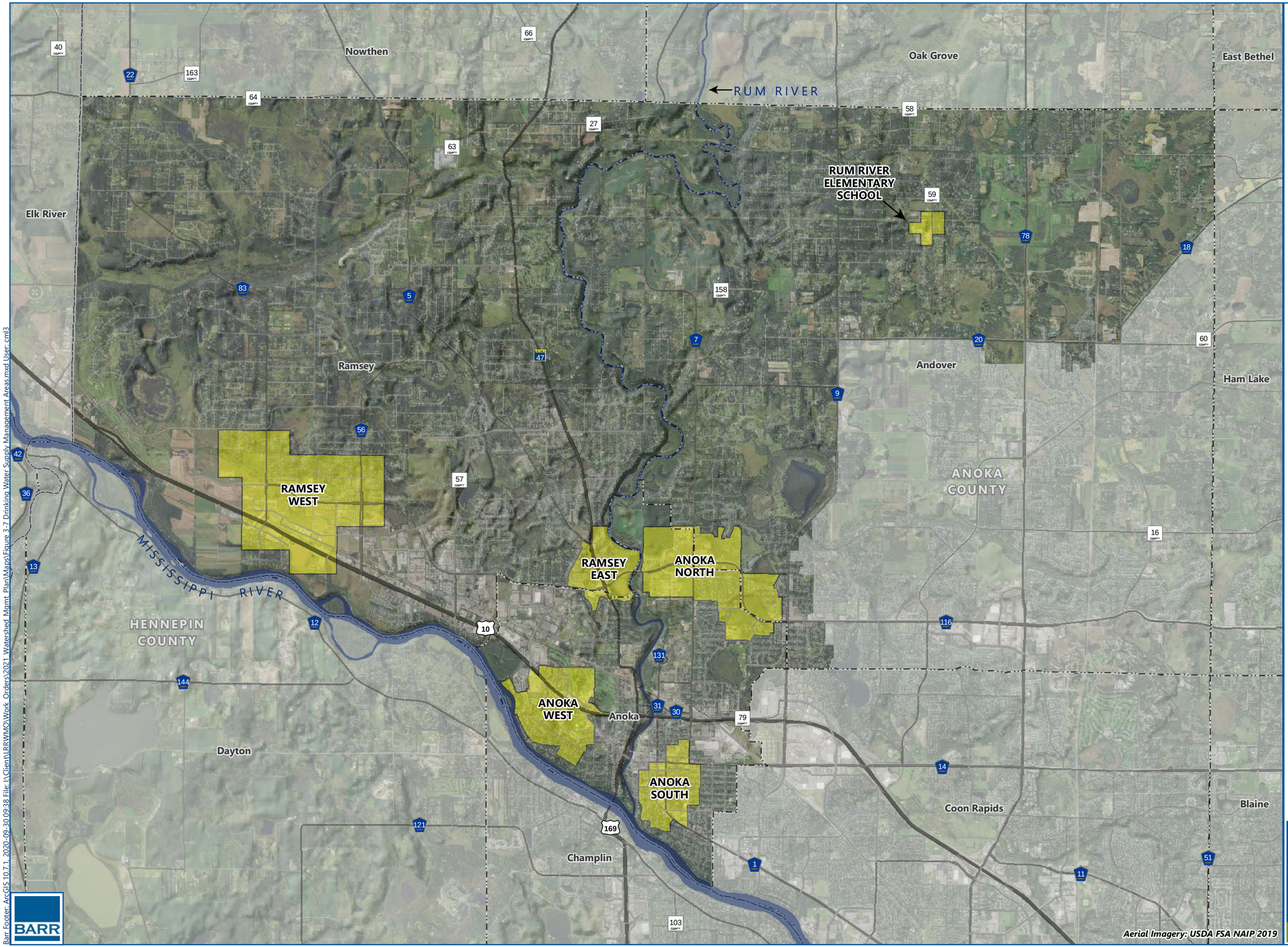
SUSCEPTIBILITY OF GROUNDWATER TO POLLUTION

2021 Watershed Management Plan
LRRWMO

FIGURE 2-6

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-30 09:39 File: I:\Client\LRRWMO\Work Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-6 Susceptibility of Surficial Groundwater to Pollution.mxd User: cml3



County Boundary

Municipal Boundary

River

Drinking Water Supply Management Area

Data Source: Minnesota Department of Health, Drinking Water Supply Management Areas, 2019.

Aerial Imagery: USDA FSA NAIP 2019

N

0 2,500 5,000

Feet

DRINKING WATER SUPPLY MANAGEMENT AREAS

2021 LRRWMO Watershed Management Plan

FIGURE 2-7

2.6.4 Groundwater Monitoring

Limited groundwater monitoring data is available within the watershed. The MPCA also implements a groundwater quality monitoring program; the program focuses on quaternary aquifers located throughout the state, including those used by private and municipal wells within the LRRWMO. Groundwater quality monitoring locations within the LRRWMO are presented in Figure 2-10. Groundwater quality monitoring information and data is available online from the MPCA at: https://www.pca.state.mn.us/water/groundwater-monitoring

The MDNR also coordinates an observation well network and collects static groundwater-level data to assess groundwater resources, determine long term trends, interpret impacts of pumping and climate, plan for water conservation, and evaluate water conflicts. The observation well network includes one well located within the LRRWMO (see Figure 2-10). More information is available from the MDNR at: https://www.dnr.state.mn.us/waters/cgm/program.html

2.6.5 Groundwater Quality

Long-term data for analyzing groundwater quality trends in the LRRWMO is limited. MDH tests water quality of several municipal drinking supply wells in Anoka County, but often only after treatment. Water quality testing for residential wells is available through Anoka County. Few studies have been completed, including the 1993 report "Effects of agricultural and residential land use on ground-water quality, Anoka Sand Plain Aquifer, east-central Minnesota" (USGS, 1993). Groundwater quality and data is available online from the MPCA at: https://www.pca.state.mn.us/water/groundwater-monitoring

Groundwater contamination has also been confirmed at landfill sites (e.g. the Anoka-Ramsey Landfill in Ramsey and the Waste Disposal Engineering Landfill in Andover) (Anoka County, 2020). Other potential sources of groundwater contamination in the watershed include: commercial and industrial waste disposal, landfills, leaking petroleum tanks, unsealed wells, non-compliant subsurface sewage treatment systems (SSTS), fertilizer/pesticide applications, animal waste, and road salt application (see also Section 2.10). Emerging contaminants include pharmaceuticals, industrial effluents, personal care products, fire retardants, and other items that are washed down drains and not able to be processed by municipal wastewater treatment plants or septic systems.

2.7 Surface Water Resource Data

The LRRWMO is located upstream of the confluence of the Rum River and the Mississippi River. The Mississippi River forms much of the south and west boundary of the LRRWMO and is a major regional resource serving power generation, recreation, navigation, and ecological functions. Additionally, the Rum River is a significant regional resource serving recreational and ecological functions.

Development within the cities of Andover, Anoka, and Ramsey has resulted in alterations to the natural hydrologic system. To facilitate development, natural drainages have been diverted or piped, wetlands had been drained or filled, and stormwater infrastructure was constructed. Still, many natural hydrologic features remain in the watershed.

The natural and altered hydrologic features present in the watershed are divided into the subwatersheds (MDNR level 8) presented in Figure 2-2. Surface waters classified by the MDNR as public waters are presented in Figure 2-8. The MDNR designates certain water resources as public waters to indicate those lakes, wetlands, and watercourses over which the MDNR has regulatory jurisdiction. By statute the definition of public waters includes both "public waters" and "public waters wetlands." The collection of public waters and public waters wetlands designated by the MDNR is generally referred to as the public waters inventory, or PWI.

Public waters are all water basins (i.e., lakes, ponds, wetlands) and watercourses (i.e., streams, rivers) that meet the criteria set forth in Minnesota Statutes, Section 103G.005, Subd. 15 that are identified on public water inventory maps and lists authorized by Minnesota Statutes, Section 103G.201. The regulatory boundary of public waters and public water wetlands is called the ordinary high water level (OHWL). For watercourses, the OHW is generally the elevation of the top of the bank of the channel. A MDNR permit is required for work within designated public waters. Additionally, shoreland development requirements may exist for public waters with shoreland classifications. Table 3-6 summarizes the public waters located within the watershed. PWI maps and lists are available on the MDNR's website: http://www.dnr.state.mn.us/waters/watermgmt_section/pwi/maps.html.

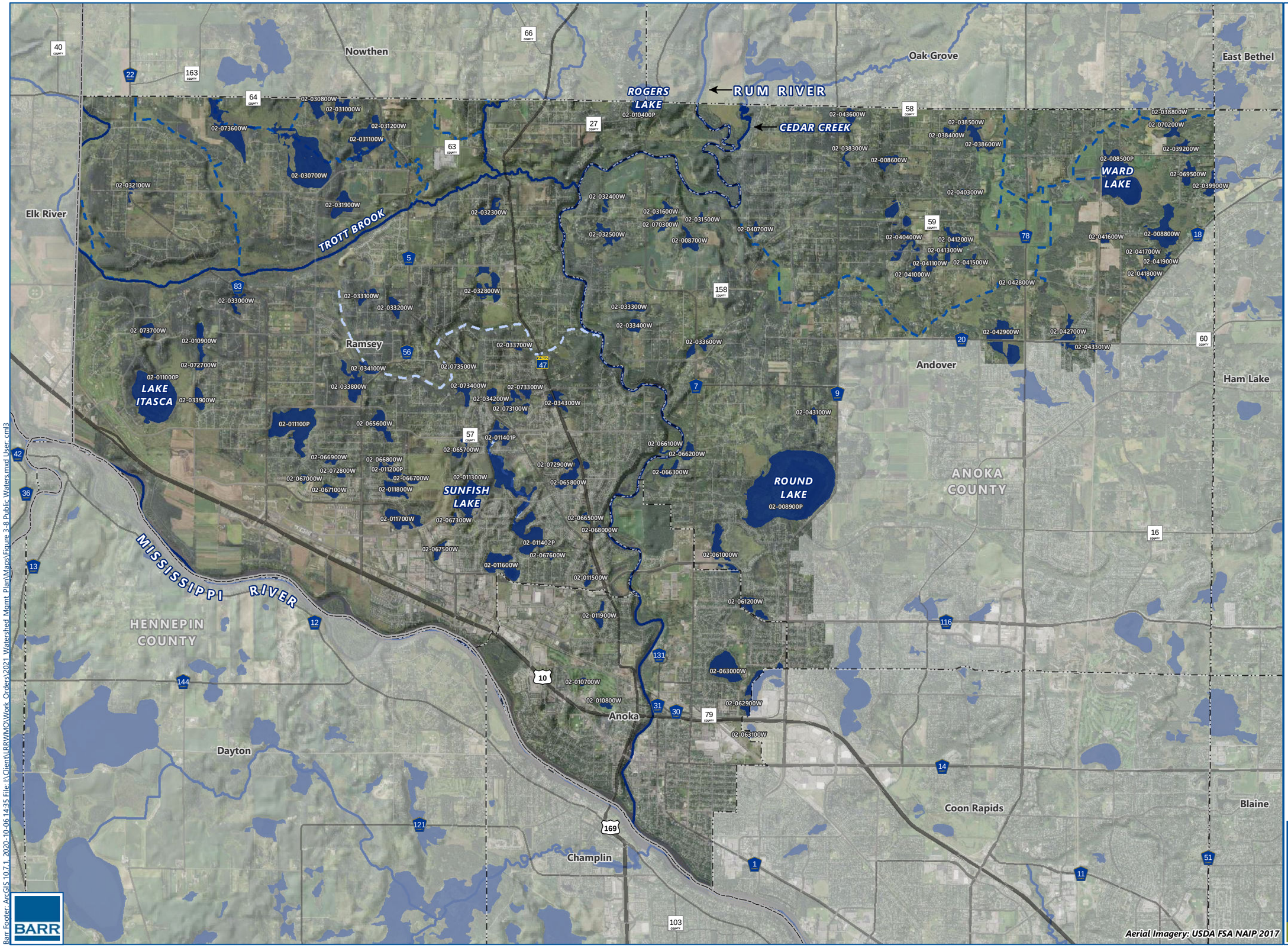
Table 3-6 Major Public Waters within the LRRWMO

Resource Name	MDNR ID Number	Area (acres)	Length[1] (miles)	Lake (P) or Wetland (W)	MDNR Shoreland Classification	OHWL (feet)	LRRWMO Priority Water
Ward Lake	02-0085	93	--	P	Natural Environment	883.7	
Round Lake	02-0089	352	--	P	Recreational Development	866.4	X
Rogers Lake	02-0104	45 2	--	P	Natural Environment	883.9	X
Lake Itasca	02-0110	122	--	P	Natural Environment	871.4	
Jeglens Marsh	02-0111	89	--	P	Natural Environment	870.5	
Grass Lake (Sunfish Lake)	02-0113	36	--	W	Natural Environment	861.6	X
Unnamed	02-0114	131	--	P	Natural Environment	--	
Rum River	109010	--	13.8	--	Scenic or Recreation River	Varies	X
Trott Brook	109012	--	6.4	--	--	Varies	
Ford Brook	109013	--	1.2	--	--	Varies	
Cedar Creek	109015	--	0.9	--	--	Varies	

Source: MDNR Public Waters Inventory

(1) Length within the LRRWMO

(2) Approximately 15 acres of Round Lake is located within the LRRWMO



County Boundary

Municipal Boundary

Public Water Inventory Basin[1]

Public Water Inventory Watercourse[1]

Ditch Owned By Anoka County[2]

Ditch Owned By LRRWMO[2]

Data Sources:
1. Minnesota Department of Natural Resources, Public Waters (PW) Basin and Watercourse Delineation, 2020.
2. Anoka County Open Access GIS Data, Accessed 10/6/2020.

N

0 2,500 5,000

Feet

Aerial Imagery: USDA FSA NAIP 2017

PUBLIC WATERS
2021 LRRWMO Watershed Management Plan

FIGURE 2-8

BARR

Barr Footer: ArcGIS 10.7.1, 2020-10-06 14:35 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Maps\Figure 3-8 Public_Waters.mxd User: cml3

2.7.1 LRRWMO Priority Waters

There are many public waters within the LRRWMO (see Figure 2-8); the LRRMWO lacks the capacity to monitor and manage all of these resources. Therefore, the LRRWMO has classified the following public waters as LRRWMO priority waters:

- Round Lake
- Grass Lake (Sunfish Lake)
- Rogers Lake
- Rum River

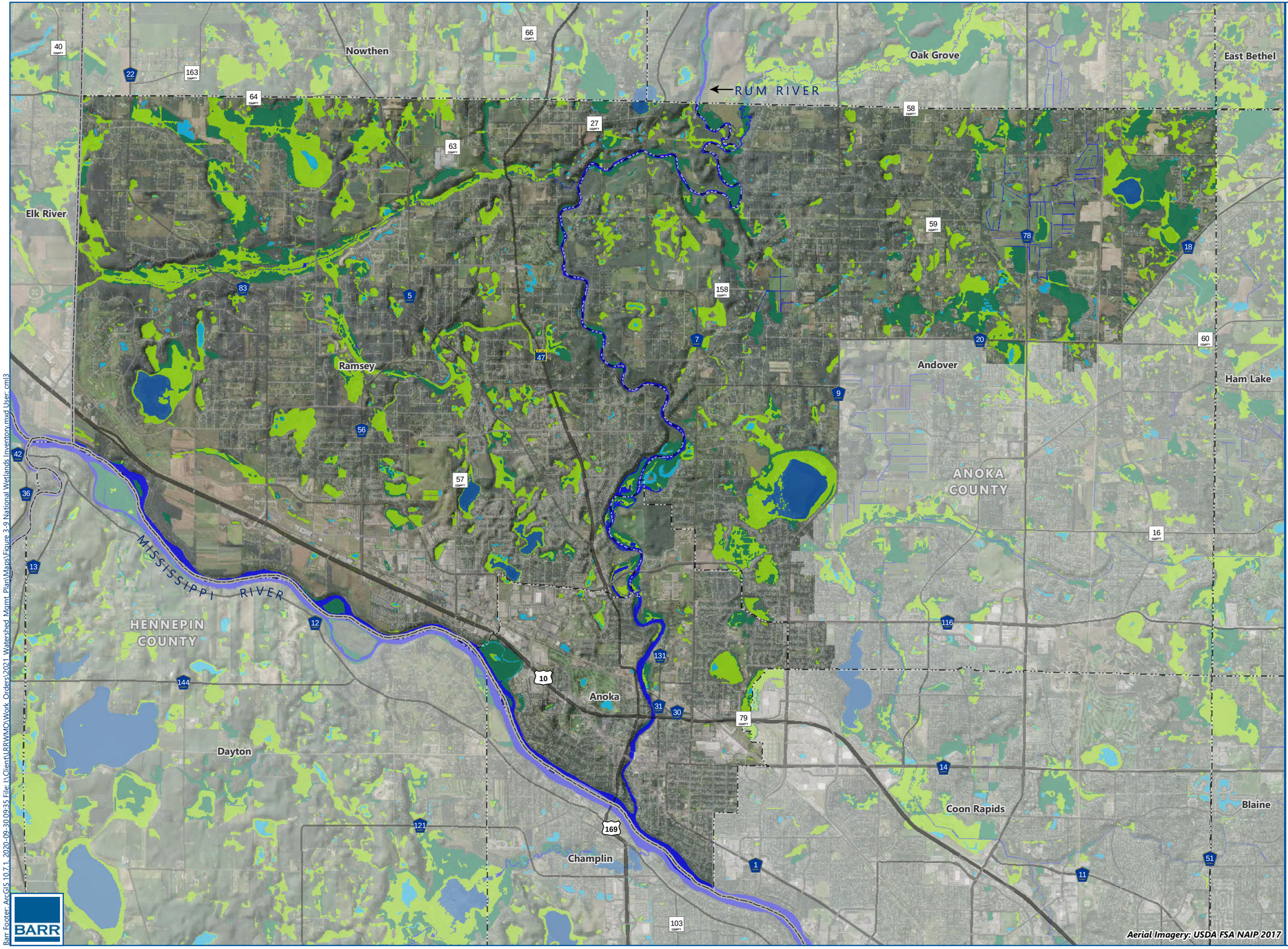
These waters have been classified as priority waters due to a combination of recreational use and value, ecological function and quality, and local priorities. As priority waters, the LRRWMO has established measurable goals for these resources (see Section 4.1) and identified implementation activities (see Table 5-1) to manage these resources. The LRRWMO also cooperates with the Anoka Conservation District (ACD), MPCA, and others to monitor the water quality of these resources. Omission of a waterbody from the LRRWMO priority waters list does not prevent or prohibit the LRRWMO from taking action to manage these waterbodies, if need should arise.

2.7.2 Wetlands

Wetlands in the LRRWMO are important community and ecological assets. Wetlands provide recreational value, runoff storage and retention, nutrient and sediment reduction, groundwater recharge, and wildlife habitat benefits. To protect these valuable resources, the LRRWMO and its member cities cooperate to manage wetlands to achieve no net loss of acreage, functions, and value. Within the watershed, the LRRWMO serves as the Local Government Unit (LGU) responsible for administration of the Wetland Conservation Act (WCA) (except for on Minnesota Department of Transportation projects). The LRRWMO's wetland permitting role is discussed in greater detail in Section 5.3.2.1. More information about WCA guidance is provided at the BWSR website: https://bwsr.state.mn.us/wetlands-regulation-minnesota

The US Fish and Wildlife Service (USFWS) maintains an inventory of wetlands known as the National Wetland Inventory (NWI). Wetlands identified in the NWI are presented in Figure 2-9. The NWI is periodically updated and was last updated for the area of the LRRWMO in 2013. The City of Ramsey has completed a detailed wetlands inventory (284 wetlands), including functions and values assessment (using MnRAM 3.0 methodology). Additional detail is available in the Ramsey Surface Water Management Plan (2018). Wetlands within the cities of Andover and Anoka are inventoried on an individual basis as part of development proposals.

The LRRWMO requires functional values of wetlands to be assessed on a case by case basis, by each municipality, for any wetland impacts proposed in the watershed, including projects requiring an LRRWMO permit (see Section 5.3.2.1.). The LRRWMO requires the Minnesota Routine Assessment Method for Evaluating Wetland Functions (MnRAM), version 3.2 or the most current version, is to be used to identify the functional value of wetlands within the watershed. Information about wetland functional assessment is available from BWSR are: www.bwsr.state.mn.us/wetlands/mnram/index.html.



County Boundary

Municipal Boundary

National Wetlands Inventory

- Freshwater Emergent Wetland
- Freshwater Forested/ Shrub Wetland
- Riverine
- Freshwater Pond
- Lake

Data Source: National Wetlands Inventory, U.S. Fish and Wildlife Service.

Aerial Imagery: USDA FSA NAIP 2017

N

0 2,500 5,000

Feet

NATIONAL WETLANDS INVENTORY

2021 LRRWMO Watershed Management Plan

FIGURE 2-9

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-30 09:35 File: I:\Client\LRRWMO\Work_Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-9 National Wetlands Inventory.mxd User: cmj3

2.7.3 Surface Water Monitoring and Modeling

Surface water quality data exists for many of the water bodies within the watershed. Several agencies have instituted programs based on particular needs, including:

- Anoka Conservation District (ACD)
- Metropolitan Council
- Minnesota Pollution Control Agency (MPCA)
- U.S. Geological Survey (USGS)

Monitoring parameters vary by monitoring program, but may include:

- Water chemistry (e.g., phosphorus, total suspended solids, chloride)
- Biological data (e.g., indices of biological integrity, macroinvertebrates, fish inventories)
- Hydrologic data (e.g., flow, water level)

Monitoring locations within the watershed are presented in Figure 2-10. Much of the historical monitoring data for the watershed is available from the MPCA's Environmental Data Access (EDA) database at: https://www.pca.state.mn.us/eda-surface-water-data

The Anoka Conservation District presently monitors water chemistry, biological, and physical parameters in several LRRWMO waterbodies (see Table 3-7). The ACD monitors the water quality of Round Lake and the Rum River annually, while Grass (Sunfish) Lake water quality is monitored every two years. The ACD also sponsors biomonitoring of invertebrates of the Rum River is done in the spring and fall of each year. The ACD also performs targeted monitoring studies to address specific water quality and quantity issues. Additional detail regarding the ACD monitoring programs, methods, and results are available from the ACD website at: https://www.anokaswcd.org/technical-support.html

Table 3-7 Anoka Conservation District (ACD) surface water monitoring in LRRWMO

Resource Name	Water Level	Total Phosph-orus	Chloro-phyll-a	Trans-parency	Total Suspended Solids	Turbidity	Chloride	Biological
Round Lake[1]	Weekly	X	X	X		X		
Rogers Lake	Weekly							
Lake Itasca	Weekly							
Grass Lake (Sunfish Lake) [1]	Weekly	X	X	X	X	X	X	X
Rum River[1]		X		X	X		X	X

Source: ACD 2019 Water Almanac; the table does not include all monitored parameters

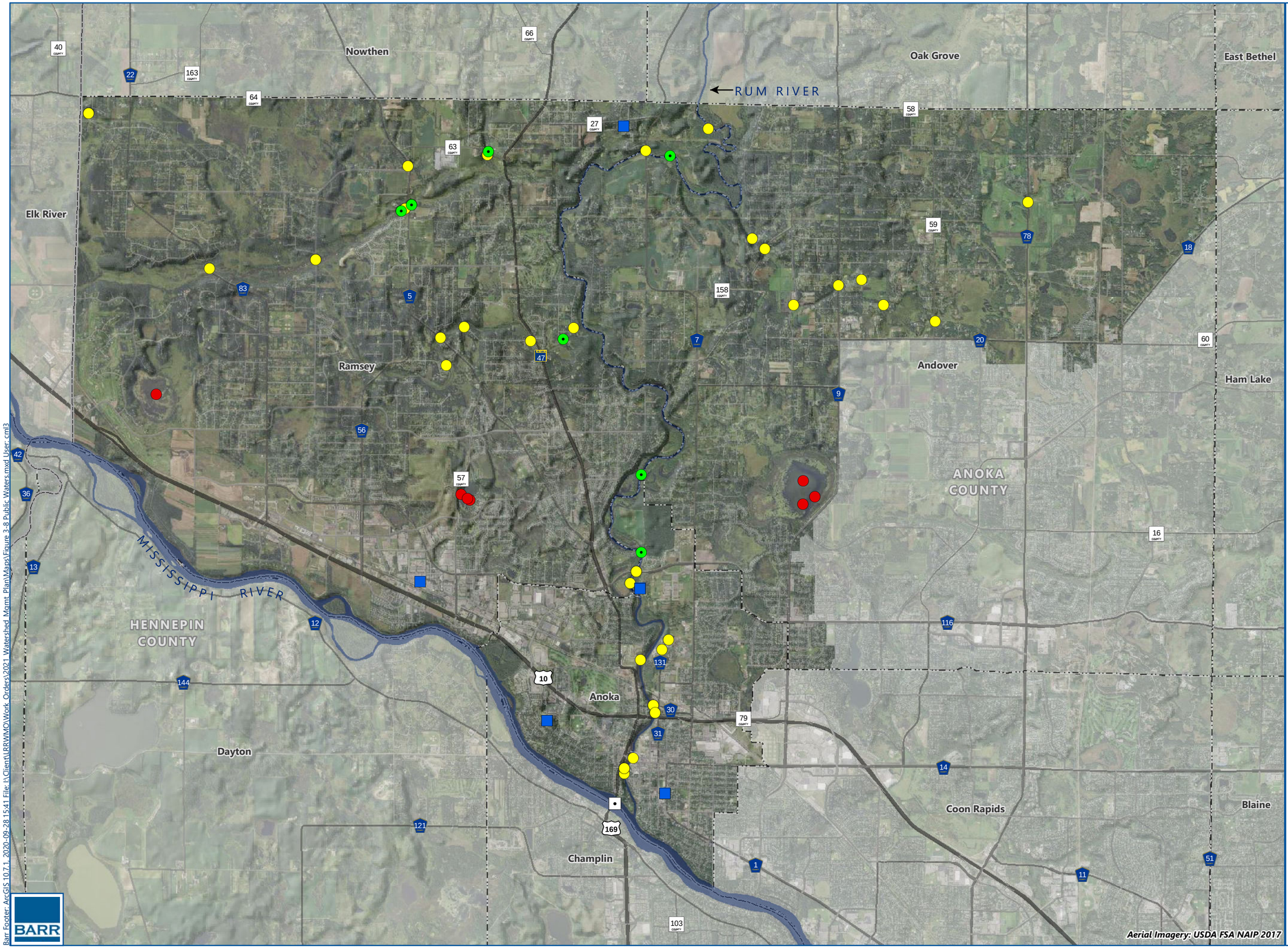
(1) Round Lake and Rum River are monitored annually, Grass (Sunfish) Lake is monitored every 2 years

Historical lake level data for Grass (Sunfish) Lake, Rogers Lake, Round Lake, and Lake Itasca is also available from the MDNR's Lakefinder website at: https://www.dnr.state.mn.us/lakefind/index.html

Data collected for the Mississippi River in the Twin Cities Metro Area has been summarized by the MPCA and is available at: https://www.pca.state.mn.us/water/watersheds/mississippi-river-twin-cities

Water quality modeling performed in support of the Rum River Watershed Restoration and Protection Strategies Report (MPCA, 2017, see Section 2.7.4.1) includes most of the area of the LRRWMO. An HSPF model was used to estimate unit area pollutant loading estimates (e.g., lbs of total phosphorus/acre/year) at approximately the HUC12 subwtershed level. Estimates of total phosphorus loading and sediment loading are presented in Figure 2-11 and Figure 2-12, respectively.

Additional information about water quality analyses performed in the larger Rum River watershed is available from the MPCA at: https://www.pca.state.mn.us/water/watersheds/rum-river



County Boundary

Municipal Boundary

River

Surface Water Monitoring Station

- Biological
- Discharge
- Lake
- Stream
- USGS

Data Source: Minnesota Pollution Control Agency, Surface Water Stations - MPCA Environmental Data Access, Accessed 9/30/2020.

N

0 2,500 5,000

Feet

WATER MONITORING LOCATIONS

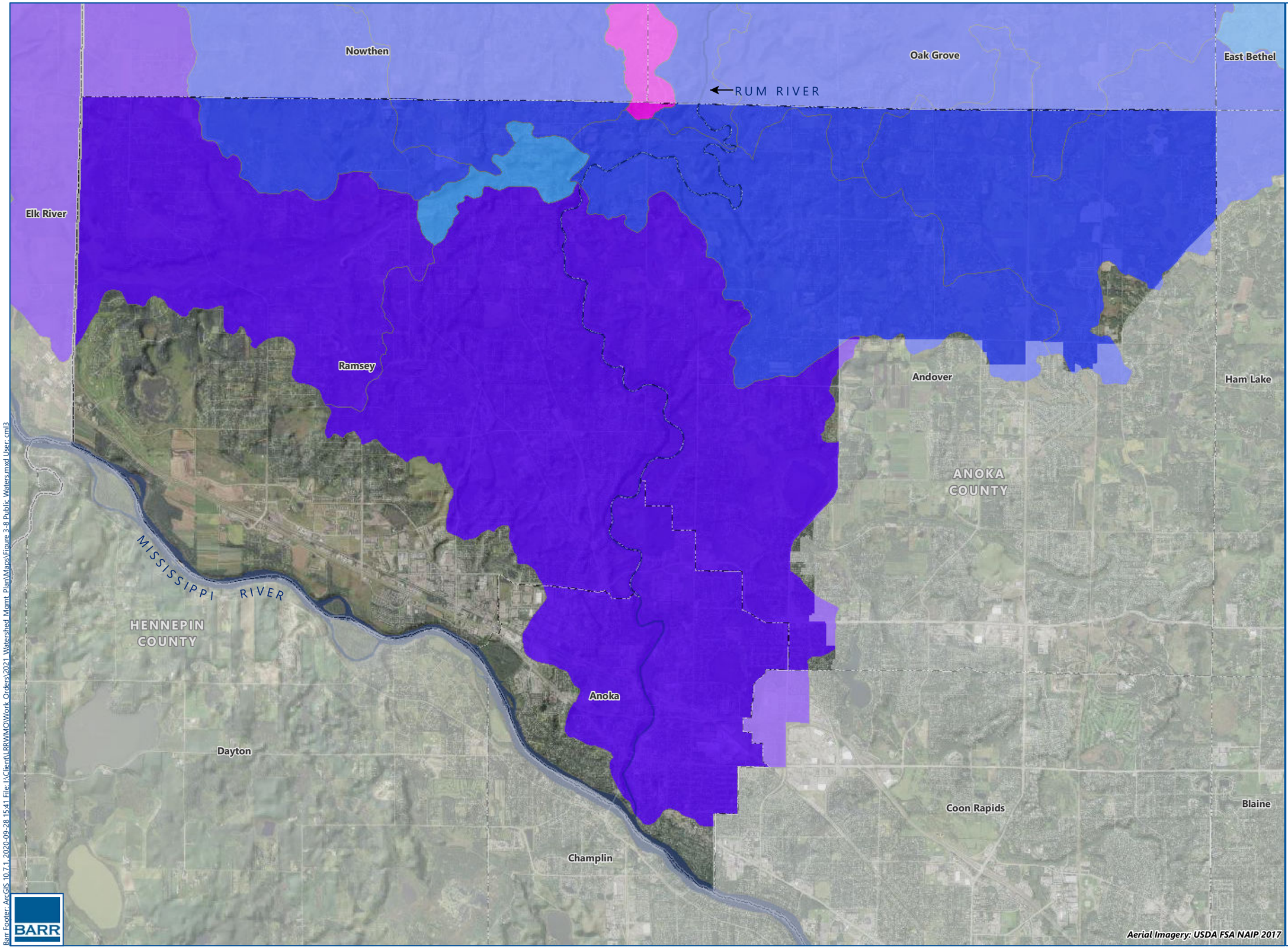
2021 LRRWMO Watershed Management Plan

FIGURE 2-10

Aerial Imagery: USDA FSA NAIP 2017

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-28 15:41 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Mxds\Figure 3-8 Public Waters.mxd User: cmh3



Phosphorus Loading
lbs/acre/yr

- less than 0.15
- 0.15 to 0.18
- 0.18 to 0.21
- 0.21 to 0.24
- 0.24 to 0.27
- more than 0.27
- County Boundary
- Municipal Boundary
- River

Data Source: Rum River WRAPS - HSPF Model provided by MPCA 11/2020

N

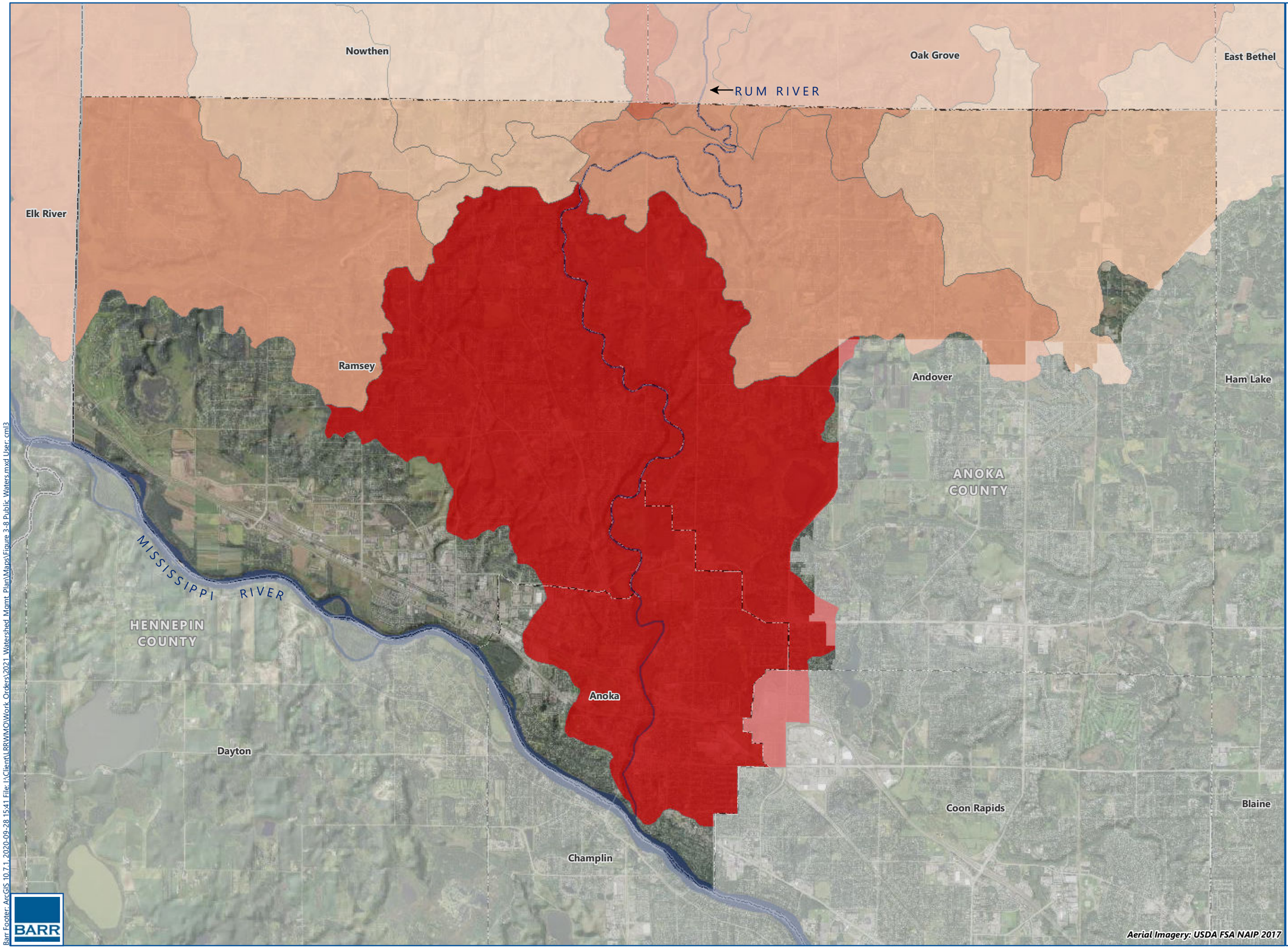
0 2,500 5,000
Feet

HSPF ESIMATED PHOSPHORUS LOADING
2021 LRRWMO Watershed Management Plan

FIGURE 2-11

Barr Footer: ArcGIS 10.7.1, 2020-09-28 15:41 File: I:\Client\LRRWMO\Work Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-8 Public Waters.mxd User: cmi3

BARR



Sediment Loading
lbs/acre/year

- less than 60
- 60 to 80
- 80 to 100
- 100 to 120
- 120 to 140
- more than 140
- County Boundary
- Municipal Boundary
- River

Data Source: Rum River WRAPS - HSPF Model provided by MPCA 11/2020

0 2,500 5,000
Feet

HSPF ESIMATED SEDIMENT LOADING
2021 LRRWMO Watershed Management Plan

FIGURE 2-12

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-28 15:41 File: I:\Client\LRRWMO\Work Orders\2021 Watershed Mgmt Plan\Maps\Figure 3-8 Public Waters.mxd User: cmi3

2.7.4 Water Quality and Impaired Waters

The federal Clean Water Act (CWA) requires states to adopt water quality standards to protect the nation's waters. Water quality standards establish criteria that must be met to support its designated use(s). The criteria differ depending on the waterbody's classification as a wetland, shallow lake, deep lake, or river. Per the CWA, the state of Minnesota must identify and establish priority rankings for impaired waters that do not meet the water quality standards. The list of impaired waters, sometimes called the 303(d) list, is maintained by the MPCA and updated every 2 years.

For impaired waterbodies, the CWA requires an assessment that addresses the causes and sources of the impairment. This process is known as a total maximum daily load (TMDL) analysis. A TMDL is a threshold calculation of the amount of a pollutant that a waterbody can receive and still meet water quality standards. A TMDL establishes the pollutant loading capacity for a waterbody and develops an allocation scheme amongst the various contributors, which include point sources, nonpoint sources and natural background, as well as a margin of safety. As a part of the allocation scheme, a waste load allocation (WLA) is developed to determine allowable pollutant loadings from individual point sources (including loads from storm sewer networks in MS4 communities), and a load allocation (LA) establishes allowable pollutant loadings from nonpoint sources and natural background levels in a waterbody.

Within the LRRWMO, Cedar Creek, Trott Brook, the Rum River, and the Mississippi River are listed on the 2020 MPCA impaired waters 303(d) list for a variety of impairments (see Table 2-8). Completed TMDLs and associated implementation plans may contain actionable steps for the cities within the LRRWMO to address these impairments. The LRRWMO coordinates with its member cities, ACD, and other partners to identify activities to address these impairments, where appropriate.

Current impaired waters listings are available from the MCPA website:
https://www.pca.state.mn.us/water/minnesotas-impaired-waters-list

Select state water quality standards for LRRWMO priority waterbodies are presented in Table 2-9. Water quality standards vary according to lake depth and location (the LRRWMO is located in the North Central Hardwood Forest, or NCHF, ego-region and central river nutrient region). Note that the LRRWMO has more stringent water quality goals for priority waterbodies (see Section 4.1)

Table 2-8 Impaired Waters within the LRRWMO

Waterbody	Impaired Use	Pollutant or Stressor	Year Listed	TMDL Study Target Completion	TMDL Study Approved
Cedar Creek	Aquatic Recreation	*E. Coli*	2016	2018	--
Trott Brook	Aquatic Life	Dissolved Oxygen	2016	--	2017[1]
		Fishes bioassessments,	2016	2027	
		Invertebrate bioassessments	2016	2027	--
Rum River	Aquatic Life	Mercury in fish tissue	1998	--	2007[1]
Mississippi River	Aquatic Consumption	Mercury in fish tissue	1998	--	2007[1]
		PCB in fish tissue	2002	2020	--
	Aquatic Life	Nutrients/ Eutrophication	2016	2018	--
	Aquatic Recreation	Fecal coliform	2006	2024	--

Source: 2020 (draft) MPCA Impaired Waters 303(d) List.

PCB = Polychlorinated Biphenyl

(1) Addressed by the Final Rum River Watershed Total Maximum Daily Load (MPCA, 2017)

(2) Addressed by the *Minnesota Statewide Mercury Total Maximum Daily Load* (MPCA, 2007, as revised)

Table 2-9 State water quality standards applicable to LRRWMO Priority Waterbodies

MPCA Lake Classification	LRRWMO Priority Waterbodies	Select Water Quality Standards[1]				
		Total Phosphorus (µg/L)	Chloro-phyll-a (µg/L)	Secchi Disk Depth (m)	Chloride (mg/)[2]	Total Suspended Solids
Shallow Lake	Round Lake, Grass (Sunfish) Lake Rogers Lake	< 60	< 20	> 1.0	230	--
Deep Lake	None	< 40	< 14	> 1.4	230	--
Central Region River	Rum River	<100	--		230	<30

Source: Minnesota Rules 7050 for NCHF eco-region; note that water quality standards for additional parameters are also applicable to District water resources

(1) Standards for total phosphorus, chlorophyll-a, and Secchi Disk Depth are summer average (June – September)

(2) The 230 mg/L chloride standard is the chronic standard, where two or more exceedances within a three year period are considered an impairment (as opposed to the acute standard which deems one exceedance over 860 an impairment).

2.7.4.1 Watershed Restoration and Protection Strategies (WRAPS)

The LRRWMO is within the area included in the MPCA's *Rum River Watershed Restoration and Protection Strategies* report (Rum River WRAPS, 2017). In support of this study, the MPCA and its partners conducted intensive watershed monitoring in the Rum River Watershed in 2013 and 2014 to determine the overall health of water resources, identify impaired waters, and to identify waters in need of additional protection. This data was combined with other available data collected in the previous 10 years for the purpose of waterbody health assessment. This information is documented in the MPCA's *Rum River Watershed Monitoring and Assessment Report* (October, 2016) and the MPCA's *Rum River Watershed Stressor Identification Study* (August, 2016).

As part of the WRAPS analysis, the MPCA performed water quality modeling of the watershed to estimate phosphorus, nitrogen, and sediment loading throughout the watershed (including the LRRWMO). Relative to the greater Rum River watershed, the watersheds in the LRRWMO contribute lower phosphorus, moderate nitrogen, and greater sediment loads (MPCA, 2017). The analysis included in the WRAPS is performed at spatial resolution that is too coarse to be used to target specific projects. Generally, however, the WRAPS identifies strategies to be implemented within the Lower Rum River watershed to reduce pollutant loading and protect or improve water quality. The LRRWMO has considered these strategies in developing and prioritizing its implementation program (see Section 5)

More information about the MPCA's water quality analysis of the Rum River watershed is available at: https://www.pca.state.mn.us/water/watersheds/rum-river

2.7.5 Stormwater Systems

The area within the LRRWMO includes a mix of urban, suburban, and rural land use (see Section 2.3). In developed areas, pre-settlement drainage patterns have been significantly altered as part of development activity, resulting in networks of stormwater management infrastructure designed to collect stormwater and convey it downstream. The stormwater system includes pipes, ponds, lakes, wetlands, ditches, streams, swales, and other drainageways. Ultimately, all stormwater in the LRRWMO is routed to the Mississippi River, either directly or via the Rum River.

Various units of government and private entities have jurisdiction over different parts of the stormwater system within the watershed. The Minnesota Department of Transportation (MNDOT) is responsible for maintaining the stormwater systems within their rights-of-way, such U.S. highways (e.g., Highway 10), and state highways (e.g., Highway 47). Anoka County is responsible for maintaining at least part of the stormwater systems within their rights-of-way, such as county roads and county state aid highways.

Each city within the LRRWMO has jurisdiction and maintenance responsibility over its own stormwater management systems. These systems include lateral (also called primary) stormwater systems (i.e., street gutters, pipes, and ditches) and outflow (also called main, trunk, or secondary) conveyors, which collect flows from city lateral systems and move the water downstream. Cities generally design lateral stormwater systems with capacity to convey runoff from 5- or 10-year frequency storms without significant flooding and protecting public health and safety for storms up to the 100-year frequency interval (these design

levels are sometimes referred to as "level of service" and "level of protection"). City stormwater management systems are described in greater detail in each City's local water management plan.

Each city within the LRRWMO must obtain Municipal Separate Storm Sewer System (MS4) permit coverage from the MPCA. The MS4 Stormwater Program is designed to reduce the amount of sediment and pollution that enters surface water and groundwater from storm sewer systems. As a requirement of the permit, each city must develop and maintain a stormwater pollution prevention program (SWPPP) which outlines programs and practices to minimize pollutant loading and water quality impacts resulting from stormwater management. The SWPPP contains six areas of focus, known as minimum control measures, including:

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management
- Pollution Prevention/Good Housekeeping For Municipal Operations

Each MS4 permittee submits a report to the MPCA annually documenting the implementation of its SWPPP. The LRRWMO is not required to obtain MS4 permit coverage because it does not own stormwater management infrastructure. The MPCA periodically updates the MS4 General Permit. More information is available from the MPCA at: https://www.pca.state.mn.us/water/municipal-stormwater-ms4

Owners of private stormwater systems in the LRRWMO are generally responsible for maintaining their facilities. Maintenance requirements for private systems are documented in agreements with each city developed during project permitting.

2.7.6 Flooding and Floodplain Management

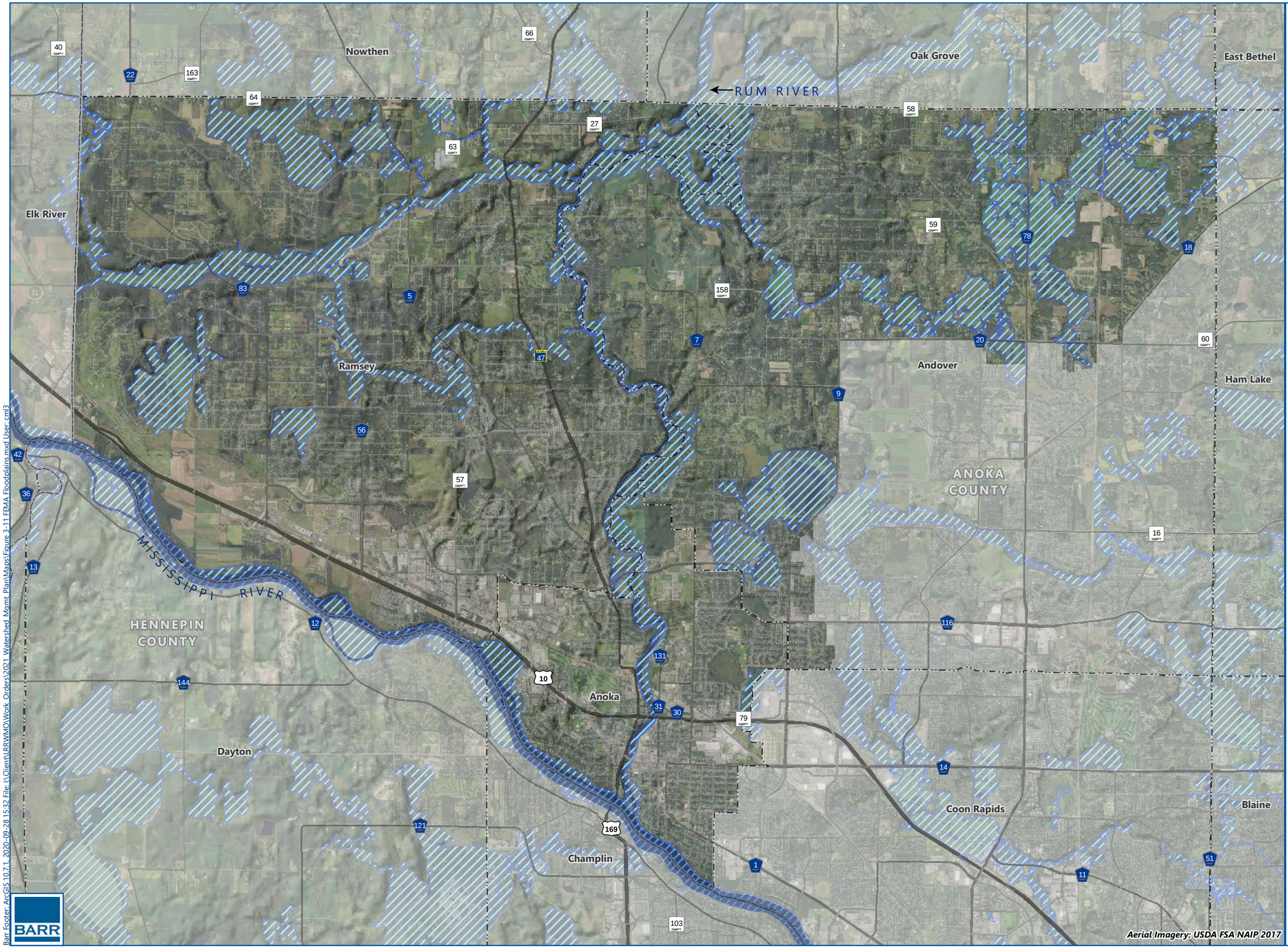
Floodplains are lowland areas adjacent to lakes, wetlands, and rivers that are susceptible to inundation of water during a flood. For regulatory purposes, the term "floodplain" refers to the area inundated during a flood or storm event with a 1 percent chance of occurring in any year (i.e., a 100-year event).

The Federal Emergency Management Agency (FEMA) performs flood insurance studies (FIS) and develops Flood Insurance Rate Maps (FIRMs) to identify areas prone to flooding during 100-year storm events. The water level corresponding to the 100-year flood event is referred to as the Base Flood Elevation (or BFE) and is the basis for the mapped floodplain extent. Figure 2-13 presents floodplains delineated by FEMA.

Each of the cities within the District has a FIS. The FIS, together with a city's floodplain ordinance, allow the city to take part in the national flood insurance program (NFIP). Homeowners within FEMA-designated floodplains are required to purchase flood insurance. NFIP is implemented independently of the District and are described herein for informational purposes. FEMA-established floodplains and 100-year flood levels are available from FEMA at: https://msc.fema.gov/portal/home

In addition to flooding adjacent to waterbodies, excessive runoff can overwhelm storm sewer infrastructure, resulting in more localized, and nuisance flooding issues (e.g., standing water in streets, flooding in backyard swales). The LRRWMO member cities have prepared local water management plans containing more detailed information regarding localized flooding issues and management actions. In the LRRWMO, flooding problems in the watershed are mostly confined to those areas identified on FEMA floodplain maps.

The LRRWMO permit program includes stormwater volume and rate control requirements to limit negative flooding impacts. The permit requirements also include criteria for minimum building elevations relative to the 100-year flood levels.



County Boundary

Municipal Boundary

FEMA 100-Year Floodplain

Data Source: National Flood Hazard Layer, Federal Emergency Management Agency.

Aerial Imagery: USDA FSA NAIP 2017

N

0 2,500 5,000

Feet

FEMA FLOODPLAINS
2021 LRRWMO Watershed Management Plan

FIGURE 2-13

BARR

Barr Footer: ArcGIS 10.7.1, 2020-09-28 15:32 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Mxds\Figure 3-11 FEMA Floodplains.mxd User: cml3

2.7.7 Shorelands an Shoreland Management

Protection and management of shoreland areas is key to maintaining the beneficial uses of surface waters in the LRRWMO. Stable, vegetated shoreland areas preserve filter pollutants, slow runoff, and create habitat. The LRRWMO member cities implement shoreland protections through standalone shoreland ordinances and/or zoning requirements. The MDNR has established minimum shoreland protection requirements based on lake classifications (see Table 3-6):

- **Natural Environment Lakes (NE)** – Usually have less than 15 total acres, less than 60 acres per mile of shoreline, and less than three dwellings per mile of shoreline. They have some winterkill of fish; may have shallow, swampy shoreline; and are less than 15-feet deep.
- **Recreational Development Lakes (RD)** – Usually have between 60 and 225 acres of water per mile of shoreline, between 3 and 25 dwellings per mile of shoreline and are more than 15-feet deep.
- **General Development Lakes (GD)** – Usually have more than 225 acres of water per mile of shoreline, between 3 and 25 dwellings per mile of shoreline and are more than 15-feet deep.

The MDNR lake shoreline classification system is intended to help local governments appropriately regulate development in shoreland areas adjacent to each lake.

The LRRWMO member cities also maintain "Wild and Scenic River Ordinances" that serve similar purposes to shoreland ordinances specific to the Rum River. More information about the management of Wild and Scenic Rivers is available from the MDNR at:
https://www.dnr.state.mn.us/waters/watermgmt_section/wild_scenic/index.html

The cities of Ramsey and Anoka also maintain local controls to regulative development activity within the Mississippi River Critical Corridor Area (MRCCA), a 72-mile stretch of the Mississippi River including the LRRWMO. MRCCA protections established by the MDNR are implemented through local governments. More information about the MRCCA and associated critical area regulations is available at:
https://www.dnr.state.mn.us/waters/watermgmt_section/critical_area/index.html

2.8 Natural Areas, Habitat, and Rare Features

The Rum River and adjacent lands provide habitat for many species. White-tailed deer, gray and fox squirrels, cottontail rabbits, snowshoe hares, beavers, minks, muskrats, raccoons, loons, great blue herons, songbirds, and waterfowl are a few of the animals found along the Rum River. Smallmouth Bass, Northern Pike, and Walleyes can be found in the Rum River.

Through its Natural Heritage and Nongame Research Program (NHNRP), the MDNR collects, manages, and interprets information about rare natural features, native plants and plant communities, and nongame animals, including endangered, threatened, and special concern species. As part of the NHNRP, the MDNR maintains the Natural Heritage Information System (NHIS) as a statewide database of these resources. The MDNR limits publication of spatial attributes and locations of these items to protect rare features or species from damage or collection.

The Lower Rum River Watershed provides habitat for a significant number of Blanding's turtles (*Emydoidea blandingii*), a state threatened species. In addition to Blanding's turtles, several other state threatened species of reptiles, birds, and rare plants have been identified and listed in the NHIS Rare Features Data. Additional information about rare, threatened, and endangered species is available from the NHNRP at: https://www.dnr.state.mn.us/nhnrp/index.html

None of the lakes in the LRRWMO are MDNR-managed fisheries. The MDNR and its partners have periodically performed fishery surveys of the Mississippi River and Rum River. The Lower Rum has been periodically managed as a smallmouth bass and walleye fishery by the MDNR, but is not consistently stocked. More information is available from the MDNR at: https://www.dnr.state.mn.us/areas/fisheries/eastmetro/rivers/rum.html

The MDNR's Minnesota County Biological Survey for Anoka County (1994, with Ramsey County) identified pre-settlement vegetation. Prior to settlement, the LRRWMO was covered primarily by oak forest interrupted by tall grass prairie. River bottom forests occurred near the confluence of the Mississippi River and Rum River in Anoka. Portions of wet prairie occurred throughout the watershed, most heavily concentrated within Andover in the northeast.

In 2007, the City of Anoka established the Anoka Nature Preserve (ANP). The preserve includes over 200 acres of forested oak savanna, meadow and grassland, wetland backwaters, and includes a mile of Rum River shoreline. The ANP is protected by a conservation easement; the ANP is cooperatively managed by the Anoka SWCD and City of Anoka. Anoka SWCD has also established a conservation area at the confluence of the Rum River and Cedar Creek. The area is preserved for nature-based outdoor recreation such as hiking, bird watching, fishing, and hunting by permit.

Minnesota County Biological Survey also identifies sites of biodiversity significance. Sites of moderate biodiversity significance occur along portions of the Rum River within the ANP and Mississippi River. Additional areas of biodiversity that do not meet MDNR threshold criteria are present throughout much of the watershed (see Figure 2-14). Additional information is available from the Minnesota Biological Survey at: https://www.dnr.state.mn.us/mbs/index.html

Nowthen
Oak Grove
East Bethel
RUM RIVER
Elk River
Ramsey
Andover
Ham Lake
ANOKA COUNTY
MISSISSIPPI RIVER
HENNEPIN COUNTY
Anoka
Dayton
Champlin
Coon Rapids
Blaine

40 66 22 163 64 27 63 58 59 78 18 83 5 158 7 20 60 47 9 56 42 57 36 13 12 16 116 131 10 31 30 79 144 14 121 169 1 51 11 103

Barr Footer: ArcGIS 10.7.1, 2020-10-01 16:49 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Maps\Figure 3-12 Areas of Remaining Natural Vegetation and Sites of Biological Significance.mxd User: cml3

County Boundary
Municipal Boundary
River
Native Plant Community[1]

MBS Sites of Biodiversity Significance[2]

Site Below Minimum Biodiversity Significance Threshold

Site With Moderate Biodiversity Signficance

Data Sources: 1. MDNR Native Plant Communities, Minnesota Department of Natural Resources- Division of Ecological and Water Resources- Biological Survey, 2020.
2. MBS Sites of Biodiversity Significance, Minnesota Department of Natural Resources- Division of Ecological and Water Resources- Biological Survey, 2020.

N

0 2,500 5,000
Feet

Aerial Imagery: USDA FSA NAIP 2017

BARR

SITES OF BIOLOGICAL SIGNIFICANCE
2021 LRRWMO Watershed Management Plan
FIGURE 2-14

2.9 Open Space and Recreation Areas

Approximately 8% of the watershed is occupied by park, open space, or preserve land uses. Open space and recreational areas are presented in Figure 2-15 and include regional and municipal parks located, as well as conservation areas like the Anoka Nature Preserve and Rum River/Cedar Creek conservation area (see Section 2.8). These areas provide opportunities for residents and people who recreate in the watershed to appreciate and connect with local water and natural resources. Major county parks located within the watershed include:

- Rum River Central Regional Park
- Rum River South County Park (Anoka County)
- Mississippi River West Regional Park (Anoka County)

Popular recreational opportunities within the District include activities like boating, fishing, hiking, walking, biking, and others. There are several public water access points within the watershed, including those on Round Lake, the Rum River, and the Mississippi River. The Mississippi River and Rum River are also State Canoe Routes operated by the MDNR Division of Trails and Waterways. The Rum River is also designated as a Regional Trail. The Anoka County Parks and Recreation Department has a listing and maps of trail systems throughout the county.

Parks and other open spaces may also provide stormwater management opportunities for the District and its partners. In addition to providing physical space for BMPs, these spaces are often in an ideal location situated between the non-point pollutant source (e.g., urban development) and the receiving water (e.g., lakes, ponds, wetlands). Implementing BMPs in parks and other areas frequented by the public can further enhance demonstration and education benefits.

2.9.1 Wild, Scenic, and Recreational River District

The Rum River is classified by the MDNR as a wild, scenic, and recreational river dating back to 1978. This designation covers the stretch of the Rum River in Mille Lacs, Sherburne, Isanti, and Anoka Counties. Minnesota's Wild and Scenic Rivers Program seeks to protect rivers which have outstanding natural, scenic, geographic, historic, cultural, and recreational values. Each wild and scenic river has a management plan that outlines the rules and goals for that river applicable within a specific area (see Figure 2-15). These rules are administered through local zoning ordinances to protect the rivers from water and visual

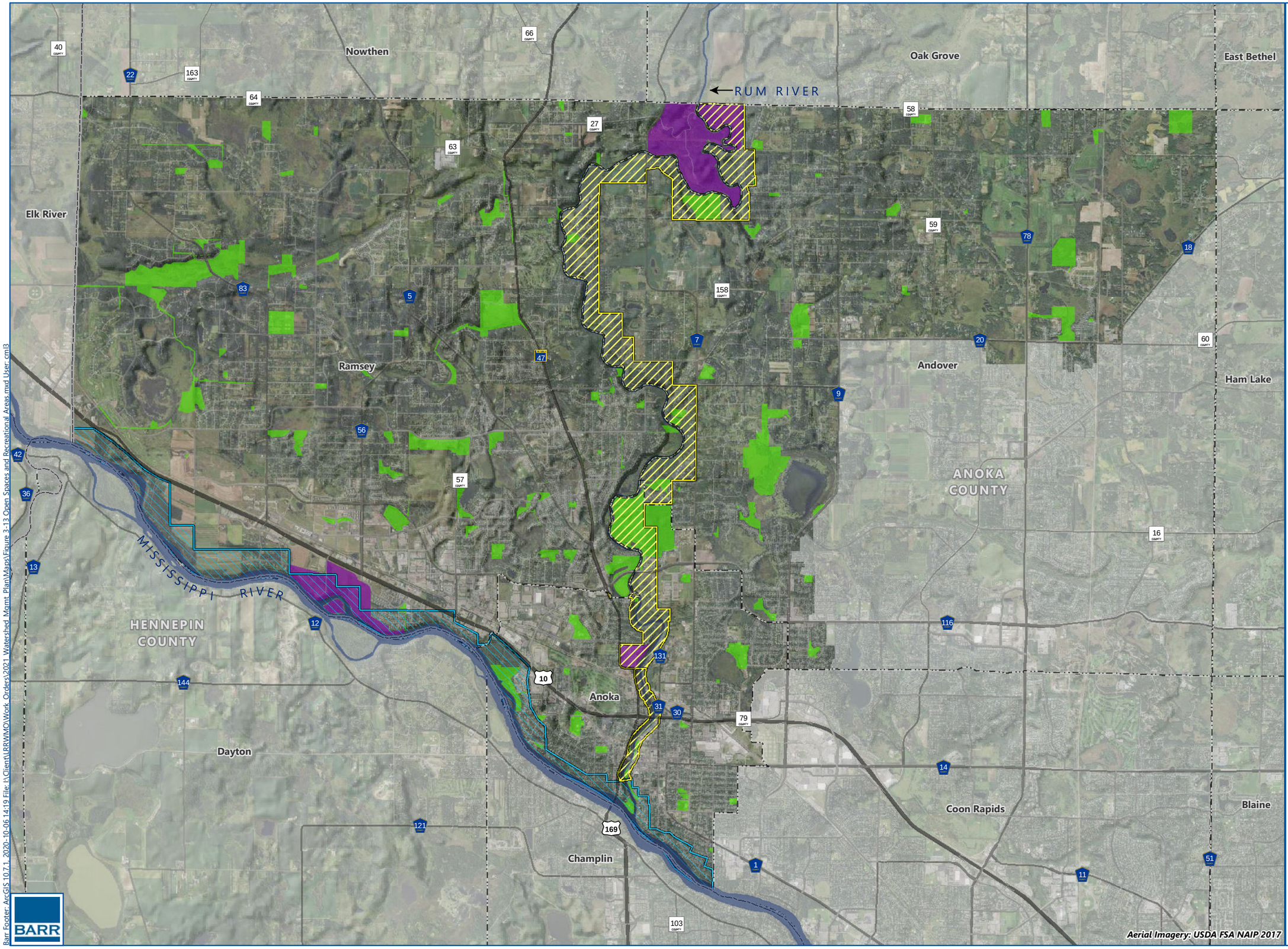
pollution, erosion, over-development, and degradation. Additional information is available from the MDNR at: https://www.dnr.state.mn.us/waters/watermgmt_section/wild_scenic/index.html

2.9.2 Mississippi National River and Recreational Area (MNRRA)

The Mississippi National River and Recreational Area (MNRRA) is a 72-mile corridor of the Mississippi River that stretches through the Minneapolis-St. Paul metropolitan area (see Figure 2-15). The MNRRA was established by the federal government Congress to develop policies and programs for:

- the preservation and enhancement of the environmental values of the area
- enhanced public outdoor recreation opportunities in the area
- the conservation and protection of the scenic, historical, cultural, natural, and scientific values of the area
- the commercial use of the area and its natural resources, consistent with the protection of the values for which the area was established

The extent of the MNRRA coincides with the Mississippi River Corridor Critical Area (MRCCA) Program. The MRCCA Program is a joint state, regional and local government program that provides coordinated land planning and regulation within the MNRRA. Within this area, management plans, ordinances, and zoning regulations limit development activity. Regulations are administered by local government units, including the Cities of Anoka and Ramsey. More information is available from the MDNR at: https://www.dnr.state.mn.us/waters/watermgmt_section/critical_area/index.html



County Boundary

Municipal Boundary

River

City Park[1]

County Park[1]

Minnesota DNR Wild, Scenic And Recreational River District Boundary[2]

National River And Recreation Area Boundary[3]

Data Sources:
1. Anoka County Open Access GIS Data, Accessed 10/1/2020.
2. Minnsota Department of Natural Resources, Minnesota Wild and Scenic River Districts, Accessed 10/6/2020.
3. US National Park Service

0 2,500 5,000
Feet

OPEN SPACES AND RECREATIONAL AREAS
2021 LRRWMO Watershed Management Plan

FIGURE 2-15

Aerial Imagery: USDA FSA NAIP 2017

BARR

Barr Footer: ArcGIS 10.7.1, 2020-10-06 14:19 File: I:\Client\LRRWMO\Work_Orders\2021 Watershed Mgmt Plan\Mxds\Figure 3-13 Open Spaces and Recreational Areas.mxd User: cm13

2.10 Potential Pollutant Sources

The sources of water pollution in the LRRWMO are many and varied. Potential pollutant sources in the watershed include permitted pollutant sources, potentially contaminated sites, leaking above- and below-ground storage tanks, unsealed wells, and non-point sources.

The MPCA maintains a database of potential environmental hazards, which includes permitted sites (air, industrial stormwater, construction stormwater, wastewater discharge), hazardous waste generating sites, leak sites, petroleum brownfields, tank sites, unpermitted dump sites, and sites enrolled in the Voluntary Investigation and Cleanup (VIC) program. This information is available online through the MPCA's What's In My Neighborhood program. Sites identified in this database are presented in Figure 2-16.

The presence of potentially contaminated or hazardous waste sites should be considered as sites are redeveloped and BMPs are implemented. The presence of soil contamination at many of these sites, if not removed, may limit or prevent infiltration as a stormwater management option.

More information about potential pollutant sources is available from the MPCA website: http://www.pca.state.mn.us/index.php/data/wimn-whats-in-my-neighborhood/whats-in-my-neighborhood.html

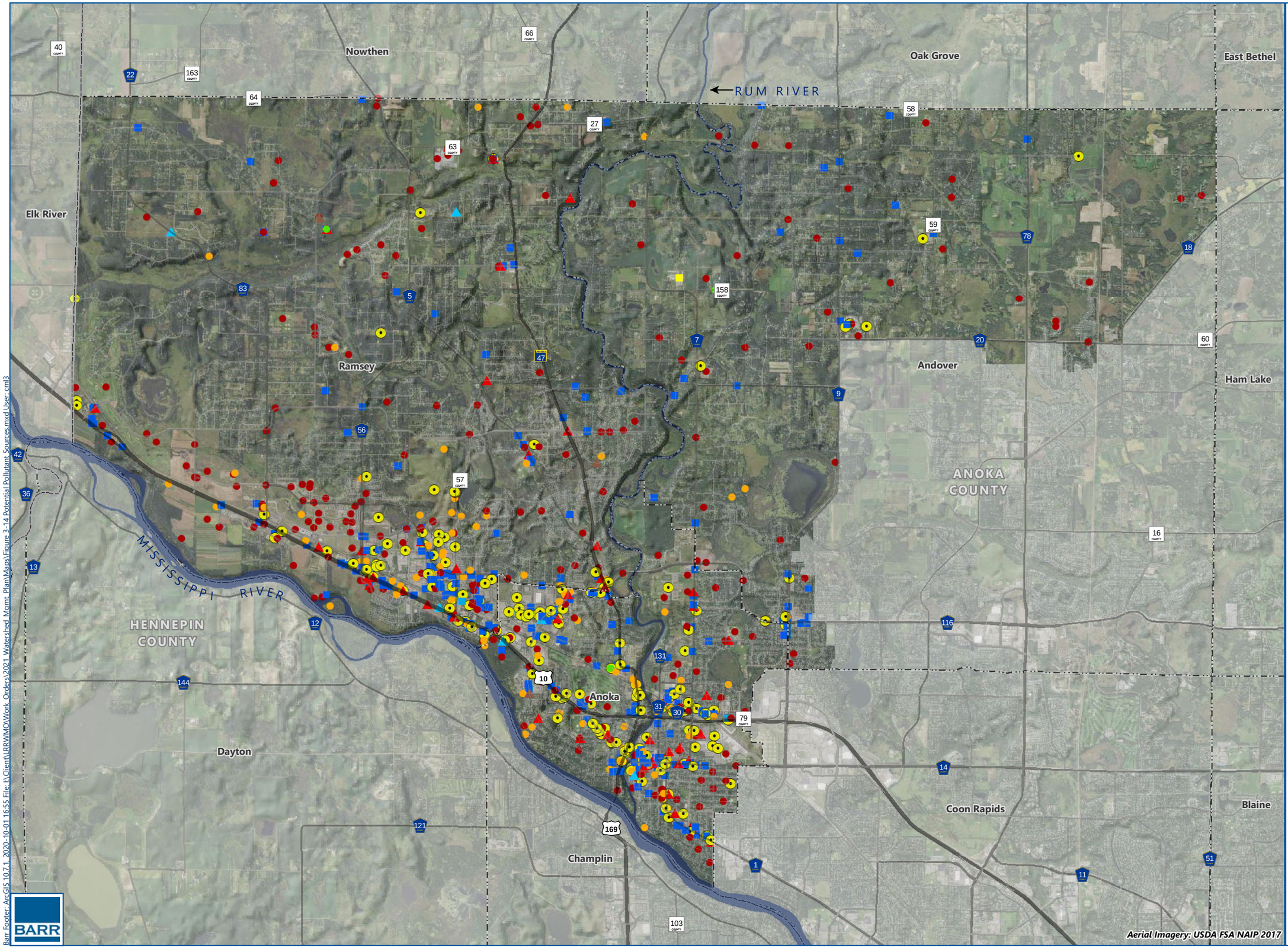
In addition to point sources of pollution, stormwater runoff can be a significant source of some pollutants (see Table 2-10). Each city within the LRRWMO is required to maintain Municipal Separate Storm Sewer System (MS4) permit coverage from the MPCA. As a requirement of the permit, MS4 permittees must develop and maintain a stormwater pollution prevention program (SWPPP) which outlines programs and practices to minimize pollutant loading and water quality impacts resulting from stormwater management.

More information is available from the MPCA at: https://www.pca.state.mn.us/water/municipal-stormwater-ms4

Table 2-10 Pollutants Commonly Found in Stormwater

Stormwater Pollutant	Examples of Sources	Related Impacts
Nutrients: Nitrogen, Phosphorus	Decomposing grass clippings, leaves and other organics, animal waste, fertilizers, failing septic systems, atmospheric deposition	Algal growth, reduced clarity, other problems associated with eutrophication (oxygen deficit, release of nutrients and metals from sediments)
Sediments: Suspended and Deposited	Construction sites, other disturbed and/or non-vegetated lands, eroding streambanks and shorelines, road sanding	Increased turbidity, reduced clarity, lower dissolved oxygen, deposition of sediments, smothering of aquatic habitat including spawning sites, and benthic toxicity
Organic Materials	Leaves, grass clippings	Algal growth, reduced clarity, other problems associated with eutrophication (oxygen deficit, release of nutrients and metals from sediments)
Pathogens: Bacteria, Viruses	Domestic and wild animal waste, failing septic systems	Human health risks via drinking water supplies, contaminated swimming beaches
Hydrocarbons: Oil and Grease, PAHs (Naphthalenes, Pyrenes)	Tar-based pavement sealant, industrial processes, automobile wear, emissions and fluid leaks, waste oil.	Toxicity of water column and sediment, bioaccumulation in aquatic species and throughout food chain
Metals: Lead, Copper, Cadmium, Zinc, Mercury, Chromium, Aluminum, others	Industrial processes, normal wear of auto brake linings and tires, automobile emissions & fluid leaks, metal roofs	Toxicity of water column and sediment, bioaccumulation in aquatic species and through the food chain, fish kill
Pesticides: PCBs, Synthetic Chemicals	Pesticides (herbicides, insecticides, fungicides, rodenticides, etc.), industrial processes	Toxicity of water column and sediment, bioaccumulation in aquatic species and through the food chain, fish kill
Chlorides	Road salting and uncovered salt storage	Toxicity of water column and sediment
Polycyclic Aromatic Hydrocarbons (PAH's)	Tar based pavement sealant	Carcinogenic to humans
Trash and Debris	Litter washed through storm drain networks	Degradation of the beauty of surface waters, threat to wildlife

Based on *Minnesota Urban Small Sites BMP Manual* (Barr Engineering Co, 2001).



County Boundary
Municipal Boundary
River

Potential Pollution Sources

- Air Quality
- Feedlots
- Hazardous Waste
- Investigation and Cleanup
- Solid Waste
- Stormwater
- SSTS
- Tanks
- Water Quality
- Multiple Programs

Data Source: What's In My Neighborhood Sites, Minnesota Pollution Control Agency, 2020.

N

0 2,500 5,000
Feet

POTENTIAL POLLUTION SOURCES
2021 LRRWMO Watershed Management Plan

FIGURE 2-16

Aerial Imagery: USDA FSA NAIP 2017

BARR

Barr Footer: ArcGIS 10.7.1, 2020-10-01 16:55 File: I:\Client\LRRWMO\Work_Orders\2021_Watershed_Mgmt_Plan\Mxds\Figure 3-14 Potential Pollutant Sources.mxd User: cml3

3 Issues Assessment

This section summarizes the priority issues identified by the Lower Rum River Watershed Management Organization (LRRWMO) during development of this Plan. Many of the priority issues to be addressed during the lift of this Plan are similar to those described in the Third Generation Plan and reflect the statutory responsibilities of WMOs (see Section X).

3.1 Issue Identification and Prioritization

As part of Plan development, the Board of Managers solicited input on issues relevant to the Lower Rum River watershed through a variety of stakeholder engagement and data review activities. These include:

- Public kickoff meeting hosted on June 26, 2019
- Citizen Advisory Committee (CAC) issue identification meeting on August 28, 2019
- Technical Advisory Committee (TAC) issue identification meeting on October 29, 2019
- Analysis of potential 2011 Plan gaps (Gaps Analysis, see Appendix D)
- Review of responses to the Plan notification letter

The LRRWMO Board of Managers participated in a workshop on November 21, 2019 to review issues identified through the activities listed above and discuss their priority to be addressing in the 2021-2030 Watershed Management Plan. The Board generally concurred that those issues addressed in the 2011 Plan remain of high priority, with the most relevant issues including:

- Adverse impacts from **stormwater runoff**
- Degraded **water quality** of lakes, streams, and rivers

Additional water and natural resource issues that were identified as important for the LRRWMO to address in this Plan include:

- **Flood risk and water quantity** issues
- Excessive **erosion and sedimentation**
- Integrity of **wetlands, shoreland, and natural areas**
- **Groundwater contamination**

In addition to natural resource issues, organizational and/or administrative issues were also identified during Plan development; these include:

- Efficacy and efficiency of the **LRRWMO permit program**
- Limited **funding and capacity**
- Opportunities for increased **education and engagement**

The priority issues areas and associated specific issues identified by the Board of Managers are summarized in Table 3-1 and discussed in greater detail in the following sections. Note that many of the resource issues identified above are interrelated (e.g., erosion and sedimentation leads to degraded water

quality). Thus, many of the goals, policies, and activities included in this Plan address multiple resource issues.

Table 3-1 Summary of Priority Issues and Resources

Issue Area	Priority Level	Specific Issues	Issue ID
Stormwater Management	Level 1	• Untreated discharges to the Rum River • Maintenance of aging municipal infrastructure • Maintenance of private infrastructure • Adequacy of stormwater regulatory controls	SW-1 SW-2 SW-3 SW-4
Surface Water Quality	Level 1	• Chloride loading in stormwater • Sediment and other pollutant loading to the Rum River and Mississippi River • Protecting water quality in priority waterbodies • Cedar Creek impairment due to *E. coli* • Trott Brook impairment due to dissolved oxygen, fish bioassessments, and invertebrate bioassessments	WQ-1 WQ-2 WQ-3 WQ-4 WQ-5
Flood Risk and Water Quantity	Level 2	• Nuisance flooding identified by cities • Addressing impacts of climate change • Adequacy of floodplain regulatory controls	FL-1 FL-2 FL-3
Erosion and Sedimentation	Level 2	• Nuisance flooding identified by cities • Addressing impacts of climate change • Adequacy of erosion and sedimentation controls	ES-1 ES-2 ES-3
Wetlands, Shorelands, and Natural Areas	Level 2	• Need for education regarding wetland buffers and protection • Lack of buffers along Rum River • Coordination with partners on future AIS issues	NA-1 NA-2 NA-3
Groundwater Contamination and Supply	Level 2	• Need for education addressing drinking water quality and groundwater conservation • Coordination with partners on groundwater planning	GW-1 GW-2
Regulatory Program Efficacy	Organiz-ation	• Adequacy of regulatory program to protect resources • Efficiency and coordination of permit program	RP-1 RP-2
Funding and Capacity	Organiz-ation	• Limited funding and staff capacity to implement projects and programs	FC-1
Education and Engagement	Organiz-ation	• Need for additional education addressing specific topics • Opportunity for engaging schools and youth groups • Opportunity to engage CAC in ongoing roles	ED-1 ED-2 ED-3

Note: Issue ID is used to correlate specific issues to goals and/or implementation actions

3.2 Resource Issues

3.2.1 Stormwater Runoff Management

Over time, much of the naturally vegetated, wetland-rich landscape of the Lower Rum River watershed has been converted to residential and other developed land uses (see Section 2.3). Development and the associated increase in impervious surface (i.e., surfaces through which water cannot infiltrate) results in increased stormwater runoff rates and volumes. Imperviousness and land disturbance (e.g., construction) result in increased amounts of nutrients, chloride, sediment, and other pollutants carried in stormwater runoff (i.e., loading). Increased stormwater runoff rates and volumes resulting from impervious area also contribute to erosion, threaten existing infrastructure, and increase flood risk. During Plan development, the CAC identified direct (i.e., untreated) stormwater discharges to the Rum River as a concern.

Development also limit the natural ability of the landscape to mitigate the negative environmental impacts of stormwater runoff by reducing infiltration and retention. Infiltration or retention of stormwater runoff is the most effective means of limiting the impacts of urbanization, as these methods reduce the total volume of runoff to the downstream receiving waterbodies. In areas of concentrated development, existing structures, utilities, and land ownership further restrict the opportunities for the LRRWMO and cities to implement cost-effective stormwater best management practices (BMPs). Redevelopment provides an opportunity to retrofit stormwater BMPs in areas that may not currently receive adequate treatment.

Further development and urbanization of the LRRWMO is anticipated into the future (see Section 2.3), emphasizing the need for systems to mitigate the negative impacts of stormwater runoff, including regulation, education, and projects (e.g., best management practices, or BMPs). Each of the Cities within the LRRWMO maintains a Municipal Separate Storm Sewer System (MS4) permit that details measures that the cities use to mitigate the negative impacts of stormwater runoff (see Section 2.7.5). In addition, the LRRWMO implements performance standards to mitigate the impacts of development of stormwater runoff.

Private developers, cities, the LRRWMO, and other partners have constructed BMPs to improve the quality and reduce the volume of stormwater runoff. Proper operation and maintenance of these BMPs is necessary to achieve the intended benefits. As stormwater management infrastructure continues to age, maintenance, repair, and eventual replacement of infrastructure may place additional financial burden on cities and owners of private infrastructure.

3.2.2 Surface Water Quality

The lakes, streams, and rivers within the LRRWMO are valued resources that provide recreational and ecological benefits. Protecting the water quality of these resources by reducing pollutant loading is key to ensuring these benefits.

The sources of water pollution in the LRRWMO are many and varied. Potential pollutant sources in the watershed include permitted sources, potentially contaminated sites, leaking above- and below-ground storage tanks, unsealed wells, and non-point sources such as stormwater runoff (see Section 3.2.1). For

many waterbodies in the LRRWMO, stormwater runoff is a major contributor of pollutants. Pollutants in stormwater runoff include phosphorus and other nutrients, sediment, chlorides, oil, grease, chemicals (including hydrocarbons), metals, litter (e.g., plastics, Styrofoam), and pathogens which can severely reduce water quality. Nutrient and sediment loading to waterbodies from stormwater runoff can far exceed what would be expected from an undeveloped watershed. Chloride loading from runoff carrying road salt applied to roadways, parking lots, sidewalks, and other developed areas throughout the winter months is also a significant pollutant source.

In District lakes and wetlands, phosphorous is the pollutant of most concern. As total phosphorus (TP) loads increase, it is likely that water quality degradation will accelerate, resulting in unpleasant consequences such as profuse algae growth or algal blooms (reflected in high chlorophyll-*a* concentrations). Algal blooms, overabundant aquatic plants, and nuisance/exotic species, such as Eurasian watermilfoil, purple loosestrife, and curly-leaf pondweed, will flourish and interfere with ecological function as well as recreational use and the aesthetics of waterbodies. Sediment is also a pollutant of concern. Sediment contributes to poor water clarity that affects vegetation growth and deposits onto stream and lake beds, impacting aquatic habitat. It is also a substrate to which phosphorus and other pollutants bind.

The Minnesota Pollution Control Agency (MPCA) is the state regulatory agency primarily tasked with protecting and improving water quality in Minnesota. In administering the CWA in Minnesota, the MPCA also maintains a list of impaired waters (see Section 0). The MPCA performs Total Maximum Daily Load (TMDL) studies and watershed restoration and protection strategy (WRAPS) to address impaired waters. Both TMDLs and WRAPSs may result in implementation plans to address water quality issues of the affected waterbodies. Often pollutant loading from tributary watersheds must often be reduced to control or reverse water quality degradation in impaired water bodies. TMDL and/or WRAPS implementation presents an opportunity for the LRRMWO to coordinate water quality improvement efforts between cities and other partners.

Regular water quality monitoring performed by the ACD, MPCA, and other partners is necessary to identify water quality issues and trends (see Section 2.7.3). Specific water quality issues identified within the LRRWMO include:

- Cedar Creek is impaired for aquatic recreation due to *E. coli*
- Trott Brook is impaired for aquatic life due to dissolved oxygen, fish bioassessments, and invertebrate bioassessments
- Protection of good water quality conditions observed in LRRWMO priority lakes
- Sediment and other pollutant loading to the Rum River and Mississippi River

Addressing water quality issues in the Rum River and Mississippi River is challenging because of the size and location of the LRRWMO within the respective watersheds of these resources. While the LRRWMO focuses on reducing the pollutant loading to the Rum River and Mississippi River within its jurisdiction, the benefits of its actions may not be observable in river water quality data.

3.2.3 Flood risk and water quantity issues

In a natural, undeveloped setting, pervious ground cover allows water, including stormwater runoff, to infiltrate the soil. Land development and increased impervious areas alter natural drainage patterns and increase the rate and volume of stormwater runoff. The additional volume of runoff can increase water levels in ponds, lakes, streams, and wetlands, which increases the potential for erosion and flooding. It also causes large, flashy flows in storm sewers, which increases the potential for flooding and property damage. Increased precipitation also results in high water tables and increased groundwater flow to springs, potentially threatening the stability and capacity of downstream structures.

Managing the risk of flooding is a focus of the LRRWMO and its cities due to the potential threat to public health and safety, infrastructure, and the environment. In addition to property damage, flooding may cause other impacts that are harder to quantify, including the following:

- Flooding of roads making them impassable to emergency vehicles and residents
- Shoreline erosion
- Destruction or alteration of riparian habitats
- Restricted recreational use of waterbodies, trails, and adjacent lands
- More strain on budgets and personnel for repairing flood-damaged facilities and controlling public use of facilities during flooding events

The Federal Emergency Management Agency (FEMA) has identified areas prone to flooding during 100-year flood events to assist cities and residents in managing flood risk. FEMA-mapped floodplains within the LRRWMO are generally limited to areas surrounding lakes, ponds, and streams and may not reflect localized flood risk related to stormwater conveyance systems (see Figure X).

During plan development, member cities were polled and did not identify significant flood risk issues for which LRRWMO assistance is requested. Minor local flooding issues (e.g., temporary street flooding) are described in the local water management plans of Andover, Anoka, and Ramsey.

While there are few existing flood risk issues, precipitation patterns are trending towards larger, more intense storms (see Section 2.1.2). NOAA's 2013 assessment of climate trends for the Midwest found that precipitation amounts are predicted to increase significantly over what is historically used in floodplain assessments and infrastructure design. Median estimates of mid-21st century 24-hour precipitation events with a 1% chance of occurring in a given year (i.e., 100-year event) exceed 10 inches, a significant increase over current design values (7.44" 100-year Atlas 14 event). Understanding the hydrologic response of the watershed to large precipitation events is critical to identifying areas of flood risk and evaluating strategies to reduce flood risk or damages. The CAC identified flood risk and water quality impacts (e.g., increased erosion) resulting from increased precipitation as high priority to be addressed in the LRRWMO Plan.

Existing development in portions of the LRRWMO limits the available physical space for capital improvements to address local flooding issues. Appropriate rate and volume control applied throughout the watershed are necessary to minimize future flooding issues. The LRRWMO's regulatory program includes criteria intended to limit adverse impacts to floodplains and minimize flooding. The negative impacts of flooding may be further minimized by thoughtful management of the floodplain achieved through education and other activities.

3.2.4 Erosion and Sedimentation

Sediment is a major contributor to water pollution. Stormwater runoff from streets, parking lots, and other impervious surfaces carries suspended sediment consisting of fine particles of soil, dust, and dirt. Abundant amounts of suspended sediment are carried by stormwater runoff from actively eroding areas, including unstable or degraded stream and lake shorelines.

Although erosion and sedimentation are natural processes, they are often accelerated by human activities, including development and other land use changes. Loss of vegetation limits the ability of the landscape to intercept rainfall and slow stormwater runoff, limiting the opportunity for runoff to infiltrate into the soil. Land development may also result in the grading and filling of natural depressions that previously provided temporary storage of rainfall and opportunities for infiltration and sediment removal. Increased precipitation volumes and intensities can also result in increased stormwater runoff, further accelerating upland erosion and contributed to higher flows in downstream resources, accelerating streambank erosion. Erosion along the Rum River was specifically identified as an issue by the TAC and CAC during Plan development,

Regardless of its source, sediment deposition decreases water depth, degrades water quality, smothers fish and wildlife habitat, and degrades aesthetics. Sediment deposition can also wholly or partially block culverts, manholes, storm sewers, etc., increasing flood risk. Sediment deposition in detention ponds and wetlands also reduces the storage volume capacity, resulting in higher flood levels and/or reducing the amount of water quality treatment provided. Erosion also results in channelization of stormwater flow, increasing the rate of stormwater runoff and further accelerating erosion. As erosion and sedimentation increase, the stormwater management systems (e.g., ponds, pipes) require more frequent maintenance, repair, and/or modification to ensure they will function as designed.

The LRRWMO implements a permit program and associated performance standards to limit the opportunity for excessive erosion and sedimentation. In addition, owners and operators of construction sites disturbing 1 or more acres of land must obtain a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit from the MPCA. A key permit requirement is the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) with appropriate best management practices (BMPs) that address erosion and sediment control.

3.2.5 Wetlands, Shoreland, and Natural Areas

Healthy wetland systems, shoreland areas, riparian areas, and natural spaces are critical components of the hydrologic system and positively affect soil health, groundwater, surface water quality and quantity,

wildlife, fisheries, aesthetics, and recreation. Development of the watershed for residential, commercial, and land uses (see Section 2.3) has resulted in the loss of wetlands and natural vegetation. However, many wetlands, areas of biological significant, and other natural areas remain (see Figure 2-9, Figure 2-14, and Figure 2-15). Most natural and semi-natural areas are located within city and regional parks and are protected from future development. Within the watershed, the LRRWMO protects wetland from further loss and degradation through administration of the Wetland Conservation Act (WCA) and LRRWMO permit program (see Section 5.3.2.1.).

Many of the hydrologic, water quality, and habitat benefits achieved by wetland and shoreland areas are dependent on the presence of buffers – upland, vegetated areas located adjacent to wetlands and shoreland areas. Establishing buffers in developed areas may be difficult, as existing structures may be located within the desired buffer area. Redevelopment offers an opportunity to establish adequate buffers in areas that are already developed. The LRRWMO requires buffers to be maintained around wetlands during construction, but does not require permanent wetland buffers. During Plan development, the TAC noted a need for continued wetland education.

The development and preservation of buffers along the Rum River and Mississippi River are regulated by state shoreland requirements (see Section 2.9.1 and Section 2.9.2) and enforced by cities at the local level. The CAC cited lack of adequate vegetated buffers along portions of the Rum River as a specific concern. The LRRWMO assists member cities, as requested, in addressing buffer and shoreline issues on a case-by-case basis.

The ecological functions, quality, and recreational benefits of natural resources may be negatively impacted by aquatic and terrestrial invasive species – non-native plants and animals that outcompete and displace native species. The MDNR established the Invasive Species Program in 1991. The program is designed to implement actions to prevent the spread of invasive species and reduce the impacts caused by invasive species to Minnesota's ecology, society, and economy. The MDNR provides technical support to counties, local governments, and their partners to develop AIS prevention strategies. The MDNR also maintains a list of waters infested with specific AIS – no LRRWMO waterbodies are listed as of 2020. The LRRWMO will continue to work with its member cities, Anoka County, and the MDNR to identify, track, and manage future AIS issues within the watershed.

During Plan development, member cities were polled and did not identify known invasive species within the watershed.

3.2.6 Groundwater Contamination and Supply

Maintaining clean, safe groundwater supplies is critical to human and environmental health and to the economic and social vitality of communities. Residents within the LRRWMO obtain their drinking water from municipal groundwater wells and private domestic wells. Most private wells are located in the surficial aquifer, which is sensitive to contamination within the watershed (see Figure 2-6). Potential sources of contamination include leaking underground storage tanks, unsealed wells, failing or non-performing subsurface sewage treatment systems (SSTS), infiltration of contaminated surface water, and others (see Section 2.10). Owners of private wells may not be aware of water quality issues (which may

include elevated concentrations of nitrates, arsenic, and the presence of pesticides) due to the lack of any required testing.

Prevention of groundwater contamination through best management practices is critical. Once contaminated, groundwater may remain contaminated for long periods of time. Groundwater clean-up is expensive and technically complex, even when feasible. Increased public awareness of the importance of drinking water protection on the public's general health and well-being is critical to promote practices that protect the quality of groundwater.

While the LRRWMO promotes infiltration as a preferred method of stormwater treatment, it may have negative consequences in areas with vulnerable groundwater resources. To protect these resources, the LRRWMO requires that infiltration practices be implemented with consideration of guidance provided by the MPCA in its NPDES General Construction Stormwater permit (2018, as amended) and MIDS guidance (2013, as amended).

During the development of this Plan, the ACD identified groundwater protection education and increased understanding of groundwater quality and quantity as specific issues of concern. The MDNR also cited groundwater conservation as a priority issue and suggested potential LRRWMO roles in relation to groundwater. The CAC further identified SSTS management as priority issues related to groundwater contamination. The LRRWMO considered TAC and CAC input in the development of the policies, goals, and implementation actions to address groundwater included in this Plan.

3.3 Organizational Issues

3.3.1 Efficacy of the LRRWMO Permit Program

Since its inception, the LRRWMO permitting program has been the primary focal point of the LRRWMO's activities and means by which the LRRWMO pursues its goals. The program requires the review and approval of projects that disturb or alter an area of more than 1 acre. During Plan development, the TAC identified permit program efficiency as an issue. Member city staff met to discuss the efficacy of the permit program, consider potential updates to performance standards, and identify modifications to improve permitting efficiency.

Concurrent with the development of this Plan, the LRRWMO is updating its permitting process to include separate permit applications for:

- Wetland impacts
- Stormwater management and erosion control

The updated permit application also clarifies the sequence for review and coordination between member cities, the LRRWMO, and the LRRWMO engineer. The updates to the permit application and process should reduce city staff time spent coordination with applicants and ultimately reduce costs to implement the program.

During Plan development, the LRRWMO and city staff concurred that the current performance standards appropriately balance environmental protection with community development needs. The LRRWMO performance standards are generally aligned with the MPCA's NPDES construction stormwater general permit to further promote efficiency.

3.3.2 Funding and Capacity

The extent to which the LRRWMO may implement projects and programs to pursue its goals is limited by the availability of funding and organizational capacity. The LRRWMO is funded by public dollars collected by its member cities and through grants from government agencies (which are also ultimately taxpayer-funded). The LRRWMO seeks spend its funds in a responsible manner that considers the relative benefits, per dollar, of its actions. The benefits of effective water and natural resource management actions are difficult to quantify – especially when achieved in the form of pollution prevention as is the focus of the LRRWMO permitting program.

During Plan development, both the TAC and CAC cited funding limitations as barriers to implementing desirable resource protection projects and programs. Grant funding and BWSR's recently implemented watershed-based implementation funding (WBIF) may provide additional resources to achieve the LRRWMO goals. In addition, the LRRWMO leverages member city and partner staff, as appropriate, in collaborate actions. The LRRWMO continues to review its accomplishments and expenses to evaluate the value of its projects and programs, using best professional judgment and available data.

3.3.3 Education and Engagement

Public education and engagement are important pathways to protect water and natural resources. Pollution prevention and other behaviors practiced by businesses and residents can cumulatively mitigate negative impacts to resources, limiting the need for expensive restoration action. Through education and engagement, the LRRWMO and its partners can empower local advocates for natural resource stewardship in their neighborhoods and communities.

During Plan development, the TAC and CAC cited the need for increased education regarding specific environmental issues, including, but not limited to:

- Chloride and salt application
- Groundwater conservation
- Buffers and shoreline management
- Drinking water quality and well testing

The CAC noted the opportunity for increased outreach to schools and youth groups to increase community capacity. The ACD also noted the importance of consistent and coordinated messaging to promote resident action.

The LRRWMO's education and engagement efforts are limited by a lack of staff. Therefore, the LRRWMO performs its education and engagement duties primarily through its member cities and the ACD. The LRRWMO also maintains a website containing meeting minutes, contact information, and reports and

studies, including the watershed management plan. The LRRWMO website also contains links to other reference and educational material. More information is available at the LRRWMO website: http://www.lrrwmo.org/

4 Goals and Policies

The Lower Rum River Watershed Management Organization (LRRWMO) has established goals to address the water and natural resource management issues described in Section 3. LRRWMO goals are aligned with the broad statutory purposes listed in Minnesota Statues 103B.201 but are more specific in their application to LRRWMO resources. The LRRWMO has also adopted policies to support the achievement of LRRWMO and partner goals. Goals and policies are described in this section.

4.1 Goals

LRRWMO goals are presented in Table 4-1. Goals are generally grouped according to issue area (see Section 3) although many of the goals address multiple issues. Where appropriate, goals contain measurable quantities to evaluate progress (see Section 5.5.2). In some cases, measurable quantities are not included for reasons that may include:

- Lack of baseline data (e.g., reduction in chloride loading from a currently unknown amount)
- Variable or unknown opportunities for implementation (e.g., volume reduction associated with LRRWMO-permitted projects)
- Dependence upon partner action (e.g., LRRWMO support for actions related to groundwater and invasive species issues)

Measures and/or outputs have been identified for each goal to assist in evaluating progress.

Table 4-1 LRRWMO goal statements and associated metrics

Issue Area	Priority Level	Goal ID	Goal Statement	Measure/Output
Stormwater Management	Level 1	SW-A	Minimize loading of nutrients, sediment, and other pollutants to downstream water resources through the continued implementation of the LRRWMO rules and permit program	
		SW-B	Manage stormwater runoff with practices that mimic natural hydrology by retaining a volume equivalent to 1.0 inches over new and redeveloped or existing impervious surfaces	
		SW-C	Achieve intended water quality and quantity performance from stormwater infrastructure through required inspection and maintenance	
Surface Water Quality	Level 1	WQ-A	Maintain or improve existing water quality in non-impaired priority LRRWMO waters: - Grass (Sunfish) Lake (TP= 14 ug/L, Chl a = 5.8 ug/L, SD = 1.3 m) - Rogers Lake (TP= 59 ug/L, Chl a = 19.7 ug/L, SD = 1.1 m) - Round Lake (TP= 31 ug/L, Chl a = 7.9 ug/L, SD = 2.9 m)	
		WQ-B	Reduce phosphorus loading to the Rum River by 800 lbs/year through implementation of the LRRWMO permit program, and by 100 lbs/year through non-structural and structural improvements (e.g., streambank stabilization)	
		WQ-C	Reduce bacteria loading to the Mississippi River and Rum River through appropriate regulatory controls, vegetated buffers, and education	
		WQ-D	Increase dissolved oxygen concentrations in Trott Brook to 75% above 5 mg/L through education for riparian landowners and targeted pollution prevention practices (to reduce P and organics) targeted wetland restoration opportunities.	
		WQ-E	Reduce chloride loading to downstream water resources	
Flood Risk and Water Quantity	Level 2	FL-A	Maintain existing floodplain volume and function (i.e., not net loss)	
		FL-B	Minimize flood risk through the implementation of minimum building elevations, volume control, and rate control standards for new development and redevelopment	
		FL-C	Mitigate negative impacts of climate change by considering present and future climate and precipitation trends when evaluating flood risk and designing projects	

Table 4-1 LRRWMO goal statements and associated metrics

Issue Area	Priority Level	Goal ID	Goal Statement	Measure/Output
Erosion and Sedimentation	Level 2	ES-A	Reduce sediment loading from streambank erosion along the Rum River by approximately 75 tons/year through streambank stabilization and restoration actions over an estimated 500 feet.	
Wetlands, Shorelands, and Natural Areas	Level 2	NA-A	Work with partners to minimize the spread and negative impact of aquatic invasive species	
		NA-B	Minimize negative impacts to wetlands through continue administration of the Wetland Conservation Act	
Groundwater Contamination and Supply	Level 2	GW-A	Cooperate with partners to limit pollutant loading to groundwater through education and regulation	
Regulatory Program Efficacy	Organiz-ation	RP-A	Improve regulatory efficiency and environmental benefits through periodic review and updates to the LRRWMO rules and permit program	
Funding and Capacity	Organiz-ation	FC-A	Evaluate the effectiveness of LRRWMO programs and activities and adjust priorities using an adaptive management approach	
		FC-B	Increase the use of grant funding and cost-share opportunities to achieve LRRWMO goals by pursuing at least 5 grant opportunities and/or cost-share projects over 10 years	
		FC-C	Coordinate with cities and partners to most efficiently achieve LRRWMO goals through shared expertise and resources	
		FC-D	Work with partners to consider and incorporate recreational benefits in coordination with LRRWMO programs and projects	
Education and Engagement	Organiz-ation	ED-A	Increase public awareness and support for LRRWMO actions through education and engagement	
		ED-B	Increase community capacity to engage in behaviors and practices to improve the quality of water and natural resources through education and at least 1 volunteer opportunity per year	

Note: Goal ID is used to correlate implementation actions to applicable goals

4.2 Strategies and Policies

The LRRWMO uses four primary strategies to implement this Plan and achieve its organizational goals and statutory obligations. These strategies include:

- Regulation
- Education
- Cooperation
- Operations

Generally, these strategies include all of the LRRWMO's activities. Different strategies are emphasized for different target audiences of this Plan, as follows:

		Target Audiences			
		Residents, Businesses, Public	City Staff and Governments	Developers	Regulatory Agencies
Strategy	Regulation	X	X	X	
	Education	X	X	X	
	Cooperation		X		X
	Operation		X		

These strategies are supplement by policies established by the LRRWMO. These policies apply to one or more target audiences and promote the achievement of LRRWMO goals. Policies and strategies are described in greater detail in the following the following sections.

4.2.1 Strategies and Policies: Cooperation

The LRRWMO is one of many organizations with authorities and responsibilities for the management and protection of water and natural resources. These organizations may implement rules, permits, programs, and projects within, or applicable to, the LRRWMO's jurisdiction. Coordination of planning, programs, and projects between the LRRWMO and existing and potential partner organizations is important to efficiently achieving shared goals while avoiding redundancy. Working with partners also allows sharing of knowledge, innovative methods, and new technologies.

Organizations the LRRWMO may cooperate or partner with during Plan implementation include:

- Anoka Conservation District: www.anokaswcd.org/
- Anoka County Public Health and Environmental Services: www.anokacounty.us/522/Public-Health-and-Environmental-Services
- Metropolitan Council www.metrocouncil.org

- Minnesota Board of Water and Soil Resources www.bwsr.state.mn.us
- Minnesota Department of Agriculture www.mda.state.mn.us
- Minnesota Department of Health www.health.state.mn.us
- Minnesota Department of Natural Resources www.dnr.state.mn.us
- Minnesota Pollution Control Agency www.pca.state.mn.us
- US Army Corps of Engineers www.mvp.usace.army.mi

Generally, the content of this Plan is consistent with the guidance of cooperating agencies. Many of the potential partner organizations listed above were consulted during the development of this Plan through a Technical Advisory Committee (see Section 1). The implementation schedule (see Table 5-1) identifies potential partners for specific activities, where appropriate. The LRRWMO will continue to seek opportunities to leverage partnerships to more effectively and efficiently implement its programs and projects.

The primary focus of the LRRWMO will be on water resource management issues that cross municipal boundaries (i.e., intercommunity issues). The LRRWMO is well-positioned to convene local stakeholders including city and county governments, residents, and property owners. Regular communication and coordination between member cities, the LRRWMO, and local stakeholders will occur throughout Plan implementation. Examples of this coordination may include stormwater BMPs implemented in cooperation with city parks, street reconstruction efforts, and other infrastructure programs.

4.2.2 Strategies and Policies: Education

Education and public engagement are important strategies for protecting and improving water and natural resources. Through education, the LRRWMO can empower local advocates for watershed stewardship, effectively increasing the LRRWMO's capacity for action. Pollution prevention and other behaviors practiced by residents can limit degradation of natural resources.

Effective communication and engagement are necessary to establish and develop relationships between the District and the communities in which the District and its partners serve. The LRRWMO has established several education and public engagement policies to foster responsible water quality management practices by educating residents, business owners, member communities, and developers. Education and public engagement policies are presented in Table 4-2.

Table 4-2 LRRWMO Education Policies

No.	Policy	Target Audience(s)	Implementing Entity(-ies)
1	The LRRWMO will continue to work with the Anoka Conservation District, member cities, and other partners to develop and distribute educational materials to inform stakeholders regarding water and environmental and promote responsible environmental practices.	Residents, Developers, Business owners, City staff, City councils	LRRWMO, ACD, Cities
2	The LRRWMO will continue to maintain its website as a primary source of information and communication tool.	Residents, Developers, Business owners, City staff, City councils	LRRWMO, ACD
3	The LRRWMO will leverage new technology platforms communication tools, as appropriate, to engage residents and other stakeholders.	Residents, Developers, Business owners,	LRRWMO
4	The LRRWMO will engage with member cities, developers, and project applicants to communicate permit requirements and promote consistency and efficiency in program implementation.	Developers, City staff, City councils	LRRWMO, Cities
5	The LRRWMO will work with ACD to solicit volunteers to participate in LRRWMO monitoring, outreach, and other Plan activities.	Residents	LRRWMO, ACD

4.2.3 Strategies and Policies: Regulation

The LRRWMO has adopted policies that leverage its own, and its member cities', regulatory authority with respect to water and natural resources. Implementation of some policies is delegated to the LRRWMO member cities. The LRRWMO will review the implementation of these policies with the member communities annually to assess applicability and compliance. The LRRWMO regulatory policies are presented in Table 4-3.

Table 4-3 LRRWMO Regulation Policies

No.	Policy	Target Audience(s)	Implementing Entity(-ies)
6	The LRRWMO requires water quality treatment through volume reduction for development and redevelopment projects disturbing at least 1 acre. Volume reduction must be consistent with the LRRWMO Stormwater Standards included in Appendix E.	Developers, Cities	LRRWMO
7	The LRRWMO requires infiltration practices to be implemented in accordance with the guidance for determining the feasibility of infiltration included in Appendix E and consistent with: • NPDES General Construction Stormwater Permit (2013, as amended) • Minimal Impact Design Standards (MIDS) Design Sequence Flow Chart (2013, as amended) • Minnesota Department of Health's Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas (MDH, 2007) The LRRWMO recommends that infiltration practices be designed consistent with the guidance included in the Minnesota Pollution Control Agency's Minnesota Stormwater Manual	Developers, Cities	LRRWMO
8	The LRRWMO requires that stormwater management practices constructed a condition of development or redevelopment shall be placed in drainage and utility easements dedicated to the member city.	Developers	LRRWMO Cities
9	The LRRWMO will cooperate with member cities, the MPCA, and other stakeholders in the preparation of total maximum daily load (TMDL) studies for waterbodies on the MPCA's current or future impaired waters 303(d) list. The LRRWMO will work to align TMDL implementation items into its Watershed Management Plan to achieve efficiency. The LRRWMO will work with the cities to evaluate funding options for the TMDL studies and implementation actions to address impaired waters.	Cites MS4s Residents	LRRWMO Cities MPCA
10	For development and redevelopment projects triggering a LRRWMO permit, the LRRWMO requires the establishment of permanent, vegetated buffers adjacent to wetlands of at least 16.5 feet. The LRRWMO encourages member cities to adopt more stringent wetland buffer requirements for new development.	Developers	LRRWMO Cities
11	The LRRWMO will serve as the Local Government Unit (LGU) for administering Wetland Conservation Act (WCA) within its member cities (excluding MNDOT jurisdiction).	Developers Cities	LRRWMO

Table 4-3 LRRWMO Regulation Policies

No.	Policy	Target Audience(s)	Implementing Entity(-ies)
12	The LRRWMO requires the submission and implementation of erosion and sediment control plans for land disturbance activities of 1 acre or more in size (unless the project is for agricultural purposes, as defined by the Municipal Comprehensive Land Use Plans). These plans shall conform to the general criteria set outlined in the Minnesota Pollution Control Agency "Protecting Water Quality in Urban Areas," Municipal Ordinances, and the NPDES Construction General permit.	Developers Cities	LRRWMO
13	Member cities shall continue managing erosion and sediment control permitting programs and ordinances as required by their NPDES MS4 permit and the NDPES Construction Stormwater General Permit. These programs must address: • Permitting and inspection of erosion controls • Erosion and sediment control at individual building sites • Requirements and procedures for reviewing, approving, and enforcing erosion control plans	Developers	Cities
14	The LRRWMO requires that member cities maintain floodplain ordinances that are consistent with the LRRWMO Stormwater Standards (see Appendix E), including minimum building elevations (including basements) at least 2 feet above the 100-year floodplain elevation.	Developers Residents	Cities
15	The LRRWMO requires compensatory storage for impacts to floodplain storage (i.e., no net loss in floodplain storage) and prohibits filling/encroachment of FEMA-delineated floodways.	Developers Residents	Cities
16	The LRRWMO allows only land uses in the LRRWMO-established or FEMA-delineated floodplain that will not be damaged by floodwaters and will not increase flooding. Allowable types of land use that are consistent with the floodplain include recreation areas, parking lots, temporary excavation and storage areas, public utility lines, agriculture, and other open spaces.	Developers Residents	Cities
17	The LRRWMO requires member cities to maintain ordinances that are consistent with Minnesota Rules, Chapter 6120.5000 and LRRWMO performance standards included in the LRRWMO Rules. Member cities must submit updates to floodplain ordinances to the LRRWMO for review.	Developers Residents	Cities

4.2.4 Strategies and Policies: Operations

The operations strategy refers to administrative and organizational roles of the LRRWMO and its member cities. These policies address ongoing programs (e.g., monitoring), reporting and assessment, funding, BMP maintenance, planning, and other activities associated with water resource management within the LRRWMO. The operations policies adopted by the LRRWMO are presented in Table 4-4.

-

Table 4-4 LRRWMO Operations Policies

No.	Policy	Target Audience(s)	Implementing Entity(-ies)
19	The LRRWMO will continue to work with the Anoka Conservation District, member cities, and other partners to perform water quality and water quantity monitoring of priority resources.	Public Cites MPCA	LRRWMO ACD
20	The LRRWMO will continue to engage the Anoka Conservation District acting as the depository and coordinator for the collection of water quality data to assure consistency and comparability of data.	Public Cites MPCA	ACD
21	The LRRWMO will assess priority water resources relative to applicable water quality standards annually; where declining trends and/or water quality standard exceedances are identified, the LRRWMO will work the appropriate member cities to evaluate the situation and develop resource specific water quality improvement or protection strategies.	Public Cities LRRWMO	LRRWMO Cities
18	The LRRWMO requires that each member city perform all duties required as part of its NPDES MS4 stormwater permit.	Public Cities	Cities
27	Member cities are responsible for maintenance of their public drainage systems to ensure intended functions (excepting County ditches and other public ditches for which the City is not the ditch authority).	Public Developers Cities	Cities
28	Owners of private stormwater facilities shall be responsible for maintenance to ensure the intended function of those facilities, except where documented maintenance agreements exist. Maintenance of private ditches and other stormwater facilities are subject to LRRWMO permit requirements, if applicable.	Public Developers	Cities LRRWMO
29	The LRRWMO recognizes Anoka County's jurisdiction over public ditches in the LRRWMO (except for County Ditch 3/66 and Ditch 43 the responsibility of the City of Ramsey, per Joint Powers Agreement dated April 18, 2002).	Anoka County	LRRWMO
31	The LRRWMO defers management authority of the Rum River Dam to the City of Anoka. The LRRWMO will collaborate on management decisions, as requested by the City of Anoka.	City of Anoka	LRRWMO
23	Member cities are required to develop local water management plans consistent with Minnesota Rules 8410. All local water management plans shall be consistent with the LRRWMO Plan and Rules. The LRRWMO shall review local water management plans.	Public Cities	LRRWMO Cities
32	The LRRWMO will work with member cities to periodically review and update its permit program to improve consistency, efficiency, and ensure the intended benefits are achieved.	Cities	LRRWMO
34	The LRRWMO will continue to track excess stormwater retention volume (i.e., "banking") and seek opportunities for future banking sites and projects.	Developers Cities	LRRWMO
22	The LRRWMO will collaborate with the URRWMO, Rum River 1W1P Partnership, and other entities to provide guidance for upstream projects and programs designed to address water quality, flooding, and ecological issues in the Rum River.	Rum River 1W1P Partners	LRRWMO

Table 4-4 LRRWMO Operations Policies

No.	Policy	Target Audience(s)	Implementing Entity(-ies)
26	The LRRWMO will collaborate with local and state agencies if/when these agencies develop a groundwater action plan in an effort to gain a better understanding of groundwater-surface water interaction and develop management strategies that consider the protection of both resources. The role of the LRRWMO may include: • Collaborate with local and state agencies to identify data gaps and attempt to fill those gaps through collection of groundwater level data and/or surface water flow data. • Coordinate with appropriate local and state agencies to develop a groundwater budget for the watershed. • Coordinate with appropriate local and state agencies to develop and utilize tools to assess surface water impacts and groundwater impacts of groundwater use	MDNR MDH Anoka County	LRRWMO
24	The LRRWMO will prepare an annual report consistent with the requirements of Minnesota Statutes 103B. The LRRWMO will submit the annual report to BWSR and make the annual report available on its website at www.lrrwmo.org	BWSR Cities	LRRWMO ACD
25	Member communities shall prepare and submit an annual status report to the LRRWMO by January 1 of each year reviewing the status of their local plans, the status of the implementation of their plans, and a review of the implementation of the policies outlined in the LRRWMO plan. Annual status reports shall be prepared using the LRRWMO template.	LRRWMO Cities	LRRWMO Cities
35	The LRRWMO will assess progress towards Plan goals and implementation at least every two years. As part of this assessment, the LRRWMO will review its implementation program prioritization and consider City implementation programs. The LRRWMO will revise its implementation plan, if necessary, through the Plan amendment process.	BWSR	LRRWMO ACD
30	The LRRWMO will continue to pursue external (i.e., non-city) sources of funding to support implementation of the LRRWMO Plan, including grants, cost-share opportunities, and in-kind services.	--	LRRWMO ACD
33	For development and redevelopment proposals that are unable to meet LRRWMO infiltration requirements, the LRRWMO requires contribution to a stormwater impact fund. The LRRWMO will review and update the contribution amount at least every two years based on expenses incurred by past projects.	Developers	LRRWMO

5 Implementation Program

The LRRWMO implementation program summarizes the activities the LRRWMO plans to perform over the next 10 years. The implementation program includes administrative activities, programs (e.g., monitoring, permitting), studies, and projects necessary to pursue LRRWMO goals. Methods for prioritizing and funding programs, projects, and capital improvements are also discussed in this section. The implementation of this plan will be through the LRRWMO, the member communities, Anoka Conservation District, or a joint effort between the LRRWMO and other state, local or federal agencies.

5.1 Implementation Plan Structure

The District's implementation plan is organized into the following major categories:

- Administration
- Programs, including:
    - Engineering, Permitting, and Planning
    - Education
    - Monitoring
- Projects, including studies and Capital Improvements

Proposed LRRWMO activities are presented in Table 5-1 according to the above categories. Table 5-1 includes the following planning-level information:

- Activity category
- Activity title
- Priority level (see Section 5.2)
- Goals addressed by the activity (see Table 4-1)
- Potential partners
- Estimated total cost over the 10-year Plan life (planning level)
- Proposed year(s) of implementation
- Estimated annual cost

5.2 Prioritization and Targeting

The LRRWMO acknowledges that limited funding and capacity may prevent the scheduled completion of all planned activities. To further guide implementation, activities presented in Table 5-1 are therefore identified as having "high" or "medium" priority with consideration for several factors.

> **High Priority** – high priority activities include those actions necessary for the LRRWMO to exist and operate and activities required by Minnesota Statute 103B and Minnesota Rules 8410 (e.g.,

plan development, annual reporting). High priority activities also include those that address level 1 priority issues of stormwater management and water quality (see Table 3-1).

Medium Priority – medium priority activities include those that are not required by statute or rule and are not essential to addressing level 1 resource issues (see Table 3-1). Examples include non-water quality monitoring activities and coordination of a citizen advisory committee.

This classification system is qualitative and intended to serve as a guide for annual work planning and budgeting. Activities in the annual work plan may be accelerated, delayed, delegated, or abandoned relative to the 10-year implementation plan. For example, activities led by partners may be implemented earlier or later than planned due to changing partner priorities, funding, and schedules. Factors considered in the development of the annual work plan may include the following:

- Annual budget commitments from previous years (i.e., ongoing responsibilities)
- Available revenues, grants, and cost-share funding (e.g., from cities or agencies)
- Activity priority
- Feasibility
- Risk (of performing or not performing the activity)
- Results of monitoring or studies
- Input from member cities, CAC, and other partners
- Consideration of balance with other proposed projects and programs

The implementation plan (Table 5-1) is a statement of intent by the LRRWMO. Final decisions on implementation activities rest with the Board of Managers to budget for and authorize via the annual work plan. During implementation, additional activities may be added to Table 5-1 via a Plan amendment (see Section 5.6).

The programs and projects identified in Table 5-1 are also targeted, where applicable, to specific geographies, resources, and audiences within the watershed. Water quality monitoring and management activities are targeted to the following **LRRWMO priority waters**:

- Rum River
- Grass (Sunfish) Lake
- Rogers Lake
- Round Lake

The LRRWMO plans to perform subwatershed analyses early in Plan implementation to estimate pollutant loading throughout the watershed (see Table 5-1). Spatial estimates of pollutant loading may be used to prioritize and target future water quality improvement projects.

5.3 Implementation Categories

5.3.1 Administration

The LRRWMO administration work includes ongoing activities that recur annually to satisfy Minnesota Rules for watershed management organizations and those that pertain to the organization, administration, and operation of the LRRWMO. This includes time and expenses for an administrator, recording secretary, and legal counsel. This category also includes activities related to annual work planning, reporting, and progress assessment, as well as activities performed in pursuit of external funding (e.g., grant) opportunities.

5.3.2 Engineering, Permitting, and Planning

Engineering, permitting, and planning implementation activities include the implementation of the LRRWMO permit program. These activities also include review of local water management plans (see Section 5.7.1), periodic review and update to LRRWMO standards, coordination with partner planning efforts (e.g., Rum River 1W1P), and updates and amendments to the LRRWMO Plan (this document).

5.3.2.1 LRRWMO Permit Program

Since its inception, the LRRWMO permitting program has been the primary focal point of the LRRWMO's activities and the primary means of pollution prevention within the watershed. The LRRWMO requires project proposers to apply for and obtain a LRRMWO permit (see Appendix B and Appendix C) prior to performing activities that disturb one or more acre of land or have potential wetland impacts, regardless of size, that meet the requirements of the Wetland Conservation Act (WCA).

Prior to submitting an LRRWMO permit application, project proposers should coordinate with applicable City staff and confirm that all local requirements (i.e., City controls) are satisfied. The project proposer must then submit a:

1. Grading, Stormwater Management, and Erosion/Sediment Control Permit Application

   and/or

2. Permit Application for Wetland Conservation Act Decision

The LRRWMO engineer reviews permit applications for compliance with LRRWMO stormwater and wetland performance standards (see Appendix E and Appendix F) and makes a recommendation for approval, approval with conditions, or disapproval to the LRRWMO Board. The Board may issue a permit based on the recommendation of the engineer. The procedures for permit review, approval, and enforcement are described in greater detail in Appendix B and Appendix C.

The LRRWMO tracks the estimated stormwater volume reduction and estimated pollutant reductions achieved by these projects. From 2019 through 2020, the LRRWMO reviewed over 40 projects which provide and estimated 175 lbs/year total phosphorus reduction and 18 tons/year sediment reduction.

The LRRWMO updated its permit application process concurrent with the development of this Plan. The LRRWMO will continue to periodically meet with City staff to evaluate the efficacy and efficiency of

LRRWMO performance standards and permit program. Placeholder activities for anticipated updates to performance standards and permit applications during the next 10 years are included in Table 5-1.

5.3.3 Education Program

Education activities include those activities performed by LRRWMO and its contracted staff. These activities are generally identified in Table 5-1. The LRRWMO carries out much of its educational programming through the member cities and ACD. Member cities distribute articles and newsletters that address water and natural resource information, including, but not limited to:

- Pollution prevention stewardship practices
- Wetland protection
- Invasive species prevention and management
- Groundwater quality
- Water conservation
- Hazardous waste disposal
- Reducing winter salt application
- Small-scale BMP cost-share opportunities

Consistent with Minnesota Rules 8410.0160, the LRRWMO maintains a website that contains the LRRWMO meeting information, Manager and staff contact information, regulatory (i.e., permit) program information, planning documents, annual reports, and links to additional information. The website is hosted and maintained by the ACD. The LRRWMO website is: http://www.lrrwmo.org/

The LRRWMO also supports education and public engagement activities through an ACD Education Coordinator. The ACD Education Coordinator prepares educational material for distribution by the LRRWMO, ACD, and member cities, represents LRRWMO interests at public events, solicits volunteers, and performs other engagement activities.

As part of Plan development, the LRRWMO convened a citizen advisory committee (CAC). The LRRWMO plans to leverage the CAC in ongoing opportunities during Plan implementation. These opportunities may include monitoring data collection, public engagement at events, or input/review of LRRWMO activities.

5.3.4 Monitoring Program

The LRRWMO monitors the water quality of the following priority water resources in order to assess trends and identify the need for potential management actions:

- Rum River
- Grass (Sunfish) Lake
- Rogers Lake
- Round Lake

Water quality monitoring is performed by the ACD and/or Metropolitan Council through the Citizen Assisted Monitoring Program (CAMP). Water quality of Grass (Sunfish) Lake is monitored annually; Round

Lake and Rogers Lake are monitored every three years. Lake level monitoring is performed annually on Grass (Sunfish) Lake, Round Lake, Rogers Lake, and Lake Itasca. Student volunteers also perform biological monitoring of the Rum River annually.

Monitoring data is compiled by the ACD and available from the LRRWMO website: http://www.lrrwmo.org/monitoring

Hydrologic and water quality monitoring data is also supplemented by data collected by the Minnesota Pollution Control Agency (MPCA), Minnesota Department of Natural Resources (MDNR), US Geological Survey (USGS) and others.

5.3.5 Projects and Capital Improvements

Projects, studies, and capital improvements known at the time of Plan development are identified in Table 5-1. Several of these activities are likely to be implemented in cooperation with the ACD and/or member cities as partners. The LRRWMO anticipates leveraging watershed based implementation funding (WBIF) to support some of these projects.

Specific project opportunities not yet identified are likely to arise during the life of this Plan. The LRRRWMO has attempted to include placeholder costs for these opportunities. The LRRWMO may perform Plan amendments (see Section 5.6), as needed, to incorporate future projects.

5.3.6 Grant Programs

The LRRWMO financially supports the Anoka Conservation District cost-share grant program. The ACD cost share program provide up to 75% of material and other expenses for projects that address:

- Shoreline Stabilization
- Stormwater Treatment
- Groundwater Conservation
- Habitat Improvement and Management
- Agricultural Projects and Practices

Additional information is available from the ACD at: https://www.anokaswcd.org/index.php/water-quality.html

Table 5-1 LRRWMO Implementation Schedule - Draft 2/12/2020

Category	Activity	Goals Addressed	Priority Level	Partners	10-year cost	Estimated Cost by Year (Planning Level) - presented in 2020 dollars									
						2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Administration	General Adminstration	All	High	ACD	$ 250,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
	Annual Report	14	High	ACD	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
	Biennial progress review	14	High	ACD	$ 5,000		$ 1,000		$ 1,000		$ 1,000		$ 1,000		$ 1,000
	Grant review and application	17	Medium	ACD	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Engineering	General Engineering	All	High		$ 50,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
	Permit Review	1, 2, 3, 8, 10, 11, 13, 16	High	City	$ 300,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
	Stormwater Plan Review	7, 10, 11, 16	High		$ 6,000							$ 6,000			
	Management Plan update	14	High		$ 104,000		$ 2,000			$ 2,000			$ 20,000	$ 50,000	$ 30,000
	Review and Update Rules	6, 8, 10, 11, 12, 14, 15	High	City	$ 20,000					$ 10,000					$ 10,000
Education	Website Administration	19	High	ACD	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
	Education Coordinator	5, 6, 7, 9, 19, 20	High	ACD	$ 100,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
	City Newsletters	5, 7, 9, 20	High	ACD, City	$ 20,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
	CAC coordination	20	Medium	City	$ 15,000	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500	$ 1,500
Monitoring	Lake WQ Monitoring	1	High	ACD, MPCA	$ 27,000	$ 4,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500	$ 1,500	$ 4,500	$ 1,500	$ 1,500	$ 4,500
	Lake Level Monitoring	15	Medium	ACD	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
	Rum River WQ Monitoring	2, 3	High	ACD, MPCA	$ 20,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000	$ 2,000
	Stream bio monitoring	1, 19, 20	Medium	Schools	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
	Wetland Monitoring		Medium	ACD	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
Projects/Programs	Cost-share grant small project support	2, 5, 17, 20	High	ACD	$ 50,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
	City/ACD Cost Share projects (streambank restoration)	2, 3, 4, 5, 17, 18, 21	High	City, ACD	$ 700,000	$ 75,000	$ 50,000	$ 50,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000
	Subwatershed Analyses	18	Medium	City, ACD	$ 50,000		$ 25,000	$ 25,000							
	Groundwater Planning	9	Medium	MDNR, MDH, Met Council	$ 10,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
	Administration				$ 275,000	$ 27,000	$ 28,000	$ 27,000	$ 28,000	$ 27,000	$ 28,000	$ 27,000	$ 28,000	$ 27,000	$ 28,000
	Engineering &Permitting				$ 480,000	$ 35,000	$ 37,000	$ 35,000	$ 35,000	$ 47,000	$ 35,000	$ 41,000	$ 55,000	$ 85,000	$ 75,000
	Education & Outreach				$ 145,000	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500	$ 14,500
	Monitoring				$ 77,000	$ 9,500	$ 6,500	$ 6,500	$ 9,500	$ 6,500	$ 6,500	$ 9,500	$ 6,500	$ 6,500	$ 9,500
	Projects				$ 810,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000	$ 81,000
	Total				**$ 1,787,000**	**$ 167,000**	**$ 167,000**	**$ 164,000**	**$ 168,000**	**$ 176,000**	**$ 165,000**	**$ 173,000**	**$ 185,000**	**$ 214,000**	**$ 208,000**

5.4 Funding Mechanisms

5.4.1 LRRWMO General Fund

Through the LRRWMO joint powers agreement, each member city contributes annually to the LRRWMO general fund. The annual contribution amount is split such that 50 percent of the total is apportioned based on the area within the LRRWMO and 50 percent is apportioned based on the taxable market value. The LRRWMO has used the general fund for administrative costs, monitoring, education, studies, and select projects, including the development of this Plan.

The LRRWMO general fund may also be used to partially or completely fund capital improvements.

5.4.2 LRRWMO Improvement Fund

The LRRWMO joint powers agreement calls for the establishment of an improvement fund for each improvement project ordered by the Board not paid for out of the LRRWMO general fund. Project costs are to be apportioned to each member city in accordance with the current joint powers agreement.

5.4.3 LRRWMO Permit Application Fees and Escrow

The LRRWMO charges permit application fees and escrow fees for projects triggering a Grading, Stormwater Management, and Erosion/Sediment Control permit and/or a permit for Minnesota WCA Decision and Procedure Requirements (see Section 5.3.2.1). These funds pay for LRRWMO engineer and administrative staff time associated with review and documentation of the permit applications. The balance of the escrow is returned to the permit applicant. See Appendix B and Appendix C for additional details.

5.4.4 Ad Valorem Taxing Authority

Minnesota Statute 103B.251 allows WMOs to certify capital improvements to the county for payment, if those improvements are included in the WMO's watershed management plan. The county then issues bonds and levies an ad valorem tax on all taxable property in the WMO (or subwatershed unit of the WMO) to pay for the projects. This process requires sufficient lead time and coordination with the County, as formal County approval of any amendments to a WMO's plan and associated levy amounts is required.

A WMO may also raise funds through direct ad valorem taxation (Minnesota Statutes 103B.241), but only if the WMO is specifically listed as a special taxing district in Minnesota Statutes 275.066. If a WMO is given taxing authority, the WMO may also accumulate funds to finance improvements as an alternative to issuing bonds (Minnesota Statutes 103B.241). The LRRWMO is not currently listed as a special taxing district per MS 275.066.

Historically, the LRRWMO has not used this funding mechanism.

5.4.5 Member City Funding

Funding mechanisms available to the member cities include:

- City General Funds
- Special Assessments
- Ad Valorem Taxes
- Stormwater Utility
- Development Fees
- Tax Increment Financing

Additional information about member city funding mechanisms is available in member city local water management plans.

5.4.6 Grand Funding and Partner Cost-share

State Clean Water Fund (CWF) grants and other competitive grants provide an opportunity for the LRRWMO to offset the cost of large studies, non-structural projects, and capital improvements. The LRRWMO will continue to seek and apply for grants and loans to offset project costs whenever possible and cost effective. However, grant and loan programs change frequently as funding sources and priorities change, new grant and loans become available, and existing programs are terminated.

In addition to competitive grants, BWSR's Watershed Based Implementation Funding (WBIF) is expected to become the primary mechanism through which BWSR distributes Clean Water Fund grants. The WBIF program will supply a steady but small source of grant funding allocated every 2 years. WBIF will be allocated within the metro by watershed, with the LRRWMO located within the "Rum River" WBIF watershed. Local units of government within the Rum River WBIF watershed shall determine the distribution of WBIF within its boundary. Coordination between the LRRWMO, its partners, and other organizations within the Rum River WBIF watershed is critical to promote effective and equitable use of WBIF grant funds. Additional information is available from BWSR at: https://bwsr.state.mn.us/watershed-based-implementation-funding-program

The LRRWMO has collaborated with the ACD and its member cities to successfully complete water and natural resources improvement projects through cost-share opportunities. Without cost-sharing, such projects may otherwise be cost-prohibitive. Noteworthy examples of effective cost-share partnerships include streambank stabilization projects along the Rum River implement in cooperation with the ACD. The LRRWMO may lead implementation of such projects or contribute financially to projects led by partners. Table 5-1 identifies potential partners for planned implementation activities, where appropriate.

5.5 Plan Reporting and Assessment

5.5.1 Annual Reporting

The LRRWMO is responsible for evaluating progress towards achieving its goals and reporting annually to BWSR, per Minnesota Rules 8410.0150. Within the first 120 days of the calendar year, the District must submit to BWSR an activity report for the previous calendar year. Reporting requirements specified in Minnesota Rules 8410 will be followed. Generally, the LRRWMO's annual report includes:

- An assessment of the previous year's annual work plan that indicates whether the planned activities were performed, including the expenditures of each activity with respect to the approved budget (unless included in the audit report)
- A work plan and budget for the current year specifying which activities will be undertaken
- At a minimum of every 2 years, an evaluation of progress on goals and the implementation actions, including the capital improvement program, to determine if amendments to the implementation actions are necessary
- A summary of significant trends of lake, stormwater, and climate monitoring data
- The BWSR Level I Performance Review and Assistance Program (PRAP) review

The LRRWMO annual report is typically prepared and submitted by the ACD on behalf of the LRRWMO. The annual report may be supplemented by additional reports (e.g., ACD Monitoring Report). Within 180 days of the calendar year, the LRRWMO must submit an audit report of the preceding year's activities.

5.5.2 Progress Assessment

Biennially, the District will perform a more detailed evaluation to assess the level of progress achieved on each of the LRRWMO's adopted goals (see Section 4.1). The format of this evaluation is based on the organization of District goals, cross referenced to the most applicable implementation activities and the associated measurable outputs (Appendix G).

Several of the LRRWMO's resource goals (e.g., water quality goals) have a clear, quantifiable metric to assess achievement or progress. In some cases, however, the scope of LRRWMO's goals is not captured by strictly quantitative metrics. Thus, the assessment of LRRWMO progress may include quantitative values and/or qualitative (narrative) discussion of progress towards each goal. The measurable outputs of the implementation activities most directly correlated with each goal will also be reported. This information may be used for annual work planning and potential amendments to the implementation schedule. This evaluation may allow the LRRWMO to focus efforts on goals that are lagging and prioritize (or de-emphasize) individual implementation activities.

The LRRWMO anticipates that BWSR will perform a Level II PRAP review during the life of this Plan. The LRRWMO will incorporate the results of the Level II PRAP in the remaining implementation of this Plan and future Plan updates.

5.6 Plan Amendments and Updates

This Plan will guide LRRWMO activities through 2030, or until superseded by adoption of a subsequent Plan. During this time, the LRRWMO may revise its Plan through an amendment procedure, as needed. Amendments to this Plan will follow the procedures described in this section and will proceed in accordance with the process provided in Minnesota Rules 8410.0140 and Minnesota Statutes 103B.231. Plan amendments may be proposed by any person to the Board of Managers, but only the Board of Managers may initiate the amendment process. All recommended plan amendments must be submitted

to the LRRWMO in writing, along with a statement of the problem and need, the rationale for the amendment, and an estimate of the cost. Amendments identified by LRRWMO contract staff and member city staff will similarly be presented to the Board of Managers for approval.

The LRRWMO anticipates that only significant changes or additions to goals, issues, administrative procedures, or implementation (i.e., programs, projects, and capital improvements) will prompt and amendment to the Plan, although final discretion resides with the Board of Managers. Minnesota Rules 8410.0140 subp. 1a defines changes that do not require an amendment (e.g. reformatting/reorganization of the plan, clarification of existing plan goals or policies, and adjustment to how the District will carry out program activities within its discretion).

Amendments to this Plan are subject to the review process provided in Minnesota Statutes 103B.231 subd. 11, except when the proposed amendments are determined to be minor-amendments by satisfying all of the following criteria:

A. BWSR has either agreed that the amendments are minor or failed to act within five working days of the end of the 30-day comment period specified in item B (unless an extension has been mutually agreed upon);

B. The LRRWMO has sent copies of the amendments to the plan review authorities for review and comment allowing at least 30 days for receipt of comments, has identified that the minor amendment procedure is being followed, and has directed that comments be sent to the District board;

C. No county board has filed an objection to the amendments with the LRRWMO and BWSR within the comment period specified in item B (unless an extension is mutually agreed upon);

D. The LRRWMO has held a public meeting to explain the amendments and published a legal notice of the meeting twice, at least seven days and 14 days before the date of the meeting; or

E. The amendments are not necessary to make the Plan consistent with an approved and adopted Anoka County groundwater plan.

Draft and final amendments will be formatted and distributed consistent with the requirements of Minnesota Rules 8410.0140, subparts 4 and 5, respectively.

Approximately 2 years prior to the expiration date of this Plan, the LRRWMO will begin the process of updating its Plan (unless a revised schedule is developed by BWSR in accordance with Minnesota Statutes section 103B.231, subdivision 3a).

5.7 Local Controls and Water Management Plans

The member cities of the LRRWMO manage the impacts of development and redevelopment on water resources through their official controls (e.g., City code, ordinances), local water management plan (LWMP) and Municipal Separate Storm Sewer System (MS4) permit.

Each member city is a regulated MS4 under the Clean Water Act and is required to be in compliance with the MS4 General Permit, issued by the State of Minnesota. The MS4 General Permit requires each regulated MS4 to develop a Storm Water Pollution Prevention Program (SWPPP) that addresses how the MS4 will reduce the amount of sediment and other pollutants entering waters from stormwater systems. Information regarding municipal stormwater responsibilities and the MS4 program is available from the MPCA at: https://www.pca.state.mn.us/water/municipal-stormwater-ms4

Member cities maintain local ordinances regulating stormwater management within their jurisdiction consistent with the LRRWMO Plan and performance Standards (see Appendix E and Appendix F). Future updates to City ordinances and official controls must be consistent with, or adopt by reference, this Plan and LRRWMO performance standards. If necessary due to future amendments to this Plan, Cities shall amend their official controls to be consistent with this Plan within 2 years of adoption of future amendments.

5.7.1 Local Water Management Plans

The member cities are required to complete a local water management plan (LWMP) that conforms to Minnesota Statutes 103B.235, Minnesota Rules 8410.0160, and is consistent with the LRRWMO Plan (this document). Minnesota Rules 8410.0160 and Minnesota Statutes 103B.235 Subd. 2 include specific requirements for LWMP content, review, approval, and adoption. LWMPs must be adopted no more than two years prior to the adoption of a local comprehensive plan and extensions of local comprehensive plans due dates do not alter the LWMP schedule. The current status of City LWMPs is presented in Table 5-2.

The policies, goals, and performance standards established in each city's LWMP must be consistent with the LRRWMO plan. The section of the LWMP covering assessment of problems must include those problems identified in the LRRWMO Plan that affect the city. The corrective action proposed must consider the individual and collaborative roles of the city and the LRRWMO and must be consistent with the LRRWMO Plan.

In general, the LRRWMO expects the Cities to take the lead in addressing problem areas that are primarily local in nature (e.g., local nuisance flooding). LWMPs should identify problems and corrective actions that affect LRRWMO concerns stated in this Plan or require LRRWMO collaboration to address. Cities are responsible for maintaining stormwater infrastructure; the LRRWMO requires that LWMPs assess the need for periodic maintenance of public works, facilities, and natural conveyance systems.

Table 5-2 Local Water Plan Status

City	Date of LRRWMO Approval	Date of City Adoption
Andover	Need to fill in	Need to fill in
Anoka	Need to fill in	Need to fill in
Ramsey	Need to fill in	Need to fill in

LWMPs must be submitted to the LRRWMO for review and approval per the requirements of Minnesota Statutes 103B.235. The LRRWMO will review the LWMP following the process and schedule described in Minnesota Statutes 103B.235. Upon LRRWMO approval of the local plan, the city must adopt and implement its plan within 120 days and amend its official controls within 180 days of plan approval. The city must notify the LRRWMO within 30 days of plan adoption and implementation and adoption of necessary official controls. If a city later wishes to amend its plan, it must submit the proposed amendment to the LRRWMO for review of consistency with the LRRWMO Plan following the procedure described in Minnesota Rules 8410.0160. Cities are encouraged to consult with the LRRWMO staff early on in their planning process. The LRRWMO will work closely with Cities as needed in local plan preparation, review, and implementation.

6 References

pending

Appendix A

Joint Powers Agreement

AMENDED AND RESTATED JOINT AND COOPERATIVE AGREEMENT FOR THE ESTABLISHMENT OF THE LOWER RUM RIVER WATERSHED MANAGEMENT ORGANIZATION TO PLAN, CONTROL AND PROVIDE FOR THE DEVELOPMENT OF THE LOWER RUM RIVER WATERSHED

PREFACE

The Lower Rum River Watershed lying East of the Mississippi River is a watershed that is basically a direct tributary to the Mississippi River. It encompasses all or parts of the cities of Andover, Anoka and Ramsey (the "Member Cities").

Minnesota Laws of 1982, Chapter 509, now codified as Minnesota Statutes 2012, Sections 103B.201 through 103B.255 mandated that all watersheds within the seven county Metropolitan area must be governed by a watershed management organization. The watershed is authorized to organize under a joint powers agreement pursuant to Minnesota Statutes, Sections 471.59 and 103B.211. If such an organization is not created, Anoka County shall petition for the establishment of a watershed district under Minnesota Statutes, Chapter 103D. All the cities in the Lower Rum River Watershed expressed a desire in 1985 to create a joint powers group rather than a watershed district and now desire to adopt an amended joint powers agreement to establish a watershed management organization, which will comply with the current law for management of the watershed. It is the belief of these three cities that a joint powers group will provide more efficient planning and administration of the Lower Rum River Watershed if the watershed is managed under a joint powers agreement. The goal is to leave as much control as possible with the three individual Member Cities.

It has been determined by the three Member Cities that they desire to proceed under a Joint Powers Agreement rather than under Minnesota Statutes, Chapter 103D as a watershed district. Each party to this agreement has been fully advised that the watershed management organization being created shall have the powers and responsibilities set forth in the Metropolitan Surface Water Management Act, Minnesota Statutes, Sections 103B.201 through 103B.255 and as amended by this Agreement. It is further understood and agreed that it is the intent of this agreement to assign to the watershed management organization, which has operated since 1985, the additional powers and duties assigned by the Minnesota legislature. The management of water resources is a rapidly changing field and new laws and regulations are being adopted and amended frequently and it should not be necessary to amend this agreement every time the legislature enacts a new law.

Each Member City further recognizes that this is a binding contract and failure to cooperate or to carry out a Member City's responsibilities will result in a breach of this contract.

The purpose of this organization shall be to assist the three Member Cities to preserve and use natural water storage and retention systems to:

1. Protect and preserve natural surface and groundwater storage and retention systems;

2. Minimize public capital expenditures needed to correct flooding and water quality problems;

3. Identify and plan for means to effectively protect and improve surface water and groundwater quality;

4. Establish more uniform local policies and official controls for surface water and groundwater management;

5. Prevent erosion of soil into surface water systems;

6. Promote groundwater recharge;

7. Protect and enhance fish and wildlife habitat and water recreational facilities;

8. Secure other benefits associated with the proper management of surface and groundwater; and

9. Promote and encourage cooperation among Member Cities in coordinating local surface water and groundwater plans and awareness of their neighbors' problems and to protect the public health, safety, and general welfare.

The Lower Rum River Watershed waters flow through many sub-watersheds directly to the Rum River and the Mississippi River. It is not anticipated that the Lower Rum River Watershed Management Organization will have many capital improvement projects; if it does, it is hereby expressed that the intent of this Agreement is to encourage that the solutions should be handled by agreements between the Member Cities.

It is the intent of this Agreement to subject the Member Cities to a common set of policies and to comply in all respects with the provisions of the Metropolitan Surface Water Management Act.

The purpose of this Preface is to clarify and establish for any court of review or any arbitrator or for the council members of the Member Cities the reasons and purpose for this joint and cooperative venture. The Member Cities realize that the success or failure of the Lower Rum River Watershed Organization created by this Agreement is dependent upon the sincere desire of each Member City to cooperate in the exercise of a joint power to solve joint problems. Each Member City hereby agrees to be bound by this agreement and pledges its cooperation.

JOINT AND COOPERATIVE AGREEMENT

The parties to this Agreement are governmental units of the State of Minnesota, all of

which have lands that drain surface water within the Lower Rum River Watershed and all of which have power and responsibility to construct, reconstruct, extend and maintain storm water management facilities to improve water quality, to promote groundwater recharge, and to protect, promote and preserve water resources within the Watershed. This agreement is made pursuant to the authority of Minnesota Statutes 2012, Sections 103B.201 through Section 103B.255 and Section 471.59.

NAME
I.

The parties hereby create and establish the Lower Rum River Watershed Management Organization.

GENERAL PURPOSE
II.

The general purpose of this agreement is to provide an organization that can investigate, study, plan and control the construction of facilities to drain or pond storm waters, to alleviate damage by flood waters; to improve the creek channels for drainage; to assist in planning for land use; to repair, improve, relocate, modify, consolidate or abandon, in whole or in part, drainage systems within the watershed area; to do whatever is necessary to assist in water conservation and the abatement of surface water and groundwater contamination and water pollution and the improvement of water quality; to promote ground water recharge; and to protect and enhance fish and wildlife habitat and water recreational facilities. In addition to the aforestated purposes, the organization hereby created shall serve as the watershed management organization for the Lower Rum River Watershed and shall carry out all of the duties and responsibilities outlined in Minnesota Statutes, Sections 103B.201 through 103B.255.

DEFINITIONS
III.

For the purposes of this Agreement, the terms used herein shall have the meanings as defined in this article.

Subdivision 1. "Lower Rum River Watershed Management Organization" or "LRRWMO" means the organization created by this agreement. It shall be a public agency of its members and a watershed management organization as defined in Minnesota Statutes, Section 103B.211.

Subdivision 2. "Board" means the Board of Commissioners of the LRRWMO, consisting of one Commissioner from each Member City or, in the absence of that Commissioner, that Member City's Alternate Commissioner. The Board shall be the governing body of the LRRWMO.

Subdivision 3. "Council" means the governing body of a Member City.

Subdivision 4. "Member City" means a city that enters into this agreement.

Subdivision 5. "Lower Rum River Watershed" or "Watershed" means the area generally contained within a line drawn around the extremities of all terrain with surface drainage that is tributary to the Lower Rum River and the Mississippi River and within the mapped areas delineated on the map filed with the Board of Water and Soil Resources originally filed pursuant to Minnesota Statutes, Section 473.877, Subd. 2 and as now amended by Minnesota Statutes, Chapter 103B, as such map has been amended with approval of the Board of Soil and Water Resources.

MEMBERSHIP
IV.

The Member Cities of the LRRWMO shall be the City of Andover, the City of Anoka and the City of Ramsey.

The LRRWMO may, with the ratification of the Councils of all Member Cities, invite other units of government within the Rum River Watershed to become parties to this Agreement, and in all respects thenceforth enjoy the full rights, duties, and obligations of this Agreement.

No change in governmental boundaries, structure or organizational status shall affect the eligibility of the Member City to be represented on the LRRWMO, so long as such Member City continues to exist as a separate political subdivision.

BOARD OF COMMISSIONERS
V.

Subdivision 1. The governing body of the LRRWMO shall be its Board. Each Member City shall be entitled to appoint one representative on the Board, and one alternate who may sit when the representative is not in attendance and said representative or alternate representative shall be called a "Commissioner" and "Alternate Commissioner", respectively.

Subdivision 2. The Council of each Member City shall determine the eligibility or qualification of its Commissioner and the terms of each Commissioner shall be as established by each individual Member City.

Subdivision 3. The term of each Commissioner and Alternate Commissioner appointed by each Member City shall be as determined by each Member City and until their successors are selected and qualify.

Any vacancy shall be filled for the unexpired term of any Commissioner by the Council of the Member City that appointed said Commissioner. Each Member City agrees to publish a notice of vacancies resulting from the expiration of a Commissioner's or Alternate Commissioner's term or when a vacancy exists for any reason. Publication and notice shall be in accordance with Minnesota Statutes, Section 103B.227, Subds. 1 and 2.

Subdivision 4. Each Member City agrees that its representative Commissioner will not be removed from the Board prior to the expiration of the Commissioner's term, unless said Commissioner consents in writing or unless said Member City has presented the Commissioner with charges in writing and has held a public hearing after reasonable notice to the Commissioner.

A Member City may remove a Commissioner or an Alternate Commissioner for just cause or for violation of a Code of Ethics of the Commission or a Member City, or for malfeasance, nonfeasance, or misfeasance. Said hearing shall be held by the Council of the Member City that appointed the Commissioner.

A Commissioner who is an elected official of a Member City, and who is not reelected, may be removed by the appointing Member City at the Member City's discretion. Any decision by a Member City to remove a Commissioner may be appealed to the Board of Water and Soil Resources. A certified copy of the Member City Council's Resolution removing said Commissioner shall be filed with the Secretary of the Board and shall show compliance with the terms of this section.

Subdivision 5. Each Member City shall within 30 days of appointment file with the Secretary of the Board a record of the appointment of its Commissioner and its Alternate Commissioner. The LRRWMO shall notify the Board of Water and Soil Resources of Commissioner appointments and vacancies within 30 days after receiving notice from the Member Cities. Member Cities shall fill all vacancies within 90 days after the vacancy occurs.

Subdivision 6. Commissioners shall serve without compensation from the LRRWMO, but this shall not prevent a Member City from providing compensation for its Commissioner for serving on the Board, if such compensation is authorized by such Member City and by law. LRRWMO funds may be used to reimburse a Commissioner or Alternate Commissioner for expenses incurred in performing LRRWMO business if authorized by the Board.

Subdivision 7. At the first meeting of the Board and in February of each year thereafter, the Board shall elect from its Commissioners a Chair, a Vice Chair, a Secretary, a Treasurer, and such other officers as it deems necessary to conduct its meetings and affairs. At the organizational meeting or as soon thereafter as it may be reasonably done, the Board shall adopt rules and regulations governing its meetings. Such rules and regulations may be amended from time to time at either a regular or a special meeting of the Board provided that a ten-day prior notice of the proposed amendment has been furnished to each person to whom notice of the Board meetings is required to be sent. A majority vote of all eligible votes of the then existing Commissioners shall be sufficient to adopt any proposed amendment to such rules and regulations.

The Board shall notify each Member City of the location and time of regular and special meetings called or established by the Board. A meeting shall be held at least annually, and all meetings shall be called and open to the public pursuant to Minnesota Statutes, Chapter 13D.

POWERS AND DUTIES OF THE BOARD
VI.

Subdivision 1. The LRRWMO, acting by its duly appointed Board of Commissioners, shall as it relates to flood control, water quality, ground water recharge and water conservation or in the construction of facilities and other duties as set forth in Minnesota Statutes, Chapter 103B and in Rules and Regulations of the Board of Water and Soil Resources, have the powers and duties set out in this Article and as prescribed by law.

Subdivision 2. It may employ such persons or contract with consultants as it deems necessary to accomplish its duties and powers, and any such persons or consultants shall be considered LRRWMO staff.

Subdivision 3. It may contract for space and for material and supplies to carry on its activities either with a Member City or elsewhere.

Subdivision 4. It may acquire necessary personal property to carry out its powers and its duties.

Subdivision 5. It shall develop an overall plan containing a capital improvement program within a reasonable time after qualifying, and said plan shall meet all of the requirements as established in Minnesota Statutes, Chapter 103B. Said overall plan shall establish a comprehensive goal for the development of the Lower Rum River Watershed and shall establish a proposed procedure for accomplishing the purposes of the LRRWMO as set forth in Article II.

Subdivision 6. It shall make necessary surveys or utilize other reliable surveys and data and develop projects to accomplish the purposes for which the LRRWMO is organized.

Subdivision 7. It may cooperate or contract with the State of Minnesota or any subdivision thereof or federal agency or private or public organization to accomplish the purposes for which it is organized.

Subdivision 8. It may, if necessary to implement the plan, order any Member City or Member Cities to construct, clean, repair, alter, abandon, consolidate, reclaim or change the course or terminus of any ditch, drain, storm sewer, or water course, natural or artificial, within the Lower Rum River Watershed.

The Member Cities further understand and agree that the LRRWMO in reviewing, ordering, or authorizing these projects will use the best management practices required to meet state and federal statutes and regulations. The LRRWMO will also consider the ability of the Member Cities to fund the enforcement of local controls and any ordered capital improvements. The LRRWMO shall incorporate financial review and anticipated sources of revenue as a part of the overall management plan and as a part of local water management plans.

Subdivision 9. It may order any Member City or Member Cities to acquire, operate, construct or maintain dams, dikes, reservoirs and appurtenant works or other improvements

necessary to implement the overall plan.

The Member Cities further understand and agree that the LRRWMO in reviewing, ordering, or authorizing these projects will use the best management practices required to meet state and federal statutes and regulations. The LRRWMO will also consider the ability of the Member Cities to fund the enforcement of local controls and any ordered capital improvements. The LRRWMO shall incorporate financial review and anticipated sources of revenue as a part of the overall management plan and as a part of local water management plans.

Subdivision 10. It shall regulate, conserve and control the use of storm and surface water and groundwater within the Watershed necessary to implement the overall plan.

Subdivision 11. It shall contract for or purchase such insurance as the Board deems necessary for the protection of the LRRWMO.

Subdivision 12. It may establish and maintain devices for acquiring and recording hydrological and water quality data within the Watershed.

Subdivision 13. It may enter upon lands, in a lawful manner, within or without the Watershed to make surveys and investigations to accomplish the purposes of the LRRWMO. The LRRWMO shall be liable for actual damages resulting therefrom but every person who claims damages shall serve the Chair or Secretary of the Board with a Notice of Claim as required by Minnesota Statutes, Section 466.05.

Subdivision 14. It shall provide any Member City with technical data or any other information of which the LRRWMO has knowledge that will assist the Member City in preparing land use classifications or local water management plans within the Watershed.

Subdivision 15. It may provide legal and technical assistance in connection with litigation or other proceedings between one or more of its Member Cities and any other political subdivision, commission, board or agency relating to the planning or construction of facilities to drain or pond storm waters or relating to water quality within the Watershed. The use of LRRWMO funds for litigation shall be only upon a favorable vote of a majority of the eligible votes of the then existing Commissioners.

Subdivision 16. It may accumulate reserve funds for the purposes herein mentioned and may invest funds of the LRRWMO not currently needed for its operations, in the manner and subject to the laws of Minnesota applicable to statutory cities.

Subdivision 17. It may collect monies, subject to the provisions of this agreement, from its Member Cities, Anoka County and from any other source approved by a majority of its Commissioners.

Subdivision 18. It may accept gifts, apply for and use grants or loans of money or other property from the United States, the State of Minnesota, a unit of government or other governmental unit or organization, or any person or entity for the purposes described herein; may

enter into any reasonable agreement required in connection therewith; may comply with any laws or regulations applicable thereto; and may hold, use, and dispose of such money or property in accordance with the terms of the gift, grant, loan or agreement relating thereto.

Subdivision 19. It may make contracts, incur expenses and make expenditures necessary and incidental to the effectuation of these purposes and powers and may disburse therefor in the manner hereinafter provided.

Subdivision 20. It shall cause to be made an annual audit by a certified public accountant or the state auditor of the books and accounts of the LRRWMO and shall make and file a report to its Member Cities at least once each year including the following information:

a. the approved budget;
b. a reporting of revenues;
c. a reporting of expenditures;
d. a financial audit report or section that includes a balance sheet, a classification of revenues and expenditures, an analysis of changes in final balances, and any additional statements considered necessary for full financial disclosure; and
e. the status of all LRRWMO projects and work within the Watershed;

Copies of said report shall be transmitted to the Clerk of each Member City.

Subdivision 21. Its books, reports and records shall be available for and open to inspection by its Member Cities at all reasonable times.

Subdivision 22. It may recommend changes in this agreement to its Member Cities.

Subdivision 23. It may exercise all other powers necessary and incidental to the implementation of the purposes and powers set forth herein and as outlined and authorized by Minnesota Statutes, Sections 103B.201 through 103B.255.

Subdivision 24. It shall cooperate with the State of Minnesota, the Commissioner of Natural Resources and the Director of the Division of Waters, Soils and Minerals of the Department of Natural Resources in complying with the requirements of Minnesota Statutes, Chapter 103G.

Subdivision 25. Each Member City reserves the right to conduct separate or concurrent studies on any matter under study by the LRRWMO.

Subdivision 26. It shall establish a procedure for establishing citizen or technical advisory committees and provide other means of public participation.

Subdivision 27. Where the LRRWMO is authorized or requested to review and make recommendations on any matter, the LRRWMO shall act on such matter within sixty (60) days of receipt of the matter referred. Failure of the LRRWMO to act within sixty (60) days shall constitute approval of the matter referred, unless the LRRWMO requests and receives from the

referring unit of government an extension of time to act on the matter referred. Where the LRRWMO makes recommendation of any matter to a Member City, the Council of a Member City not acting in accordance with such recommendation shall submit a written statement of its reasons for doing otherwise to the LRRWMO within ten (10) days of its decision to act contrary to the LRRWMO's recommendation. The LRRWMO shall review the written statement and if determined insufficient by the LRRWMO, request written clarification within an additional ten (10) days.

METHOD OF PROCEEDING
VII.

Subdivision 1. The procedures to be followed by the Board in carrying out the powers and duties set forth in Article VI, Subdivisions 5, 6, 7, 8, 9, and 10, shall be as set forth in this Article.

Subdivision 2. The Board has previously prepared the overall plan as required in Article VI, Subdivision 5. This plan shall be updated as required by state law. The Board shall proceed to implement said plan, and this implementation may be ordered by stages.

Subdivision 3. No project that will channel or divert additional waters to subdistrict and subtrunks that cross municipal boundaries shall be commenced by any Member City prior to approval of the Board of the design of an adequate outlet or of adequate storage facilities.

Subdivision 4. Ordering Improvements. All construction, reconstruction, extension or maintenance of outlets for the various subdistrict and subtrunks, including outlets, lift stations, dams, reservoirs, or other appurtenances of a surface water or storm sewer system that involve construction by, or assessment against, any Member City or against privately or publicly owned land within the Watershed shall follow the statutory procedures outlined in Chapter 429 of the Minnesota Statutes except as herein modified.

The Board shall secure from its engineers or some other competent person a report advising it in a preliminary way as to whether the proposed improvement is feasible and whether it shall best be made as proposed or in connection with some other improvement and the estimated cost of the improvement as recommended and the proposed allocation of costs between Member Cities.

The Board shall then hold a public hearing on the proposed improvement after mailed notice to the Clerk of each Member City. The Board shall not be required to mail or publish notice except by said notice to the Clerk. Said notice shall be mailed not less than 45 days before the hearing, shall state the time and place of the hearing, the general nature of the improvement, the estimated total cost and the estimated cost to each Member City. The Board may adjourn said hearing to obtain further information, may continue said hearing pending action of the Member Cities or may take such other action as it deems necessary to carry out the purposes of the LRRWMO.

To order the improvement, in accordance with the powers and duties established in Article VI, Subdivisions 7, 8 and 9, a resolution setting forth the order for a capital improvement project shall require a favorable vote by two-thirds of all eligible votes of the then existing Commissioners. (In all cases other than for a capital improvement project, a majority vote of all eligible Commissioners shall be sufficient to order the work.) The order shall describe the improvement, shall allocate in percentages the cost between the Member Cities, shall designate the engineers to prepare plans and specifications, and shall designate the Member City that will contract for the improvement in accordance with Subdivision 7 of this Article. In determining how costs of a capital improvement shall be allocated among Member Cities, the Board shall consider whether the improvement benefits one or more subwatersheds rather than the Lower Rum River Watershed as a whole.

After the Board has ordered an improvement it shall forward to all Member Cities an estimated time schedule for the construction of said improvement. The Board shall allow an adequate amount of time, and in no event less than 45 days, for each Member City to conduct hearings, in accordance with the provisions of the aforestated Chapter 429, or the charter requirements of any city, or to ascertain the method of financing that said Member City will utilize to pay its proportionate share of the costs of the improvement. Each Member City shall ascertain within a period of 90 days the method it shall use to pay its proportionate share of the costs.

If the LRRWMO proposes to utilize Anoka County's bonding authority as set forth in Minnesota Statutes, Section 103B.251, or if the LRRWMO proposes to certify all or any part of a capital improvement to Anoka County for payment, then and in that event all proceedings shall be carried out in accordance with the provisions set forth in said Section 103B.251.

Subdivision 5. Any Member City being aggrieved by the determination of the Board as to the allocation of the costs of said improvement shall have 30 days after the Board resolution ordering the improvement to appeal said determination. Failure of a Member City to appeal the determination of the Board within such 30-day period shall be deemed to be consent to and agreement with the cost allocation in the Board's resolution. An appeal shall be in writing and shall be addressed to the Board asking for arbitration. The determination of the Member City's appeal shall be referred to a board of arbitration. The board of arbitration shall consist of three persons; one to be appointed by the Board, one to be appointed by the appealing Member City, and the third to be appointed by the two so selected. In the event the two persons so selected do not appoint the third person within 15 days after their appointment, then the Chief Judge of the District Court of Anoka County shall have jurisdiction to appoint, upon application of either or both of the two earlier selected, the third person to the board of arbitration. The third person selected shall not be a resident of any Member City and if appointed by the Chief Judge said person shall be a registered professional engineer. The arbitrators' expenses and fees, together with the other expenses, not including counsel fees, incurred in the conduct of the arbitration shall be divided equally between the LRRWMO and the appealing Member City. Arbitration shall be conducted in accordance with the Uniform Arbitration Act, Minnesota Statutes, Chapter 572B. Arbitration shall be non-binding unless the LRRWMO and the appealing Member City agree to binding arbitration. If the parties agree to binding arbitration the decision of the board of arbitration shall be final and the parties to the arbitration will be deemed to have consented to

and agreed with the decision. If these parties do not agree to binding arbitration, any party that does not agree with and consent to the decision of the board of arbitration must notify the Board in writing within 30 days of receipt of the decision of the board of arbitration that it does not consent to or agree with the decision. Failure to so notify the Board shall be deemed consent to and agreement with the decision of the board of arbitration. Unless the parties agree with the decision of the board of arbitration, capital improvements can only be funded in accordance with Minnesota Statutes, Section 103B.251, or secured from other sources.

Subdivision 6. The Board shall not order and no engineer shall be authorized by the Board to prepare plans and specifications before the Board has adopted a resolution ordering the improvement. The Board may order the advertising for bids upon receipt of notice from each Member City that will be assessed that it has completed its hearing or determined its method of payment or upon expiration of 90 days after the mailing of the preliminary report to the Member City.

Subdivision 7. Contracts for Improvements. All contracts that are to be let as a result of the Board's order to construct, repair, alter, reclaim or change the course or terminus of any ditch, drain, storm sewer, watercourse, or to acquire, operate, construct or maintain dams, dikes, reservoirs or their appurtenances or to carry out any of the other provisions of the plan as authorized by Minnesota Statutes, and for which two or more Member Cities shall be responsible for the costs, shall be let in accordance with the provisions of Minnesota Statutes, Section 429.041 of the Minnesota Statutes. The bidding and contracting of said work shall be let by any one of the Member Cities, as ordered by the Board, after compliance with the statutes. All contracts and bidding procedures shall comply with all the requirements of law applicable to contracts let by a statutory city in the State of Minnesota.

The LRRWMO shall not have the authority to contract in its own name for any improvement work for which a special assessment will be levied against any private or public property under the provisions of Minnesota Statutes, Chapter 429 or under the provisions of any City charter. This section shall not preclude the LRRWMO from proceeding under Minnesota Statutes, Section 103B.251.

Subdivision 8. Contracts with Other Governmental Bodies. The LRRWMO may exercise the powers set forth in Article VI, Subdivision 7, but said contracts for a capital improvement shall require a favorable vote of two-thirds majority of the eligible votes of the then existing Commissioners.

Subdivision 9. Supervision. All improvement contracts awarded under the provisions of Subdivision 7 of this Article shall be supervised by the Member City awarding said contract or said Member City may contract or appoint any qualified staff member or members of the LRRWMO to carry out said supervision, but each Member City agrees that the staff of the LRRWMO shall be authorized to observe and review the work in progress and the Member Cities agree to cooperate with the LRRWMO staff in accomplishing the purposes of the LRRWMO. Representatives of the LRRWMO shall have the right to enter upon the place or places where the improvement work is in progress for the purpose of making reasonable tests and inspections. The staff of the LRRWMO shall report, advise and recommend to the Board on

the progress of said work.

Subdivision 10. Land Acquisition. The LRRWMO shall not have the power of eminent domain. The Member Cities agree that any and all easements or interests in land that are necessary will be negotiated or condemned in accordance with Minnesota Statutes, Chapter 117 by the Member City wherein said lands are located, and each Member City agrees to acquire the necessary easements or right-of-way or partial or complete interest in land upon order of the Board to accomplish the purposes of this agreement. All reasonable costs of said acquisition shall be considered as a cost of the improvement. If a Member City determines it is in the best interests of that Member City to acquire additional lands, in conjunction with the taking of lands for storm and surface drainage or storage, for some other purposes, the costs of said acquisition will not be included in the improvement costs of the ordered project. The Board in determining the amount of the improvement costs to be assessed to each Member City may take into consideration the land use for which said additional lands are being acquired and may credit the acquiring Member City for said land acquisition to the extent that it benefits the other Member Cities. Any credits may be applied to the cost allocation of the improvement project under construction or the Board, if feasible and necessary, may defer said credits to a future project.

If any Member City refuses to negotiate or condemn lands as ordered by the Board, any other Member City may negotiate or condemn outside its corporate limits in accordance with Minnesota Statutes, Chapter 117. All Member Cities agree that they will not condemn or negotiate for land acquisition to pond or drain storm and surface waters within the corporate boundaries of another Member City within the Lower Rum River Watershed except upon order of the Board.

The LRRWMO shall have authority to establish land acquisition policies as a part of the overall plan.

Subdivision 11. Pollution Control and Water Quality. The LRRWMO shall have the authority and responsibility to protect and improve water quality in the Watershed as this is one of the main purposes set forth in the Surface Water Management Act. All Member Cities agree that they will refuse to allow the drainage of sanitary sewage or industrial wastes onto any lands or into any water course or storm sewer draining into the Rum River or Mississippi River. The Board may investigate on its own initiative and shall investigate upon petition of any Member City all complaints relating to pollution of surface water or ground water draining to or affecting the Rum River or the Mississippi River or their tributaries. Upon a finding that the creek or surface waters or groundwater are being polluted, the Board shall order the Member City to abate this nuisance and each Member City agrees that it will take all reasonable action available to it under the law to alleviate the pollution and to assist in protecting and improving the water quality of surface water and groundwater in the Watershed.

Subdivision 12. Local Water Management Plans. The LRRWMO shall have power and authority to review the Member Cities' local water management plans, capital improvements relating to surface water management programs and official controls required by Minnesota Statutes, Section 103B.235 and/or by rules promulgated and adopted by the Board of Water and Soil Resources.

FINANCES
VIII.

Subdivision 1. The LRRWMO funds may be expended by the Board in accordance with this agreement and in accordance with the procedures as established by law and as may be determined by the Board. The Board shall designate one or more national or state bank or trust companies, authorized by Minnesota Statutes, Chapters 118 and 427 to receive deposits of public moneys and to act as depositories for the LRRWMO funds. In no event shall there be a disbursement of LRRWMO funds without the signature of at least two Board members, one of whom shall be the Treasurer or Authorized Deputy Treasurer. The Treasurer shall be required to file with the Secretary of the Board a bond in the sum of at least $10,000 or such higher amount as shall be determined by the Board. The LRRWMO shall pay the premium on said bond.

Subdivision 2. Each Member City agrees to contribute each year to a general fund, said fund to be used for general administration purposes including, but not limited to: salaries, rent, supplies, development of an overall plan, engineering and legal expenses, insurance, and bonds, and to purchase and maintain devices to measure hydrological and water quality data. Said funds may also be used for normal maintenance of the facilities, but any extraordinary maintenance or repair expense shall be treated as an improvement cost and processed in accordance with Subdivision 5 of this Article. The annual contribution by each Member City shall be based fifty percent (50%) on the net tax capacity of all property within the Watershed and fifty percent (50%) on the basis of the total area of each Member City within the boundaries of the Watershed each year to the total area in the Lower Rum River Watershed governed by this Agreement.

Subdivision 3.

(a) An improvement fund shall be established for each improvement project instituted under Article VII, Subdivision 4. In all cases in which capital improvements are to be paid in whole or in part by Member Cities, each Member City agrees to contribute to said fund its agreed-upon proportionate share of the engineering, legal and administrative costs as determined in accordance with Article VII, Subdivisions 4 and 5 as the amount to be assessed against each Member City as a cost of the improvement. The Board shall submit in writing a statement to each Member City, setting forth in detail the expenses incurred by the LRRWMO for each project. Each Member City further agrees to pay to or contract with the Member City awarding said contract for the improvement, its agreed-upon proportionate share of the cost of the improvement in accordance with the determination of the Board under Article VII, Subdivisions 4 and 5. The Member City awarding the contract shall submit in writing copies of the engineer's certificate authorizing payment during construction and the Member City being billed agrees to pay its proportionate share of said improvement costs within 30 days after receipt of the statement. The Member City awarding the contract shall advise other contributing Member Cities of the tentative time schedule of the work and the estimated times when the contributions shall be necessary.

(b) The LRRWMO and Anoka County may establish a maintenance fund to be used for normal and routine maintenance of an improvement constructed in whole or in part with money provided by Anoka County pursuant to Minnesota Statutes, Section 103B.251. The levy and collection of an ad valorem tax levy for maintenance shall be by Anoka County based upon a tax levy resolution adopted by a majority vote of all eligible Commissioners and remitted to the County on or before the date prescribed by law each year. If it is determined to levy for maintenance, the LRRWMO shall be required to follow the hearing process established by Minnesota Statutes, Sections 103D.915 and 103D.921. Mailed notice shall be sent to the Clerk of each Member City at least 30 days prior to the hearing.

Subdivision 4. On or before July 1 of each year, the Board shall adopt a detailed budget for the ensuing year and decide upon the total amount necessary for the general fund. Budget approval shall require a favorable vote by a majority of all eligible votes of the then existing Commissioners.

The secretary of the Board shall certify the budget on or before July 1 to the Clerk of each Member City together with a statement of the proportion of the budget to be provided by each Member City.

The Council of each Member City agrees to review the budget, and the Board shall upon notice from any Member City received prior to August 1, hear objections to the budget, and may, upon notice to all Member Cities and after a hearing, modify or amend the budget, and then give notice to the Member Cities of any and all modifications or amendments.

Each Member City agrees to provide the funds required by the budget and said determination shall be conclusive if no Member City enters objections in writing on or before August 1. If no objections are submitted to the Board, each Member City agrees to provide the funds approved by the Board, after the Board has conducted the aforementioned hearing. Modifications or amendments to the original budget require a favorable vote by a majority of all eligible voters of then existing Commissioners.

The schedule of payments by the Member Cities shall be determined by the Board in such a manner as to provide for an orderly collection of the funds needed.

Upon notice and hearing, the Board by a favorable vote of a majority of all eligible votes of then existing Commissioners may adopt a supplemental budget requiring additional payments by the Member Cities within 60 days of its adoption but in no event shall the budget require any Member City to contribute in excess of one half of one percent of the net tax capacity of all taxable property within the Watershed and within the Member City's corporate boundaries in any one calendar year.

Member Cities' attention is drawn to Minnesota Statutes, Section 103B.245, which authorizes a Watershed Management Tax District to be created within each Member City to pay the costs of planning and for the purpose of paying capital costs and/or normal and routine

maintenance of facilities.

Subdivision 5. Cost Allocation. General costs of operating the LRRWMO shall be as set forth in Article VIII, Subdivision 2. Costs of capital projects to be paid by Member Cities will be determined in accordance with Articles VII, Subdivisions 4 and 5 and paid in accordance with Article VIII, Subdivision 3.

MISCELLANEOUS PROVISIONS
IX.

Subdivision 1. The LRRWMO shall not have the power to issue certificates, warrants or bonds.

Subdivision 2. The LRRWMO shall not have the power of eminent domain and shall not own any interest in real property. All interests in lands shall be held in the name of the Member City wherein said lands are located.

Subdivision 3. The LRRWMO shall not have the power to levy a special assessment upon any privately or publicly owned land. All such assessments shall be levied by the Member City wherein said lands are located. The LRRWMO shall have the power to require any Member City to contribute the costs allocated or assessed according to the other provisions of this agreement.

Subdivision 4. Each Member City agrees that it will not directly or indirectly collect or divert any additional surface water to the Lower Rum River or the Mississippi River or their tributaries from any subdistrict or subtrunk without a permit from the Board. Permits may be granted by the Board for a Member City to proceed with the construction or reconstruction of improvements within the Member City's boundaries and at its sole cost upon a finding:

(1) that there is an adequate outlet;
(2) that said construction is in conformance with the overall plan;
(3) that the construction will not adversely affect other Member Cities.

Subdivision 5. Any Member City that is more than 60 days in default in contributing its share to the general fund shall have the vote of its Commissioner suspended pending the payment of its proportionate share.

Any Member City that is more than 60 days in default in contributing its proportionate share of the cost of any improvement to the contracting Member City shall upon application of the contracting Member City have the vote of its Commissioner suspended, pending the payment of its proportionate share.

Any Member City whose vote is under suspension shall not be considered as an eligible Member City as such membership affects the number of votes required to proceed on any matter under consideration by the Board.

Subdivision 6. Enforcement. Member Cities agree to be bound by the determination of the Commission and to agree to use their best efforts to carry out directives from the Commission; failure to respond may result in a legal action by the Commission to require the Member City to act under a court order.

DURATION
X.

Subdivision 1. Each Member City agrees to be bound by the terms of this agreement until January 1, 2025, and it may be continued thereafter at the option of the Member Cities.

Subdivision 2. This agreement may be terminated prior to January 1, 2025, by the unanimous consent of the Member Cities or if for any reason the LRRWMO is reduced to less than three Member Cities. If the agreement is to be terminated, a notice of the intent to dissolve the LRRWMO shall be sent to the Board of Water and Soil Resources and to Anoka County at least 90 days prior to the date of dissolution.

Subdivision 3. In addition to the manner provided in Subdivision 2 for termination, any Member City may petition the Board to dissolve the agreement. Upon 30 days' notice in writing to the Clerk of each Member City and the Board of Water and Soil Resources and Anoka County, the Board shall hold a hearing and upon a favorable vote by a majority of all eligible votes of then existing Commissioners, the Board may by Resolution recommend that the LRRWMO be dissolved. Said Resolution shall be submitted to each Member City and if ratified by two-thirds of the Councils of all Member Cities within 60 days, said Board shall dissolve the LRRWMO allowing a reasonable time to complete work in progress and to dispose of personal property owned by the LRRWMO.

DISSOLUTION
XI.

Upon dissolution of the LRRWMO, all property of the LRRWMO shall be sold and the proceeds thereof, together with monies on hand, shall be distributed to the eligible Member Cities. Such distribution of LRRWMO assets shall be made in proportion to the total contribution to the LRRWMO as required by the last annual budget.

EFFECTIVE DATE
XII.

This agreement shall be in full force and effect upon the filing of a certified copy of the resolution approving said agreement by all three Member Cities, for the Lower Rum River Watershed area to be governed by this Agreement. Said resolution shall be filed with the City Manager of the City of Anoka, who shall notify all Member Cities in writing of its effective date. The effective date of the new amended Joint Powers Agreement shall be when approved by all the Member Cities and when the Mayor and other authorized City representatives have executed the amended agreement.

IN WITNESS WHEREOF, the undersigned governmental units, by action of their governing bodies, have caused this agreement to be executed in accordance with the authority of Minnesota Statutes, Sections 103B.211 and 471.59.

Approved by the City Council

September 2, 2014

CITY OF ANDOVER

By: _____

Attest: _____

Approved by the City Council

Dated: July 7, 2014

CITY OF ANOKA

By: _____

Attest: _____

Approved by the City Council

August 26, 2014

CITY OF RAMSEY

By: Saul Stra

Attest: Heidi M. Kiesling

Lower Rum River Watershed Management Organization
Boundary Description

Revised November 2014

Beginning at an intersecting point on the east municipal boundary of the City of Andover and the centerline of Crosstown Boulevard; thence southwesterly along the centerline of Crosstown Boulevard to the centerline of 161st Avenue; thence westerly along the centerline of 161st Avenue to the west right of way line of Burlington Northern Railroad; thence southerly along the west right of way line of Burlington Northern Railroad to an intersecting point along the extension of the property line between Lot 44, and Lot 43, Block 4, Red Pine Fields; thence westerly along said extension line to the easterly right of way line of Vale Street; thence southwesterly and westerly along said right of way line of Vale Street to an intersecting point along the extension of the southwesterly right of way line of 159th Avenue; thence northwesterly along said extension line and southwesterly right of way line of 159th Avenue to the east plat line of Woodland Oaks; thence southerly along the said plat line to the southeast corner of Lot 5, Block 2, Woodland Oaks; thence westerly along south line of said Lot 5 to the southwest corner of said Lot 5; thence westerly to the southeast corner of Lot 12, Block 5, Woodland Oaks; thence westerly along south line of said Lot 12 to the southwest corner of said Lot 12; thence northerly along west line of said Lot 12 to the southeast corner of Lot 2, Block 5, Woodland Oaks; thence westerly along south line of said Lot 2 to the southwest corner of said Lot 2; thence westerly to the southeast corner of Lot 5, Block 4, Woodland Oaks; thence westerly along south line of said Lot 5 to the west plat line of Woodland Oaks; thence northerly along the west plat line of Woodland Oaks to the centerline of 161st Avenue; thence westerly along the centerline of 161st Avenue to an intersecting point along the extension of the west right of way line of Hanson Boulevard; thence southerly along said extension line and west right of way line of Hanson Boulevard to the northeast corner of Woodland Crossings; thence westerly along the north plat line of Woodland Crossings to the southwest corner of Lot 3, Block 1, Nightingale Ridge; thence northerly along the west line of Lots 3, and 2, Block 1, Nightingale Ridge and extending to the north right of way of 159th Lane; thence westerly along the north right of way of 159th Lane to the east right of way of Nightingale Street; thence northerly along the east right of way of Nightingale Street to the centerline of 161st Avenue; thence westerly along the centerline of 161st Avenue to the centerline of Round Lake Boulevard; thence southerly along the centerline of Round Lake Boulevard to an intersecting point along the extension of the west plat line of Creekridge Estates; thence southerly along said extension line and west plat line of Creekridge Estates to the centerline of South

Coon Creek Boulevard; thence northwesterly along the centerline of South Coon Creek Boulevard to the east corner of Parcel (pin 293224420009) of Government Lot 4, Sec 29, T 32, R 24; thence southwesterly along the southeast line of said Parcel (pin 293224420009) to the south corner of said Parcel (pin 293224420009); thence northwesterly along the southwest line of said Parcel (pin 293224420009) to the north corner of Parcel (pin 293224420006) of Government Lot 4, Sec 29, T 32, R 24; thence southwesterly along the northwest line of said Parcel (pin 293224420006) to the north corner of Parcel (pin293224420066) of Government Lot 4, Sec 29, T 32, R 24; thence southerly along the west line of said Parcel (pin293224420066) to the southwest corner of said Parcel (pin 293224420066); thence westerly along the south line of Parcels (pin 293224420020) and (pin 293224420019) of Government Lot 4, Sec 29, T 32, R 24 and extending to the centerline of Round Lake Boulevard; thence southerly along the centerline of Round Lake Boulevard to an intersecting point along the extension of the north property line of Lot 1, Block 1 Woodland Pond 2nd Addition; thence easterly along said extension line and the north line of Lots 1, 7, 8, 14, Block 1, Woodland Pond 2nd Addition to the northwest corner of Lot 15, Block 1, Woodland 2nd Addition; thence southerly along the west line of said Lot 15 to the southwest corner of said Lot 15; thence southeasterly to the northeast corner of Lot 8, Block 1, Quickstrom Addition; thence southerly along the east line of said Lot 8 to the southeast corner of said Lot 8; thence westerly along the north line of Lots 13, and 14, Block 1, Quickstrom Addition to the northwest corner of Lot 14, Block 1, Quickstrom Addition; thence southerly to the southwest corner of said Lot 14; thence southwesterly to the northwest corner of Lot 6, Block 3, Quickstrom Addition; thence southerly along the west line of said Lot 3 to the south plat line of Quickstrom Addition; thence easterly along the south plat line of Quickstrom Addition to the west plat line of Woodland Creek 5th Addition; thence southerly along west plat line of Woodland Creek 5th Addition to the northwest corner of Lot 3, Block 3, Woodland Creek 5th Addition; thence easterly along the north line of said Lot 3 to the northeast corner of said Lot 3; thence southerly along the east line of said Lot 3 to the southeast corner of said Lot 3; thence southerly along the extension of the east line of said Lot 3 to the west right of way line of Orchid Street; thence southerly along and online with the west right of way line of Orchid Street to the southeast corner of Lot 5, Block 2, Woodland Creek; thence westerly along the south line of said Lot 5 to the northeast corner of Lot 6, Block 7, Northglen; thence southerly along the east line of said Lot 6 to the southeast corner of said Lot 6; thence westerly along the south line of said Lot 6 to the east right of way line of Quay Street; thence southerly along the east right of way line of Quay Street to the north right of way line of Bunker Lake Boulevard; thence easterly along the north right of way line of Bunker Lake Boulevard to an point along the centerline of Marigold Street; thence southeasterly to the northwest corner of Lot 10, Block 1, Woodland Terrace 2nd Addition; thence

southerly along the east line of Lots 10, 9, and 8, Block 1 of Woodland Terrace 2nd Addition to the northeast corner of Lot 1, Block 4, Woodland Terrace; thence southerly along the east line of Lots 1, 2, 3, 4, 5, 6, 7, 8, and 9, Block 4, Woodland Terrace to the northeast corner of Lot 10, Block 4, Woodland Terrace; thence easterly along the north line of Lots 11, 12, 13, 14, and 15, Block 4, Woodland Terrace to the northeast corner of Lot 15, Block 4, Woodland Terrace; thence southerly along the east line of Lots 15, 16, 17, 18, and 19, Block 4, Woodland Terrace to the northeast corner of Lot 1, Block 6, Woodland Terrace 4th Addition; thence southerly along the east line of Lots 1, and 2, Block 6, Woodland Terrace 4th Addition to the northeast corner of Lot 4, Block 6, Woodland Terrace 4th Addition; thence westerly along the northerly line of said Lot 4 to the northwest corner of said Lot 4; thence southerly along the westerly line of said Lot 4 to the southwest corner of said Lot 4; thence southerly to the northwest corner of Lot 12, Block 7, Woodland Terrace 4th Addition; thence southerly along the west line of said Lot 7 to the southwest corner of said Lot 7; thence westerly along the south line of Lot 11, Block 7, Woodland Terrace 4th Addition to the northeast corner of Lot 7, Block 7, Woodland Terrace 4th Addition; thence southerly along the easterly line of Lots 7, and 6, Block 7, Woodland Terrace 4th Addition to an intersecting point on the south municipal boundary line of the City of Andover, the north municipal boundary line of Coon Rapids, thence westerly along the northern municipal boundary of the City of Coon Rapids to the east municipal boundary of the City of Anoka, thence southerly along the east municipal boundary of the City of Anoka to the centerline of the Mississippi River, the boundary between Anoka and Hennepin Counties, thence northwesterly along the boundary between Anoka and Hennepin Counties to the west municipal boundary of the City of Ramsey, thence northerly along the west municipal boundary of the City of Ramsey to the north municipal boundary of the City of Ramsey, thence easterly along the north municipal boundary of the Cities of Ramsey and Andover to the point of beginning.

Appendix B

Grading, Stormwater Management and Erosion/Sediment Control Permit Application

Lower Rum River WMO

Permit # _____

GRADING, STORMWATER MANAGEMENT AND EROSION/ SEDIMENT CONTROL PERMIT APPLICATION

A $100.00 application fee and additional $700.00 escrow deposit must accompany this permit application.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

The permit application and supporting documentation must be submitted to the LRRWMO by the THIRD THURSDAY OF THE MONTH TO BE ON THE FOLLOWING REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AGENDA. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: _____

Address/Location: _____

Project Description/Purpose: _____

Name of Applicant (Site Owner or Property Owner)	**Applicant's Contact Organization Name**
Address	**Address**
City, State, Zip	**City, State, Zip**
Phone Fax	**Phone Fax**
Email	**Email**

Submittal Requirements

Completed Grading, Stormwater Management and Erosion/ Sediment Control permit applications are to be submitted as per LRRWMO attachments G1 (Permit Requirements) and G2 (Office Procedure) included with this application. Note that projects involving potential wetland impacts and/or involving a Wetland Replacement Plan require a separate permit application and are subject to additional requirements.

PROJECT SUBMITTALS (check all that apply):

- ☐ **GRADING PLAN:** Including existing and proposed contours and boundaries of all wetlands and surface waters.
- ☐ **STORM SEWER/ DRAINAGE PLAN:** Including all permanent drainage features and all permanent water quality features.
- ☐ **STORM DRAINAGE CALCULATIONS:** Design computations as required by the LRRWMO.
- ☐ **EROSION CONTROL PLAN:** Including all temporary and permanent measures proposed to retain all sediment on site.
- ☐ **OTHER**

Lower Rum River WMO

START OF PROJECT: _____ EST. COMPLETION DATE: _____ APPROVAL DATE: _____

By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated Agent (no agent without a letter of authority)	Date	Signature of applicant if different from property owner	Date
Print Signer's name		Print Signer's name	

Application Acknowledged by City:

Name of City Official	City	Date

SIGNATURE OF LRRWMO CHAIRMAN: **

NOTE: Subject to conditions recommended by Barr Engineering (see attached)

PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

LRRWMO Attachment G1

PERMIT REQUIREMENTS

APPLICATION DEADLINE: Third Thursday of the month for consideration at the following regularly scheduled monthly LRRWMO board meeting on third Thursday of month.

REQUIRED SUBMITTALS:

1. Completed Permit Application Form (attached)
2. $100 Application Fee plus an escrow deposit of $700 (as described on Permit Application Form)
3. A Stormwater Management Plan and supporting computations as identified in Appendix E of the LRRWMO Watershed Management Plan.

Submittals shall be provided in electronic (e.g., PDF) or other easily reproduced format and must be signed by a registered professional engineer in the State of Minnesota. One (1) hard copy of the submittal must be provided with the application for the LRRWMO files and one (1) hard copy to the LRRWMO engineer (Barr Engineering Co.).

LRRWMO Attachment G2

OFFICE PROCEDURE

Procedure to Accept LRRWMO Permit:

1. Complete LRRWMO Permit Application and all supporting supplemental documents for review. Requires signature of acknowledgement on application form from City official prior to submittal to LRRWMO. For the appropriate City contact information refer to the LRRWMO website at www.lrrwmo.org/

   NOTE: See "PROJECT SUBMITTALS" section of Application.

2. Submit Application, $100 application fee plus a $700 escrow deposit* payable to the Lower Rum River WMO, and one (1) set of the project submittals (hard copy) to:

   Shayna Forster
   Finance Department
   City of Anoka
   2015 First Street N.
   Anoka, MN 55303
   763-576-2773
   SForster@ci.anoka.mn.us

   (This set of plans is for LRRWMO file copy.) **\$700 escrow deposits: The LRRWMO costs related to the project will be charged to permit escrow fund. Funds remaining in the permit escrow account when* the project is closed will be returned to the applicant.

3. Mail or email a copy of Application and one (1) set of the project submittals (hard copy) to:

   Bob Obermeyer
   Barr Engineering Co.
   4300 MarketPointe Drive
   Suite 200
   Minneapolis, MN 55435
   bobermeyer@barr.com

4. Agenda deadline is the third Thursday of each month to be on the following regularly scheduled LRRWMO monthly meeting.

Procedure to Request Return of Permit Fund Balance:

1. When project reaches status of 100% completion (as contained in Quarterly Report), the respective City prepares a written request to LRRWMO for return of escrow deposit balance with copy to Anoka's Finance Department. The request must be submitted prior to the third Thursday of each month to meet the next month regular meeting agenda deadline.

Appendix C

Application for Minnesota Wetland Conservation Act Decisions and Procedure Requirements

Lower Rum River WMO

Permit # _____

APPLICATION FOR MINNESOTA WETLAND CONSERVATION ACT (WCA) DECISIONS AND PROCEDURE REQUIREMENTS

A $75.00 LRRWMO initial application fee and the appropriate escrow deposits (determined in accordance with Attachment W3) must accompany this permit application for any Wetland Conservation Act (WCA) decisions. These are separate and in addition to permit and escrow fees for Grading, Stormwater Management, and Erosion/Sediment Control permit application, if applicable.

Permits are to be processed at the same time as the site plan, preliminary plat or other city land use or building application submitted to the city in which the work or project is located.

Wetland permit processing takes longer than other permit processing. The permit application and supporting documentation should be submitted to the LRRWMO AT LEAST 60 DAYS PRIOR TO THE REGULARLY SCHEDULED MONTHLY LRRWMO MEETING AT WHICH A DECISION IS REQUESTED. A PERMIT NUMBER WILL NOT BE ASSIGNED UNTIL CITY AUTHORIZATION IS RECEIVED.

Project Name: _____

Address/Location: _____

Project Description/Purpose: _____

Name of Applicant (Site Owner or Property Owner)	**Applicant's Contact Organization Name**
Address	**Address**
City, State, Zip	**City, State, Zip**
Phone Fax	**Phone Fax**
Email	**Email**

Submittal Requirements

Complete applications are to be submitted as per LRRWMO attachments W1 (Permit Requirements), W2 (Office Procedure), and W3 (Fees, Deposit, and Sureties for Wetland Conservation Act) included with this application. Projects may also require a LRRWMO Grading, Stormwater Management, and Erosion/Sediment Control Permit (separate application and fee/escrow amounts)

PROJECT SUBMITTALS (check all that apply):

- ☐ **WETLAND BOUNDARY DELINEATION AND TYPE CONCURRENCE**
- ☐ **REQUEST FOR NO LOSS OR EXEMPTION UNDER THE WETLAND CONSERVATION ACT (WCA)**
- ☐ **WETLAND REPLACEMENT PLAN AND/OR SEQUENCING**
- ☐ **WETLAND BANKING PLAN**
- ☐ **OTHER**

Lower Rum River WMO

START OF PROJECT: _____ EST. COMPLETION DATE: _____ APPROVAL DATE: _____

By signing this Permit Application, the undersigned consents and agrees on behalf of the Applicant that:

1. The permit application fee is non-refundable. Escrow deposits will be held by the LRRWMO until the project has been completed and all conditions of issuance of the permit are satisfied. The Applicant is responsible for all expenses incurred by the LRRWMO in the processing, administration and enforcement of the permit application and permit. The escrow deposit will be used to reimburse the LRRWMO for all expenses incurred by the LRRWMO in processing, administering and enforcing the permit application and permit, including engineering, legal and other consultant costs. If such expenses exceed the escrow deposit, the LRRWMO will bill the Applicant or Permittee for such excess amount and payment will be due within twenty (20) days of mailing the invoice. Timely payment of such invoices is a condition of all permits and work may be stopped on the project for failure to make payments when due.
2. The undersigned, its agents, principal, assigns and/or representatives (hereinafter "Permittee") shall abide by all the standard conditions and special terms and conditions of the LRRWMO.
3. Any work that violates the terms of the permit may result in the LRRWMO or the City in which the work is being done immediately causing the work on the project relating to the permit to cease and desist. All work on the project shall cease until the permit conditions are met and approved by the LRRWMO and/or the City in which the work is being done.
4. The Permittee agrees to be bound by the terms of the LRRWMO permit requirements, final permit, standard conditions, and special conditions required by the LRRWMO for approval of the permit. The undersigned has the authority to bind the permit holder, the owner of the property and/or any entity performing work on the property pursuant to the terms of LRRWMO permit, and shall be responsible for complying with terms of the LRRWMO permit.

"I certify that I have thoroughly read and understand the above information."

Signature of property owner or designated Agent (no agent without a letter of authority)	Date	Signature of applicant if different from property owner	Date
Print Signer's name		Print Signer's name	

Application Acknowledged by City:

Name of City Official	City	Date

SIGNATURE OF LRRWMO CHAIRMAN: **

NOTE: Subject to conditions as designated in the WCA Notice of Decision as recommended by the Technical Evaluation Panel and Barr Engineering (see attached)

PERMIT IS NOT VALID IF PROJECT HAS NOT STARTED WITHIN ONE YEAR FROM DATE OF APPROVAL

LRRWMO Attachment W1

PERMIT REQUIREMENTS

APPLICATION DEADLINE: Third Thursday of the month for consideration at the following regularly scheduled monthly LRRWMO board meeting on third Thursday of month.

REQUIRED SUBMITTALS:

1. Completed Permit Application Form (attached)
2. $75 LRRWMO initial application fee plus an escrow deposit determined in accordance with Attachment W3 for any Wetland Conservation Act (WCA) decisions.
3. Wetland Permitting Information
   a. The permit applicant is responsible for ensuring wetland applications are in complete compliance with the Wetland Conservation Act of 1991 and applicable documentation is provided as listed on the Minnesota Board of Water and Soil Resources (BWSR) website:

      http://www.bwsr.state.mn.us/.

      Permit applicants shall refer to the BWSR website for sample application forms and check lists. These forms will be used for reviewing wetland applications. Failure to provide a complete application will result in delays in permit review.

   b. When working near DNR public waters, applicants shall submit information indicating the OHW (ordinary high water) level and the wetland boundary according to the WCA of 1991. Availability of OHW information is available from the MDNR Area Hydrologist. When working in DNR Public Waters, an online Minnesota DNR Permitting and Reporting System (MPARS) application may also be required by the DNR.

SUBMITTAL NOTES:

- Permit applicants shall submit the attached Joint Application Form for Activities Affecting Water Resources in Minnesota (Attachment W4).
- Failure to fully follow the application requirements of the Wetland Conservation Act will result in delays in permit review.
- Applicants can expect a 60-day review period provided all applicable materials have been submitted and reviews are completed within the growing season, if applicable.

LRRWMO Attachment W2

OFFICE PROCEDURE

Procedure to Accept LRRWMO Permit:

1. Complete LRRWMO Permit Application for Minnesota Wetland Conservation Act (WCA) Decisions and Procedure Requirements form. Requires signature of acknowledgement from City official prior to submittal to LRRWMO. For appropriate City contact information refer to the LRRWMO website at www.lrrwmo.org/

   NOTE: See "PROJECT SUBMITTALS" section of Application

2. Submit Application, $75 initial application fee plus an escrow deposit* in accordance with LRRWMO Attachment W3 for Wetland Conservation Act applications, as applicable, payable to the Lower Rum River WMO, and one (1) set of plan submittals (hard copy) to:

   Shayna Forster
   Finance Department
   City of Anoka
   2015 First Street N.
   Anoka, MN 55303
   763-576-2773
   SForster@ci.anoka.mn.us

   (This set of plans is for LRRWMO file copy) **escrow deposits: The LRRWMO costs related to the project will be charged to permit escrow fund. Funds remaining in the permit escrow account when the project is closed will be returned to the applicant.*

3. Forward electronic copy of Application and associated submittals to:

   Karen Wold
   Barr Engineering Co.
   kwold@barr.com

4. Wetland permit decisions are usually made within 60 days from receipt of a complete application.

Procedure to Request Return of Permit Fund Balance:

1. When project reaches status of 100% completion (as contained in Quarterly Report), the respective City prepares a written request to LRRWMO for return of escrow deposit balance with copy to Anoka's Finance Department. The request must be submitted prior to the third Thursday of each month to meet the next month regular meeting agenda deadline.

Lower Rum River WMO

LRRWMO ATTACHMENT W3

Fees, Deposit and Sureties for Wetland Conservation Act (WCA) Applications

Updated ***April 2011***

FEES

Activity		**Fee**
Initial WCA Application Fee		***$75***
Office and Field Review of Wetland Boundary Delineation or Type Determination (Applicant is responsible for submitting a complete Wetland Delineation Report, according to BWSR guidance).	Evaluation Area < 10 acres and less than 3 wetlands being evaluated	$1,000 ***Escrow***
	Evaluation Area < 100 acres and < 6 wetlands being evaluated	$1,500 ***Escrow***
	Evaluation Area =/> 100 acres and/or =/> 6 wetlands being evaluated	$2,000 ***Escrow***
Review of WCA exemptions and No Loss requests.		$1,000 ***Escrow***
Review of Wetland ***Replacement Plans*** (needed for all projects requiring replacement for wetland impacts).		$1,000 ***Escrow*** plus $100/acre of wetland plus $5,000/acre of wetland impact plus $5,000 for mitigation monitoring review
Creating a Wetland Bank		$15,000

Note: escrow amounts are cumulative if more than activity is being reviewed.

Cash Surety Deposit for Performance

For Wetland Replacement Plans:
The Permittee or owner shall provide a cash surety ***(or an automatically renewable Letter of Credit from a bank approved by the Treasurer of the LRRWMO)*** in an amount determined by the LRRWMO, so that, if needed, a third party has the funds to create, manage, and monitor the wetland replacement area should the applicant fail to comply with the required creation of the wetland mitigation site. If the Letter of Credit is not honored by the issuer, the LRRWMO may choose litigation to obtain the necessary funds or to obtain a court order to require the permittee or owner to create the wetland mitigation area. The LRRWMO will determine a cash surety ***(or letter of credit)*** amount in addition to the permit application fee and escrow deposit.

Proposed WCA LRRWMO Surety Amount

Activity	Performance Surety Amount
Wetland Replacement	***$1 per sq. ft. of mitigation with a minimum of $5,000 unless a higher or lower amount is deemed necessary by the LRRWMO.***

- The permit application, fee escrow deposit and cash surety deposit may be in one check payable to the Lower Rum River Watershed Management Organization.
- Only actual work done by the LRRWMO or its consultants will be charged against the escrow deposit or performance security.
- The performance surety may be waived if approved wetland banking credits are purchased for fulfilling the required mitigation provisions of the permit.

Joint Application Form for Activities Affecting Water Resources in Minnesota

This joint application form is the accepted means for initiating review of proposals that may affect a water resource (wetland, tributary, lake, etc.) in the State of Minnesota under state and federal regulatory programs. Applicants for Minnesota Department of Natural Resources (DNR) Public Waters permits **MUST** use the MPARS online permitting system for submitting applications to the DNR. Applicants can use the information entered into MPARS to substitute for completing parts of this joint application form (see the paragraph on MPARS at the end of the joint application form instructions for additional information). This form is only applicable to the water resource aspects of proposed projects under state and federal regulatory programs; other local applications and approvals may be required. Depending on the nature of the project and the location and type of water resources impacted, multiple authorizations may be required as different regulatory programs have different types of jurisdiction over different types of resources.

Regulatory Review Structure

Federal

The St. Paul District of the U.S. Army Corps of Engineers (Corps) is the federal agency that regulates discharges of dredged or fill material into waters of the United States (wetlands, tributaries, lakes, etc.) under Section 404 of the Clean Water Act (CWA) and regulates work in navigable waters under Section 10 of the Rivers and Harbors Act. Applications are assigned to Corps project managers who are responsible for implementing the Corps regulatory program within a particular geographic area.

State

There are three state regulatory programs that regulate activities affecting water resources. The Wetland Conservation Act (WCA) regulates most activities affecting wetlands. It is administered by local government units (LGUs) which can be counties, townships, cities, watershed districts, watershed management organizations or state agencies (on state-owned land). The Minnesota DNR Division of Ecological and Water Resources issues permits for work in specially-designated public waters via the Public Waters Work Permit Program (DNR Public Waters Permits). The Minnesota Pollution Control Agency (MPCA) under Section 401 of the Clean Water Act certifies that discharges of dredged or fill material authorized by a federal permit or license comply with state water quality standards. One or more of these regulatory programs may be applicable to any one project.

Required Information

Prior to submitting an application, applicants are **strongly encouraged** to seek input from the Corps Project Manager and LGU staff to identify regulatory issues and required application materials for their proposed project. Project proponents can request a pre-application consultation with the Corps and LGU to discuss their proposed project by providing the information required in Sections 1 through 5 of this joint application form to facilitate a meaningful discussion about their project. Many LGUs provide a venue (such as regularly scheduled technical evaluation panel meetings) for potential applicants to discuss their projects with multiple agencies prior to submitting an application. Contact information is provided below.

The following bullets outline the information generally required for several common types of determinations/authorizations.

- For delineation approvals and/or jurisdictional determinations, submit Parts 1, 2 and 5, and Attachment A.
- For activities involving CWA/WCA exemptions, WCA no-loss determinations, and activities not requiring mitigation, submit Parts 1 through 5, and Attachment B.
- For activities requiring compensatory mitigation/replacement plan, submit Parts 1 thru 5, and Attachments C and D.
- For local road authority activities that qualify for the state's local road wetland replacement program, submit Parts 1 through 5, and Attachments C, D (if applicable), and E to both the Corps and the LGU.

Submission Instructions

Send the completed joint application form and all required attachments to:

U.S Army Corps of Engineers. Applications may be sent directly to the appropriate Corps Office. For a current listing of areas of responsibilities and contact information, visit the St. Paul District's website at: http://www.mvp.usace.army.mil/Missions/Regulatory.aspx and select "Minnesota" from the contact Information box. Alternatively, applications may be sent directly to the St. Paul District Headquarters and the Corps will forward them to the appropriate field office.

Section 401 Water Quality Certification: Applicants do not need to submit the joint application form to the MPCA unless specifically requested. The MPCA will request a copy of the completed joint application form directly from an applicant when they determine an individual 401 water quality certification is required for a proposed project.

Wetland Conservation Act Local Government Unit: Send to the appropriate Local Government Unit. If necessary, contact your county Soil and Water Conservation District (SWCD) office or visit the Board of Water and Soil Resources (BWSR) web site (www.bwsr.state.mn.us) to determine the appropriate LGU.

DNR Public Waters Permitting: In 2014 the DNR will begin using the Minnesota DNR Permitting and Reporting System (MPARS) for submission of Public Waters permit applications (https://webapps11.dnr.state.mn.us/mpars/public/authentication/login). Applicants for Public Waters permits **MUST** use the MPARS online permitting system for submitting applications to the DNR. To avoid duplication and to streamline the application process among the various resource agencies, applicants can use the information entered into MPARS to substitute for completing parts of this joint application form. The MPARS print/save function will provide the applicant with a copy of the Public Waters permit application which, at a minimum, will satisfy Parts one and two of this joint application. For certain types of activities, the MPARS application may also provide all of the necessary information required under Parts three and four of the joint application. However, it is the responsibility of the Applicant to make sure that the joint application contains all of the required information, including identification of all aquatic resources impacted by the project (see Part four of the joint application). After confirming that the MPARS application contains all of the required information in Parts one and two the Applicant may attach a copy to the joint application and fill in any missing information in the remainder of the joint application.

Project Name and/or Number:

PART ONE: Applicant Information

If applicant is an entity (company, government entity, partnership, etc.), an authorized contact person must be identified. If the applicant is using an agent (consultant, lawyer, or other third party) and has authorized them to act on their behalf, the agent's contact information must also be provided.

Applicant/Landowner Name:
Mailing Address:
Phone:
E-mail Address:

Authorized Contact (do not complete if same as above):
Mailing Address:
Phone:
E-mail Address:

Agent Name:
Mailing Address:
Phone:
E-mail Address:

PART TWO: Site Location Information

County: **City/Township:**
Parcel ID and/or Address:
Legal Description (Section, Township, Range):
Lat/Long (decimal degrees):
Attach a map showing the location of the site in relation to local streets, roads, highways.
Approximate size of site (acres) or if a linear project, length (feet):

If you know that your proposal will require an individual Permit from the U.S. Army Corps of Engineers, you must provide the names and addresses of all property owners adjacent to the project site. This information may be provided by attaching a list to your application or by using block 25 of the Application for Department of the Army permit which can be obtained at:

http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RegulatoryDocs/engform_4345_2012oct.pdf

PART THREE: General Project/Site Information

If this application is related to a delineation approval, exemption determination, jurisdictional determination, or other correspondence submitted ***prior to*** this application then describe that here and provide the Corps of Engineers project number.

Describe the project that is being proposed, the project purpose and need, and schedule for implementation and completion. The project description must fully describe the nature and scope of the proposed activity including a description of all project elements that effect aquatic resources (wetland, lake, tributary, etc.) and must also include plans and cross section or profile drawings showing the location, character, and dimensions of all proposed activities and aquatic resource impacts.

Project Name and/or Number:

PART FOUR: Aquatic Resource Impact[1] Summary

If your proposed project involves a direct or indirect impact to an aquatic resource (wetland, lake, tributary, etc.) identify each impact in the table below. Include all anticipated impacts, including those expected to be temporary. Attach an overhead view map, aerial photo, and/or drawing showing all of the aquatic resources in the project area and the location(s) of the proposed impacts. Label each aquatic resource on the map with a reference number or letter and identify the impacts in the following table.

Aquatic Resource ID (as noted on overhead view)	**Aquatic Resource Type** (wetland, lake, tributary etc.)	**Type of Impact** (fill, excavate, drain, or remove vegetation)	**Duration of Impact** Permanent (P) or Temporary (T)[1]	**Size of Impact**[2]	**Overall Size of Aquatic Resource** [3]	**Existing Plant Community Type(s)** in Impact Area[4]	**County, Major Watershed #, and Bank Service Area #** of Impact Area[5]

[1]If impacts are temporary; enter the duration of the impacts in days next to the "T". For example, a project with a temporary access fill that would be removed after 220 days would be entered "T (220)".
[2]Impacts less than 0.01 acre should be reported in square feet. Impacts 0.01 acre or greater should be reported as acres and rounded to the nearest 0.01 acre. Tributary impacts must be reported in linear feet of impact and an area of impact by indicating first the linear feet of impact along the flowline of the stream followed by the area impact in parentheses). For example, a project that impacts 50 feet of a stream that is 6 feet wide would be reported as 50 ft (300 square feet).
[3]This is generally only applicable if you are applying for a de minimis exemption under MN Rules 8420.0420 Subp. 8, otherwise enter "N/A".
[4]Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.
[5]Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

If any of the above identified impacts have already occurred, identify which impacts they are and the circumstances associated with each:

PART FIVE: Applicant Signature

☐ Check here if you are requesting a pre-application consultation with the Corps and LGU based on the information you have provided. Regulatory entities will not initiate a formal application review if this box is checked.

By signature below, I attest that the information in this application is complete and accurate. I further attest that I possess the authority to undertake the work described herein.

Signature: _____ Date:

I hereby authorize to act on my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this application.

[1] **The term "impact" as used in this joint application form is a generic term used for disclosure purposes to identify activities that may require approval from one or more regulatory agencies. For purposes of this form it is not meant to indicate whether or not those activities may require mitigation/replacement.**

Project Name and/or Number:

Attachment A
Request for Delineation Review, Wetland Type Determination, or Jurisdictional Determination

By submission of the enclosed wetland delineation report, I am requesting that the U.S. Army Corps of Engineers, St. Paul District (Corps) and/or the Wetland Conservation Act Local Government Unit (LGU) provide me with the following (check all that apply):

☐ **Wetland Type Confirmation**

☐ **Delineation Concurrence**. Concurrence with a delineation is a written notification from the Corps and a decision from the LGU concurring, not concurring, or commenting on the boundaries of the aquatic resources delineated on the property. Delineation concurrences are generally valid for five years unless site conditions change. Under this request alone, the Corps will not address the jurisdictional status of the aquatic resources on the property, only the boundaries of the resources within the review area (including wetlands, tributaries, lakes, etc.).

☐ **Preliminary Jurisdictional Determination**. A preliminary jurisdictional determination (PJD) is a non-binding written indication from the Corps that waters, including wetlands, identified on a parcel may be waters of the United States. For purposes of computation of impacts and compensatory mitigation requirements, a permit decision made on the basis of a PJD will treat all waters and wetlands in the review area as if they are jurisdictional waters of the U.S. PJDs are advisory in nature and may not be appealed.

☐ **Approved Jurisdictional Determination**. An approved jurisdictional determination (AJD) is an official Corps determination that jurisdictional waters of the United States are either present or absent on the property. AJDs can generally be relied upon by the affected party for five years. An AJD may be appealed through the Corps administrative appeal process.

In order for the Corps and LGU to process your request, the wetland delineation must be prepared in accordance with the 1987 Corps of Engineers Wetland Delineation Manual, any approved Regional Supplements to the 1987 Manual, and the *Guidelines for Submitting Wetland Delineations in Minnesota* (2013).
http://www.mvp.usace.army.mil/Missions/Regulatory/DelineationJDGuidance.aspx

Project Name and/or Number:

Attachment B
Supporting Information for Applications Involving Exemptions, No Loss Determinations, and Activities Not Requiring Mitigation

Complete this part ***if*** you maintain that the identified aquatic resource impacts in Part Four do not require wetland replacement/compensatory mitigation OR ***if*** you are seeking verification that the proposed water resource impacts are either exempt from replacement or are not under CWA/WCA jurisdiction.

Identify the specific exemption or no-loss provision for which you believe your project or site qualifies:

Provide a detailed explanation of how your project or site qualifies for the above. Be specific and provide and refer to attachments and exhibits that support your contention. Applicants should refer to rules (e.g. WCA rules), guidance documents (e.g. BWSR guidance, Corps guidance letters/public notices), and permit conditions (e.g. Corps General Permit conditions) to determine the necessary information to support the application. Applicants are strongly encouraged to contact the WCA LGU and Corps Project Manager prior to submitting an application if they are unsure of what type of information to provide:

Project Name and/or Number:

Attachment C
Avoidance and Minimization

Project Purpose, Need, and Requirements. Clearly state the purpose of your project and need for your project. Also include a description of any specific requirements of the project as they relate to project location, project footprint, water management, and any other applicable requirements. Attach an overhead plan sheet showing all relevant features of the project (buildings, roads, etc.), aquatic resource features (impact areas noted) and construction details (grading plans, storm water management plans, etc.), referencing these as necessary:

Avoidance. Both the CWA and the WCA require that impacts to aquatic resources be avoided if practicable alternatives exist. Clearly describe all on-site measures considered to avoid impacts to aquatic resources and discuss at least two project alternatives that avoid all impacts to aquatic resources on the site. These alternatives may include alternative site plans, alternate sites, and/or not doing the project. Alternatives should be feasible and prudent (see MN Rules 8420.0520 Subp. 2 C). Applicants are encouraged to attach drawings and plans to support their analysis:

Minimization. Both the CWA and the WCA require that all unavoidable impacts to aquatic resources be minimized to the greatest extent practicable. Discuss all features of the proposed project that have been modified to minimize the impacts to water resources (see MN Rules 8420.0520 Subp. 4):

Off-Site Alternatives. An off-site alternatives analysis is not required for all permit applications. If you know that your proposal will require an individual permit (standard permit or letter of permission) from the U.S. Army Corps of Engineers, you may be required to provide an off-site alternatives analysis. The alternatives analysis is not required for a complete application but must be provided during the review process in order for the Corps to complete the evaluation of your application and reach a final decision. Applicants with questions about when an off-site alternatives analysis is required should contact their Corps Project Manager.

Project Name and/or Number:

Attachment D
Replacement/Compensatory Mitigation

Complete this part ***if*** your application involves wetland replacement/compensatory mitigation not associated with the local road wetland replacement program. Applicants should consult Corps mitigation guidelines and WCA rules for requirements.

Replacement/Compensatory Mitigation via Wetland Banking. Complete this section if you are proposing to use credits from an existing wetland bank (with an account number in the State wetland banking system) for all or part of your replacement/compensatory mitigation requirements.

Wetland Bank Account #	**County**	**Major Watershed #**	**Bank Service Area #**	**Credit Type** (if applicable)	**Number of Credits**

Applicants should attach documentation indicating that they have contacted the wetland bank account owner and reached at least a tentative agreement to utilize the identified credits for the project. This documentation could be a signed purchase agreement, signed application for withdrawal of credits or some other correspondence indicating an agreement between the applicant and the bank owner. *However, applicants are advised not to enter into a binding agreement to purchase credits until the mitigation plan is approved by the Corps and LGU.*

Project-Specific Replacement/Permittee Responsible Mitigation. Complete this section if you are proposing to pursue actions (restoration, creation, preservation, etc.) to generate wetland replacement/compensatory mitigation credits for this proposed project.

WCA Action Eligible for Credit[1]	**Corps Mitigation Compensation Technique**[2]	**Acres**	**Credit % Requested**	**Credits Anticipated**[3]	**County**	**Major Watershed #**	**Bank Service Area #**

[1]Refer to the name and subpart number in MN Rule 8420.0526.
[2]Refer to the technique listed in *St. Paul District Policy for Wetland Compensatory Mitigation in Minnesota*.
[3]If WCA and Corps crediting differs, then enter both numbers and distinguish which is Corps and which is WCA.

Explain how each proposed action or technique will be completed (e.g. wetland hydrology will be restored by breaking the tile……) and how the proposal meets the crediting criteria associated with it. Applicants should refer to the Corps mitigation policy language, WCA rule language, and all associated Corps and WCA guidance related to the action or technique:

Attach a site location map, soils map, recent aerial photograph, and any other maps to show the location and other relevant features of each wetland replacement/mitigation site. Discuss in detail existing vegetation, existing landscape features, land use (on and surrounding the site), existing soils, drainage systems (if present), and water sources and movement. Include a topographic map showing key features related to hydrology and water flow (inlets, outlets, ditches, pumps, etc.):

Project Name and/or Number:

Attach a map of the existing aquatic resources, associated delineation report, and any documentation of regulatory review or approval. Discuss as necessary:

For actions involving construction activities, attach construction plans and specifications with all relevant details. Discuss and provide documentation of a hydrologic and hydraulic analysis of the site to define existing conditions, predict project outcomes, identify specific project performance standards and avoid adverse offsite impacts. Plans and specifications should be prepared by a licensed engineer following standard engineering practices. Discuss anticipated construction sequence and timing:

For projects involving vegetation restoration, provide a vegetation establishment plan that includes information on site preparation, seed mixes and plant materials, seeding/planting plan (attach seeding/planting zone map), planting/seeding methods, vegetation maintenance, and an anticipated schedule of activities:

For projects involving construction or vegetation restoration, identify and discuss goals and specific outcomes that can be determined for credit allocation. Provide a proposed credit allocation table tied to outcomes:

Provide a five-year monitoring plan to address project outcomes and credit allocation:

Discuss and provide evidence of ownership or rights to conduct wetland replacement/mitigation on each site:

Quantify all proposed wetland credits and compare to wetland impacts to identify a proposed wetland replacement ratio. Discuss how this replacement ratio is consistent with Corps and WCA requirements:

By signature below, the applicant attests to the following (only required if application involves project-specific/permittee responsible replacement):

- All proposed replacement wetlands were not:
  - Previously restored or created under a prior approved replacement plan or permit
  - Drained or filled under an exemption during the previous 10 years
  - Restored with financial assistance from public conservation programs
  - Restored using private funds, other than landowner funds, unless the funds are paid back with interest to the individual or organization that funded the restoration and the individual or organization notifies the local government unit in writing that the restored wetland may be considered for replacement.
- The wetland will be replaced before or concurrent with the actual draining or filling of a wetland.
- An irrevocable bank letter of credit, performance bond, or other acceptable security will be provided to guarantee successful completion of the wetland replacement.
- Within 30 days of either receiving approval of this application or beginning work on the project, I will record the Declaration of Restrictions and Covenants on the deed for the property on which the replacement wetland(s) will be located and submit proof of such recording to the LGU and the Corps.

Applicant or Representative: Title:

Signature: _____ Date:

Project Name and/or Number:

Attachment E
Local Road Replacement Program Qualification

Complete this part ***if*** you are a local road authority (county highway department, city transportation department, etc.) seeking verification that your project (or a portion of your project) qualifies for the MN Local Government Road Wetland Replacement Program (LGRWRP). If portions of your project are not eligible for the LGRWRP, then Attachment D should be completed and attached to your application.

Discuss how your project is a repair, rehabilitation, reconstruction, or replacement of a currently serviceable road to meet state/federal design or safety standards/requirements. Applicants should identify the specific road deficiencies and how the project will rectify them. Attach supporting documents and information as applicable:

Provide a map, plan, and/or aerial photograph accurately depicting wetland boundaries within the project area. Attach associated delineation/determination report or otherwise explain the method(s) used to identify and delineate wetlands. Also attach and discuss any type of review or approval of wetland boundaries or other aspects of the project by a member or members of the local Technical Evaluation Panel (TEP) or Corps of Engineers:

In the table below, identify only the wetland impacts from Part 4 that the road authority has determined should qualify for the LGRWRP.

Wetland Impact ID (as noted on overhead view)	**Type of Impact** (fill, excavate, drain)	**Size of Impact** (square feet or acres to 0.01)	**Existing Plant Community Type(s)** in Impact Area[1]	**County, Major Watershed #, and Bank Service Area #** of Impact[2]

[1]Use *Wetland Plants and Plant Community Types of Minnesota and Wisconsin* 3rd Ed. as modified in MN Rules 8420.0405 Subp. 2.
[2]Refer to Major Watershed and Bank Service Area maps in MN Rules 8420.0522 Subp. 7.

Discuss the feasibility of providing onsite compensatory mitigation/replacement for important site-specific wetland functions:

Please note that under the MN Wetland Conservation Act, projects with less than 10,000 square feet of wetland impact are allowed to commence prior to submission of this notification so long as the notification is submitted within 30 days of the impact. The Clean Water Act has no such provision and requires that permits be obtained prior to any regulated discharges into water of the United States. To avoid potential unauthorized activities, road authorities must, at a minimum, provide a complete application to the Corps and receive a permit prior to commencing work.

By signature below, the road authority attests that they have followed the process in MN Rules 8420.0544 and have determined that the wetland impacts identified in Part 4 are eligible for the MN Local Government Road Wetland Replacement Program.

Road Authority Representative: Title:

Signature: _____ Date:

Technical Evaluation Panel Concurrence: Project Name and/or Number:

TEP member: Representing:

Concur with road authority's determination of qualification for the local road wetland replacement program? ☐ Yes ☐ No

Signature: _____ Date:

TEP member: Representing:

Concur with road authority's determination of qualification for the local road wetland replacement program? ☐ Yes ☐ No

Signature: _____ Date:

TEP member: Representing:

Concur with road authority's determination of qualification for the local road wetland replacement program? ☐ Yes ☐ No

Signature: _____ Date:

TEP member: Representing:

Concur with road authority's determination of qualification for the local road wetland replacement program? ☐ Yes ☐ No

Signature: _____ Date:

Upon approval and signature by the TEP, application must be sent to: **Wetland Bank Administration**
Minnesota Board of Water & Soil Resources
520 Lafayette Road North
Saint Paul, MN 55155

Appendix D

Plan Development Gaps Analysis

resourceful. naturally.
engineering and environmental consultants

BARR

Memorandum

To: Lower Rum River Watershed Management Organization Board of Managers
From: Greg Williams, Barr Engineering Co.
Subject: LRRWMO 2021 Plan Update – Review of Existing Plans and Identification of Gaps
Date: November 14, 2019
Project: 23021077.00-100-106

As part of the 2021 update to the Lower Rum River Watershed Management Organization (LRRWMO) Watershed Management Plan (Plan), Barr Engineering Co. (Barr) has reviewed the 3rd generation LRRWMO Plan (2011 Plan) relative to other documents to identify potential gaps, conflicts, and/or inconsistencies. Documents reviewed in addition to the 2011 Plan include:

- City of Ramsey Surface Water Management Plan (October 2015, revised 2018)
- City of Andover Third Generation Surface Water Management Plan (May 2015, revised 2018)
- City of Anoka Local Surface Water Management Plan (July 2015)
- Anoka County Community Health and Environmental Services Water Resources Report (2014)
- Rum River Watershed Total Maximum Daily Load (MPCA, 2017)
- Rum River Watershed Restoration and Protection Strategy Report (MPCA, July 2017)
- Board of Water and Soil Resources Level II Performance Review (PRAP)
- Minnesota Pollution Control Agency (MPCA) Draft 2012 MS4 Permit
- MPCA National Pollution Discharge Elimination System (NPDES) Construction Stormwater Permit (2008)

The following table identifies and organizes gaps by topic. Discussion of each gap includes a summary of how it is addressed in the 2011 LRRWMO Plan, the identified gap or inconsistency or issue, and a recommended action to address the gap in the 2021 Plan.

This memorandum is intended as a resource for more detailed discussion with the LRRWMO Board of Managers during development and review of draft Plan sections. Decisions on the recommended actions included in this memorandum are not required at this time.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Impaired Waters The 2011 Plan notes the following impaired waters: • Rum River (Hg) • Rogers Lake (Nutrients) • Mississippi River (PCB, Hg)	The draft 2020 impaired waters 303(d) list has been released and includes impairments not included in the 2011 Plan, including: • Cedar Creek (E. coli) • Trott Brook (dissolved oxygen, Fish IBI, macroinvertebrate IBI) • Mississippi River (nutrients, fecal coliform) Also, Rogers Lake has been delisted.	The Plan should be updated to include the most current impairments. The Plan update should consider the Rum River TMDL and incorporate appropriate implementation recommendations.
Water Quality Standards The 2011 Plan does not reference state water quality standards applicable to LRRWMO water resources. Appendix F includes water quality action thresholds for select waterbodies based on observed data.	State water quality standards have been updated since the 2011 Plan. The "actions" triggered in Appendix F include further monitoring but do not contain specific actions in the event of continued trends.	Include applicable water quality standards in the Plan update. Consider revising the action thresholds to MPCA standards or based on trends, versus concentrations. Consider revision the "actions" to be more specific.
Water Quality Data and Studies The 2011 Plan identifies available water quality programs and data sources. The 2011 Plan does not include water quality data within the document.	Since the completion of the 2011 Plan, the MPCA has completed the Rum River Watershed Restoration and Protection Strategies (WRAPS) and Rum River Total Maximum Daily Load (TMDL). Both of these studies include the LRRWMO.	Summary of relevant water quality data and analysis should be include in the Plan and reference the MPCA documents. Possible implementation actions included in the TMDL may be included in the Plan.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Upper Rum River Water Quality The 2011 Plan notes total suspended solids and other water quality issues in the Rum River, but does not discuss upstream loading.	With the development of the Rum River One Watershed One Plan, there may be opportunities for the LRRWMO to contribute to upstream projects that will achieve cumulative water quality benefits in the Lower Rum River.	Consider ways for the LRRWMO to contribute technical assistance, funding, or other support for projects upstream of the LRRWMO jurisdiction.
Chloride Section III.A.5 of the 2011 Plan notes that chloride concentrations in the Rum River increase from upstream to downstream, but are below standards.	Since the 2011 Plan, the MPCA has published the Twin Cities Metro Area Chloride Management Plan which includes recommended practices for chloride reduction. Although no waterbodies in the LRRWMO are impaired for chloride, portions of the watershed are identified in the "road density >18%" area which is a critical area for implementation, per the MPCA.	Include more detailed discussion about chloride pollution and chloride reduction efforts in the Plan. Consider including chloride reduction elements in future permit program updates.
Subwatershed Assessments The 2011 Plan does not identify priority areas for water quality improvement projects. The scale of current water quality modeling from MPCA is insufficient for targeting of projects.	LRRWMO Cities have noted that they do not know where water quality improvement projects are most needed within the watershed and have requested direction from the LRRWMO.	Incorporate watershed or subwatershed assessment into the Plan implementation program to identify locations where future improvements should be concentrated.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Water Quality Improvement Projects The 2011 Plan implementation program did not identify any capital improvement projects (Table 10).	The Anoka Conservation District recommended an increased emphasis on water quality improvement projects in the updated Plan. The availability of watershed based funding may provide a consistent funding source for such projects.	Consider adding placeholder actions to the implementation plan for future water quality improvements, even if the specific actions are not yet identified and will be identified by future analyses.
Water Quality Project Maintenance The 2011 Plan notes maintenance responsibilities for municipal systems and county ditches.	The 2011 Plan does not explicitly discuss the maintenance responsibilities for private stormwater infrastructure.	The Plan update should include more detailed discussion of the maintenance responsibilities for privately-owned stormwater infrastructure.
Aquatic Invasive Species (AIS) Section III.C.1 of the 2011 Plan notes The LRRWMO's interest in working with MDNR and ACD to develop an AIS monitoring program.	The 2011 Plan does not include discussion of AIS present with the LRRWMO or existing management authorities/efforts.	Consider including information about species and abundance in local resources (if known) as well as references to other management agencies and programs.
Groundwater Quality Section II.D.3 of the 2011 Plan generally discusses susceptibility of groundwater to contamination within the LRRWMO	There are groundwater monitoring networks and well-testing resources that are available to residents that are not referenced in the Plan.	Consider adding links and references to additional groundwater resources (e.g., MPCA, MDNR) and discussion of available well-testing services from Anoka County.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Climate Data Section II.A of the 2011 Plan includes climate data compiled through 2005. The permit program utilizes Atlas 14 values.	Atlas 14 was published since the 2011 Plan. Also, recent studies identify long-term climate trends that may be observed during and after the lift of this Plan.	Update the climate data in the Plan to include the most recent climate normal period, Atlas 14 precipitation values, and expected climate trends.
Wetland Management The 2011 Plan Section V.8 includes discussion of possible wetland education actions. The Plan references the current LRRWMO requirement for a 16.5 foot buffer during construction.	LRRWMO standards do not include a permanent, post-construction wetland buffer requirement. The City of Anoka requires permanent wetland buffers for new development. The TAC cited a need for continued wetland education.	Review the proposed wetland education actions from the 2011 Plan and update based on continued need. Consider including post-construction wetland buffer requirements for new development.
Permit Program Section VI.A of the 2011 Plan requires that City official controls require LRRWMO permits for development activity, when needed.	The 2011 Plan has limited detail regarding when LRRWMO permits are needed and the integration of the LRRWMO permitting process with City review/permitting activities.	Revise the Plan to include detailed discussion of LRRWMO permit program implementation and coordination with cities. Consider including implementation items related to review and improvement of the permit program (see also TAC recommendations).
Consistency with MPCA Permits Section IV.C.10 requires the submission of erosion and sediment control plans conforming to MPCA construction stormwater general permit.	The MPCA construction stormwater general permit was updated in 2018. The update generally includes the same water quality performance standards	Update the Plan to reference the most current version of the general permit and note that future updates to the permit are anticipated during the life of this Plan.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Local Ordinances Section V.D.8 Section V.3 notes that "Cities must adopt standards at least as protective as the LRRWMO standards in their local water plan and/or ordinances.	Local water management plans for Anoka and Andover include floodplain policies that are potentially inconsistent with LRRWMO requirements for low floor elevations and no net loss of floodplain.	Review City plans and ordinances during update of LRRWMO policies to determine where revisions may be needed. Include future LRRWMO review of local plans and ordinances as an implementation item.
Measurable Goals The goals in Section IV of the 2011 Plan are based heavily on Minnesota Statute 103B and are generally not measurable	The BWSR Level II PRAP recommended a focus on measurable goals in the Plan update. The 2011 Plan does not contain organization-specific or resource specific goals.	Revise the Plan goals to reflect the specific goals of the organization and incorporate measurable resource-specific goals, where appropriate (e.g., achieve 100 ug/L total phosphorus in the Rum River).
Self-assessment and Reporting Annual reporting to BWSR is identified in the 2011 Plan implementation program (Table 9).	BWSR's most recent WMO Plan guidance includes at least biennial review of WMO progress towards Plan goals.	Update the Plan to include discussion of the LRRWMO's self-assessment process, including at least biennial review of goals and implementation program status.
Advisory Committees The 2011 Plan notes input from a Technical Advisory Committee during Plan development.	The 2011 Plan does not identify ongoing actions for a citizen advisory committee (CAC) or TAC. The BWSR Level II PRAP identified the use of an advisory committee as an action item.	Consider incorporating planned CAC and TAC activities in the Plan update, including in the implementation program.

Topic and 2011 Plan Status	Identified Gap or Inconsistency	Recommended Action for 2021 Plan
Data Practices Policy The 2011 Plan does not discuss data management practices	The BWSR Level II PRAP identified the development and periodic update of a data practices policy as an action item.	Include a data practices policy as part of the Plan update.

Appendix E

LRRWMO Stormwater Management Performance Standards

Lower Rum River
Watershed Management Organization

Stormwater Standards

Date of Adoption by LRRWMO
March 15, 2018

Effective Date
March 15, 2018

Background

Stormwater is an all-inclusive term that refers to any of the water running off the land's surface after a rainfall or snowmelt event. Prior to development, stormwater is a small component of the annual water balance. However, as development increases, the paving and compaction of pervious surfaces increase stormwater runoff. It is important to manage this water because of the impacts it can have on water quality, flooding, and groundwater recharge. The LRRWMO has goals of improving or maintaining water quality, preventing future flooding problems, and encouraging groundwater recharge. Therefore, the Lower Rum River WMO has minimum stormwater standards.

These standards were developed by a Technical Advisory Committee including representation from each LRRWMO community, MN Department of Natural Resources, MN Pollution Control Agency, MN Board of Water and Soil Resources, Metropolitan Council, US Army Corps of Engineers, MN Department of Transportation, Anoka Conservation District, Anoka County Environmental Services, and the Builder's Association of the Twin Cities.

Administration

These stormwater standards will be administered by both the LRRWMO and member cities. The LRRWMO will apply these standards to their permitting program. Each city must adopt standards at least as protective as the LRRWMO standards in their local water plan and/or ordinances, and implement them.

Applicability

LRRWMO Stormwater Standards apply to:

Projects that disturb/alter one acre or more, or are part of a common plan of development or sale that disturbs/alters one acre or more.

Definitions:

A common plan of development or sale is defined as a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land disturbing activities may occur.

Land disturbance is defined as activity that results in a change or alteration in the existing ground cover (both pervious and non-pervious) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, construction, reconstruction, clearing, grading, filling, stockpiling, excavation, and borrow pits. Road milling/overlay, demolition, and routine vegetation management activities will not be considered land disturbance.

The following are exempt:

- Road reconstruction that does not increase impervious area by more than one acre or alter drainage patterns (example: mill and overlay). Altering drainage patterns is defined as changing the ultimate discharge point of the water.
- Utility construction/reconstruction within road right-of-way.
- Agricultural operations >300 feet from the Rum River and not creating additional impervious surfaces.
- Gardens.
- Pole setting.
- Emergency activities immediately necessary for the protection of life, property, or natural resources.
- Whenever the LRRWMO Board determines:
    - The proposed project is not likely to impair attainment of the purpose and intent of these standards.
    - Off-site stormwater treatment is provided by an existing facility, achieving a level of control that is at least equal to the on-site requirements.

Permit Application Materials

Any project to which these standards are applicable must submit a completed LRRWMO permit application and all materials requested within that application. Permits from other entities, such as the city, US Army Corps of Engineers, MN DNR, MN Pollution Control Agency, or others may also be necessary.

Permit Process and Reviews

Projects must obtain approvals/permits from both the LRRWMO and the city. The LRRWMO permit application must be submitted to the LRRWMO, not the city. LRRWMO permit materials are available on the LRRWMO website. Questions can be directed to the LRRWMO representative or city staff liaison to the LRRWMO for the city where the project will occur. These contacts are listed on the website with the permitting materials. The city and LRRWMO will coordinate their permit reviews; duplication in the review process will be minimized by a review checklist that all reviewers use.

Permit Lifespan

Permits have a fixed lifespan of two years from the date of issuance. During this lifespan the requirements of the permit shall be fixed, and the project will not be subject to new LRRWMO stormwater standards enacted since the issuance of the original permit.

Permit Extensions

Extensions to LRRWMO permits may be granted. When an extension is granted, the LRRWMO stormwater standards in effect at the time of the original permit issuance shall continue to apply. The procedure for extensions varies for platted and non-platted projects as follows:

For platted projects, LRRWMO permit extensions shall automatically follow extensions granted by the City for that same project. The applicant is responsible for notifying the LRRWMO in writing if such an extension is granted by the city.
In cases where a project must reapply to the City for a preliminary plat, either because of expiration of the original permit or changes to the project, the permitee must also reapply for a LRRWMO permit and will be subject to any new LRRWMO stormwater standards enacted since the issuance of the original permit.

For non-platted projects, the applicant must apply to the LRRWMO for a permit extension before the end the two year permit life. Such requests will be considered by the LRRWMO Board on a case-by-case basis, and will only be granted if the proposed project has not changed since the issuance of the original permit.

Satisfaction of Permit

The LRRWMO stormwater treatment permit requirements shall be deemed satisfied when stormwater infrastructure has been built to meet LRRWMO permit requirements and required performance has been verified (other permit aspects, such as erosion control, may remain outstanding). Activities or construction consistent with the original permitted project plan occurring at a later date do not require a new LRRWMO permit nor are they subject to new LRRWMO stormwater treatment standards that may have been enacted since the issuance of the original permit.

The following example serves to clarify how this provision would apply to a phased common plan of development. Consider an example where a common plan of development will be built in several phases, including grading, stormwater infrastructure, and several phases of building construction. A LRRWMO permit must be secured for the multi-phase common plan of development. Once stormwater infrastructure is constructed and found to be performing to the standards required by the permit, the stormwater standards for all phases of the common plan of development will be considered satisfied. Subsequent phases of construction will not be subject to additional LRRWMO stormwater standards, even in the event that the LRRWMO standards are changed. However, if later building construction occurs that is not consistent with the original common plan of development, then a new LRRWMO permit would be triggered and stormwater standards in effect at that time would apply.

Storm Sewer Design

Except as noted in this document (LRRWMO Stormwater Standards), the design of storm sewers shall be reviewed and approved by the municipality, not the LRRWMO. The LRRWMO must review and approve basin inlets and outlets.

Stormwater Basin Sizing and Design

Hydrologic and hydraulic design of stormwater basins shall be based upon:

- For basins that are not landlocked —Available storage volume shall be based on 100-year return period, 24-hr. duration, Atlas 14 rainfall using the NRCS MSE-3 distribution with average soil moisture conditions (AMC 2). Rainfall amounts using the National Oceanic and Atmospheric Administration's update Precipitation Frequency Atlas for the Midwestern States (Atlas 14, Volume 8) can be found at www.dnr.mn.us/climate/noaa_atlas_14.html.

- For landlocked areas - Available storage volume shall be established by estimating the water surface elevation resulting from back-to-back 100-year frequency rainfall events, or the 100-year, 10-day snowmelt, whichever provides the higher water surface elevation. In the snowmelt scenario, frozen soils shall be assumed (CN=100).

  Flood levels in landlocked basins are difficult to predict, as they depend upon the starting water elevation at the beginning of a storm event. The starting elevation of the waterbody prior to the runoff event shall be established by one of the following:

  - Existing Ordinary High Water level established by the Minnesota Department of Natural Resources,
  - Annual water balance calculation approved by the LRRWMO,
  - Local observation well records, as approved by the LRRWMO, or
  - The elevation of hydric soils, or the highest anticipated ground water table or elevation shown by a geotechnical study accepted by the LRRWMO.

- Infiltration within the basin during frozen conditions will be allowed in the calculation of basin sizing. The infiltration rate used must be approved by the LRRWMO.
- Ultimate development, based on the approved common plan of development and the city's future land use plan within the area tributary to the pond/waterbody, shall be assumed.
- Modeling methodology acceptable to the LRRWMO. Methods currently approved by the LRRWMO include: USDA SCS, TR-55 and TR-20, HydroCAD, and EPA SWMM methodology.

Precipitation Data Sources

Rainfall amounts for hydrologic analyses should be based on:

- National Oceanic and Atmospheric Administration's updated Precipitation Frequency Atlas for the Midwestern States (Atlas 14, Volume 8). (Reference: www.dnr.state.mn.us/climate/nosa_atlas_14.html).

More recent updates of these documents should be used, if available.

Low Floor Elevation

The lowest floor elevation of all development, including basements, must be at least 3 feet above the highest anticipated ground water table, 2 feet above the designated or designed 100-year flood elevation, or 1 foot above the emergency overflow, whichever is higher.

This requirement may be waived if evidence that a lesser separation can be achieved is:

- submitted and certified by a geotechnical engineer,
- reviewed and approved by the city engineer or other party designated by the city engineer, and
- approved by the LRRWMO.

If this process is pursued, the developer should consult with the LRRWMO Engineer before beginning study to discuss acceptable methodologies.

Discharges to the Rum River

The Rum River is classified as an Outstanding Resource Value Water. State Rules 7050.0180 prohibit new or expanded discharges. Determinations about discharges that may or may not impact

the Rum River are made by the Minnesota Pollution Control Agency, and shall be addressed through MPCA regulatory processes.

Water Quality

- Treatment of storm water to MPCA Stormwater guidelines is required prior to stormwater discharge to a lake, stream, or wetland and prior to discharge from the site as part of development. The stormwater treatment facilities shall provide at least an annual removal efficiency of sixty (60%) phosphorus and at least an annual removal efficiency of ninety percent (90%) total suspended solids. The onsite abstraction of runoff may be included in demonstrating compliance with the total suspended solids and total phosphorus removal requirements.

Peak Flow Rate Control

Post-development peak runoff rates shall not exceed existing rates for the 2, 10, and 100 year storm peak discharges.

The Rational Method shall be the preferred methodology to calculate peak flow rates for the design of minor systems that do not require hydrograph routings. If a minor system requires the use of a hydrograph method for routing purposes, only methods pre-approved by the LRRWMO will be accepted. If the method is not currently approved by the City, documentation of the methodology used shall be submitted with the calculations. Hydrograph methods currently approved by the LRRWMO include: USDA SCS, TR-55 and TR-20, HydroCAD, and EPA SWMM.

Volume Control

A volume equal to one inch of runoff from all impervious surfaces on the site shall be infiltrated on-site.

In cases of redevelopment, this volume control requirement applies only if >50% of the project area is disturbed. Project area is defined as the parcel(s) to which the permit would apply or the area encompassed by the common plan of development, whichever is greater.

At a minimum, abstraction from 1-inch of runoff from the on-site impervious surfaces shall be provided.

Abstraction, through infiltration, shall not be allowed within a 1-year travel zone of a public well as determined by the municipal well-head protection plan.

Unless determined by the LRRWMO to be exempt or granted a waiver, the following shall be addressed for stormwater management of all sites:

1. Stormwater volume management practices shall attempt the equivalent of retaining 1-inch of runoff, while recognizing that meeting a full 1-inch may not be practical.
2. These practices should utilize pervious area for the retention of runoff from impermeable surfaces to the maximum extent practical to provide treatment for both water quantity and quality.

Use of an *existing* regional treatment facility with available treatment capacity for the required volume will be allowed as an exception to the infiltration requirements if the LRRWMO and the city where the project is occurring agree the facility has the capacity.

For all ponds, infiltration through the pond bottom, draining dry within 48 hours, does count toward the required volume to infiltrate. Dead storage alone, without infiltration of that stored volume, does not count toward the required infiltration volume. Evaporation or transpiration from pond surfaces

may not be counted toward infiltration volume requirement because evaporation does not yield water quality benefits, achieve groundwater recharge goals, and because it is highly variable based upon climatological conditions.

Infiltration Facility Design and Construction

The chapters on Infiltration in the Minnesota Stormwater Manual should be used as a reference in the design and construction of infiltration basins for the stormwater management. This includes, but is not limited to, soil borings, period of inundation, pretreatment, and protection during construction. Robust pretreatment to remove suspended solids is especially important to long term functioning of the practice. Infiltration rates used in design of infiltration practices shall be either those in the MN Stormwater Manual (see Table 1 below) or those measured on-site by a double-ring infiltrometer. A maximum infiltration rate of 3 in/hr is allowed. Rates used for design higher than those listed in Table 1 below shall be verified by post-construction testing.

TABLE 1. Infiltration Rates for Hydrologic Soil Groups

Hydrologic Soil Group	Soil Textures	Corresponding Unified Soil Classification	Infiltration Rate (in/hr)
A	Gravel, sand, sandy gravel, silty gravel, loamy sand, sandy loam	**GW** – Well-graded gravel or well-graded gravel with sand **GP** – Poorly graded gravel or poorly graded gravel with sand	1.6
		GM – Silty gravel or silty gravel with sand **SW** – Will-graded sand or well-graded sand with gravel **SP** – Poorly graded sand or poorly graded sand with gravel	0.8
B	Loam, silt loam	**SM** – Silty sand or silty sand with gravel	0.6
		ML – Silt **OL** – Organic silt or organic silt with sand or gravel or gravelly organic silt	0.3
C	Sandy clay loam	**GC** – Clayey gravel or clayey gravel with sand **SC** – Clayey sand or clayey sand with gravel	0.2

Hydrologic Soil Group	Soil Textures	Corresponding Unified Soil Classification	Infiltration Rate (in/hr)
D	Clay, clay loam, silty clay loam, sandy clay, silty clay	**CL** – Lean clay or lean clay with sand or gravel or gravelly lean clay **CH** – Fat clay or fat clay with sand or gravel or gravelly fat clay **OH** – Organic clay or organic clay with sand or gravel or gravelly organic clay **MH** – Elastic silt or elastic silt with sand or gravel	0.06

Source: Minnesota Stormwater Manual. Thirty guidance manuals and many other stormwater references were reviewed by the MPCA when it compiled the recommended infiltration rates.

Sites Where Infiltration is Infeasible or Inappropriate

The LRRWMO recognizes that infiltration may be infeasible or inappropriate in some instances, and will review these on a case-by-case basis. Reasons that infiltration may be infeasible or inappropriate include:

- Physical limitations including soils, high water table, and available space limitations in the case of redevelopment.
- Projects within a Drinking Water Supply Management Area (DWSMA). Refer to MN Department of Health guidance entitled "Evaluating Proposed Stormwater Infiltration Projects in Vulnerable Wellhead Protection Areas" (http://www.health.state.mn.us/divs/eh/water/swp/stormwater.pdf) to determine if infiltration techniques are appropriate.
- Storm water discharges from potential stormwater hotspots, such as fueling stations, vehicle service or washing areas, vehicle fleet storage areas, auto recycling or salvage, stockpiled snow from salted roadways, construction site inputs, manufacturing sites, public works storage areas, facilities that generate or store hazardous waste materials, and others as determined by the community or watershed management organization.
- Utility locations.
- Contaminated soils.
- Others as determined by the LRRWMO.

In these scenarios, permittees must treat the required volume through the following techniques, in order of preference:

1. On site infiltration of the entire, or a portion of, the required volume.
2. On site filtration or off site infiltration within the LRRWMO. Excess volume reduction on any project may be banked for use on another off site project. The excess volume reduction bank will be administered by the LRRWMO.
3. Other non-volume control treatment on site.

4. Contribution to a stormwater impact fund held by the LRRWMO. This fund is used for projects that offset the volume reduction that permitted projects were unable to achieve. Such projects may occur throughout the LRRWMO, but funds are favored for use in the city where they originated. The LRRWMO determines the contribution amount necessary per acre of impervious surface. This amount is based upon actual expenditures of other projects to meet the same volume control standards.

Stormwater Facility Maintenance

Stormwater facility maintenance shall follow the recommendations of the MN Stormwater Manual, or for public agencies facility maintenance shall be in accordance with the provisions of their MS4 permit or approved Local Water Management Plan. An easement is required over the area inundated by the design high water level storm event (including elevations determined for land-locked basins) and additional area adequate to provide maintenance access. Where a private party is responsible for maintenance, a maintenance declaration and plan that runs in perpetuity and is approved by the LRRWMO must be placed on the property title.

Performance Surety

A performance surety shall be collected by either the LRRWMO or city, but not both, for stormwater practices. Practice performance must be measured after installation. The surety may be used to correct any deficiencies in performance, such as infiltration rate. Unused funds will be returned to the permittee one year after construction is completed and after the practice is performing satisfactorily.

The performance surety will be waived for public projects.

Appendix F

LRRWMO Wetland Protection Standards

Lower Rum River
Watershed Management Organization

Wetland Protection Standards

Rationale and Overview

Wetlands serve a variety of beneficial functions. Wetlands within the Lower Rum River Watershed Management Organization (LRRWMO) maintain water quality, recharge groundwater, provide wildlife habitat, control rates and volumes of stormwater discharge, reduce flooding, provide open space, and contribute to the area's desirable aesthetics. The roles of greatest interest to the LRRWMO include protecting water quality in downstream recreational water bodies, groundwater recharge, and wildlife habitat. Major land use changes during development can have a detrimental effect on these functions. Therefore, regulating wetlands and the land uses around them are in the public interest. Applying these standards during major land use changes is in line with other local and state regulatory systems.

The LRRWMO Wetland Protection Standards apply only to projects with land disturbance more than one acre. They focus on the area 16.5-feet upland of the wetland boundary. This area must be protected from disturbance and erosion during the construction process. After construction, restrictions within this area are similar to restrictions cities impose within drainage and utility easements. This area is usually within the drainage and utility easement so in most cases this imposes no new restrictions after construction.

These wetland standards also require that vegetation establishment at the conclusion of construction use native plant seeding in certain common spaces (outlots, city-owned property, etc.) near wetlands and developed ponding areas (stormwater management areas). Vegetation establishment is already required by cities; the LRRWMO is requiring the use of native plants in certain areas because of the benefits to water quality and wildlife. It applies only to common spaces that are disturbed during the construction process. The extent of native plant seeding should follow the guidance in these wetland protection standards. Native plant seeding is not required in all areas. There are no restrictions on modifying or removing it at a later date.

These standards were developed by a Technical Advisory Committee including representation from each LRRWMO community, MN Department of Natural Resources, MN Pollution Control Agency, MN Board of Water and Soil Resources, Metropolitan Council, US Army Corps of Engineers, MN

Department of Transportation, Anoka Conservation District, Anoka County Environmental Services, and the Builder's Association of the Twin Cities. These standards will be implemented through the LRRWMO permitting process and each LRRWMO city must adopt standards at least as protective.

Wetland Definition

For the purpose of these standards, wetlands:

- Are defined in MN Statutes section 103G.005, subdivision 19.
- Include public waters wetlands defined in MN Statutes section 103G.005, subdivision 15a.
- Do not include any areas created for the purpose of stormwater management.

Wetland Delineation

Applicants for projects triggering these standards must delineate any wetlands, or portions of wetlands, within the project area. Wetland delineations shall be conducted using methodology approved by the MN Wetland Conservation Act (1987 US Army Corps of Engineers Wetland Delineation Manual, along with any regional supplements, or other methodology approved by WCA in the future).

Administration

These wetland protection standards will be administered by both the LRRWMO and member cities. The LRRWMO will apply these standards to their permitting program. Each city must adopt standards at least as protective as the LRRWMO standards in their local water plan and/or ordinances, and implement them.

Applicability

LRRWMO Wetland Protection Standards apply to:

- Projects that disturb/alter one acre or more, or are part of a common plan of development or sale that disturbs/alters one acre or more.

  The following are exempt:

  - Road reconstruction.
  - Utility construction/reconstruction within road right-of-way or drainage and utility easement.
  - Agricultural operations >300 feet from the Rum River and not creating additional impervious surfaces.
  - Gardens.
  - Pole setting.

- Emergency activities immediately necessary for the protection of life, property, or natural resources.
- Whenever the LRRWMO Board determines the proposed project is not likely to impair attainment of the purpose and intent of these standards.

Projects exempt from LRRWMO Wetland Protection Standards must still comply with any applicable local, state, or federal requirements.

Note that projects involving wetland excavation, if land disturbance exceeds one acre, are subject to these standards.

Definitions:

A **common plan of development or sale** is defined as a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement, or physical demarcation indicating that land disturbing activities may occur.

Project area is defined as the parcel(s) to which the permit would apply or the area encompassed by the common plan of development, whichever is greater.

Land disturbance is defined as activity that results in a change or alteration in the existing ground cover (both vegetative and non-vegetative) and/or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, construction, reconstruction, clearing, grading, filling, stockpiling, excavation, and borrow pits. Road milling/overlay, demolition, and routine vegetation management activities will not be considered land disturbance.

Permit Application Materials

Any project to which these standards are applicable must submit a completed LRRWMO permit application and all materials requested within that application. LRRWMO permit materials are available on the LRRWMO website. Permits from other entities, such as the city, US Army Corps of Engineers, MN DNR, MN Pollution Control Agency, or others may also be necessary.

Permit Process and Reviews

Projects may require approvals/permits from both the LRRWMO and the city. The LRRWMO permit application must be submitted to the LRRWMO, not the city. LRRWMO permit materials are available on the LRRWMO website. Questions can be directed to the LRRWMO representative or

city staff liaison to the LRRWMO for the city where the project will occur. These contacts are listed on the LRRWMO website with the permitting materials. The city and LRRWMO will coordinate their permit reviews; duplication in the review process will be minimized by a review checklist that all reviewers use.

Permit Lifespan

Permits have a fixed lifespan of two years from the date of issuance. During this lifespan the requirements of the permit shall be fixed, and the project not subject to new LRRWMO wetland protection standards enacted since the issuance of the original permit.

Permit Extensions

Extensions to LRRWMO permits may be granted. When an extension is granted, the LRRWMO wetland protection standards in effect at the time of the original permit issuance shall continue to apply. The procedure for extensions varies for platted and non-platted projects as follows:

For platted projects, LRRWMO permit extensions shall automatically follow extensions granted by the City for that same project. The applicant is responsible for notifying the LRRWMO in writing if such an extension is granted by the city.

In cases where a project must reapply to the City for a preliminary plat, either because of expiration of the original permit or changes to the project, the permittee must also reapply for a LRRWMO permit and will be subject to any new LRRWMO wetland protection standards enacted since the issuance of the original permit.

For non-platted projects, the applicant must apply to the LRRWMO for a permit extension before the end the two year permit life. Such requests will be considered by the LRRWMO Board on a case-by-case basis, and will only be granted if the proposed project has not changed since the issuance of the original permit.

Stormwater Discharge into Wetlands

Stormwater discharge into wetlands must comply with LRRWMO Stormwater Standards.

Temporary Wetland Protections During Construction

Areas within 16.5 feet of a wetland boundary must be protected from land grading and other disturbance during the construction process. The purpose is to prevent construction impacts to the wetland, such as erosion and vegetation removal. The area temporarily protected during construction:

- Must be no less than 16.5-feet wide upland from the wetland boundary.
- Must be present where ever land disturbance is occurring within 100 feet up-gradient of the wetland boundary.
- Must not be graded or disturbed.
- Must be demarcated by a properly installed heavy duty silt fence. Fiber logs or other continuous temporary erosion measures may be used if approved by the LRRWMO and/or the City. All erosion control measures must be installed and inspected prior to initiating any site disturbance activities. These materials must be in place throughout the construction process, including land grading and building.
- May be accomplished by installation of erosion control around the perimeter of land disturbance used to satisfy LRRWMO, city, or state erosion control rules provided it is consistent with the other specifications listed in this section.
- May be encroached upon for:
    - Activities associated with planting native vegetation or management to favor native vegetation. Encroachment for establishing turf grass is not allowed, EXCEPT AS SPECIFIED BELOW:
    - The installation of stormwater conveyances, such as outfalls, or grading necessary for hydrologic safeguards, such as emergency overflows.

If portions of a wetland are to be lawfully filled or drained during the construction process through a MN Wetland Conservation Act permit, the area of wetland protections shall be placed at that new wetland boundary. In this case it does not make sense to place the silt fence 16.5 feet from the new wetland boundary, because this would be within the area that is being filled or drained. Instead, the protections should be placed at the new wetland boundary. This applies only to the portion of the wetland edge where lawful wetland impact will occur during the construction process.

The provisions listed above apply until construction (including grading and building) is complete, the site is stabilized, and vegetation has been established in the project area.

Native Plant Seeding in Common Spaces at the Conclusion of Construction

Within common spaces, areas adjacent to wetlands that are disturbed through the construction process and ponding areas (stormwater management areas) should be seeded with a MN Board of Water and Soil Resources (BWSR) native seed mix which matches site conditions. Common spaces include outlots, areas transferred to city ownership, homeowners association common space, and similar. This seeding should be done as part of site stabilization following construction. Site preparation and seeding should be consistent with BWSR guidance.

The extent of seeding around wetlands shall be reviewed by the LRRWMO Board and determined on a case by case basis. Decision making will be based on the following guidance:

- All areas that will be idle for one year or more and are within 100 feet of a wetland boundary should be seeded with the native plant mix.
- Seeding all areas that will be idle for one year or more, even if more distant from the wetland, is encouraged for wildlife benefits, lower long-term maintenance, and aesthetics. Native plant seeding adjacent to stormwater management areas is also encouraged.
- Areas where the city or land manager plans an active land use inconsistent with unmowed vegetation can be excluded from the native plant seeding requirement. For example, if an area is planned to be developed into a playground within one year, native plant seeding need not occur.
- Seeding should only occur within the 16.5-foot wide area around the wetland that was left undisturbed during construction if it is dominated by invasive or noxious weeds. In all other cases this area should remain undisturbed.

The LRRWMO does not require this native plant seeding to be maintained. Native plants are favored in areas near wetlands and on idle lands because of their benefits to wildlife and water quality. However if the desired use or landscaping of the area changes, the vegetation may be replaced without any restrictions or penalties imposed by the LRRWMO.

These provisions do not apply to private properties; they only apply to common spaces.

Wetland Protections After Construction

Following construction, site stabilization, and vegetation establishment certain activities shall be prohibited within 16.5 feet of the wetland edge. Activities prohibited include:

- Structures, excluding fences. Fences are not allowed inside the wetland boundary.
- Paving, except projects with a public purpose such as public trails.
- Retaining walls.
- Filling, dumping, or yard waste disposal.
- Fertilization.
- Septic systems.

If portions of a wetland have been lawfully impacted (filled, drained, etc.) during the construction process through a MN Wetland Conservation Act permit, the 16.5-foot area of wetland protections shall be measured from the new, post-impact wetland boundary.

Relationship to Drainage and Utility Easement

The LRRWMO wetland protections after construction are similar to restrictions cities impose within drainage and utility easements. In most cases the drainage and utility easement (defined by the designed or designated 100 year flood elevation) extends more than 16.5 feet from the

wetland boundary, so in most cases these LRRWMO wetland protection standards impose no new restrictions after construction.

Occasionally a wetland boundary may be outside of the drainage and utility easement. The 16.5-foot wide area of LRRWMO wetland protections would be outside of the normal drainage and utility easement. In these cases, the drainage and utility easement should be expanded to encompass the area within 16.5 feet from the wetland edge.

Variances

A variance may be granted in the following circumstances:

- For public road projects whenever the road right of way does not provide sufficient space to implement the wetland protections.
- Whenever the permitting authority determines substitute activities will be used that will provide the same level of protection.
- Other factors, as determined by the permitting authority.

Performance Surety

A performance surety will be collected to ensure the proper execution of wetland protection measures. The surety may be used to correct any deficiencies. Performance sureties shall be collected by the city, except in cases of wetland mitigation when the LRRWMO will collect the surety. Any surety shall be returned at completion of the construction process and proper execution of wetland protection measures.

The performance surety will be waived for public projects.

CC Work Session **2. 3.**

Meeting Date: 02/23/2021

Information

Title:

Review Draft Ordinance 21-04, Critical Water Deficiency Regulations

Purpose/Background:

Purpose:

The purpose of this case is to review draft Ordinance 21-04, Critical Water Deficiency Regulations, along with the attached documents and information presented within this case, and to receive consensus direction from Council on any amendments required to draft Ordinance 21-04 before introducing it at a future City Council meeting.

Background:

On January 7, 2021, draft Ordinance 21-04, Critical Water Deficiency Regulations, was published as item 7.2 of the January 12 regular City Council agenda. However, on January 11 this item was pulled from the agenda due to the numerous requests Staff received from Council members for documents and information concerning the draft ordinance. Attached is a copy of item 7.2, including draft ordinance 21-04. At the time, Council was informed Staff would reschedule this item, and that the City has until April 15 to adopt a Critical Water Deficiency ordinance.

Staff has since researched the statutory and regulatory rules that require the City to adopt a Critical Water Deficiency ordinance, as well as alternatives available to the City Council, in an attempt to respond to the numerous requests received from Council members. Below are bullet points summarizing Staff's findings based on communications with Minnesota Department of Natural Resources (DNR) and League of Minnesota Cities (LMC) Staff, and from online searches.

- The DNR is responsible for interpretation and application of water supply laws.
- The sole legal authority for Critical Water Deficiency ordinances comes from Minnesota Statute 103G.291.
- Minnesota Statute 103G.291 refers to rules the DNR Commissioner would adopt in the event the governor declares a critical water deficiency.
- DNR Commissioner Rules did not inform the development of the Critical Water Deficiency model ordinance.
- The Critical Water Deficiency model ordinance was developed by the Minnesota Rural Water Association in cooperation with the LMC.
- The City is not required to adopt a Critical Water Deficiency Ordinance until the governor declares a critical water deficiency by executive order, but the DNR recommends developing our ordinance now to practice good preparedness planning.
- The City can amend the LMC model ordinance language, but at a minimum the ordinance must reference Minnesota Statute 103G.291 and must limit lawn sprinkling, vehicle washing, golf course and park irrigation, and other nonessential uses, and have appropriate penalties for failure to comply with the restrictions in accordance with Subdivision 1(b).

Staff believes these findings address the numerous requests received from City Council members regarding draft Ordinance 21-04. However, if any questions remain or new questions surface, Staff will follow up and report back with our findings.

As previously noted, Staff initially believed the City had until April 15 to adopt a Critical Water Deficiency ordinance based on the attached email from the DNR approving the City's Water Supply Plan. Since then, Staff received the following information from the DNR. The purpose of developing the ordinance now, rather than waiting for a crisis, is just a matter of good preparedness planning. The statute doesn't require the City to take action until the governor declares the deficiency, but by then the City may be in crisis mode. LMC attorneys agreed that the statute is required by cities so they developed a model ordinance. There is no statute or rule requiring the

City to adopt an ordinance within 6 months of receiving DNR approval of the City's Water Supply Plan.

The following documents are attached to this case. Some of the documents are referenced within draft ordinance 21-04. Others are attached as supporting documents or because they were requested by Council members.

- Agenda item 7.2 with draft Ordinance 21-04 (pulled from January 12 agenda)
- Model Ordinance used by Staff to develop draft Ordinance 21-04
- Minnesota Statute 103G.291
- Minnesota Statute 103G.261
- Minnesota Rules Chapter 6115
- DNR email approving Water Supply Plan
- City Code Section 58-118

In summary, the City is not required to adopt a critical water deficiency ordinance before the governor declares a critical water deficiency, and the language within the attached draft ordinance can be amended to some extent.

Adopting a critical water deficiency ordinance before an emergency is declared would allow the City to enact targeted water use restrictions on short notice if the governor were to declare a critical water deficiency. A deficiency could be driven by a prolonged drought, insufficient water quantities within the municipal water supply aquifer, or if the aquifer were to become polluted.

It is important to note that the DNR approves the City's water appropriation permit, which allows the City to withdraw a maximum volume of groundwater each year from our water supply aquifer. Based on the volume of water the City withdrew last year, which was a relatively wet year, the City will likely soon need to apply for a new water appropriation permit from the DNR with an increased appropriation volume. Minnesota Rule 6115.0690 Subpart 3 states, "*Appropriation permits issued to public water supply authorities shall be subject to requirements of Minnesota Statutes, section 103G.291, relating to critical water deficiency periods and restriction of nonessential uses.*" Therefore, when the City applies for a new water appropriation permit, the DNR could potentially deny the permit if they think the City is not complying with Statute 103G.291.

Timeframe:

Staff anticipates 20 minutes will be required to present this case, to respond to questions, and to receive consensus direction from Council on any amendments required to draft Ordinance 21-04.

Funding Source:

No costs are required to amend draft Ordinance 21-04. Staff can complete this work as part of their regular duties.

Responsible Party(ies):

The City Engineer will present this case and will respond to questions. The Civil Engineer IV, who prepared draft ordinance 21-04 and item 7.2, will also be available to respond to questions as needed.

Outcome:

Receive consensus direction from Council on any amendments required to draft Ordinance 21-04 before introducing an amended ordinance at a future City Council meeting. Alternatively, an amended ordinance could be presented at a future work session if additional discussions or information is desired.

Attachments

Item 7.2 and Draft Ord 21-04

Model Ordinance

MSS 103G.291

MSS 103G.261

MN Rules 6115

DNR email approving WSP

City Code 58-118

Form Review

Inbox	Reviewed By	Date
Len Linton	Len Linton	02/18/2021 02:10 PM
Kurt Ulrich	Kurt Ulrich	02/18/2021 02:55 PM
Form Started By: Bruce Westby		Started On: 02/17/2021 09:54 AM
Final Approval Date: 02/18/2021		

CC Agenda **7. 2.**

Meeting Date: 01/12/2021

Submitted For: Len Linton, Engineering/Public Works

By: Len Linton, Engineering/Public Works

Information

Title:

Introduce Ordinance 21-04 Approving an Addition to Chapter 58 of the City Code: Utilities

Purpose/Background:

The purpose of this case is for the City Council to review the proposed additions to Chapter 58 of the City Code: Utilities. The proposed ordinance amendment would provide regulations for governing the use of municipal water during a critical water deficiency declared by the Governor of Minnesota.

The 2040 Comprehensive Plan was recently approved by the Metropolitan Council. The Comprehensive Plan included the updated Municipal Water Supply plan which was reviewed by the MN Department of Natural Resources and the Metropolitan Council. The Water Supply plan review comments included a requirement to adopt the Critical Water Deficiency Regulations.

The Critical Water Deficiency Regulations allow the City to regulate the use of municipal water when the Governor declares a critical water deficiency.

Upon declaration of a water emergency and notification to the public, the following mandatory restrictions upon nonessential water use shall be enforced:

1. Outdoor irrigation of yards, gardens, golf courses, parklands, and other non-agricultural land, except for those areas irrigated with reclaimed water, is prohibited.

2. Washing or spraying of sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas with water from any pressurized source, including garden hoses, except to alleviate immediate health or safety hazards, is prohibited.

3. The outdoor use of any water-based play apparatus connected to a pressurized source is prohibited.

4. Restaurants and other food service establishments are prohibited from serving water to their customers, unless water is specifically requested by the customer.

5. Operation of outdoor misting systems used to cool public areas is prohibited.

6. The filling of swimming pools, fountains, spas, or other exterior water features is prohibited.

7. The washing of automobiles, trucks, trailers, and other types of mobile equipment is prohibited, except at facilities equipped with wash water recirculation systems, and for vehicles requiring frequent washing to protect public health, safety, and welfare.

Variances

The City Clerk or their designee, is authorized to grant variances to this ordinance where strict application of its provisions would result in serious hardship to a customer. A variance may be granted only for reasons involving health or safety. An applicant may appeal the denial of a variance within five (5) days of the decision by submitting a written appeal to the City Clerk. The City Council shall hear the appeal at the next City Council meeting. The

decision of the City Council is final.

Violation
1. Violations shall be determined and cited by the City Clerk or his/her designee. A violator may appeal the citation within five (5) days of its issuance by submitting a written appeal to the City. The City Council shall hear the appeal at the next City Council meeting. The decision of the City Council is final. Violators may be granted an administrative waiver if evidence is provided that equipment failure was the cause of the violation. A letter from a qualified vendor or equipment invoice will be required to show proof of equipment failure.

2. Upon discovery of a first violation, the violator shall be issued, either personally or by mail, a warning letter that sets forth the violation and which shall describe the remedy and fines for future violations.

3. Upon subsequent violations at the same location, the violator shall be issued, either personally or by mail, a citation that sets forth the violation and shall describe the remedy. Fines shall be added to the monthly water bill of the owner or current occupant of the premises where the violation occurred. The imposition of the fine shall in no way limit the right of the City to pursue other legal remedies.

Enforcement
The City Clerk or his/her designee is authorized to designate city employees or law enforcement personnel to enforce the provisions of this ordinance.

Notification:
Notifications are not required for this case. However, following the introduction of Ordinance 21-04 the City Council will be asked to adopt the ordinance on January 26, 2021 following a Public Hearing. Notification of the Public Hearing will be advertised as required in the City's official newspaper.

Funding Source:
Not applicable

Recommendation:
Staff is recommending the City Council introduce and finally adopt the attached ordinance to establish an ordinance governing the use of municipal water during a critical water deficiency declared by the Governor.

Action:
Motion to introduce Ordinance #21-04 adding to Chapter 58 of the City Code: Utilities

---

Attachments

Ordinance

Form Review

Inbox	Reviewed By	Date
Bruce Westby	Bruce Westby	01/06/2021 03:14 PM
Len Linton (Originator)	Len Linton	01/06/2021 03:22 PM
Len Linton (Originator)	Kathy Schmitz	01/07/2021 02:05 PM
Bruce Westby	Bruce Westby	01/07/2021 02:16 PM
Kurt Ulrich	Kurt Ulrich	01/07/2021 02:20 PM
Len Linton (Originator)	Kathy Schmitz	01/07/2021 02:34 PM
Form Started By: Len Linton		Started On: 01/05/2021 09:39 AM
Final Approval Date: 01/07/2021		

ORDINANCE NO. 21-04

CITY OF RAMSEY
ANOKA COUNTY
STATE OF MINNESOTA

AMENDMENT TO CHAPTER 58 OF THE CITY CODE, ADDING SEC. 58-25 TO BE KNOW AS THE CRITICAL WATER DEFICIENCY SECTION OF THE CODE.

AN ORDINANCE ADDING SECTION 58-25 OF THE CITY CODE OF RAMSEY, MINNESOTA, REGULATING NONESSENTIAL WATER USAGE UPON CRITICAL WATER DEFICIENCY AS AUTHORIZED BY MINN. STAT. § 103G.291, SUBD. 1 AND 2.

The City Council of Ramsey, Minnesota ordains:

SECTION 1. AUTHORITY

This ordinance is adopted pursuant to and under the authority of the City Charter of the City of Ramsey.

SECTION 2 PURPOSE
This ordinance establishes water conservation restrictions; and the plan will be in effect at any time the governor declares by executive order a critical water deficiency, pursuant to Minnesota Statutes section 103G.291.

SECTION 3. DEFINITIONS
3.1 Clerk in statutory cities means the person assigned duties pursuant to Minn. Stat. § 412.151; or the city manager pursuant to Minn. Stat. § 412.601 – 412.751 or in charter cities as determined by city charter.

3.2 Department means the city water department.

3.3 Emergency means the declaration of a critical water deficiency by the governor.

3.4 Irrigation means the watering of shrubs, trees, sod, seeded areas, gardens, lawns, or any other outdoor vegetation, except outdoor vegetation utilized for agricultural purposes.

3.5 Notification to public means notification through local media, including interviews and issuance of news releases.

3.6 Public water supplier means the city or other entity that owns, manages, or operates a public water supply, as defined in Minn. Stat. § 144.382, subdivision 4.

3.7 Reclaimed water means water collected from rooftops, paved surfaces, or other collection devices and all water utilized more than once before re-entering the natural water cycle.

3.8 Water recirculation system means any system which enables a user to reuse water at least once prior to returning the water to the natural water cycle.

SECTION 4. APPLICATION

4.1 This ordinance applies to all customers of public water suppliers who own or control water use on any premises.

4.2 No person shall make, cause, use, or permit the use of water received from a public water supply for residential, commercial, industrial, governmental, or any other purpose in any manner contrary to any provision in this ordinance.

4.3 Mandatory emergency conservation measures shall be implemented based upon the declaration of a critical water emergency by the governor.

SECTION 5. DECLARATION OF CRITICAL WATER DEFICIENCY

Upon the declaration of a critical water deficiency by the governor, the public water supplier shall immediately post notice of the emergency declaration at the usual meeting place of the city council, or the official city bulletin board. The city shall provide notification to the public as quickly as possible or through established water supply plans emergency response plans or procedures.

SECTION 6. MANDATORY EMERGENCY WATER CONSERVATION MEASURES

Upon declaration of a water emergency and notification to the public, the following mandatory restrictions upon nonessential water use shall be enforced:

(1) Outdoor irrigation of yards, gardens, golf courses, parklands, and other non-agricultural land, except for those areas irrigated with reclaimed water, is prohibited.

(2) Washing or spraying of sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas with water from any pressurized source, including garden hoses, except to alleviate immediate health or safety hazards, is prohibited.

(3) The outdoor use of any water-based play apparatus connected to a pressurized source is prohibited.

(3) Restaurants and other food service establishments are prohibited from serving water to their customers, unless water is specifically requested by the customer.

(5) Operation of outdoor misting systems used to cool public areas is prohibited.

(6) The filling of swimming pools, fountains, spas, or other exterior water features is prohibited.

(7) The washing of automobiles, trucks, trailers, and other types of mobile equipment is prohibited, except at facilities equipped with wash water recirculation systems, and for vehicles requiring frequent washing to protect public health, safety, and welfare.

SECTION 7. VARIANCES

The City Clerk or their designee, is authorized to grant variances to this ordinance where strict application of its provisions would result in serious hardship to a customer. A variance may be granted only for reasons involving health or safety. An applicant may appeal the denial of a variance within five (5) days of the decision by submitting a written appeal to the City Clerk. The City Council shall hear the appeal at the next City Council meeting. The decision of the City Council is final.

SECTION 8. VIOLATION

8.1 Violations shall be determined and cited by the City Clerk or his/her designee. A violator may appeal the citation within five (5) days of its issuance by submitting a written appeal to the City. The City Council shall hear the appeal at the next City Council meeting. The decision of the City Council is final. Violators may be granted an administrative waiver if evidence is provided that equipment failure was the cause of the violation. A letter from a qualified vendor or equipment invoice will be required to show proof of equipment failure.

8.2 Upon discovery of a first violation, the violator shall be issued, either personally or by mail, a warning letter that sets forth the violation and which shall describe the remedy and fines for future violations.

8.3 Upon subsequent violations at the same location, the violator shall be issued, either personally or by mail, a citation that sets forth the violation and shall describe the remedy. Fines shall be added to the monthly water bill of the owner or current occupant of the premises where the violation occurred. The imposition of the fine shall in no way limit the right of the City to pursue other legal remedies.

SECTION 9. ENFORCEMENT

The City Clerk or his/her designee is authorized to designate city employees or law enforcement personnel to enforce the provisions of this ordinance.

SECTION 10. SEVERABILITY

If any provision of this ordinance or the application of any provision to a particular situation is held to be invalid by a court of competent jurisdiction, the remaining portions of the ordinance and the application of the ordinance to any other situation shall not be invalidated.

SECTION 11. SUMMARY

The official summary of Ordinance #21-04 has been approved by the City Council of the City of Ramsey as clearly informing the public of the intent and effect of the Ordinance.

Ordinance #21-04 adds Section 58-25 of the City Code to allow enforcement of water conservation restrictions to be in effect at any time the governor declares by executive order a critical water deficiency, pursuant to Minnesota Statutes section 103G.291

SECTION 12. EFFECTIVE DATE
This ordinance becomes effective 30 days after its passage and publication subject to City Charter Section 5.04.

Passed by the City Council of the City of Ramsey, Minnesota the _____day of _____, 2021.

_____
Mayor

ATTEST::

_____
City Administrator

Introduction Date: January 12, 2021

Posting dates:

Adoption date:

Publication date:

Effective date:

Water Usage in a Critical Water Deficiency, LMC Model Ordinance

League models are thoughtfully developed by our staff for a city's consideration. Models should be customized as appropriate for an individual city's circumstances in consultation with the city's attorney. Helpful background information on this model may be found in "Securing Payment of Utility Charges."

This icon marks places where the city must customize the model. They offer additional provisions, optional language, or comments for your consideration. The icon, and language you do not wish to include, should be deleted from this model before use. Make other changes, as needed, to customize the model for your city.

ORDINANCE NO. _____

AN ORDINANCE REGULATING NONESSENTIAL WATER USAGE UPON CRITICAL WATER DEFICIENCY AS AUTHORIZED BY MINN. STAT. § 103G.291, SUBD. 1 AND 2.

This model ordinance was drafted in collaboration with the Minnesota Rural Water Association. Under Minnesota Statute section 103G.291, cities are required to adopt and enforce water conservation restrictions when the governor declares a critical water deficiency. Some cities may already have such restrictions in their water supply plans.

The City Council of _____, Minnesota ordains:

SECTION 1. PURPOSE.
This ordinance establishes water conservation restrictions; and the plan will be in effect at any time the governor declares by executive order a critical water deficiency, pursuant to Minnesota Statutes section 103G.291.

SECTION 2. DEFINITIONS.
2.1 Clerk in statutory cities means the person assigned duties pursuant to Minn. Stat. § 412.151; or the city manager pursuant to Minn. Stat. § 412.601 – 412.751 or in charter cities as determined by city charter.

2.2 Department means the city water department.

2.3 Emergency means the declaration of a critical water deficiency by the governor.

2.4 Irrigation means the watering of shrubs, trees, sod, seeded areas, gardens, lawns, or any other outdoor vegetation, except outdoor vegetation utilized for agricultural purposes.

2.5 Notification to public means notification through local media, including interviews and issuance of news releases.

2.6 Public water supplier means the city or other entity that owns, manages, or operates a public water supply, as defined in Minn. Stat. § 144.382, subdivision 4.

2.7 Reclaimed water means water collected from rooftops, paved surfaces, or other collection devices and all water utilized more than once before re-entering the natural water cycle.

2.8 Water recirculation system means any system which enables a user to reuse water at least once prior to returning the water to the natural water cycle.

SECTION 3. APPLICATION.
3.1 This ordinance applies to all customers of public water suppliers who own or control water use on any premises.

3.2 No person shall make, cause, use, or permit the use of water received from a public water supply for residential, commercial, industrial, governmental, or any other purpose in any manner contrary to any provision in this ordinance.

3.3 Mandatory emergency conservation measures shall be implemented based upon the declaration of a critical water emergency by the governor.

SECTION 4. DECLARATION OF CRITICAL WATER DEFICIENCY.
Upon the declaration of a critical water deficiency by the governor, the public water supplier shall immediately post notice of the emergency declaration at the usual meeting place of the city council, or the official city bulletin board. The city shall provide notification to the public as quickly as possible or through established water supply plans emergency response plans or procedures.

SECTION 5. MANDATORY EMERGENCY WATER CONSERVATION MEASURES.
Upon declaration of a water emergency and notification to the public, the following mandatory restrictions upon nonessential water use shall be enforced:

(1) Outdoor irrigation of yards, gardens, golf courses, parklands, and other non-agricultural land, except for those areas irrigated with reclaimed water, is prohibited.

(2) Washing or spraying of sidewalks, driveways, parking areas, tennis courts, patios, or other paved areas with water from any pressurized source, including garden hoses, except to alleviate immediate health or safety hazards, is prohibited.

(3) The outdoor use of any water-based play apparatus connected to a pressurized source is prohibited.

(3) Restaurants and other food service establishments are prohibited from serving water to their customers, unless water is specifically requested by the customer.

(5) Operation of outdoor misting systems used to cool public areas is prohibited.

(6) The filling of swimming pools, fountains, spas, or other exterior water features is prohibited.

(7) The washing of automobiles, trucks, trailers, and other types of mobile equipment is prohibited, except at facilities equipped with wash water recirculation systems, and for vehicles requiring frequent washing to protect public health, safety, and welfare.

SECTION 6. VARIANCES.
The City Clerk or their designee, is authorized to grant variances to this ordinance where strict application of its provisions would result in serious hardship to a customer. A variance may be granted only for reasons involving health or safety. An applicant may appeal the denial of a variance within five (5) days of the decision by submitting a written appeal to the City Clerk. The City Council shall hear the appeal at the next City Council meeting. The decision of the City Council is final.

SECTION 7. VIOLATION.
7.1 Violations shall be determined and cited by the City Clerk or his/her designee. A violator may appeal the citation within five (5) days of its issuance by submitting a written appeal to the City. The City Council shall hear the appeal at the next City Council meeting. The decision of the City Council is final. Violators may be granted an administrative waiver if evidence is provided that equipment failure was the cause of the violation. A letter from a qualified vendor or equipment invoice will be required to show proof of equipment failure.

7.2 Upon discovery of a first violation, the violator shall be issued, either personally or by mail, a warning letter that sets forth the violation and which shall describe the remedy and fines for future violations.

7.3 Upon subsequent violations at the same location, the violator shall be issued, either personally or by mail, a citation that sets forth the violation and shall describe the remedy. Fines shall be added to the monthly water bill of the owner or current occupant of the premises where the violation occurred. The imposition of the fine shall in no way limit the right of the City to pursue other legal remedies.

SECTION 8. ENFORCEMENT.
The City Clerk or his/her designee is authorized to designate city employees or law enforcement personnel to enforce the provisions of this ordinance.

SECTION 9. SEVERABILITY.
If any provision of this ordinance or the application of any provision to a particular situation is held to be invalid by a court of competent jurisdiction, the remaining portions of the ordinance and the application of the ordinance to any other situation shall not be invalidated.

SECTION 10. EFFECTIVE DATE.
This ordinance becomes effective _____.

The effective date may be "from and after its passage and publication" or simply choose and insert any date after passage and publication of the ordinance.

Passed by the City Council of _____, Minnesota this _____ day of Month, Year.

_____
Mayor

Attested:

_____
City Clerk

103G.291 PUBLIC WATER SUPPLY PLANS; APPROPRIATION DURING DEFICIENCY.

Subdivision 1. **Declaration and conservation.** (a) If the governor determines and declares by executive order that there is a critical water deficiency, public water supply authorities appropriating water must adopt and enforce water conservation restrictions within their jurisdiction that are consistent with rules adopted by the commissioner.

(b) The restrictions must limit lawn sprinkling, vehicle washing, golf course and park irrigation, and other nonessential uses, and have appropriate penalties for failure to comply with the restrictions.

Subd. 2. **Modifying permit for noncompliance.** Disregard of critical water deficiency orders, even though total appropriation remains less than that permitted, is adequate grounds for immediate modification of a public water supply authority's water-use permit.

Subd. 3. **Water supply plans; demand reduction.** (a) Every public water supplier serving more than 1,000 people must submit a water supply plan to the commissioner for approval by January 1, 1996. In accordance with guidelines developed by the commissioner, the plan must address projected demands, adequacy of the water supply system and planned improvements, existing and future water sources, natural resource impacts or limitations, emergency preparedness, water conservation, supply and demand reduction measures, and allocation priorities that are consistent with section 103G.261. Public water suppliers must update their plan and, upon notification, submit it to the commissioner for approval every ten years.

(b) The water supply plan in paragraph (a) is required for all communities in the metropolitan area, as defined in section 473.121, with a municipal water supply system and is a required element of the local comprehensive plan required under section 473.859.

(c) Public water suppliers serving more than 1,000 people must encourage water conservation by employing water use demand reduction measures, as defined in subdivision 4, paragraph (a), before requesting approval from the commissioner of health under section 144.383, paragraph (a), to construct a public water supply well or requesting an increase in the authorized volume of appropriation. The commissioner of natural resources and the water supplier shall use a collaborative process to achieve demand reduction measures as a part of a water supply plan review process.

(d) Public water suppliers serving more than 1,000 people must submit records that indicate the number of connections and amount of use by customer category and volume of water unaccounted for with the annual report of water use required under section 103G.281, subdivision 3.

(e) For the purposes of this section, "public water supplier" means an entity that owns, manages, or operates a public water supply, as defined in section 144.382, subdivision 4.

Subd. 4. **Demand reduction measures.** (a) For the purposes of this section, "demand reduction measures" means measures that reduce water demand, water losses, peak water demands, and nonessential water uses. Demand reduction measures must include a conservation rate structure, or a uniform rate structure with a conservation program that achieves demand reduction. A "conservation rate structure" means a rate structure that encourages conservation and may include increasing block rates, seasonal rates, time of use rates, individualized goal rates, or excess use rates. If a conservation rate is applied to multifamily dwellings, the rate structure must consider each residential unit as an individual user.

(b) To encourage conservation, a public water supplier serving more than 1,000 people must implement demand reduction measures by January 1, 2015.

History: *1990 c 391 art 7 s 31; 1993 c 186 s 6; 2007 c 131 art 1 s 57; 2008 c 363 art 5 s 20,21; 2012 c 150 art 1 s 2,3; 1Sp2015 c 4 art 4 s 97*

103G.261 WATER ALLOCATION PRIORITIES.

(a) The commissioner shall adopt rules for allocation of waters based on the following priorities for the consumptive appropriation and use of water:

(1) first priority, domestic water supply, excluding industrial and commercial uses of municipal water supply, and use for power production that meets the contingency planning provisions of section 103G.285, subdivision 6;

(2) second priority, a use of water that involves consumption of less than 10,000 gallons of water per day;

(3) third priority, agricultural irrigation, and processing of agricultural products involving consumption in excess of 10,000 gallons per day;

(4) fourth priority, power production in excess of the use provided for in the contingency plan developed under section 103G.285, subdivision 6;

(5) fifth priority, uses, other than agricultural irrigation, processing of agricultural products, and power production, involving consumption in excess of 10,000 gallons per day; and

(6) sixth priority, nonessential uses.

(b) For the purposes of this section, "consumption" means water withdrawn from a supply that is lost for immediate further use in the area.

(c) Appropriation and use of surface water from streams during periods of flood flows and high water levels must be encouraged subject to consideration of the purposes for use, quantities to be used, and the number of persons appropriating water.

(d) Appropriation and use of surface water from lakes of less than 500 acres in surface area must be discouraged.

(e) The treatment and reuse of water for nonconsumptive uses shall be encouraged.

History: *1989 c 326 art 4 s 1; 1990 c 391 art 7 s 25; 1990 c 426 art 1 s 13; 1993 c 186 s 1; 2012 c 272 s 48*

CHAPTER 6115

DEPARTMENT OF NATURAL RESOURCES

PUBLIC WATER RESOURCES

PERMIT, INSPECTION, AND MONITORING FEES

6115.0010 STATUTORY AUTHORITY.
6115.0020 SCOPE.
6115.0030 DEFINITIONS.
6115.0060 PERMIT FEES APPLICATIONS.
6115.0065 AMENDMENT AND TRANSFER FEE.
6115.0080 FIELD INSPECTION FEES.
6115.0090 FEES FOR MONITORING ACTIVITIES.
6115.0110 ANNUAL WATER APPROPRIATION PROCESSING FEE.
6115.0120 WATER APPROPRIATION PROCESSING FEE EXEMPTIONS.

FEES FOR UNDERGROUND GAS OR LIQUID STORAGE

6115.0130 FEE SCHEDULE FOR UNDERGROUND STORAGE OF GAS OR LIQUID IN NATURAL FORMATIONS.

STANDARDS AND CRITERIA FOR GRANTING PERMITS TO CHANGE THE COURSE, CURRENT, OR CROSS-SECTION OF PUBLIC WATERS

6115.0150 PURPOSE AND STATUTORY AUTHORITY.
6115.0160 SCOPE.
6115.0170 DEFINITIONS.
6115.0190 FILLING INTO PUBLIC WATERS.
6115.0191 SPECIFIC STANDARDS; FILLING.
6115.0192 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0200 EXCAVATION OF PUBLIC WATERS.
6115.0201 SPECIFIC STANDARDS; EXCAVATION.
6115.0202 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0210 STRUCTURES IN PUBLIC WATERS.
6115.0211 SPECIFIC STANDARDS; STRUCTURES.
6115.0212 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0215 RESTORATION OF PUBLIC WATERS.
6115.0216 SPECIFIC STANDARDS; RESTORATION.
6115.0217 APPLICATION OF OTHER STANDARDS; RESTORATION.
6115.0220 WATER LEVEL CONTROLS.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0221 SPECIFIC STANDARDS; WATER LEVEL CONTROLS.
6115.0222 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0230 BRIDGES AND CULVERTS, INTAKES AND OUTFALLS.
6115.0231 SPECIFIC STANDARDS; BRIDGES, CULVERTS, INTAKES, AND OUTFALLS.
6115.0232 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0240 APPLICATION FOR PUBLIC WATERS WORK PERMITS.
6115.0250 PERMIT REVIEW.
6115.0255 PUBLIC WATERS ENFORCEMENT PROCEDURES.
6115.0260 STATUTORY REQUIREMENTS.
6115.0270 DRAINAGE OF PUBLIC WATERS.
6115.0271 SPECIFIC STANDARDS; DRAINAGE.
6115.0272 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.
6115.0280 ALTERATIONS OF PUBLIC WATERS FOR MINING.

DAMS

6115.0300 PURPOSE AND STATUTORY AUTHORITY.
6115.0310 SCOPE.
6115.0320 DEFINITIONS.
6115.0330 SEVERABILITY.
6115.0340 CLASSIFICATION OF DAMS.
6115.0350 GENERAL PROCEDURES FOR ALTERATION, REPAIR, OR REMOVAL OF A DAM.
6115.0360 INSPECTIONS.
6115.0370 TRANSFER OF DAM OWNERSHIP.
6115.0380 OPERATION AND MAINTENANCE.
6115.0390 TERMINATION OF OPERATIONS AND PERPETUAL MAINTENANCE.
6115.0400 REPORTS TO LEGISLATURE ON PUBLICLY OWNED DAMS.
6115.0410 NEW DAMS OR ENLARGEMENTS.
6115.0420 LEGAL CLAIMS.
6115.0430 LIABILITY OF OWNER AND PERMITTEE.
6115.0440 OWNER'S RIGHTS.
6115.0450 INSPECTIONS.
6115.0460 COMPLIANCE WITH OTHER LAWS.
6115.0470 ACQUISITION OF PROPERTY.
6115.0480 ASSIGNMENT OF PERMITS.
6115.0490 WARNING SYSTEMS AND EMERGENCY PROCEDURES.
6115.0500 PERMIT AND HEARING PROCEDURES.
6115.0510 REQUIRED INFORMATION AND WAIVERS.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0520 INSPECTION FEES.

WATER APPROPRIATION AND USE PERMITS

6115.0600 POLICY.
6115.0610 PURPOSE AND STATUTORY AUTHORITY.
6115.0620 SCOPE.
6115.0630 DEFINITIONS.
6115.0640 COORDINATION WITH OTHER AGENCIES.
6115.0650 SEVERABILITY.
6115.0660 APPLICATION FOR PERMIT.
6115.0670 COMMISSIONER'S ACTIONS ON PERMIT APPLICATIONS.
6115.0680 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR AGRICULTURAL IRRIGATION.
6115.0690 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR PUBLIC WATER SUPPLIES.
6115.0700 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR WATER LEVEL MAINTENANCE FOR BASINS.
6115.0710 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR DEWATERING.
6115.0720 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR MINING AND PROCESSING OF METALLIC MINERALS AND PEAT.
6115.0730 WELL INTERFERENCE PROBLEMS INVOLVING APPROPRIATION.
6115.0740 WATER USE CONFLICTS.
6115.0750 PROVISIONS AND CONDITIONS OF WATER APPROPRIATION PERMITS.
6115.0760 LOCAL PERMITS.
6115.0770 WATER CONSERVATION.
6115.0780 ABANDONMENT OF WELLS.
6115.0790 FIELD INVESTIGATIONS.
6115.0800 INFORMATION ON APPROPRIATION PERMIT LAWS.
6115.0810 WATER APPROPRIATION AND USE MANAGEMENT PLANS.

LAKE IMPROVEMENT DISTRICTS

6115.0900 PURPOSE.
6115.0910 SCOPE.
6115.0920 DEFINITIONS.
6115.0930 SEVERABILITY.
6115.0940 GOALS FOR LAKE IMPROVEMENT DISTRICTS.
6115.0950 ELIGIBILITY FOR LAKE IMPROVEMENT DISTRICTS.
6115.0960 CRITERIA AND STANDARDS FOR ESTABLISHMENT OF LAKE IMPROVEMENT DISTRICTS.
6115.0970 CREATION OF LAKE IMPROVEMENT DISTRICT.
6115.0980 ADMINISTRATION OF LAKE IMPROVEMENT DISTRICTS.

STATE WATER BANK PROGRAM

6115.1200 STATUTORY AUTHORITY AND PURPOSE.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.1210 DEFINITIONS.
6115.1220 PROCEDURES.
6115.1230 EFFECTIVE DATE.
6115.1240 PAYMENT RATES.
6115.1250 TERMS FOR WATER BANK AND LEASE AGREEMENTS.
6115.1260 MODIFICATIONS OF WATER BANK AND LEASE AGREEMENTS.
6115.1270 AGREEMENT TERMINATIONS.
6115.1280 EXTENSION OF WATER BANK OR LEASE AGREEMENT.

AGRICULTURAL DIKE CONSTRUCTION ALONG THE RED RIVER OF THE NORTH AND BOIS DE SIOUX RIVERS

6115.1300 PURPOSE.
6115.1310 SCOPE.
6115.1320 DEFINITIONS.
6115.1330 SEVERABILITY.
6115.1340 DESIGN CRITERIA.
6115.1350 HYDROLOGIC DATA FOR DESIGN.
6115.1360 DIKES ACROSS NATURAL WATERWAYS AND LEGAL DRAINS.
6115.1370 FARMSTEAD DIKING.
6115.1380 PERMIT APPLICATION.
6115.1390 EXCEPTION TO CRITERIA.
6115.1400 APPLICATION OF RULES TO EXISTING DIKES.

CONSOLIDATED CONSERVATION AREAS; DRAINAGE PROJECTS

6115.1500 PURPOSE.
6115.1510 DEFINITIONS.
6115.1520 DRAINAGE PROJECTS.
6115.1530 DETERMINING BENEFIT AND PARTICIPATION.
6115.1540 FINDINGS AND REPORT.
6115.1550 APPEAL.

PERMIT, INSPECTION, AND MONITORING FEES

6115.0010 STATUTORY AUTHORITY.

The commissioner of natural resources is authorized by Minnesota Statutes, sections 103G.301, subdivision 2 to 5, and 103G.315, subdivision 12, to establish fee schedules for permit applications, field inspections, and monitoring, with regard to permits required by Minnesota Statutes, chapter 103G.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *10 SR 236*
Published Electronically: *June 11, 2008*

6115.0020 SCOPE.

The fees established in parts 6115.0010 to 6115.0100 shall not be imposed on any state or federal agency.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*
Published Electronically: *June 11, 2008*

6115.0030 DEFINITIONS.

Words used in parts 6115.0010 to 6115.0100 have the meanings normally ascribed to them except:

A. "Appropriation of water," "waters of the state," and "public waters" have the meanings given by Minnesota Statutes, section 103G.005.

B. "Field inspection" means an on-site determination of relevant characteristics of the area involved in or affected by the proposed or permitted project.

C. "Monitoring" means checking on the status or progress of activities authorized by permit, and checking and inspecting special aspects of proposed permit applications, during construction, implementation, or after completion of permitted activities.

D. "Division" means the Division of Waters, Department of Natural Resources.

E. "Commissioner" means the commissioner of natural resources or the commissioner's authorized representative.

F. "Project cost" means the total cost of all materials, services, equipment purchase or rental, and labor expended for the portion of the project proposed in the permit application which are directly governed by protected waters permit rules, parts 6115.0150 to 6115.0280.

G. "Protected waters" means those waters of the state identified as public waters or wetlands under Minnesota Statutes, sections 103G.005, subdivisions 15 and 15a, and 103G.201.

H. "Ordinary high water mark" means the boundary of protected waters as defined in Minnesota Statutes, section 103G.005, subdivision 14.

I. "Shoreline" means:

(1) for water bodies other than watercourses, the lateral measurement along the contour of the ordinary high water mark; and

(2) for watercourses, the top of the bank of the channel (coincides with ordinary high water mark as defined in Minnesota Statutes, section 103G.005, subdivision 14).

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

J. "State agency" has the meaning given in Minnesota Statutes, section 16B.01, subdivision 2.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236*
Published Electronically: *June 11, 2008*

6115.0040 [Repealed, 10 SR 236]
Published Electronically: *June 11, 2008*

6115.0050 [Repealed, 10 SR 236]
Published Electronically: *June 11, 2008*

6115.0060 PERMIT FEES APPLICATIONS.

Subpart 1. **Fee.** A permit application fee of $75 shall accompany permit applications submitted under Minnesota Statutes, section 103G.271, appropriation and use of water, Minnesota Statutes, section 103G.531, subdivision 2, relating to dams, and Minnesota Statutes, section 105.391, relating to water bank.

Subp. 2. **Protected waters; fee.** The permit application fee for works affecting protected waters, authorized under Minnesota Statutes, sections 103G.245 and 103G.297, shall be based on estimated project cost, the amount of material deposited in or removed from the protected waters, and the amount of shoreline affected by the project. The commissioner shall make the final determination of project costs used to calculate the permit application fee. The permit application fee shall be the greater of the fees calculated from the following parameter schedules, but not less than $75 nor more than $500:

A. Project cost parameter. If the project cost is greater than $7,500, the fee shall be one percent of the project cost. If a dispute arises between the commissioner and a permit applicant over project cost, the commissioner may require the permit applicant to submit a project cost estimate prepared by a registered professional engineer, contractor, planning consultant, or other qualified professional entity.

B. Shoreline affected parameter. If the project affects more than 100 feet of shoreline, the fee shall be 75 cents per foot of shoreline affected. For channel excavation projects, the shoreline affected is the difference in length in feet between the existing channel and the proposed channel.

C. Fill-excavation parameter. If the project requires more than 100 cubic yards of fill or excavation, the fee shall be 75 cents per cubic yard of material filled or excavated. For channel excavation projects, the volume in cubic yards is only that material filled or excavated in existing protected waters.

D. The permit application fee for protection of shoreline from erosion by placement of riprap and to recover shoreland lost by erosion or other natural forces, shall be limited to $75.

Subp. 3. **Failure to remit.** If the permit application fee does not accompany the application, the applicant will be so notified. If no fee is received within 30 days from mailing of the written

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

notice, the commissioner shall consider the application withdrawn and no further action shall be taken on it unless the applicant submits a new application accompanied by the minimum fee.

Subp. 4. **Multiple applications.** If a project requires several permit applications, the permit application fee must accompany each application. Projects that involve a combination of work that results in both the alteration of protected waters and the use of waters of the state, shall be required to submit only one permit application and one set of fees. The type of permit application to be used and the fees to be charged shall be determined by the ultimate purpose of the project.

Subp. 5. **Nonrefundable.** The permit application fee is not returnable, whether the application is permitted, modified, or denied, unless the commissioner determines the activity does not require a permit.

Subp. 6. **Applications after commencement.** The permit application fee for permit applications filed after the work applied for has been partially or wholly completed, except for emergency work provided for in existing permit rules and policies, shall be double the amount that would have been charged if a timely application had been filed. In the case of a belated permit application, the permit application fee shall accompany the application or the commissioner shall proceed to issue a restoration order under Minnesota Statutes, section 103G.315, subdivision 7.

Subp. 7. **Fees following a hearing.** If a hearing is demanded, and if the outcome of the hearing is a decision to issue a permit, payment of all required fees must precede issuance. The fee charged will be based on the schedules contained in this part regardless of whether a permit application has been filed.

Subp. 8. **Form of payment.** Payment of all fees covered by parts 6115.0010 to 6115.0030, 6115.0060, 6115.0080 to 6115.0100, and 6115.0130 shall be made by check or money order payable to the Minnesota Department of Natural Resources. Cash cannot be accepted.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; 13 SR 2825*
Published Electronically: *June 11, 2008*

6115.0065 AMENDMENT AND TRANSFER FEE.

Each request by a permittee to amend or transfer an existing permit shall be accompanied by a $75 fee, unless exempted under part 6115.0120. Any amendment initiated by the department is exempt from fees. Projects that involve a combination of transfer and amendment requests shall only be required to pay the $75 fee.

Statutory Authority: *MS s 105.44*

History: *10 SR 236; 13 SR 2825*
Published Electronically: *June 11, 2008*

6115.0070 [Repealed, 10 SR 236]
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0080 FIELD INSPECTION FEES.

Subpart 1. [Repealed, 13 SR 2825]

Subp. 2. **Computation.** If a field inspection is conducted, field inspection fees shall be charged only for: (1) projects requiring an environmental assessment worksheet (EAW) or environmental impact statement (EIS) pursuant to Minnesota Statutes, chapter 116D, and the environmental review program rules, parts 4410.0200 to 4410.6500. Projects that do not require a mandatory environmental assessment worksheet (EAW) or environmental impact statement (EIS) under parts 4410.4300 and 4410.4400, at the time the permit application is made, shall not be charged field inspection fees; (2) projects undertaken without a permit or application as required by Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G; or (3) projects undertaken in excess of limitations established in an issued permit.

The fee charged will be the actual cost of the field inspection, but shall not be less than $100. Examples of field inspection costs are:

A. state salaries, including fringe benefits and overhead, (travel and inspection time of state employees multiplied by actual hourly rates);

B. transportation to and from inspection site, laboratories and other documented travel sites, based on current Department of Administration rates or rates specified in applicable bargaining unit agreements;

C. expense of purchase, rental, or repair of special equipment and supplies;

D. living expenses away from home, based on current Department of Administration rates or rates specified in applicable bargaining unit agreements;

E. inspection and consultant services contracted for by the state; and

F. laboratory expenses and analysis of data.

Subp. 2a. **Dams and water level controls.** Field inspection fees shall not be charged for any dam subject to parts 6115.0300 to 6115.0520. Such dams are subject to the inspection fee requirements of part 6115.0520. Field inspection fees for all other water level control structures shall be charged pursuant to parts 6115.0010 to 6115.0130.

Subp. 3. [Repealed by amendment, 10 SR 236]

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; 13 SR 2825*
Published Electronically: *October 8, 2013*

6115.0090 FEES FOR MONITORING ACTIVITIES.

If the project requires an environmental assessment worksheet (EAW) or environmental impact statement (EIS) pursuant to Minnesota Statutes, chapter 116D, and parts 4410.0200 to 4410.6500, the commissioner shall charge an additional fee for monitoring subject to the following:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. Where the commissioner determines that a permitted activity requires monitoring of water or related land resources, the permit shall specify the procedures and scope of such monitoring. Actual costs of the monitoring shall be paid by the permittee in accordance with procedures set forth in the permit.

B. When the commissioner determines after the permit is issued, that there is a need for monitoring, the commissioner shall notify the permittee in writing of the nature of and reasons for the monitoring, and after opportunity for hearing, shall modify the permit accordingly. The actual costs of the monitoring shall be paid by the permittee.

Actual costs incurred and charged by the state are determined in the same manner as prescribed for field inspections.

The commissioner may allow the permittee to provide the monitoring service or employ a consultant for that purpose, subject to the right of the commissioner to charge for state costs related to private monitoring, including the costs of periodically monitoring the monitor.

Fees for monitoring activities shall not be charged for any dam subject to parts 6115.0300 to 6115.0520.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*
Published Electronically: *June 11, 2008*

6115.0100 [Repealed, 10 SR 236]
Published Electronically: *June 11, 2008*

6115.0110 ANNUAL WATER APPROPRIATION PROCESSING FEE.

Subpart 1. **In general.** An annual water appropriation processing fee shall be submitted for each water appropriation permit in force at any time during the year. The fees are required whether or not the permittee appropriated or used any water as authorized by permit during the year.

Subp. 2. **Fee schedule.** The fee shall be based on the following schedule:

A. for irrigation permits, $15 for the first permitted 160 acres or portion thereof, and $25 for each additional permitted 160 acres or portion thereof;

B. for all other permits, $5 for each permitted 10,000,000 gallons or portion thereof;

C. the annual water appropriation processing fee shall not exceed a total fee of $500 per permit.

Subp. 3. **Billing and payment.** A notice of the fees owed will be mailed to the permittee, with the reporting forms, by the commissioner.

The fee, with accompanying report, for the calendar year's appropriation or use of water, shall be sent to the commissioner no later than February 15 of the following year.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Failure to pay the fee shall be sufficient cause for terminating a permit 30 days following written notice by the commissioner.

The effective date of this part is August 1, 1985.

Statutory Authority: *MS s 105.44*

History: *10 SR 236*
Published Electronically: *June 11, 2008*

6115.0120 WATER APPROPRIATION PROCESSING FEE EXEMPTIONS.

The following water appropriation permit actions are exempt from amendment or transfer fees:

A. a change in mailing address;

B. a change of authorized agent when land ownership has not changed;

C. an assignment of a permit within the immediate family;

D. a change in pump location on surface water sources for the same operation;

E. an addition of a new well that replaces an old well for the same permitted operation and is completed at a similar depth in the same aquifer;

F. a decrease in the permitted pumping rate, amount of water authorized, or irrigated acreage;

G. an increase in the permitted pumping rate within ten percent;

H. an increase in the permitted appropriation within ten percent of the annual authorization for nonirrigation permits; or

I. an increase of less than 30 acres in the number of permitted irrigated acres.

Any amendments or transfers that exceed the exemptions in items A to I require a processing fee under part 6115.0065.

Statutory Authority: *MS s 105.44*

History: *13 SR 2825*
Published Electronically: *June 11, 2008*

FEES FOR UNDERGROUND GAS OR LIQUID STORAGE

6115.0130 FEE SCHEDULE FOR UNDERGROUND STORAGE OF GAS OR LIQUID IN NATURAL FORMATIONS.

Subpart 1. **In general.** This schedule is established pursuant to Minnesota Statutes, section 103I.681, subdivision 11. It provides for payment of permit application fees and additional fees for processing and analyzing the application, and issuing the permit. It also includes fees for the inspection and monitoring of activities authorized by the permit.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 2. **Permit application fee.** A permit application fee of $30, check or money order, payable to the commissioner of management and budget, shall accompany each permit application for underground storage of gas or liquid.

If the fee does not accompany the application, the applicant will be so notified, and there will be no further action taken on the application until the fee is submitted.

Subp. 3. **Additional fees.** The applicant or permittee shall pay the actual costs of field inspection and monitoring as follows.

A. When a field inspection is conducted, the costs charged will be the sum of: salaries (inspection time of state employees multiplied by actual hourly rates); transportation to and from inspection site, based on current state Department of Administration rates; fair rental for any special equipment and supplies; and inspection and consultant services contracted for by the state.

B. When the commissioner determines that a permitted activity requires monitoring of water or related land resources, the permit shall specify the procedures and scope of such monitoring. Actual costs of the monitoring, whether conducted by state personnel or by consultants hired by the state, shall be paid by the permittee in accordance with procedures in the permit.

When the commissioner determines after the permit is issued that there is a need for monitoring, the commissioner shall notify the permittee in writing of the nature of and reasons for the monitoring, and after opportunity for hearing, shall modify the permit accordingly. The actual costs of monitoring shall be paid by the permittee.

The commissioner may allow the permittee to provide monitoring services, or employ a consultant for that purpose, subject to the right of the commissioner to charge for state costs related to private monitoring, including the costs of periodically monitoring the monitor.

Subp. 4. **Refund of fees.** The permit application fee for a permit application shall not be refunded for any reason, even if the application is denied or withdrawn.

Subp. 5. **Billing and payment of fees.** The commissioner shall submit an itemized bill to the applicant or permittee for all additional fees. Fees are payable within 30 days of receipt; failure to pay is grounds for suspending the permit or for taking other legal actions as required. In the case of an applicant, a permit shall not be issued until all fees owed have been paid.

Statutory Authority: *MS s 105.44; 103G.301; 103G.315*

History: *10 SR 236; L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*
Published Electronically: *August 7, 2009*

STANDARDS AND CRITERIA FOR GRANTING PERMITS TO CHANGE THE COURSE, CURRENT, OR CROSS-SECTION OF PUBLIC WATERS

6115.0150 PURPOSE AND STATUTORY AUTHORITY.

The purpose of parts 6115.0150 to 6115.0280 is to provide for the orderly and consistent review of permit applications in order to conserve and utilize the water resources of the state in the best

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

interest of its people. In deciding whether to issue permits, the department is guided by the policies and requirements declared in Minnesota Statutes, sections 103A.201, 103A.208, 103F.101, 103F.105, 103F.205, 103F.351, 103G.297, 103G.305, and 116D.04.

The proposed development must also be consistent with the goals and objectives of applicable federal, state, and local environmental quality programs and policies, including but not limited to shoreland management, floodplain management, water surface use management, boat and water safety, wild and scenic rivers management, water quality management, recreational or wilderness management, critical areas management, scientific and natural areas management, and protected species management.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0160 SCOPE.

To achieve the purpose declared in part 6115.0150, parts 6115.0160 to 6115.0280 set forth minimum standards and criteria for the review, issuance, and denial of permits for proposed projects affecting public waters. Permits are required for any activity affecting the course, current, or cross-section of public waters unless specifically exempted within parts 6115.0160 to 6115.0280.

These standards and criteria apply to the public waterbasins, public watercourses, and public water wetlands identified on public water inventory maps authorized by Minnesota Statutes, section 103G.201. The designation of waters of the state as public waters does not grant the public additional rights or grant right of access to the waters, diminish the right of ownership or usage of the beds underlying the designated public waters, affect state law forbidding trespass on private lands, or require the commissioner to acquire access to the designated public waters under Minnesota Statutes, section 97A.141.

These standards and criteria apply to any and all work that will cause or result in the alteration of the course, current, or cross-section of public waters except for the following:

A. utility crossings of public waters that are regulated under Minnesota Statutes, section 84.415, and rules adopted thereunder;

B. planting, destruction, and control of aquatic vegetation that is regulated under Minnesota Statutes, section 103G.615, and rules adopted thereunder;

C. water aeration systems that are regulated under Minnesota Statutes, section 103G.611, and rules adopted thereunder;

D. watercraft, buoys, or other structures that are regulated under Minnesota Statutes, section 86B.111, 86B.211, or 86B.401, and rules adopted thereunder; or

E. water appropriations that are regulated under Minnesota Statutes, section 103G.271, and rules adopted thereunder.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; L 1986 c 386 art 4 s 11; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0170 DEFINITIONS.

Subpart 1. **Certain terms.** For the purposes of parts 6115.0150 to 6115.0280, certain terms or words used are interpreted as follows: the word "shall" is mandatory, not permissive. All distances unless otherwise specified are measured horizontally.

Subp. 2. **Alteration.** "Alteration" means any activity that will change or diminish the course, current, or cross-section of public waters.

Subp. 3. **Beds of public waters.** "Beds of public waters" means all portions of public waters located below the ordinary high water level.

Subp. 3a. **Boat storage structure.** "Boat storage structure" means a structure that is supported on the bed of a public water and has walls, a roof, and either an open well for boats or a floor from wall to wall.

Subp. 3b. **Boathouse.** "Boathouse" means a floating structure that is moored by spuds, cables, ropes, anchors, or chains; may be intended for habitation; and has walls, a roof, and either an open well for boats or a floor from wall to wall. Boathouse does not include a houseboat or boat storage structure.

Subp. 4. **Breakwater.** "Breakwater" means an offshore structure intended to protect a shore area, harbor, or marina from wave and current action, erosion, or sedimentation.

Subp. 5. **Commissioner.** "Commissioner" means the commissioner of natural resources.

Subp. 6. **Department.** "Department" means the Department of Natural Resources.

Subp. 7. **Dock.** "Dock" means a narrow platform or structure extending waterward from the shoreline intended for ingress and egress for moored watercraft or seaplanes or to provide access to deeper water for swimming, fishing, or other water-oriented recreational activities.

Subp. 8. **Drainage.** "Drainage" means any method for removing or diverting waters from public waterbasins or public water wetlands. The methods include, but are not limited to, excavation of an open ditch, installation of subsurface drainage tile, filling, diking, or pumping.

Subp. 9. **Drawdown.** "Drawdown" means a temporary lowering of water levels, for a maximum duration of two years.

Subp. 9a. **Ecology of the waters.** "Ecology of the waters" means the natural aquatic environment, including organisms, physical characteristics, and interactions between and among the organisms and their surroundings.

Subp. 9b. **Energy exchanger.** "Energy exchanger" means a structure designed for placement on the bed or excavated into the bed of public waters for the purpose of exchanging energy for

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

heating or cooling and includes accompanying hoses or lines connecting the energy exchange components.

Subp. 10. **Excavation.** "Excavation" means the displacement or removal of the sediment or other materials from the beds of public waters by means of hydraulic suction or mechanical operations.

Subp. 11. **Fill.** "Fill" means any material placed or intended to be placed on the bed or bank of any public water.

Subp. 12. **Filter.** "Filter" means a transitional layer of gravel, small stone, or fabric between the fine material of an embankment and riprap shore protection materials.

Subp. 13. **Floating structure.** "Floating structure" means any structure, except for boathouses, watercraft, and seaplanes, that is supported entirely by its own buoyancy and can be removed from public waters before winter freeze-up by skidding intact or by disassembly with hand tools.

Subp. 14. **Floodplain.** "Floodplain" means the areas adjoining a watercourse which has been or hereafter may be covered by the regional flood.

Subp. 15. **Floodway.** "Floodway" means the channel of the watercourse and those portions of the adjoining floodplains which are reasonably required to carry and discharge the regional flood.

Subp. 16. **Harbor.** "Harbor" means either an inland or offshore area protected from waves which is intended for the mooring of watercraft.

Subp. 16a. **Houseboat.** "Houseboat" means a motorboat that has either a pontoon or a flat-bottomed hull configuration and a permanent enclosed superstructure that houses, at a minimum, built-in sleeping, cooking, and toilet facilities.

Subp. 16b. **Ice ridge.** "Ice ridge" means a linear mound of lakebed materials pushed up onto the lakeshore by the action of ice.

Subp. 17. **Inland boat slip.** "Inland boat slip" means an inland excavation generally having a uniform width which serves as a protective area for launching and mooring of a single watercraft.

Subp. 18. **Inland excavation.** "Inland excavation" means any excavation intended to extend the cross-section of public waters landward of the natural or preexisting shoreline.

Subp. 18a. **Local government unit.** "Local government unit" has the meaning given in part 8420.0111, subpart 38.

Subp. 18b. **Local origin.** "Local origin" means a source for live plant materials and their propagules that is limited to areas of the same region where the plant materials are proposed to be planted, not to exceed 200 miles from where the plant materials are proposed to be planted.

Subp. 19. **Low-water ford type crossing.** "Low-water ford type crossing" means a stream crossing which conforms to the natural cross-section of the stream and utilizes the placement of a suitable substrate to allow vehicular passage without confining the stream flow within culverts or other hydraulic enclosures.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 20. **Marina.** "Marina" means either an inland or offshore commercial mooring facility for the concentrated mooring of seven or more watercraft or seaplanes wherein commercial ancillary services common to marinas are provided.

Subp. 21. **Maximum.** "Maximum," with respect to storage capacity, refers to the most severe design condition, including surcharge (floodwater storage).

Subp. 22. **Mining activity.** "Mining activity" means the construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of metallic or nonmetallic minerals. Facilities include all mine pits, quarries, stockpiles, tailings basins, and any structures which drain or divert public waters to allow mining. Ancillary facilities such as access roads, bridges, culverts, and water level control structures are not mining activities.

Subp. 23. **Mooring.** "Mooring" means any containment of free-floating watercraft that provides a fixed fastening for the craft.

Subp. 23a. **Mooring facility.** "Mooring facility" means a concentrated area intended solely for the mooring or containment of seven or more watercraft or seaplanes by docks, mooring buoys, or other means.

Subp. 23b. **Native plants.** "Native plants" means indigenous plant species growing in an ecological classification system province or a major watershed in Minnesota prior to European settlement.

Subp. 24. **Offshore.** "Offshore" means the area waterward of the ordinary high water level of a public water.

Subp. 25. **Ordinary high water level.** "Ordinary high water level" means the boundary of public waters as defined in Minnesota Statutes, section 103G.005, subdivision 14.

Subp. 26. [Repealed, 27 SR 529]

Subp. 26a. **Permit.** "Permit" means a public waters work permit required under Minnesota Statutes, section 103G.245.

Subp. 27. **Port.** "Port" means a water transportation complex established and operated under the jurisdiction of a port authority pursuant to Minnesota Statutes, chapter 458.

Subp. 28. **Port facility.** "Port facility" means any facility useful in the maintenance and operation of a port. Facilities include, but are not limited to, transportation facilities, terminal and storage facilities, floating and handling equipment, power stations, and other facilities necessary for the maintenance and operation of a port.

Subp. 29. **Principal spillway.** "Principal spillway" means a spillway designed to convey water from an impoundment at release rates established for the structure.

Subp. 30. **Professional engineer.** "Professional engineer" means an engineer registered to practice in Minnesota.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 30a. **Project.** "Project" means a specific plan, contiguous activity, proposal, or design necessary to accomplish a goal. As used in parts 6115.0150 to 6115.0280, a project may not be split into components or phases for the sole purpose of gaining an exemption from permit requirements.

Subp. 31. **Public water or public waters.** "Public water" or "public waters" means those waters of the state identified under Minnesota Statutes, section 103G.005, subdivision 15 or 15a, or 103G.201.

Subp. 31a. **Public water wetlands.** "Public water wetlands" means those public waters of the state identified as public water wetlands under Minnesota Statutes, section 103G.005, subdivision 15a, or 103G.201, as shown on the public water inventory maps.

Subp. 31b. **Public waterbasins.** "Public waterbasins" means those public waters of the state identified as public waterbasins under Minnesota Statutes, section 103G.005, subdivision 15, clauses (1) to (8), or 103G.201, as shown on the public water inventory maps. Public waterbasins includes public water wetlands reclassified as public waters according to the procedures in Minnesota Statutes, section 103G.201.

Subp. 31c. **Public watercourse.** "Public watercourse" means those public waters of the state identified as natural and altered natural watercourses under Minnesota Statutes, section 103G.005, subdivision 15, clauses (9) and (10), or 103G.201, as shown on the public water inventory maps.

Subp. 31d. **Public waters inventory or protected waters inventory.** "Public waters inventory" or "protected waters inventory" means the map prepared by the commissioner on file with the auditor of a county under Minnesota Statutes, section 103G.201.

Subp. 31e. **Public waters work permit.** "Public waters work permit" means a permit issued by the commissioner under Minnesota Statutes, section 103G.245.

Subp. 32. **Reconstruction.** "Reconstruction" means the rebuilding or renovation of an existing structure, where the cost of such work will exceed 50 percent of the replacement cost.

Subp. 33. **Regional flood.** "Regional flood" means the flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.

Subp. 34. **Retaining walls.** "Retaining walls" means vertical or nearly vertical structures constructed of mortar-rubble masonry, handlaid rock or stone, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials and constructed approximately parallel to the shoreline.

Subp. 35. **Riprap shore protection.** "Riprap shore protection" means coarse stones, boulders, cobbles, artificially broken rock or concrete, or brick materials laid loosely or within gabion baskets against the slope of the existing bank of a public water.

Subp. 36. [Repealed, 27 SR 529]

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 36a. **Shoreline zone.** "Shoreline zone" means an area immediately waterward of the ordinary high water level that may include the littoral area of a water body.

Subp. 37. **Structure.** "Structure" means any building, footing, foundation, slab, roof, boathouse, deck, wall, dock, bridge, culvert, or any other object extending over or under, anchored to, or attached to the bed or bank of a public water.

Subp. 38. **Structural height.** "Structural height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the control structure or from the lowest elevation of the outside limit of the control structure, if it is not across a stream channel or watercourse, to the maximum storage elevation.

Subp. 39. **Swellhead.** "Swellhead" means the difference between the headwater elevation necessary to pass the regional flood through the proposed structure and the tail water elevation below the structure.

Subp. 40. **Temporary structure.** "Temporary structure" means any dock, floating structure, watercraft lift, watercraft canopy, or other structure that can be removed from public waters by skidding intact or by disassembly with hand tools.

Subp. 41. **Watercourse.** "Watercourse" means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

Subp. 42. **Water level control structure.** "Water level control structure" means any structure which impounds or regulates the water surface elevation or flow of public waters, including dams regulated under the provisions of parts 6115.0300 to 6115.0520.

Subp. 42a. **Watercraft canopy.** "Watercraft canopy" means a structure or device with a fabric covered roof and without walls or a floor that is placed on the bed of a public water, is designed to shelter watercraft, and is designed and constructed so that all components may be removed from the lake or stream bed on a seasonal basis by skidding intact or by disassembly with hand tools.

Subp. 42b. **Watercraft lift.** "Watercraft lift" means a structure or device without walls that is placed on the bed of a public water, is designed to lift watercraft above the level of the public water when not in use, and is designed and constructed so that all components may be removed from the lake or stream bed on a seasonal basis by skidding intact or by disassembly with hand tools. A watercraft lift may be designed to include a fabric covered roof.

Subp. 43. **Wharf.** "Wharf" means a permanent structure constructed into navigable waters as a part of a port facility for berthing or mooring commercial watercraft, or for transferring cargo to and from watercraft in an industrial or commercial enterprise, or for loading or unloading passengers from commercial watercraft, or for the operation of a port facility.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529; 34 SR 145*

Published Electronically: *August 27, 2009*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0180 [Repealed by amendment, 8 SR 533]
Published Electronically: *June 11, 2008*

6115.0190 FILLING INTO PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the placement of any fill material into public waters in order to:

A. minimize encroachment, change, or damage to the environment;

B. regulate the quantity and quality of fill and the purposes for which filling may be allowed based upon the capabilities of the waters to assimilate the material; and

C. maintain consistency with floodplain, shoreland, and wild and scenic rivers management standards and ordinances.

Subp. 2. **Scope.** Filling as used in this part involves placement of unconfined or loosely confined materials in public waters.

Subp. 3. **Prohibited placement.** Placement is prohibited in the following cases:

A. to achieve vegetation control;

B. to create upland areas, except where expressly provided herein;

C. to stabilize beds of public waters which cannot support fill materials because of excessive depths of muck, steep bank, bed slope, or other conditions;

D. to stabilize or impound the site of active springs;

E. to dispose of rock, sand, gravel, or any other solid material resulting from activities carried out above the ordinary high water level;

F. to construct a roadway or pathway, or create or improve land accesses from peripheral shorelands to islands, or to facilitate land transportation across the waters; however, when a project is proposed by a federal, state, or local government agency and this provision would prevent or restrict the project, or create a major conflict with other public purposes or interests, the commissioner may waive this provision if:

(1) there is no other feasible and practical alternative to the project that would have less environmental impact; and

(2) the public need for the project rules out the no-build alternative; or

G. filling posted fish spawning areas.

Subp. 4. **No permit required.** No permit is required for the following activities unless prohibited under subpart 3:

A. to install a beach sand blanket if:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) the sand or gravel layer does not exceed six inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and does not extend more than ten feet waterward of the ordinary high water level;

(2) the beach sand blanket does not cover emergent vegetation, unless authorized by an aquatic plant management permit; and

(3) local watershed district and local zoning officials are given at least seven days notice by the landowner;

B. for one additional installation of a sand or gravel layer subsequent to an initial installation at the same location and not exceeding the same amounts and dimensions allowed under item A; or

C. to place fill in a public watercourse having a total drainage area, at its mouth, of five square miles or less, if the watercourse is not an officially designated trout stream and the placement of fill does not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse; or

(3) any actions that would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district.

Subp. 5. **Permits required.** Permits are required for the placement of fill in public waters, except as provided under subparts 3 and 4, and a project must meet all of the following requirements:

A. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

B. the fill consists of clean inorganic material that is free of pollutants and nutrients;

C. the existence of a stable, supporting foundation is established by appropriate means, including soil boring data where deemed necessary by the commissioner;

D. where erosion protection is deemed necessary by the commissioner, the site conditions and fill material are capable of being stabilized by an approved erosion control method such as riprap, retaining wall, or other method which is consistent with existing land uses on the affected public water;

E. the proposed project represents the minimal impact solution to a specific need with respect to all other reasonable alternatives;

F. the size, shape, depths, shoreline, and bottom character and topography, and susceptibility of the beds of public waters to actions of wind, waves, and currents are such that the fill will be stable;

G. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

H. the proposed filling is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved; and

I. the proposed filling is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0191 SPECIFIC STANDARDS; FILLING.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0190, subparts 2 to 5, specific requirements for certain activities shall be met as follows.

Subp. 2. [Repealed, 27 SR 529]

Subp. 3. **Navigational access.** Filling to gain navigational access to waters shall be permitted only where access to navigable depths cannot be reasonably attained by utilizing a dock, the excavation of an offshore access channel, or other alternatives which would result in less environmental impact.

Fill for navigational access shall not extend beyond the edge of open water, shall not exceed side slopes greater than 2:1 horizontal:vertical, shall not exceed a maximum width of 15 feet at the base of the fill, and shall not extend to a water depth greater than four feet.

Subp. 4. **Shoreline lost by erosion.** Permits for filling to recover shoreland lost by erosion or other natural forces shall be granted if:

A. the loss of shoreline is a threat to health and safety through the impending loss or damage to existing shoreline developments; or

B. the loss of shoreline has occurred as a result of changes in water level or flow conditions caused by artificial manipulation of flows or levels of the waters involved within a period of not more than five years prior to the date when an application for filling is submitted.

The requirements of items A and B do not preclude the issuance of permits to recover up to 400 square feet of eroded area or to place riprap materials or use other structural means for protection of the shoreline to prevent continuous erosion.

Subp. 5. **Port development or improvement.** Filling necessary for port development or improvement is allowed only on those waters that are under the jurisdiction of established port authorities subject to the following:

A. no filling is allowed to extend beyond the limits of federally established harbor lines, or when no harbor line has been established, beyond the maximum distance waterward which could be attained without obstructing navigational use of the waters;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. the proposed development is part of a comprehensive port development plan that has been approved by the commissioner; and

C. adverse effects of the proposed filling on the physical and biological character of the area are subject to mitigation measures approved by the commissioner.

Subp. 6. **Fish and wildlife habitat.** Filling to restore or improve fish and wildlife habitat, except for filling in designated trout streams, shall be permitted provided plans are submitted showing the nature and degree of habitat to be benefited, and the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

Subp. 7. **Trout streams.** Filling in trout streams officially designated by the commissioner is allowed only if:

A. the amount, method of placement, and location of the fill will not result in increased water temperatures, excessive sedimentation in the stream, or destruction of fish habitat; and

B. there is no other feasible or practical alternative other than filling.

Subp. 8. **Other purposes.** Filling for other purposes not specifically listed shall be subject to the general standards in part 6115.0190, subparts 2 to 5, and submission of information to show that:

A. the intended purpose of the fill is reasonable with respect to all other alternatives and there are no feasible and practical means to attain the intended purpose without filling; and

B. the proposal will adequately protect public safety and promote the public welfare.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 27 SR 529*

Published Electronically: *October 8, 2013*

6115.0192 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0190 and 6115.0191 shall apply to filling proposed as part of any other activity or activities including but not limited to: excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Published Electronically: *October 8, 2013*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0200 EXCAVATION OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the excavation of materials from the beds of public waters in order to:

A. preserve the natural character of public waters and their shorelands, in order to minimize encroachment, change, or damage to the environment, particularly the ecosystem of the waters;

B. regulate the nature, degree, and purpose of excavations so that excavations will be compatible with the capability of the waters to assimilate the excavation; and

C. control the deposition of materials excavated from public waters and protect and preserve the waters and adjacent lands from sedimentation and other adverse physical and biological effects.

Subp. 2. **Scope.** Excavation as used in this part includes any activity that results in the displacement or removal of bottom materials or the widening, deepening, straightening, realigning, or extending of public waters. It may involve proposals for excavations landward or waterward from the ordinary high water level.

Subp. 3. **Prohibited excavation.** Excavation is prohibited in the following cases:

A. where it is intended to gain access to navigable water depths when such access can be reasonably attained by alternative means which would result in less environmental impact;

B. where inland excavation is intended to extend riparian rights to nonriparian lands, or to promote the subdivision and development of nonriparian lands;

C. when the proposed excavation will be detrimental to significant fish and wildlife habitat and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;

D. when the proposed excavation will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;

E. where it is intended to provide fill materials for development purposes except as provided under part 6115.0280;

F. where the excavation would not provide an effective solution to a problem because of recurrent sedimentation and there are feasible and practical alternative solutions which do not require excavation;

G. unless the excavation project includes provisions for acceptable disposal of excavated materials as provided in these rules; or

H. where the excavation would cause increased seepage of water which would lower the water level of public waters and result in subsurface drainage.

Subp. 4. **No permit required.** No permit for excavation is required for the following activities unless prohibited in subpart 3:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. for excavations in a public watercourse having a total drainage area, at its mouth, of five square miles or less, if the watercourse is not an officially designated trout stream and the excavation will not result in:

(1) any diversions of water from the drainage area;

(2) any impoundment of waters by damming the watercourse; or

(3) any actions that would result in erosion and cause sedimentation of downstream waters as determined by the county or local soil and water conservation district;

B. to remove debris such as trees, logs, stumps, and trash provided such removal does not alter the original alignment, slope, or cross-section of the waters; or

C. for repair of a public drainage system lawfully established under Minnesota Statutes, chapters 103D and 103E, and sponsored by the public drainage authority consistent with the definition of "repair" in Minnesota Statutes, section 103E.701, subdivision 1.

Subp. 5. **Permits required.** Permits are required for the excavation and removal of any materials from public waters or any excavations extending into or out of public waters, except as provided in subparts 3 and 4, and a project is subject to the following general criteria:

A. the project is reasonable and practical based upon geologic and hydrologic conditions, including but not limited to:

(1) quantity and quality of local drainage at the site;

(2) type of sediment/soil strata and underground formations in the vicinity;

(3) life expectancy of the excavation with respect to bedload, longshore drift, and siltation patterns in the project vicinity; and

(4) protection of the water body from increased seepage, pollution, and other hydrologic impacts;

B. the disposal of excavated materials is subject to the following requirements:

(1) the disposal of any excavated materials containing pollutants is subject to requirements of Minnesota Statutes, chapter 115; and

(2) the most acceptable means of disposing of clean materials, free from pollutants, that are excavated from public waters listed in order of preference are:

(a) complete removal of excavated materials from the waters and disposal or reuse for other purposes outside of the floodplain;

(b) deposition in stable on-land disposal sites located above the ordinary high water level and outside of floodway districts established under local ordinance. Provisions must be included for sodding, seeding, or otherwise properly stabilizing these materials;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(c) temporary deposition along shorelines or within floodplains by stockpiling materials for subsequent removal to areas outside of any public waters and outside of established floodplain districts provided that: any stockpile materials are removed within one year of stockpiling; and the stockpile is constructed so that any materials or waters entering or leaving the stockpile are controlled to prevent any introduction of sediment into the environment surrounding the stockpile;

(d) redeposition of excavated materials, consisting of inorganic materials free from pollutants, into public waters shall only be permitted when it will result in improvement of natural conditions of public waters for the public benefit and will not result in sedimentation, obstruction of navigation, or a loss of fish or wildlife habitat. Separate permit provisions are required for redeposition of excavated materials subject to the standards and criteria of subparts 2 to 5; and

(e) determination of the public benefit served by redeposition of excavated materials is based on the value to the public of redeposited materials in order to protect shorelines from the damaging effects of erosion due to winds and waves when there are no other feasible, practical, and ecologically acceptable means to protect the shoreline; or create or improve habitat areas for fish and wildlife; or mitigate or enhance the physical and biological environment within public waters when mitigative or enhancement measures are required as a condition of a permitted activity within the waters involved and there are no other feasible, practical, and ecologically acceptable mitigative measures;

C. the proposed project represents the "minimal impact" solution to a specific need with respect to all other reasonable alternatives and does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

D. the excavation is limited to the minimum dimensions necessary for achieving the desired purpose;

E. when excavation is proposed in a public water that is perched on an impervious stratum, soil borings show that the proposed excavation will not rupture the impervious stratum;

F. the biological character of the waters and surrounding shorelines is affected to the minimum degree feasible and practical;

G. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

H. the water supply, navigational, and drainage characteristics of the waters is protected to ensure that the interests of the public and of private riparian landowners are not adversely affected by the proposed excavation;

I. the proposed excavation is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

J. the proposed excavation is consistent with plans and management programs of local and regional governments, provided that such plans are consistent with state plans and programs; and

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

K. for harbors, boat slips, and other mooring facilities, the excavation is appropriately sized to provide a single mooring space for each riparian lot to be served. The number of mooring spaces to be provided shall generally be the amount of natural shoreline to be served divided by the lot requirements of the local land use control authority and the state shoreland management standards.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; L 1985 c 172 s 80; L 1985 1Sp16 art 2 s 19; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0201 SPECIFIC STANDARDS; EXCAVATION.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0200, subparts 2 to 5, specific requirements shall be met for the activities described in subparts 2 to 7.

Subp. 2. **Excavations for beach development.** The existing site conditions will not provide a suitable beach using a sand blanket alone. When the proposal includes the installation of a beach sand blanket, the area to be excavated shall be consistent with the criteria for filling under part 6115.0190, subparts 2 to 5. The depth of excavation needed to reach a suitable beach stratum shall be the minimum depth necessary considering anticipated site maintenance and reasonable water depths for a beach.

Subp. 3. **Waterbasin excavations.** Excavations for improvement or enhancement of hydrologic and biologic conditions in all, or large portions of waterbasins:

A. A public need for the excavation has been established by local governmental resolution specifying the public interests to be improved or enhanced, except where the project is state sponsored.

B. The proposed project is intended to achieve one or more of the following public purposes:

(1) to improve navigation, swimming, and other recreational uses;

(2) to reduce winter fish-kill potential;

(3) sediment removal to eliminate a source of nutrients and/or contaminants.

C. The proposed excavation is part of an overall improvement or enhancement project based upon adequate background and field test data for which a comprehensive plan is submitted at the time of application detailing all of the following:

(1) Objectives to be accomplished, and an analysis of any alternative means considered to meet the objectives and the rationale for selecting excavation.

(2) Sufficient soil boring and bottom sampling data to evaluate sediment quality and bottom "seal" conditions. Where excavation is proposed on a waterbasin that is perched on an impervious stratum, soil borings must show that the proposed excavation will not rupture the impervious stratum.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(3) The methods, uses, and locations to be employed in excavating and disposing of excavated material consistent with the provisions of parts 6115.0190 to 6115.0192.

(4) Existing water quality data and provision for future water quality monitoring including any water returned to the waterbasin during the removal of excavated materials.

(5) A timetable which indicates anticipated yearly excavation areas and volumes of materials to be removed, plus the selected disposal methods, uses, and deposition locations for each excavation period.

(6) A detailed description of proposed excavation and disposal equipment and facilities, including, where applicable, the length of discharge pipe purchased or available for the project and the pumping characteristics of the equipment.

Subp. 4. **Excavations for navigation-related purposes.** Excavations for navigation-related purposes:

A. Access channels from shorelines for recreational craft. Excavations for accesses from shorelines to reach navigable depths shall not be allowed if access could reasonably be obtained through use of a dock to reach navigable depths, and prevalent wind, wave, and current conditions would not impair reasonable access to reach navigable depths.

When shoreline conditions and wind, wave, and current conditions preclude access to navigable depths, excavations for navigational access shall be allowed provided the access channel shall not exceed four feet in depth, more than 15 feet in bottom width, and will not extend to an offshore water depth greater than four feet.

B. Other navigational channels. Excavations shall be limited to the minimum depth and width necessary to allow reasonable use of anticipated watercraft.

Excavations to provide maintenance of navigational channel projects shall be limited to the length, width, and depth dimensions of the original channel.

Subp. 5. **Harbors and boat slips.** Harbors and boat slips:

A. Excavations for development of offshore or inland harbors or boat slips for the mooring of more than 25 watercraft or watercraft larger than 20 feet in length shall be restricted to those waters which have the following characteristics:

(1) waterbasins having areas of 1,000 acres or more;

(2) watercourses which are used for commercial or industrial navigational purposes.

B. Excavations for development of offshore harbors serving fewer than 25 watercraft shall be limited to those water areas where the location of the proposed offshore harbor would not create unreasonable obstructions to public use and navigation on the water involved. Unreasonable obstructions include any development which would result in threats to public health, safety, or welfare.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

C. Excavations for development of private inland harbors or boat slips serving fewer than 25 watercraft or watercraft less than 20 feet in length shall be limited to those waters where:

(1) prevalent wind, wave, or current conditions along the shoreline where excavation is proposed are of a magnitude and frequency which precludes the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency which would inhibit use of docks shall be based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe winds, waves, or currents;

(2) the presence of lake bed and bank conditions would preclude the use and maintenance of docks and the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities which could be used to haul watercraft out of the water for on-land storage; or

(3) the proposed site is located in an area of the water body where offshore mooring or excavations or extensive dock development would create unreasonable obstructions to public use and navigation of the water body.

D. The width and length of boat slips shall not exceed 150 percent of the width and length of the anticipated watercraft and all authorized boat slips shall be oriented to maximize the degree of wave protection.

E. Excavations for development of inland harbors shall be limited to those waters described in item C and shall meet the following additional requirements:

(1) Requirements applicable to all commercial and industrial inland harbors:

(a) The mooring area of the harbor shall be compactly shaped in order to minimize the surface area excavated in relation to the number of mooring spaces to be provided and shall be located at an adequate distance from the shoreline to provide wave protection and prevent breakthrough.

(b) No branch or connecting channels shall be permitted extending laterally outward from authorized inland excavations.

(c) If practical, a "dogleg" shall be incorporated in the approach channel located between the mooring area and the shoreline to minimize visual impact from the water body and promote wave dissipation.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(d) The excavation shall not extend more than 200 feet inland from the public water unless evidence is provided to show that greater distances are required because of the dimensions of the watercraft to be moored.

(e) The methods, use, and deposition locations to be employed in disposing of excavated materials shall be consistent with the provisions of part 6115.0200, subpart 5, item B.

(2) An application for a permit shall contain plans, maps, and supporting data regarding proposed excavation site soil borings, ground water levels and characteristics, water quality, topography, drainage, and vegetation which shall substantiate that the proposed project must be reasonable and practical based upon geologic and hydrologic conditions including:

(a) quantity and quality of stream flow and local drainage at the proposed project site;

(b) water stagnancy problems including the capability of being flushed or drained;

(c) interference with stream flow or longshore drift;

(d) type of soil strata and underground formations in the project vicinity;

(e) protection of the water body itself in terms of reduced water supply, increased seepage or drainage, pollution, increased flooding, and other adverse hydrological impacts;

(f) adequate entrance openings;

(g) ample turning radius;

(h) adequate depth and size for the anticipated watercraft usage;

(i) adequate reduction of wave heights in mooring areas;

(j) proper harbor shape to reduce wave resonance;

(k) need for and feasibility of maintenance dredging;

(l) adequate height of perimeter wall;

(m) need for wave absorbers within the harbor; and

(n) bank stabilization by appropriate erosion control measures.

(3) Additional requirements applicable to specific types of harbors. Private inland harbors serving two or more single family residential riparian lots shall, if practical, be located along the mutual boundary of properties to be served.

Private inland harbors for proposed multifamily or cluster developments, residential planned unit developments, or for resorts, campgrounds, or other commercial purposes. The development plan shall be approved by the local governmental unit. The permit shall be of the title-registration type including a provision that the individual waterfront lots in the development have priority rights to the available mooring spaces thus obviating issuance of future permits for individual harbors for

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

these lots. The harbor shall be appropriately sized, consistent with the number of watercraft to be served. For residential and commercial planned unit developments, the number of mooring spaces to be permitted shall be consistent with part 6120.3800.

Public inland harbor projects must be justified by:

(a) a public need for the proposed inland harbor established by local governmental resolution specifying public interests to be enhanced;

(b) the harbor shall be appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served;

(c) the harbor shall be available for use by the general public; and

(d) the harbor may extend more than 200 feet inland provided the plans minimize the total length by which the public water is proposed to be extended in keeping with the number of watercraft to be served and the topography.

Subp. 6. **Excavations for fish and wildlife habitat improvement.** Excavation to restore or improve fish and wildlife habitat require plans showing the nature and degree of habitat to be benefited, and information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

Excavations in trout streams officially designated by the commissioner shall be allowed only if:

A. the amount, method, and location of the excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

B. there is no other feasible or practical alternative other than excavation.

Subp. 7. **Excavations in public watercourses.** Except as noted in part 6115.0200, subpart 4, a permit shall be required for any excavation in a public watercourse and shall be subject to the following specific requirements in addition to the general requirements of part 6115.0200, subparts 2 to 5:

A. The watercourse capacity shall be sufficient to adequately convey normal runoff.

B. The watercourse bottom gradients shall be such that normal low flow velocities are nonerosive and the sideslopes shall be graded such that bank slumping is not a hazard. Where excavation will result in excessive bank erosion, energy dissipation structures, channel and bank protection, or other engineering measures shall be required.

C. The outlet shall be adequate in that it:

(1) sufficiently conveys the discharge waters from the area proposed for excavation;

(2) does not produce substantial increases in downstream overbank flooding; and

(3) does not produce downstream erosion hazards as a result of the watercourse excavation.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. When projects involve widening or straightening which alters the watercourse banks, all sideslopes which contribute direct surface runoff into the authorized altered watercourse, and a strip of land along both sides of the watercourse, one rod wide or to the top of the spoil bank, whichever is the greater, shall be seeded and maintained in permanent grasses. No mowing of this grassed strip shall be allowed until after July 31 of each year.

E. The alignment and slope of the excavated channel shall be such as to provide a smooth transition between the existing and the excavated channel.

F. Disposal of excavated material from channel excavation shall be consistent with part 6115.0200, subpart 5, except where the original channel is allowed to be filled as part of the project.

G. No significant increase in flood damages will be permitted. Floodwater retardance structures may be required to minimize any increase in flood damage.

H. The applicant shall submit the names and addresses of landowners located immediately upstream, downstream, and adjacent to any proposed watercourse alteration resulting from excavation. In addition, the applicant shall submit the names and addresses of other landowners and occupants that the commissioner, after reviewing the plans for the proposed excavation, believes will have a substantial interest in the channel change or will be substantially affected by the watercourse alteration.

I. The preferred alternative to widening, deepening, or straightening a watercourse for control of flood waters is the construction of water impoundment structures in upstream areas. Where impoundments are infeasible, impractical, or would result in adverse effects on health and safety or greater adverse environmental effects, the preferred alternative is the construction of flood bypass channels to convey high velocity flood flows.

Excavations in public watercourses for flood management purposes shall be allowed only where an upstream impoundment or a flood bypass channel is infeasible or impractical or excavation is the least damaging environmentally.

Excavations for widening, deepening, or straightening portions of watercourses shall be based on flood management plans which provide details on the relationship of the proposed excavation to management of flood flows for the entire watercourse and shall be consistent with state standards and state approved local standards for floodplain management including maximum use of nonstructural measures where feasible and practical.

J. Excavations shall be limited to the minimum extent necessary to facilitate construction of the road crossing and shall include provisions for adequate riprap or other bank protection measures to protect altered banks from erosion.

K. Excavations for construction of sediment traps or settling basins to control sedimentation and water quality shall be based on plans approved by the Pollution Control Agency or the local soil and water conservation district and shall be consistent with any state and local standards, regulations, and requirements.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

L. Watercourse channel excavations to restore or improve fish and wildlife habitat shall require plans showing the nature and degree of habitat to be benefited, and information showing that the project will not create other adverse effects such as flooding, erosion, sedimentation, or navigational obstructions.

M. Watercourse channel excavations in trout streams officially designated by the commissioner shall only be allowed if:

(1) the amount, method, and location of the channel excavation will not result in increased water temperatures, cause excessive sedimentation in the stream, or destruction of fish habitat; and

(2) there is no other feasible or practical alternative other than channel excavation.

N. The straightening or realignment of a watercourse with a total drainage area, at its mouth, greater than five square miles shall only be permitted where the project will not result in increased downstream flooding, erosion, or sedimentation. Where it is proposed to straighten or realign a watercourse with a total drainage area, at its mouth, greater than five square miles, the applicant may be required to submit appropriate hydraulic data. Such data may include:

(1) contributing watershed above the project;

(2) data for the flood of record;

(3) maximum observed high water level;

(4) flow data, based on the best available technology as follows:

(a) existing and proposed time of concentration;

(b) existing and proposed stage downstream;

(c) existing and proposed mean velocity downstream;

(5) certification that the data was prepared by a registered professional engineer.

O. The alteration of watercourses by straightening or realigning channels to facilitate adjacent land use shall be allowed only if the applicant provides evidence:

(1) that the alteration is reasonable, practical, and will adequately protect public safety and welfare; and

(2) that the alteration will involve a minimum of encroachment, change, or damage to the environment, particularly to the ecological system of the waterway.

P. All other proposals for excavations in public watercourses shall meet the general requirements of part 6115.0200, subparts 2 to 5 and the specific requirements of subparts 2 to 6 and shall require submission of supporting evidence as provided in items N and O.

Statutory Authority: *MS s 103G.315; 105.415*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0202 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0200 and 6115.0201 shall apply to excavations proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0210 STRUCTURES IN PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to limit the occupation of public waters by offshore navigational facilities, retaining walls, and other structures in order to:

A. preserve the natural character of public waters and their shorelands;

B. provide a balance between the protection and utilization of public waters; and

C. encourage the removal of existing structures which do not serve the public interest from the beds of public waters at the earliest practicable date.

Subp. 2. **Scope.** This part applies to the placement, construction, reconstruction, repair, relocation, abandonment, or removal of any structure placed on or in public waters.

Subp. 3. **Prohibited placement of structures.** Placement of structures, temporary structures, and floating structures is prohibited when the structure, temporary structure, or floating structure:

A. will obstruct navigation or create a water safety hazard;

B. will be detrimental to significant fish and wildlife habitat. Construction is prohibited in posted fish spawning areas;

C. is designed or intended to be used for human habitation or as a boat storage structure;

D. is designed or intended to include walls, a roof, or sewage facilities; or

E. will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300.

Subp. 4. **No permit required.** No permit is required for the following activities, unless prohibited under subpart 3:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. to construct, reconstruct, or install a dock, floating or temporary structure, watercraft lift, or mooring facility if:

(1) the structure or mooring facility will not constitute a hazard to navigation or public health, safety, and welfare, as determined by the commissioner;

(2) the structure will allow the free flow of water beneath it;

(3) the structure or mooring facility is not used or intended to be used as a marina;

(4) the structure or mooring facility is consistent with or allowed under local land use controls, as determined by the local government land use authority;

(5) the length of the structure is limited to that necessary to accomplish its intended use, including reaching navigable water depths;

(6) the structure, other than a watercraft lift or watercraft canopy, is not more than eight feet in width and is not combined with other similar structures so as to create a larger structure; and

(7) docks placed on rock filled cribs are located only on waters where the bed is predominantly bedrock, which is incapable of accepting pilings;

B. to construct or reconstruct a boat launching ramp if:

(1) privately owned ramps do not exceed 12 feet in width and do not extend more than ten feet beyond the shoreline or into water more than four feet in depth, whichever is less. Excavations five cubic yards or less, and placement of up to five cubic yards of crushed rock, gravel, clean sand, or small stone are allowed to provide a stable base or maintain use of the ramp;

(2) publicly owned ramps do not exceed 36 feet in width and do not extend more than 30 feet waterward of the shoreline or into water more than four feet in depth, whichever is less. Excavations of 200 cubic yards or less, and placement of up to 80 cubic yards of crushed rock, gravel, clean sand, or small stone are allowed to provide a stable base or maintain use of the ramp. The use of coffer dams constructed of metal sheet piling or other portable materials is allowed to construct and maintain public boat launching ramps if all materials are completely removed from public waters within 30 days of completion of the project;

(3) the ramp is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding seven inches in thickness; and

(4) the ramp is not located on a federally designated wild and scenic river; or

C. to remove structures or other waterway obstructions if:

(1) the original cross-section and bed conditions are restored insofar as practicable;

(2) the structure is completely removed including any footings or pilings that obstruct navigation;

(3) the structure is not located on an officially designated trout stream; and

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(4) the structure does not function as a water level control device.

Subp. 5. **Permits required; criteria.** Permits are required for the construction, reconstruction, repair, or relocation of any structure or mooring facility on or in public waters, except as provided under subparts 3 and 4, and a project must meet the following general criteria:

A. the proposed project must represent the minimal impact solution to a specific need with respect to all other reasonable alternatives;

B. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

C. the proposed structure is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

D. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

E. the proposed structure is consistent with water and related land management plans and programs of local and regional governments, provided these plans and programs are consistent with state plans and programs; and

F. except for mooring facilities and boat ramps, all new structures have a title-registered permit, unless a public agency or local governmental unit accepts responsibility for future maintenance or removal.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0211 SPECIFIC STANDARDS; STRUCTURES.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0210, subparts 2 to 5, specific requirements shall apply to the activities described in subparts 3 to 8.

Subp. 2. [Repealed, 27 SR 529]

Subp. 3. **Wharves.** A permit is required for the construction or reconstruction of all wharves. The following order of preference for construction types shall be utilized: bulkheaded shoreline, inland slip with bulkheaded sidewalls, and wharf projecting into public waters.

Wharves shall be approved if the structure:

A. is part of a designated port facility;

B. is consistent with local land use plans and ordinances;

C. does not extend further waterward than any existing wharves in the area or beyond any established harbor line, whichever is less;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. is of the minimum practicable size; and

E. is not an obstruction to flood flows or longshore drift and is adequately designed to resist the natural forces of ice, wind, and wave.

Subp. 4. **Breakwaters.** A permit is required for the construction or reconstruction of all offshore breakwaters. These structures shall be approved if the following general conditions and the additional listed specific conditions are met:

A. alternative dock or inland facilities are infeasible;

B. the structure is limited to those waters where:

(1) prevalent wind, wave, or current conditions along the shoreline are of a magnitude and frequency that preclude the use and maintenance of docks to moor watercraft. Determinations of magnitude and frequency that would inhibit the use of docks is based on supporting facts including:

(a) the character of the water involved and its shoreline in relation to exposure to severe wind, wave, or current actions and the configuration and area of the water;

(b) the frequency of occurrence of storms producing severe winds and waves based on climatological data for the area; and

(c) the average number of days during each month of the navigational season when the shoreline is affected by severe wind, waves, or currents; and

(2) the conditions of the site and the number, type, or size of watercraft intended to be moored would preclude the development and use of on-land facilities, such as rollers, winch and track systems, sliderails, or other facilities that could be used to haul watercraft out of the water for on-land storage;

C. the facility is adequate in relation to appropriate engineering factors, including but not limited to those listed in part 6115.0201, subpart 5, item E, subitem (2), units (f) to (n);

D. the plan is adequate in relation to the geologic and hydrologic factors listed in part 6115.0201, subpart 5, item E, subitem (2), units (a) to (e);

E. the structure is designed in a compact fashion so as to blend in with the surrounding shoreline and so that all mooring and maneuvering activities can be normally confined to an area bounded by the property lines as extended into the public waters while minimizing the surface area occupied in relation to the number of watercraft to be served; and

F. the breakwaters do not exceed the minimum thickness necessary to withstand the anticipated forces consistent with maintenance requirements and are faced with an adequate layer of natural rock riprap of appropriate size and gradation.

Subp. 4a. **Mooring facilities.** Except as provided in part 6115.0210, subpart 4, item A, a permit is required for the construction of all offshore mooring facilities. A mooring facility shall be approved if the following general conditions and the additional listed specific criteria are met:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. the mooring facility is designed in a compact fashion so as to blend in with the surrounding shoreline and so that all mooring and maneuvering activities can be normally confined to an area bounded by the property lines as extended into public waters while minimizing the surface area occupied in relation to the number of watercraft to be served;

B. the mooring facility minimizes encroachment waterward of the ordinary high water level;

C. for docks or mooring facilities more than eight feet in width, the applicant provides reasonable justification that the proposed width represents the minimal impact solution to a specific need with respect to all reasonable alternatives; and

D. offshore mooring facilities shall be approved, subject to the listed specific conditions:

(1) private offshore mooring facilities not serving as marinas, if the mooring facility is consistent with or allowed under local land use controls, as determined by the local government land use authority;

(2) public offshore mooring facilities not serving as marinas, if:

(a) a local unit of government passes a resolution that specifies the public interests to be benefited by the proposal;

(b) the mooring facility is appropriately sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served; and

(c) the mooring facility is available for use by the general public; and

(3) offshore marinas, if:

(a) the area is zoned for such use or the local government land use authority grants a land use permit; and

(b) the marina is sized consistent with the demand for mooring facilities in the area and the number of watercraft to be served.

Subp. 5. **Retaining walls and erosion and sedimentation control structures.** A permit is required for the construction or reconstruction of all retaining walls and erosion and sedimentation control structures that do not impound water. The construction of retaining walls is discouraged because their appearance is generally not consistent with the natural environment and their construction and maintenance cost is generally greater than riprap.

The issuance of permits is contingent on the following conditions:

A. existing or expected erosion problems preclude the use of riprap shore protection, there is a demonstrated need for direct shoreland docking, or the design is consistent with existing uses in the area. Examples are: riverfront commercial-industrial areas having existing structures of this nature, dense residential shoreland areas where similar retaining walls are common, resorts where floating docks may be attached to such a bulkhead, or where barges are utilized to transport equipment and supplies;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. adequate engineering studies are performed of foundation conditions, tiebacks, internal drainage, construction materials, and protection against flanking;

C. the facility is not an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans and programs for the water body; and

D. encroachment below the ordinary high water level is held to the absolute minimum necessary for construction.

Subp. 6. **Boat launching ramp.** A permit is required for the construction or reconstruction of any boat launching ramp not covered under part 6115.0210, subpart 4, item B, and shall be granted if:

A. the applicant demonstrates a need for a launching facility;

B. the proposed ramp is of the minimum dimensions necessary for launching of watercraft;

C. the proposed ramp does not obstruct flowing water; and

D. construction does not necessitate alteration of shoreland that could result in substantial erosion and sedimentation.

Subp. 6a. **Boathouses.** A permit is required for the construction, reconstruction, relocation, removal, or repair of a boathouse. The permit shall be granted if the following conditions are met:

A. the boathouse is located in an area of historic boathouse use. "Historic boathouse use" shall be determined by the commissioner and shall be based on a review of factual information such as photographs, local government comments, newspaper accounts, or other relevant information;

B. the boathouse is approved by the local unit of government by means of a resolution with supporting documentation that identifies the owner, length, width, height, number of rooms, and sanitary facilities of the boathouse; and

C. the boathouse was located on public waters before January 1, 1997.

Subp. 6b. **Energy exchangers.** A permit is required for the construction, reconstruction, relocation, or repair of energy exchangers located on the bed of a public water. The permit shall be granted if the following general conditions and the additional listed specific conditions are met:

A. there are no other feasible and practical alternative sites for the project that would have less environmental impact;

B. a closed loop design is utilized;

C. the facility is designed in accordance with sound engineering practices;

D. the facility is not located in a designated trout stream or lake, a designated wild and scenic river, or an outstanding resource value water as defined in part 7050.0335;

E. the facility is designed in a fashion and located so as not to cause a navigation hazard;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

F. the facility will not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

G. the facility will not take threatened or endangered species identified in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;

H. the facility will not contain substances, if released into public waters, that would be detrimental to water quality or plant or animal life forms; and

I. the construction, relocation, or reconstruction of privately owned structures shall be permitted only when a federal, state, or local governmental agency accepts responsibility for future maintenance of the facility or its removal in the event that the private owner fails to maintain or abandons the facility.

Subp. 7. **Other facilities.** A permit is required for the construction, reconstruction, relocation, removal, repair, and abandonment of all other offshore structures, boat storage structures, cables other than utility crossings, pilings, or other structures not covered by specific regulations.

A. Permits for structural repair, relocation, or modification, other than minor maintenance work such as reroofing, painting of structures, or similar work, shall be issued if all of the following conditions are met:

(1) the applicant demonstrates a need for the work;

(2) the cost of the work will not exceed 50 percent of the replacement cost of the structure;

(3) the degree of permanence of the structure will not be materially increased by virtue of constructing a new foundation or replacing the majority of the structure above the foundation;

(4) the structure being repaired has appropriate permits from the local land use or sanitary authority; and

(5) the degree of obstruction or structure size is not increased.

B. Permits for construction, relocation, or reconstruction of publicly owned structures shall be issued where:

(1) public need is documented and outweighs adverse environmental impact;

(2) the site is adequately protected from the forces of ice and wave pressures; and

(3) the proposed construction is of sound design and is not necessarily obtrusive or visually incompatible with the natural surroundings.

C. The construction, relocation, or reconstruction of privately owned structures, other than docks and mooring facilities, shall be permitted only when a governmental agency or local unit of governmental accepts responsibility for future maintenance of the structure or its removal.

Subp. 8. **Removal of structures.** Where the commissioner has determined that a structure is no longer functional, constitutes a public nuisance or a hazard to navigation, or poses a threat to

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

public health or safety, the structure shall be removed from public waters under the applicable provisions of these rules. Except as provided under part 6115.0210, subpart 4, item C, a permit is required for the removal or abandonment of all existing waterway obstructions including boathouses, bridges, culverts, pilings, piers, and docks. Permits shall be issued provided:

A. the original cross-section and bed conditions will be restored insofar as practicable;

B. adequate provisions are made to mitigate any side effects resulting from removal, such as restoration of wave or current forces; and

C. no portion of the structure remains which would obstruct or impair navigation, interfere with the passage of flood waters, or contribute to erosion and sedimentation.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529; 8 SR 533; 25 SR 143; 27 SR 529; 41 SR 545*
Published Electronically: *December 9, 2016*

6115.0212 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0210 and 6115.0211 shall apply to structures proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; water level controls, parts 6115.0220 to 6115.0222; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0215 RESTORATION OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to encourage the restoration of public waters to:

A. improve and protect fish and wildlife habitat and the diversity of the habitat;

B. preserve the natural character of public waters and their shoreline zones;

C. encourage the use of natural materials for shoreline zone protection and restoration;

D. limit the removal of natural materials from the beds of public waters; and

E. prevent erosion and siltation of public waters, while maintaining natural processes.

Subp. 2. **Scope.** This part applies to placement, construction, reconstruction, repair, relocation, abandonment, or other work needed to restore or protect public waters or to removal of any materials, structure, fill, water level control, excavation, or drainage device placed on or in public waters. For purposes of this part, "restoration" means the repair, reconstruction, or recreation of essentially

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

natural or native conditions of a public water and its shoreline or banks. This part does not apply to restoration orders issued by the commissioner consistent with part 6115.0255.

Subp. 3. **Prohibited work.** Public waters alteration, protection, or restoration work is prohibited when the work:

A. is detrimental to significant fish and wildlife habitat and there are no feasible, practical, or ecologically acceptable means to mitigate the effects;

B. takes threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300;

C. obstructs navigation or creates a water safety hazard, as determined by the commissioner;

D. violates the regulations of any local zoning authority or water management agency;

E. results in the creation of land above the ordinary high water level that is not deemed essential by the commissioner as part of the project;

F. uses materials that are not clean and free of pollutants, nutrients, and exotic species sources;

G. manipulates water levels solely to satisfy private interests; or

H. will adversely impact public infrastructure, particularly roads and drainage systems.

Subp. 4. **No permit required.** No permit is required for the following activities, unless prohibited elsewhere in parts 6115.0150 to 6115.0280:

A. to perform bank or shoreline zone restoration work using willow wattles, willow posts, brush mattressing, brush layering, fiber roll breakwaters, plant carpets, root wads, and other natural materials installed by hand for the purpose of shoreline zone restoration work, if:

(1) the project is approved by the commissioner and designed or reviewed by the local soil and water conservation district or the local watershed district;

(2) the design does not interfere with navigation or other riparian uses of the waterbody;

(3) the project is done during times of the year when it will not interfere with fish spawning or the nesting of protected bird species;

(4) local origin native plant species, adapted for the site, are used;

(5) an aquatic plant management permit is obtained, when aquatic macrophytes are used;

(6) the waterward encroachment is the minimum necessary for the purpose of the project; and

(7) a maintenance plan is developed for the project and a copy submitted for review to the department area fisheries office;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. to remove or grade an ice ridge, if all of the following conditions are met:

(1) the ice ridge resulted from ice action within the last year;

(2) the project is either exempt from local permits or is authorized by issuance of a local government permit;

(3) the total length of shoreline zone to be affected does not exceed 200 feet;

(4) all ice ridge material that is composed of muck, clay, or organic sediment is deposited and stabilized at an upland site above the ordinary high water level of any public water;

(5) all ice ridge material that is composed of sand or gravel is removed as provided in subitem (4) or graded to conform to the original cross-section and alignment of the lakebed, with a finished surface at or below the ordinary high water level;

(6) no additional excavation or placement of fill material occurs on the site;

(7) all exposed areas are immediately stabilized as needed to prevent erosion and sedimentation; and

(8) local zoning officials, the watershed district, if applicable, and the soil and water conservation district are given seven days' prior notice;

C. to construct, reconstruct, or abandon a water level control structure on a public watercourse with a contributing watershed of 300 acres or less, except on officially designated trout streams, if the structure does not qualify as a dam under parts 6115.0300 to 6115.0520;

D. to excavate or place fill for the purpose of planting or collecting native aquatic plants for restoration purposes, if the work is authorized by an aquatic plan management permit; and

E. to install natural rock riprap and associated filter materials where there is a demonstrated need to prevent erosion or to restore eroded shoreline, when there is a demonstrated need for such work, except along the shores of Lake Superior and officially designated trout streams, if:

(1) the rock is sized appropriately with the erosion potential of the wave or current action of the particular water body, but in no case shall the rock average less than six inches in diameter or more than 30 inches in diameter;

(2) the rock is placed so that it conforms to the natural alignment of the shoreline zone;

(3) the finished slope, as measured on top of the rocks, is not steeper than three to one (horizontal to vertical);

(4) no materials are placed more than six feet waterward of the ordinary high water level, unless the commissioner determines that this dimension may be measured from another point due to the particular nature of water levels of the public water;

(5) the total length of shoreline to be affected does not exceed 200 feet for public waterbasins or public water wetlands or five times the width of the public watercourse measured at bank full conditions;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(6) the riprap does not cover emergent vegetation, unless authorized by an aquatic plant management permit;

(7) the riprap does not obstruct navigation or the flow of water;

(8) a filter, consisting of crushed rock, gravel, or suitable filter fabric material is placed underneath the rock; and

(9) the rock and any filter material are free from organic material, soil, clay, debris, trash, or any material that may cause siltation or pollute the waterbody.

Subp. 5. **Permit required; criteria.** A permit is required for the restoration of public waters, except as provided under subpart 4, and shall be granted if all of the following conditions are met:

A. the proposed project represents the minimal impact solution to a specific need with respect to all other reasonable alternatives;

B. the proposed project is intended to achieve one or more of the following purposes:

(1) improve navigational or recreational uses;

(2) improve or restore fish or wildlife habitat;

(3) expose sediment to remove or eliminate nutrients or contaminants;

(4) restore shorelines or watercourse channels to more natural conditions;

(5) improve or restore natural hydrologic conditions; or

(6) improve or restore water quality;

C. the project does not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

D. adverse effects of the proposed project on the physical or biological character of the waters are avoided when possible and are subject to feasible and practical measures to mitigate the effects;

E. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

F. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided the plans and programs are consistent with state plans and programs; and

G. projects that involve the placement of fill to recover shoreland lost by erosion or other natural forces are subject to part 6115.0191, subpart 4, except that part 6115.0191, subpart 4, does not preclude the issuance of a permit to place riprap materials or use other structural and vegetative means for protection of the shoreline zone to prevent continuing erosion.

Statutory Authority: *MS s 103G.315*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *27 SR 529*
Published Electronically: *June 11, 2008*

6115.0216 SPECIFIC STANDARDS; RESTORATION.

Subpart 1. **In general.** In addition to compliance with the general standards in part 6115.0215, subparts 2 to 5, specific requirements apply to the activities described in subparts 2 to 6.

Subp. 2. **Riprap shore protection.** The protection of shoreline from continued erosion by placement of natural rock riprap along the shore shall be approved if:

A. the riprap materials are of sufficient size, quality, and thickness to withstand ice and wave action. The riprap must be placed with a minimum amount of space between the larger materials and the space between them must be filled with firmly seated smaller rocks or gabion baskets to procure a uniform surface;

B. the site soils are capable of supporting riprap and a filter consisting of well-graded gravel, crushed stone, or fabric is installed to prevent undercutting of the riprap;

C. when site conditions warrant, the toe end of the riprap is installed in a trench excavated into the bed of the public water to anchor the riprap from ice and wave action, with all excavated materials either used to back fill behind the riprap or removed from the bed of the public water;

D. the encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water; and

E. adequate engineering studies are done to certify the adequacy of the design of the riprap project, if deemed necessary by the area hydrologist.

Subp. 3. **Bioengineering projects.** The grading or filling of materials below the ordinary high water level to facilitate the installation or use of willow wattles, willow posts, brush mattressing, brush layering, fiber roll breakwaters, plant carpets, root wads, and other natural materials for erosion protection and shoreline zone restoration purposes shall be approved if:

A. the methods and materials used are designed in consultation with department or local government staff experienced in the use of such materials;

B. excavation and fill placement needed in conjunction with bioengineering projects are minimized and are subject to all requirements related to fill and excavation in parts 6115.0190, 6115.0191, 6115.0200, and 6115.0201; and

C. a separate aquatic plant management permit is obtained whenever the project involves planting aquatic plants other than willow and dogwood.

Subp. 4. **Structural erosion control projects.** Installation of rock gabions, A-jacks, cable concrete, bendway weirs, interlocking concrete blocks, eddy rocks, deflectors, gravel riffles, or other structural methods of erosion control or bank stabilization shall be approved if:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. adequate engineering studies are performed to determine the suitability for use of any of these types of erosion control projects, as determined by the department;

B. the project is not an aesthetic intrusion upon the area and is consistent with all applicable local, state, and federal management plans, programs, and ordinances relating to the affected waterbody;

C. encroachment below the ordinary high water level is limited to the minimum necessary for the construction project;

D. when the project involves the removal of aquatic plants, a separate aquatic plant management permit is obtained;

E. the project does not adversely impact native plants, trees, or animals; and

F. any retaining wall complies with requirements for structures under parts 6115.0210 and 6115.0211.

Subp. 5. **Wave breaks.** Grading, filling, or excavation to install rock, silt fence, or any other material or device designed solely for the purpose of protecting native aquatic plants from wave or current action during their establishment shall be approved if:

A. the materials do not obstruct navigation or the flow of water;

B. the project is done in conjunction with an issued aquatic plant management permit; and

C. temporary (less than two years) wave breaks are preferred over permanent structures, which must also meet the requirements of parts 6115.0210 and 6115.0211.

Subp. 6. **Other erosion control projects.** Using a structure, material, fill, excavation, or other technique that is not covered under subparts 2 to 5 and that is designed primarily to control erosion of the shoreline zone or to restore the shoreline zone to a more natural condition or altering the shoreline zone in any way that is not covered by specific regulations shall be approved if:

A. the intended purpose of the project is reasonable with respect to all other alternatives;

B. any method of erosion control that is not widely accepted as being effective is used only as a temporary or experimental project, provided that the project sponsor must totally repair the shoreline zone if the project proves to be unsuccessful within five years. A public entity must be a cosponsor of the temporary or experimental project and accept responsibility for maintenance, repair, and removal of the project;

C. the project complies with all other federal, state, and local regulations and ordinances; and

D. the project adequately protects public safety and promotes the public welfare.

Subp. 7. **Contaminated site restoration projects.** Restoration of a site contaminated with materials or water determined to be hazardous or toxic through a publicly funded study or site cleanup process shall be approved if:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. the study includes a discussion of alternative approaches to restore the contaminated site; and

B. the commissioner, in consultation with the Minnesota Pollution Control Agency, participated in either the development of the site restoration plan or study and concurs with the site restoration plan or study recommendations or participated in the development of the site restoration funding initiative and concurs with the funded initiative.

Statutory Authority: *MS s 103G.315*

History: *27 SR 529*
Published Electronically: *June 11, 2008*

6115.0217 APPLICATION OF OTHER STANDARDS; RESTORATION.

Unless otherwise specified in other parts, parts 6115.0215 and 6115.0216 apply to projects proposed as part of any other activity or activities including, but not limited to:

A. filling, parts 6115.0190 to 6115.0192;

B. excavations, parts 6115.0200 to 6115.0202;

C. structures, parts 6115.0210 to 6115.0212;

D. water level controls, parts 6115.0220 to 6115.0222;

E. bridges and culverts, parts 6115.0230 to 6115.0232;

F. drainage of public waters, parts 6115.0270 to 6115.0272; and

G. alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315*

History: *27 SR 529*
Published Electronically: *June 11, 2008*

6115.0220 WATER LEVEL CONTROLS.

Subpart 1. **Goals.** It is the goal of the department to manage public waters to:

A. maintain or restore natural flow and natural water level conditions to the maximum feasible extent;

B. encourage the construction of small off-channel retarding structures for the conservation of water in altered, natural waterbasins, consistent with any overall plans for the affected watershed area; and

C. limit the artificial manipulation of water levels, except when the balance of affected public interests clearly warrants the establishment of appropriate controls and it is not proposed solely to satisfy private interests.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 2. **Scope.** The construction, repair, reconstruction, or abandonment of any structure intended to impound, divert, or control the level or flow of public waters is subject to the provisions of this part.

Subp. 3. **Prohibited water level control facilities.** Construction or reconstruction of water level control facilities is prohibited when it is intended to manipulate water levels solely to satisfy private interests.

Subp. 4. **No permit required.** No permit is required to construct, reconstruct, or abandon a water level control structure on public watercourses with a contributing watershed of 300 acres or less, except on officially designated trout streams, provided the structure does not qualify as a dam under the rules for dam safety.

Subp. 5. **Permits required.** Permits are required for the construction, repair, reconstruction, or abandonment of any water level control structure, except as provided in subparts 3 and 4, and a project must meet the following general criteria:

A. the project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, storm water retention, and agricultural uses;

B. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

C. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

D. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs;

E. the construction or reconstruction complies with parts 6115.0300 to 6115.0520 with respect to dam safety for the protection of human life and property;

F. the construction or reconstruction of water level control structures or changing the level of an existing structure shall be approved only to:

(1) control and store flood waters;

(2) maintain low flows for instream flow or water level protection;

(3) manage water quality, including the prevention or control of erosion and sedimentation;

(4) improve water-based recreation;

(5) create, improve, and maintain water supplies;

(6) create, improve, or maintain aquatic habitat for fish and wildlife species;

(7) establish, improve, or maintain the generation of hydroelectric power; or

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(8) restore the existing control elevation to a historic natural water elevation if detailed engineering surveys establish that the proposed control elevation does not exceed the estimated natural control elevation; and

G. the construction or reconstruction of water level control structures or changing the level of an existing structure on watercourses shall be approved only to:

(1) control and store flood waters;

(2) improve water-based recreation;

(3) create, improve, and maintain water supplies;

(4) establish, improve, or maintain the generation of hydroelectric power; or

(5) create, improve, or maintain aquatic habitat for fish and wildlife species.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0221 SPECIFIC STANDARDS; WATER LEVEL CONTROLS.

Subpart 1. **Specific requirements.** In addition to the general standards in part 6115.0220, subparts 2 to 5, specific requirements for water level control structures shall be met according to this part.

Subp. 2. **Permanent lake level control facilities.**

A. Permanent lake level control facilities shall be approved when the commissioner initiates proceedings for the purpose of conserving or utilizing the water resources of the state and assumes responsibility for operation and future maintenance, or when all of the following conditions are met:

(1) the ordinary high water level and runout elevation of the water body have been determined by a detailed engineering survey, or by order of the commissioner following a public hearing;

(2) the proposed facilities are "reasonably consistent with natural conditions":

(a) where a functioning outlet existed in a state of nature or for a long period of time following lawful creation or alteration of an outlet by the activities of people or animals, or cataclysmic events, the proposed outlet is at essentially the same control elevation;

(b) where no natural or artificial outlet exists and the lake is for all practical purposes "landlocked," the control elevation shall not be more than 1-1/2 feet below the ordinary high water level, unless the commissioner finds that:

i. the control is necessary to prevent adverse impacts to the lake or adjoining property;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

ii. other reasonable or cost-effective alternatives are not available;

iii. natural resource or hydrologic conditions exist in the watershed that would limit the potential for continuous discharge of excess waters from the lake; and

iv. the outlet and discharge of excess waters is addressed in an approved water management plan under Minnesota Statutes, chapter 103B or 103D; and

(c) the commissioner may issue a permit to restore the existing control elevation to a historic natural water elevation if detailed engineering surveys establish that the proposed control elevation does not exceed the estimated natural control elevation;

(3) the project is sponsored by a governmental unit, which assumes responsibility for operation and future maintenance, except when:

(a) the majority of the riparian owners sign the permit application;

(b) appropriate easements or other property interests have been obtained from all affected owners;

(c) a title-registration type permit is issued to the owner or owners of the property upon which the proposed water level control structure will be located; and

(d) the structure will further public interests in navigation, propagation of fish or wildlife, or other beneficial public uses of the water;

(4) justification has been made of the need in terms of public and private interests and the available alternatives, including the impact on receiving waters and public uses thereof, through a detailed hydrologic study; and

(5) a detailed plan is developed for operation and control including:

(a) manner and time of operation;

(b) frequency of maintenance;

(c) appropriate monitoring of water levels, water quality, and other factors; and

(d) management of excess waters.

B. In addition to the requirements of item A, subitem (2), unit (b), if the proposed control elevation is more than 1-1/2 feet below the ordinary high water level, the permit applicant must serve a copy of the application on each county and municipality within which any portion of the lake is located and the lake improvement district, if one exists. The commissioner must not issue a permit to establish a control elevation more than 1-1/2 feet below the ordinary high water level of a lake if a county, municipality, watershed district, or lake improvement district required to be served under this item or Minnesota Statutes, section 103G.301, subdivision 6, files a written objection to the issuance of the permit with the commissioner within 30 days after receiving a copy of the application.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 3. **Fish and wildlife management.** Fish and wildlife management proposals made pursuant to Minnesota Statutes, section 97A.101, or other appropriate authority shall be approved when:

A. the public water has been designated for wildlife management purposes;

B. there is a specific water level management plan for the lake basin;

C. any drawdown of the lake is only temporary and the management plans include a permanent facility for restoration of water levels following such drawdowns;

D. any alteration of a watercourse included in the plan follows the requirements specified in part 6115.0201, subpart 7;

E. appropriate easements or fee title is obtained; and

F. specified management personnel are required to establish a lake level gauge and keep a record of water levels with a specified frequency during seasons of active water level manipulation and with a lesser frequency during all other open water seasons.

Subp. 4. **Certain landlocked waterbasins.** Plans for landlocked waterbasins less than 25 acres in surface area and contained completely within the municipal boundaries of a single city shall be approved when:

A. a municipal drainage plan for the affected tributary watershed is prepared by a qualified engineer or hydrologist and is approved by the affected watershed district and the city;

B. the city has a field survey made of the waterbasin after consultation with the department, including but not limited to:

(1) the elevation of the aquatic vegetation fringe;

(2) the elevation of the tree line and a description of the location, type, and size of representative trees;

(3) groundwater elevations, if appropriate; and

(4) other information as requested by the department;

C. control elevations and associated physical parameters are approved by the department and the city; and

D. the city holds a public hearing on the proposal and provides a transcript of the proceedings to the department. Provision of a transcript may be waived by the department.

Subp. 5. **Other controls.** Permits for the construction, reconstruction, and abandonment of water level control structures not covered under subparts 2 to 4 shall be issued if:

A. the need is established in terms of quantifiable benefits;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. the structural design is done by a professional engineer or by a qualified engineer of the Natural Resources Conservation Service or the Corps of Engineers and includes the following considerations:

(1) gravity forces;

(2) hydrostatic pressure;

(3) uplift forces;

(4) overturning moment;

(5) resistance to sliding;

(6) ice pressures;

(7) earthquake forces;

(8) slope stability, including consolidation and pore pressures;

(9) seepage collection or prevention;

(10) foundation conditions, including appropriate borings and determination of the strength of foundation materials;

(11) specifications for materials of construction and their placement or installation;

(12) adequate construction inspection to assure conformance with design assumptions; and

(13) adequacy of the cofferdam or diversion during construction, if any; and

C. adequate assurances are made for future maintenance of new water level control structures:

(1) for water level control structures 25 feet or more in structural height or having a maximum storage capacity of 50 acre-feet or more, permits shall be issued only to governmental agencies, public utilities, or corporations having authority to construct and maintain such projects, except that a title-registration type permit may be issued to the owner or owners of the private property upon which the proposed water level control structure will be located when the provisions of subpart 2, item A, subitem (3), are met;

(2) for other water level control structures, title-registration type permits shall be issued to the owner or owners of the private property upon which the water level control structure will be located if the permit runs with the land and requires breaching or removal if the structure ever falls into a state of disrepair or becomes unsafe; and

(3) periodic engineering inspections of authorized water level control structures may be made by the department or its designee.

Statutory Authority: *MS s 103G.315; 105.415*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *8 SR 533; L 1986 c 386 art 1 s 19; 17 SR 1279; 25 SR 143; 27 SR 529*
Published Electronically: *October 8, 2013*

6115.0222 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0220 and 6115.0221 shall apply to water level control structures proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; bridges and culverts, parts 6115.0230 to 6115.0232; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0230 BRIDGES AND CULVERTS, INTAKES AND OUTFALLS.

Subpart 1. **Goals.** It is the goal of the department to allow crossings of public waters, including the construction of water intake and sewer outfall structures in public waters, only when less detrimental alternatives are unavailable or unreasonable, and where such facilities adequately protect public health, safety, and welfare.

Subp. 2. **Scope.** The construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of public waters is subject to this part. Abandonment or removal of all crossings and structures governed by this part requires a permit according to part 6115.0211, subpart 8.

Subp. 3. **Prohibited crossings.** Crossings are prohibited when the project:

A. will obstruct navigation or create a water safety hazard;

B. will cause or contribute to significant increases in flood elevations and flood damages either upstream or downstream;

C. involves extensive channelization above and beyond minor stream channel realignments to improve hydraulic entrance or exit conditions, except when a separate permit is obtained according to part 6115.0201, subpart 7;

D. will be detrimental to water quality or significant fish and wildlife habitat;

E. will take threatened or endangered species listed in chapter 6134 without authorization by the commissioner according to parts 6212.1800 to 6212.2300; or

F. will provide private access to an island.

Subp. 4. **No permit required.** No permit is required to construct the following types of crossings on public waters, unless prohibited in subpart 3:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. to construct or reconstruct a bridge or culvert on a public watercourse with a total drainage area, at its mouth, of five square miles or less, except on officially designated trout streams;

B. to construct or reconstruct a low-water ford type crossing, if:

(1) the stream bed is capable of supporting the crossing without the use of pilings, culverts, dredging, or other special site preparation;

(2) the water depth does not exceed two feet under normal summer flow conditions;

(3) the crossing conforms to the natural cross-section of the stream channel and does not reduce or restrict normal low-water flows;

(4) the original stream bank at the site does not exceed four feet in height;

(5) the crossing is constructed of gravel, natural rock, concrete, steel matting, or other durable inorganic material not exceeding one foot in thickness;

(6) the approach is graded to a finished slope not steeper than 5:1 horizontal:vertical, and all graded banks are seeded or mulched to prevent erosion and sedimentation; and

(7) the crossing is not placed on an officially designated trout stream, on a wild, scenic, or recreational river, or on an officially designated state water trail;

C. to construct or reconstruct a temporary bridge, if:

(1) the stream bank is capable of supporting the bridge without the use of foundations, pilings, culverts, excavation, or other special site preparation;

(2) nothing is placed in the bed of the stream;

(3) the bridge is designed and constructed so that it can be removed for maintenance and flood damage prevention;

(4) the bridge is firmly anchored at one end and so constructed as to swing away to allow flood waters to pass;

(5) the lowest portion of the bridge is at least three feet above the ordinary high water level on navigable streams; and

(6) the bridge is consistent with state and local rules and regulations for floodplain, shoreland, and wild, scenic, or recreational rivers management standards and ordinances;

D. to maintain the hydraulic adequacy of any storm sewer or agricultural drain tile outfall or ditch that has been functioning within the previous five years, if such work does not alter the original course, current, or cross-section of the public waters; or

E. to install an agricultural drain tile outletting into public waters, if the bank is restored to the original cross-section or contour and no permanent structure is placed below the ordinary high water level, except for the drain tile.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 5. **Permits required.** Permits are required for the construction or reconstruction of any bridge, culvert, intake, outfall, or other crossing of public waters, except as provided in subparts 3 and 4, and a project must meet the following general criteria:

A. the project must not exceed more than a minimum encroachment, change, or damage to the environment, particularly the ecology of the waters;

B. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

C. the proposed crossing is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved;

D. the proposed crossing is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs; and

E. crossings of public waterbasins or public water wetlands are allowed only when there is no feasible and practical alternative that does not require filling, excavating, or the placement of a structure in public waters.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529; L 2010 c 361 art 4 s 82*

Published Electronically: *July 23, 2010*

6115.0231 SPECIFIC STANDARDS; BRIDGES, CULVERTS, INTAKES, AND OUTFALLS.

Subpart 1. **Specific requirements.** In addition to the general standards in part 6115.0230, subparts 2 to 5, specific requirements for bridges, culverts, intakes, outfalls, and other crossings of public waters shall be met according to this part.

Subp. 2. **Bridges, culverts, and other crossings.** The construction, reconstruction, or relocation of all bridges, culverts, or other crossings over public waters shall be approved if all of the following criteria are met:

A. the hydraulic capacity of the structure is established by a competent technical study. The sizing shall not be based solely on the size of existing upstream and downstream structures. If a state or federal floodplain information study exists for the area, or a United States Geological Survey gaging station is located nearby on the stream, the hydraulics of the proposed bridge/culvert design must be consistent with these data. The department may waive this requirement if:

(1) the department has performed a hydraulic study based upon available information and reasonable assumptions;

(2) the department has made a field investigation of the project site; and

(3) the project will not cause flood-related damages or problems for upstream or downstream interests;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. new crossings and replacements of existing crossings comply with local floodplain management ordinances, with provisions of part 6120.5700, subpart 4, item A, and with the following:

(1) for new crossings, no approach fill for a crossing shall encroach upon a community designated floodway. When a floodway has not been designated or when a floodplain management ordinance has not been adopted, increases in flood stage in the regional flood of up to one-half of one foot shall be approved if they will not materially increase flood damage potential. Additional increases may be permitted if: a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream, and any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance;

(2) for replacement of existing crossings, if the existing crossing has a swellhead of one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings in subitem (1). If the existing crossing has a swellhead of more than one-half of one foot for the regional flood, stage increases up to the existing swellhead shall be allowed if field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions for new crossings found in subitem (1); and

(3) the decks and approaches to bridges or culverts on major transportation routes and on roads that provide access to development at urban densities shall be no lower than two feet below the flood protection elevation as defined in part 6120.5700, subpart 5, unless it can be shown that alternative routes or access can be provided during the regional flood;

C. the structure provides for game fish movement, unless the structure is intended to impede rough fish movement or the stream has negligible fisheries value;

D. the structure will not obstruct reasonable public navigation. For bridges over public watercourses, three feet above the calculated 50-year flood stage ordinarily satisfies navigational clearance requirements. For bridges over public waterbasins or public water wetlands, and all culverts, three feet of clearance above the ordinary high water level ordinarily satisfies navigational requirements;

E. any project proposed near an existing or proposed segment of the state trails system should be consistent therewith; and

F. bridges and walkways to islands comply with the following:

(1) bridges and walkways over watercourses to islands must be designed to cause negligible backwater effects during floods and must be securely anchored or otherwise capable of withstanding the dynamic forces of flowing water, ice, and debris; and

(2) permits for reconstruction of existing bridges or walkways over public waterbasins and public water wetlands to islands that are intended to provide public access shall be issued only if the existing crossing provides the only existing land access to the island, there is existing

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

development on the island, and the design provides for any public navigational needs and is consistent with the natural surroundings.

Subp. 3. **Intakes and outfalls.** The construction, reconstruction, or relocation of all water intake and sewer outfall structures placed in public waters shall be approved if all of the following criteria are met:

A. adequate attention is given to methods of screening the structure from view as much as possible from the surface of the public water through the use of existing vegetation or new plantings;

B. the project is not detrimental to public values, including but not limited to fish and wildlife habitat, navigation, water supply, water quality, or storm water retention;

C. no site conditions will require frequent future disruption of the beds of public waters;

D. adequate precautions are planned during and after construction to prevent silt, soil, and other suspended particles from being discharged into public waters;

E. adjacent to the intake structure, the banks and bed of the public water are protected from erosion and scour by placement of suitable riprap shore protection;

F. the banks are revegetated by seeding and/or sodding;

G. the structure is designed by a professional engineer;

H. for intake structures, excavation is detailed in the application and on design plans. When necessary, a water appropriation permit must be obtained from the department prior to operation of the intake structure. An appropriate sized screen must be used to prevent fish intake; and

I. outfall structure design:

(1) when necessary, incorporates a stilling-basin, surge-basin, energy dissipator, or other device or devices to minimize disturbance and erosion of natural shoreline and bed resulting from peak flows;

(2) when feasible, utilizes discharge to storm water treatment ponds, artificial stilling or sedimentation basins, or other devices for entrapment of floating trash and litter, sand, silt, debris, and organic matter prior to discharge to public waters; and

(3) when feasible, maximizes use of natural or artificial ponding areas to provide water retention and storage for the reduction of peak flows into public waters.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0232 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0230 and 6115.0231 shall apply to bridges and culverts proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; drainage of public waters, parts 6115.0270 to 6115.0272; and alterations of public waters for mining, part 6115.0280.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0240 APPLICATION FOR PUBLIC WATERS WORK PERMITS.

Subpart 1. **Forms and submission.** All applications pursuant to parts 6115.0150 to 6115.0280 shall be made on forms prepared by the department and submitted to the regional office for the area where the majority of the proposed project is located.

Subp. 2. **Who may apply.** Applications shall be submitted by the riparian owner of the land on which a project is proposed, except:

A. a governmental agency, public utility, or corporation authorized by law to conduct the project may apply if the property rights acquired or to be acquired are fully described in the application;

B. a holder of appropriate property rights such as a lease or easement may apply if the application is countersigned by the owner and accompanied by a copy of the lease or other agreement. A permit shall be issued for the term of the lease only, subject to cancellation prior to the termination date of the agreement if the agreement is canceled; and

C. a prospective lessee of state-owned lands may apply for a permit in the applicant's own name after requesting a lease from the departmental official responsible for the affected lands. Both the lease request and the permit application shall be processed concurrently with appropriate coordination.

Subp. 3. **Information required.** Pursuant to Minnesota Statutes, section 103G.305, an application is complete when:

A. it includes all of the information specified in parts 6115.0150 to 6115.0280;

B. it is accompanied by appropriate photographs, maps, sketches, drawings, or other plans that adequately describe the proposed project;

C. it includes a brief statement regarding the following points:

(1) anticipated changes in water and related land resources;

(2) unavoidable anticipated detrimental effects on the natural environment;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(3) alternatives to the proposed action;

(4) that the proposed project is reasonable and practical and will adequately protect public safety and promote the public welfare; and

(5) a demonstration by the applicant that the proposed activity authorized by part 6115.0190, subpart 5; 6115.0200, subpart 5; 6115.0210, subpart 5; 6115.0215, subpart 5; 6115.0220, subpart 5; 6115.0230, subpart 5; 6115.0270, subpart 4; or 6115.0280, subpart 4, complies with all the following principles in descending order of priority:

(a) avoids direct or indirect impacts to public waters that may destroy or diminish the public waters;

(b) minimizes the impact to the public water by limiting the degree or magnitude of the public water activity and its implementation;

(c) rectifies the impact by repairing, rehabilitating, or restoring the affected public water;

(d) reduces or eliminates the impact to the public water over time by preservation and maintenance operations; and

(e) for a major change in the public waters, replaces unavoidable impacts to the public water by restoring degraded or impacted public waters having equal or greater public value or, if public waters restoration opportunities are not reasonably available, creating and protecting additional replacement water areas having greater public value;

D. application fees are paid. Final permits shall not be issued until any field inspection fees are paid; and

E. proof of service of a copy of the application and accompanying documents on the mayor of the city or the secretary of the board of the district is included with the application if the project is within or affects a city, watershed district, or soil and water conservation district.

Subp. 4. **Fees.** All applications shall be accompanied by an application fee as required by part 6115.0060. An additional fee may be charged for field inspections conducted by department personnel in the course of review subject to the provisions of part 6115.0080.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 17 SR 1279; 25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0250 PERMIT REVIEW.

Subpart 1. **Field inspection.** The department may conduct field investigations to determine a project's nature, scope, and impact on water and related land resources. The department shall determine which applications must be investigated and such inspections shall be made in a timely fashion.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 1a. **Effect on environment and mitigation.** The commissioner may not issue a permit that causes pollution, impairment, or destruction of the air, water, land, or other natural resources so long as there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare. If the commissioner determines that a major change in public waters is justified and can be authorized by parts 6115.0190, subpart 5; 6115.0200, subpart 5; 6115.0210, subpart 5; 6115.0215, subpart 5; 6115.0220, subpart 5; 6115.0230, subpart 5; 6115.0270, subpart 4; or 6115.0280, subpart 4, the permit must include provisions to compensate for the detrimental aspects of the change. Compensation for the identified detrimental aspects of the permitted project include:

A. restoring degraded or impacted public waters having equal or greater public value;

B. creating or restoring additional replacement water areas having equal or greater public value; or

C. any other measures approved by the commissioner that compensates for the detrimental aspects of the change.

Subp. 2. **Coordination with other agencies.** Nothing in these standards is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other federal, state, regional, or local governmental subdivisions with the authority to regulate work in the beds or on the shorelands of public waters. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review with other units of government having jurisdiction in such matters.

Subp. 3. **Procedure upon decision.** The commissioner may grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 103G.311, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application. Any hearing shall be conducted as a contested case hearing before an administrative law judge from the independent Office of Administrative Hearings according to Minnesota Statutes, chapter 14 and section 103G.311.

Subp. 4. **General permits.** The commissioner is authorized to issue general permits to a governmental subdivision or to the general public for classes of activities having minimal impact on public waters under which more than one activity may be conducted with a single permit.

Subp. 5. **Public water wetland permit processing.**

A. Public waters work permit applications submitted to the commissioner for proposed projects in public water wetlands shall be granted if authorized by parts 6115.0190 to 6115.0232 or parts 6115.0270 to 6115.0280 and if the public water wetland is:

(1) assigned a shoreland classification;

(2) classified as lacustrine wetland or deepwater habitats according to the document under item C; or

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(3) where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

B. All other public waters work permit applications for proposed projects in public water wetlands shall be:

(1) granted, with or without conditions, if authorized by parts 6115.0190 to 6115.0232 or 6115.0270 to 6115.0280 and if the permit application complies with provisions for sequencing under part 8420.0520, and replacement provisions under parts 8420.0522 to 8420.0544, 8420.0810, and 8420.0820, or denied; or

(2) waived pursuant to item D.

C. The following documents are incorporated by reference:

(1) Classification of Wetlands and Deepwater Habitats of the United States, Lewis M. Cowardin et al., United States Department of the Interior, Fish and Wildlife Service (1979); and

(2) Guidelines for Ordinary High Water Level (OHWL) Determinations, John Scherek and Glen Yakel, Minnesota Department of Natural Resources, Division of Waters (June 1993).

These documents are available through the Minitex interlibrary loan system and are not subject to frequent change.

D. Public waters work permits in public water wetlands:

(1) notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for activities within public water wetlands is waived to the local unit of government under chapter 8420 when the commissioner has received notice or application from the landowner or project sponsor and when the commissioner has provided the applicant or project sponsor and the local unit of government a notice within 15 days of receipt of the notice or permit application that the department will waive public waters work permit jurisdiction to the local unit of government; or

(2) the commissioner shall not waive the requirement for a public waters work permit in a public water wetland for activities:

(a) allowed under part 8420.0122, subparts 1 to 7 and 10;

(b) in public water wetlands assigned a shoreland classification;

(c) in public water wetlands classified as lacustrine wetland or deepwater habitats according to the document under item C; or

(d) in public water wetlands where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

E. Notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for public road activities that are associated with the repair, rehabilitation, reconstruction, or replacement of currently serviceable existing public roads is waived to the public road authority under chapter 8420:

(1) for projects that affect less than 10,000 square feet of public water wetlands, upon receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D, except for projects in public water wetlands:

(a) assigned a shoreland classification;

(b) classified as lacustrine wetland or deepwater habitats according to the document under item C, subitem (1); or

(c) when the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and when the responsible state or federal agency declares that the water is necessary for purposes of public ownership; or

(2) for projects that affect 10,000 square feet or more of public water wetlands, when the commissioner has provided the public road authority notice of the waiver within 15 days of receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D, except for projects in public water wetlands:

(a) assigned a shoreland classification;

(b) classified as lacustrine wetlands or deepwater habitats according to the document under item C, subitem (1); or

(c) when the state or federal government has become titleholder to any of the beds or shores of the public water wetlands, subsequent to the preparation of the public waters inventory maps on file with the auditor of the county and when the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

Subp. 6. **Wetland areas of public waters affected by public road permit projects.**

A. For purposes of this subpart, "wetland areas of public waters" means areas that are contiguous with the ordinary high water level and that generally exhibit emergent vegetation within:

(1) public waterbasins;

(2) public water wetlands assigned a shoreland classification;

(3) public water wetlands classified as lacustrine wetlands or deepwater habitats according to the document under item C; or

(4) public water wetlands where the state or federal government has become titleholder to any of the beds or shores of the public water wetlands subsequent to the preparation of the public

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

water inventory maps on file with the auditor of the county and where the responsible state or federal agency declares that the water is necessary for purposes of public ownership.

B. Public waters work permit applications submitted by a public road authority to the commissioner for proposed projects in wetland areas of public waters shall be granted if authorized by parts 6115.0190 to 6115.0232 or 6115.0270 to 6115.0280.

C. The classification of lacustrine wetlands and deepwater habitats found in Classification of Wetlands and Deepwater Habitats of the United States, Lewis M. Cowardin et al., United States Department of the Interior, Fish and Wildlife Service (1979) is incorporated by reference. This document is available through the Minitex interlibrary loan system and is not subject to frequent change.

D. Notwithstanding parts 6115.0150 to 6115.0280, the authority of the commissioner to require a permit for public road activities in, on, or over wetland areas of public waters according to the document under item C is waived for:

(1) all activities authorized by the local government unit under chapter 8420 when the commissioner has received notice or application from the public road authority and when the commissioner has notified the public road authority and the local unit of government of the waiver within 15 working days of receipt of the notice or application; or

(2) activities authorized by the public road authority having jurisdiction under chapter 8420 for public road activities that are associated with the repair, rehabilitation, reconstruction, or replacement of currently serviceable existing public roads when the commissioner has notified the public road authority of the waiver within 15 working days of receipt of a copy of the state, city, county, or town public road authority report that is submitted to the Board of Water and Soil Resources in compliance with part 8420.0544, item D.

Subp. 7. **Written agreements with local government units.**

A. For projects affecting both public waters and wetlands, the local government may, by written agreement with the commissioner, waive the requirement for a replacement plan or a no-loss or exemption determination if a public waters work permit is required and the commissioner includes provisions of Minnesota Statutes, sections 103A.201, 103B.3355, 103G.222, and 103G.2372, and rules adopted thereunder, in the public waters work permit.

B. The written agreement may be done on a project-by-project basis when:

(1) the agreement identifies the parties having authority to make the agreement and the proposed project subject to the agreement;

(2) the commissioner requires an individual public waters work permit for the proposed project;

(3) the majority of the proposed project impacts on public waters and wetlands are to public waters;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(4) the proposed wetland impacts are subject to approval of a wetland replacement plan or a no-loss or exemption determination by the local unit of government according to part 8420.0210, 8420.0220, or 8420.0230;

(5) the local government unit provides the commissioner with specific language addressing no-loss or exemption determinations or allowable wetland impacts and required wetland replacement for incorporation into the commissioner's public waters work permit; and

(6) the local government unit agrees to assist the commissioner should appeals be brought against the commissioner based on the language impacting the wetlands covered in the public waters work permit.

C. The written agreement may be done on a local unit of government basis, a watershed basis, a waterbody basis, or a project activity basis when:

(1) the written agreement identifies the parties having authority to enter into the agreement, the location of agreement application, and the scope of proposed activities subject to the agreement;

(2) the commissioner requires an individual public waters work permit for the proposed project;

(3) the majority of the proposed project impacts to public waters and wetlands are to public waters;

(4) the wetland impacts are subject to approval of a wetland replacement plan or a no-loss or exemption determination by the local unit of government according to part 8420.0210, 8420.0220, or 8420.0230;

(5) the local government unit provides the commissioner with specific language addressing no-loss or exemption determinations or allowable wetland impacts and required wetland replacement for incorporation into the commissioner's public waters work permit;

(6) the local government unit agrees to assist the commissioner should appeals be brought against the commissioner based on the language impacting the wetlands covered in the public waters work permit; and

(7) the agreement addresses enforcement procedures and procedures for the commissioner or the local government unit to terminate the written agreement.

Subp. 8. **Local plan implementation.** Notwithstanding parts 6115.0150 to 6115.0280, the commissioner may authorize alternative regulation of public waters activities that are specifically identified in a local plan, ordinance, or other similar written document approved by the commissioner and subject to the following:

A. the proposed activities are subject to the following principles in descending order of priority:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) avoid direct or indirect impacts to the public water that may destroy or diminish the public water;

(2) minimize the impact to the public water by limiting the degree or magnitude of the public water activity;

(3) rectify the impact by repairing, rehabilitating, or restoring the affected public water;

(4) reduce or eliminate the impact to the public water over time by preservation and maintenance operations; and

(5) replace unavoidable impacts to the public water when a major change in the resource is justified, by including provisions to compensate for the detrimental aspects of the change according to subpart 1a;

B. the proposed activities, their dimensional standards, the criteria used to issue or deny applications, and allowable locations are identified in the local plan;

C. adverse effects of the proposed activity on the physical and biological character of the area are subject to mitigation measures identified in the local plan;

D. the proposed activities are consistent with locally adopted controls;

E. the plan addresses enforcement procedures;

F. the plan includes procedures for the commissioner to reassume the permit authorities in parts 6115.0150 to 6115.0280 upon notice, if determined necessary by the commissioner or plan sponsor;

G. the local plan sponsor publishes a notice in the State Register identifying:

(1) the local plan sponsor that is developing an alternative plan for regulation of public waters;

(2) the scope of activities and the location of the public waters impacted by the plan;

(3) the groups the local plan sponsor has been working with in the development of the plan;

(4) the name and address of the local plan sponsor who can be contacted for copies of the plan, and the name and address of the plan contact for the department; and

(5) a statement that the interested public has a time period of no less than 30 days in which to forward comments to the plan sponsor and the department plan contact for consideration before the plan sponsor submits the draft plan to the commissioner for approval;

H. when considering whether the plan should be approved, the commissioner shall determine that:

(1) the proposed plan, when not in conformity to parts 6115.0150 to 6115.0280, provides an explanation of how the proposed changes are justified;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(2) the public values provided by public waters subject to the plan are maintained or improved; and

(3) the proposed plan provides a mechanism for a periodic review of the plan contents and a procedure to revise the plan, if determined necessary by the commissioner and plan sponsor, or to terminate the plan upon notice being provided by either the plan sponsor or commissioner; and

I. nothing in the review of local plans proposed under this part shall be construed as prohibiting or discouraging a local plan from creating standards that are more restrictive than parts 6115.0150 to 6115.0280.

Statutory Authority: *MS s 14.386; 103G.315; 105.415*

History: *8 SR 533; L 1984 c 640 s 32; 25 SR 143; 27 SR 529; 32 SR 281; 34 SR 145*

Published Electronically: *August 27, 2009*

6115.0255 PUBLIC WATERS ENFORCEMENT PROCEDURES.

Subpart 1. **Enforcement options.** Parts 6115.0150 to 6115.0280 may be enforced through one or any combination of the following authorities:

A. criminal proceedings under Minnesota Statutes, section 103G.141, subdivision 1;

B. orders of the commissioner under Minnesota Statutes, sections 103G.251 and 103G.315; and

C. cease and desist orders, restoration orders, and replacement orders under Minnesota Statutes, section 103G.2372.

The choice of enforcement authorities is dependent on the scope of the activity conducted without a public waters work permit.

Subp. 2. **Enforcement authorities.** The commissioner, conservation officers, and other peace officers may issue cease and desist orders and restoration and replacement orders according to Minnesota Statutes, section 103G.2372.

Subp. 3. **Cease and desist orders.**

A. Cease and desist orders may be issued when the enforcement authority has probable cause to believe that any activity is being or has been conducted in public waters without a valid permit from the commissioner.

B. A cease and desist order must not be issued if a landowner has documentation of a valid public waters work permit from the commissioner authorizing the work that was done or if a landowner has documentation proving that no permit is required.

C. The cease and desist order shall direct a landowner to:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) stop all work, conduct no further work, and take immediate corrective action to stabilize the site from imminent erosion or restore water flow if ordered by the enforcement authority; and

(2) immediately submit a written project application form to the area hydrologist.

D. The enforcement authority issuing a cease and desist order shall promptly submit copies of the order to the commissioner.

E. The commissioner or agent shall review the evidence, including any evidence produced by a landowner, inspect the site if necessary, and determine:

(1) whether the area in question is a public water;

(2) whether a public waters work permit is required; and

(3) whether a public waters work permit application should be submitted or whether a restoration order or replacement order should be issued immediately, if it is determined that a public waters work permit application submitted in response to the cease and desist order would be denied in its entirety for being inconsistent with parts 6115.0150 to 6115.0280.

F. Pending a resolution of any criminal proceedings, if it is determined that the activity does not require a permit or if a permit is issued, the commissioner or agent shall request that the enforcement authority rescind the cease and desist order, pending the outcome of any decision that is appealed, and notify the soil and water conservation district, the commissioner, and the landowner. If the application is denied, the commissioner shall immediately notify the soil and water conservation district, the enforcement authority, and the landowner.

G. A cease and desist order must advise the landowner that violation of the order is a misdemeanor.

Subp. 4. **Restoration and replacement orders.**

A. If the commissioner or agent, with the concurrence of the enforcement authority, determines that restoration may not restore all the loss caused by the drain, excavate, structure, or fill activity, the enforcement authority may order restoration, a combination of restoration and replacement, or replacement rather than restoration.

B. The enforcement authority shall issue a restoration order or replacement order if:

(1) a cease and desist order has been issued and the landowner has not submitted a written project notification form to the area hydrologist within three weeks; or

(2) the commissioner has denied a permit application, determined that a permit application submitted for the activity subject to a cease and desist order would be denied in its entirety for being inconsistent with parts 6115.0150 to 6115.0280, or determined that some combination of restoration of the site and off-site restoration or replacement is necessary.

C. Promptly upon being informed of the need, the commissioner or agent shall inspect the site and prepare a plan for restoring the site. Restoration shall be ordered unless the commissioner

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

or agent, with the concurrence of the enforcement authority, concludes that restoration would cause additional impairment or further degradation of the public water. The commissioner or agent shall incorporate the restoration plan into a restoration order and send it to the enforcement authority for service in person or by certified mail to the landowner.

D. A restoration order must specify a date by which the landowner must restore the public waters according to the commissioner's plan and obtain a certificate of satisfactory restoration from the commissioner or agent.

E. A replacement order must specify a date by which the landowner must submit a replacement plan to the commissioner and a subsequent date by which the landowner must replace the public waters and obtain a certificate of satisfactory replacement from the commissioner or agent.

F. A restoration or replacement order must advise the landowner that violation of the order is a misdemeanor.

G. If, as part of a misdemeanor proceeding, the court orders restoration or replacement, the commissioner or agent, with the concurrence of the enforcement authority, shall determine which is appropriate, and if it is restoration, the method of restoration. If the court orders replacement, the landowner must follow the replacement plan ordered by the commissioner or agent.

H. If a landowner seeks approval of a public waters work permit after the proposed project has already impacted the public water, the commissioner may require the landowner to replace the impacted public water at a ratio not to exceed twice the replacement ratio otherwise required.

Subp. 5. **Appeals of replacement and restoration orders.**

A. A landowner may appeal the terms and conditions of a restoration or replacement order issued under subparts 2 to 4, to the commissioner, within 30 days of receipt of written notice by filing a written request for review. If the written request is not submitted within 30 days, the restoration or replacement order becomes final. The commissioner shall review the request and supporting evidence and render a decision within 60 days of the request for review.

B. If a landowner wishes to appeal the decision of the commissioner after review under item A, the landowner must file a written request within 30 days for a contested case hearing under Minnesota Statutes, chapter 14. The demand for hearing must be accompanied by a bond as required under Minnesota Statutes, section 103G.311, subdivision 6.

Statutory Authority: *MS s 14.386; 103G.315; L 2000 c 382 s 20*

History: *25 SR 143; 27 SR 529*

Published Electronically: *June 11, 2008*

6115.0260 STATUTORY REQUIREMENTS.

Further provisions for the administration of parts 6115.0150 to 6115.0280 are found in Minnesota Statutes, chapter 103G, including but not limited to sections 103G.135, 103G.141, 103G.241, 103G.251, 103G.295, 103G.301, 103G.305, 103G.311, and 103G.315.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0270 DRAINAGE OF PUBLIC WATERS.

Subpart 1. **Goals.** It is the goal of the department to protect and preserve public waterbasins and public water wetlands from damage or destruction by drainage.

Subp. 2. **Scope.** Parts 6115.0270 to 6115.0272 relate to the partial drainage or temporary drawdown of public waterbasins and public water wetlands for all purposes except mining of metallic or nonmetallic minerals which are subject to provisions of part 6115.0280.

Subp. 3. **Prohibited activity.** The permanent or total drainage of public waterbasins and public water wetlands is prohibited.

Subp. 4. **Permits required.** A permit is required for the partial drainage or temporary drawdown of public waterbasins and public water wetlands and shall be granted if all of the following conditions are met:

A. the proposed project is intended to achieve one or more of the following purposes:

(1) improve navigational or recreational uses;

(2) improve or restore fish or wildlife habitat;

(3) expose sediment in order to remove or eliminate nutrients or contaminants;

(4) alleviate flooding of agricultural lands caused by artificial obstruction of downstream drainage or increased upstream discharge; or

(5) allow the mining of iron ore, taconite, copper, copper-nickel, or nickel under Minnesota Statutes, section 103G.297;

B. the project will involve a minimum of encroachment, change, or damage to the environment, including but not limited to fish and wildlife habitat, navigation, water supply, water quality, and storm water retention;

C. adverse effects on the physical or biological character of the waters are subject to feasible and practical measures to mitigate the effects;

D. the proposed project is consistent with applicable floodplain, shoreland, and wild and scenic rivers management standards and ordinances for the waters involved; and

E. the proposed project is consistent with water and related land management plans and programs of local and regional governments, provided such plans and programs are consistent with state plans and programs.

Statutory Authority: *MS s 103G.315; 105.415*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

6115.0271 SPECIFIC STANDARDS; DRAINAGE.

In addition to compliance with the general standards in part 6115.0270, subparts 2 to 4, specific requirements for drainage or drawdown activities shall be met as follows:

A. the drainage or diversion of public waters for mining iron ore, taconite, copper, copper-nickel, or nickel shall be approved only when all of the provisions of Minnesota Statutes, section 103G.297 and part 6115.0280 have been met;

B. the drainage or diversion of public waters for mining all other metallic and nonmetallic minerals shall be approved only when the public waters being drained are replaced by public waters that will have equal or greater public value, subject to provisions of part 6115.0280; and

C. all other drainage or diversion of public waters allowed in part 6115.0270, subparts 2 to 4, shall be approved if all of the following specific criteria are met:

(1) for public waterbasins and public water wetlands, permits shall be issued only to governmental agencies having the authority to undertake such projects. In addition, a public need for the partial drainage or temporary drawdown shall be established by specifying the public interests to be enhanced;

(2) written consent for the partial drainage or temporary drawdown of public waterbasins and public water wetlands is obtained from all riparian owners;

(3) partial drainage or temporary drawdown of public waterbasins and public water wetlands shall be approved only when the applicant has submitted data to confirm:

(a) that the partial drainage will improve navigation or recreational uses;

(b) that the partial drainage will improve or restore fish and wildlife habitat; or

(c) that agricultural lands have been flooded due to artificial obstruction of downstream drainage or increased upstream discharge;

(4) any proposed temporary drawdown shall not exceed two years in duration under normal climatic conditions;

(5) there are no feasible and practical means to attain the intended purpose without drainage; and

(6) the proposal adequately protects public safety and promotes the public welfare.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0272 RELATIONSHIP TO STANDARDS AND CRITERIA FOR OTHER ACTIVITIES INVOLVING CHANGES IN COURSE, CURRENT, OR CROSS-SECTION.

Unless otherwise specified in other parts, parts 6115.0270 and 6115.0271 shall apply to drainage activities proposed as part of any other activity or activities including but not limited to: filling, parts 6115.0190 to 6115.0192; excavations, parts 6115.0200 to 6115.0202; structures, parts 6115.0210 to 6115.0212; water level controls, parts 6115.0220 to 6115.0222; and bridges and culverts, parts 6115.0230 to 6115.0232.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533*

Published Electronically: *June 11, 2008*

6115.0280 ALTERATIONS OF PUBLIC WATERS FOR MINING.

Subpart 1. **Goals.** It is the goal of the department to ensure that alterations of public waters for mining or reclamation of mining areas will minimize adverse environmental effects, preserve water resources to the maximum extent feasible and practical, and encourage the planning of future land and water utilization while at the same time promoting the orderly development of mining and the use of sound mining practices.

Subp. 2. **Scope.** Mining activities which may involve alterations of public waters include the mining of metallic minerals including but not limited to iron ore, taconite, copper, copper-nickel, nickel, cobalt, and gold; and the mining of nonmetallic minerals including but not limited to sand and gravel, stone, clay, marl, oil, gas, and coal; and the mining of peat.

Subp. 3. **Permits required for alterations of public waters.** Permits are required for any alterations of public waters to facilitate mining of iron ore, taconite, copper, copper-nickel, or nickel minerals or reclamation of mining areas provided that:

A. permits to mine are obtained when required by Minnesota Statutes, sections 93.44 to 93.51; and

B. permits for alterations in public waters shall be granted according to Minnesota Statutes, section 103G.297. Applications for permits for alterations in public waters shall include an analysis showing why underground mining without drainage, diversion, or control of public waters is not feasible or economical.

Subp. 4. **Permit required for mining of certain minerals and peat.** Permits are required for mining of nonmetallic minerals, peat, and other metallic minerals not regulated in Minnesota Statutes, section 103G.297, or reclamation of mining areas and shall be granted if the applicant provides evidence that:

A. there is no other feasible and practical location for the proposed mining activity;

B. there is no other feasible or economical method to mine except by draining, diverting, or controlling the public waters;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

C. the proposed alteration of public waters is necessary and no other feasible and economical method for it is reasonably available;

D. the proposed alteration of public waters will not substantially impair the interests of the public in lands or waters or the substantial beneficial public use thereof, except as expressly authorized in the permit, and will not endanger public health or safety;

E. the proposed mining operations will be in the public interest and that the public benefits resulting from it will be sufficient to warrant the proposed alteration of public waters;

F. the activities represent the minimal impact solution with respect to watershed modifications, watercourse diversions or changes, drainage, runoff and seepage management, and avoidance of major adverse changes in the ecosystem of public waters having substantial public value;

G. whenever public watercourses must be diverted or changed to facilitate mining, the design and construction of the diversion or change shall provide for:

(1) maintenance of adequate flows and levels in order to protect instream flows and prevent downstream flooding;

(2) measures to prevent bank erosion and sedimentation in order to protect water quality; and

(3) details on the location, relocation, and utilization of the watercourse after cessation of mining;

H. whenever public waterbasins and public water wetlands are allowed to be drained to facilitate mining, and such drainage is justified and legally permitted, compensation for the loss of the basin is provided for by either:

(1) immediate replacement of the public waterbasins and public water wetlands with waters of equal or greater value; or

(2) submission of acceptable plans for the eventual replacement of the public waterbasins and public water wetlands with waters of equal or greater value upon cessation of mining activities; and

I. whenever a water impoundment is necessary and justified to facilitate mining, the design, construction, operation, and maintenance of the impoundment structure shall:

(1) meet the applicable requirements of parts 6115.0300 to 6115.0520 pertaining to dam safety;

(2) provide hydrologic and hydraulic measures to ensure that any public waters downstream of the impoundment area are adequately protected with respect to maintenance of water quantity and quality and prevention of flooding; and

(3) include plans detailing the disposition and utilization of the impoundment area after cessation of mining activities.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 5. **Compensatory measures for detrimental aspects of mining.** Whenever metallic, nonmetallic, and peat mining activities in the beds of public waters will result in detrimental effects on the physical and biological character of public waters, measures to compensate for the detrimental aspects shall be required in the permit conditions.

Statutory Authority: *MS s 103G.315; 105.415*

History: *8 SR 533; 25 SR 143; 27 SR 529*
Published Electronically: *June 11, 2008*

DAMS

6115.0300 PURPOSE AND STATUTORY AUTHORITY.

The purpose of these rules is to regulate the construction and enlargement of dams, as well as the repair, alteration, maintenance, operation, transfer of ownership, and abandonment, in such a manner as to best provide for public health, safety, and welfare. In the application of these parts, the department shall be guided by the policies and requirements declared in Minnesota Statutes, section 84.083, and chapters 103A, 103B, 103E to 103G, and 116D.

The rules are pursuant to Laws of Minnesota 1978, chapter 779, section 8, and are intended to be consistent with the goals and objectives of applicable federal and state environmental quality programs and policies including, but not limited to, mineland reclamation, and the management of: shorelands, floodplains, water surface use, boat and water safety, wild and scenic rivers, critical areas, recreational or wilderness areas, scientific and natural areas, and protected vegetative species.

To achieve this purpose, the commissioner hereby sets forth minimum standards and criteria for dam classification and identification of hazards to health, safety, and welfare and for permits for dam projects for water and waste impoundments and for ordering repairs.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0310 SCOPE.

These parts shall apply to all dams defined in part 6115.0320 unless excluded in other sections of the rules. They are supplementary and complimentary to the rules which establish standards and criteria for granting permits to change the course, current, or cross-section of public waters (parts 6115.0150 to 6115.0210, 6115.230, and 6115.0240 to 6115.0260).

Where these parts conflict with other appropriate rules and requirements, the most restrictive provision shall apply.

All provisions of part 6115.0220 are superseded by these parts as they relate to dams as defined herein, except the section relating to water level controls.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0320 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of these parts, certain terms used herein shall be interpreted as follows. These definitions are in addition to those contained in part 6115.0170, except where the same word is contained in both lists of definitions in which case the definitions in these parts shall apply in respect to dam safety administration.

Subp. 2. **Alteration.** "Alteration" means any activity which will affect the safety of a dam and/or which will result in a change in the course, current, or cross-section of public waters.

Subp. 3. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources and any duly authorized representative.

Subp. 4. **Cost.** "Cost" includes labor and materials; preliminary investigations and surveys; construction plant properly chargeable to the project; excluding costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads affording access to the project.

Subp. 5. **Dam.** "Dam" means any artificial barrier, together with appurtenant works, which does or may impound water and/or waste materials containing water except:

A. dams which are less than 25 feet in height and have storage capacity at maximum storage elevation of less than 50 acre-feet, which shall be exempt from dam safety permit requirements if they do not have potential for loss of life resulting from failure or misoperation;

B. any artificial barrier which is not in excess of six feet in height regardless of storage capacity or which has a storage capacity not in excess of 15 acre-feet regardless of height;

C. underground or elevated tanks to store water and/or waste;

D. any artificial barrier constructed solely for the purpose of containment of sewage or biological treatment of wastewater which is under the jurisdiction of the Minnesota Pollution Control Agency;

E. United States owned dams;

F. dikes and levees constructed for flood control purposes to divert flood waters and which are not intended to act as impoundment structures.

This does not preclude the need for any permits from the commissioner which may be required under applicable provisions of parts 6115.0200 to 6115.0260 as further explained in part 6115.0340.

Subp. 6. **Enlargement.** "Enlargement" means any change which may raise the maximum storage elevation of the dam.

Subp. 7. **Height.** "Height" means the vertical distance from the natural bed of the stream or watercourse measured at the downstream toe of the dam or from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or watercourse, to the maximum storage elevation.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 8. **Maintenance.** "Maintenance" means any work which will not result in a change in the hydraulic capacity of the structure or entail any changes in the structural character of the dam.

Subp. 9. **Maximum storage elevation.** "Maximum storage elevation" means the highest elevation to which water or waste materials can be effectively stored behind the dam on either a temporary or permanent basis, whichever is greater.

Subp. 10. **Owner.** "Owner" means the owner or lessee of the property to which the dam is attached, unless the dam is sponsored by a governmental agency which will be responsible for operation and maintenance of the dam, in which case that sponsoring agency shall be considered the owner.

Subp. 11. **Repair.** "Repair" means any work which will change the hydraulic capacity of the structure or entail any changes in the structural character of a dam.

Subp. 12. **Shall.** "Shall" is mandatory and not permissive.

Subp. 13. **Surface.** "Surface" shall be determined by multiplying total dam length by average height.

Subp. 14. **Total dam length.** "Total dam length" means the maximum horizontal distance between the outer limits of all artificial containment structures, including any artificially constructed dike, which are essential to containment, but does not include the length of emergency spillways which are located outside the abutments of the dam.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0330 SEVERABILITY.

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0340 CLASSIFICATION OF DAMS.

All existing and proposed dams shall be classified by the commissioner into the following three hazard classes: those dams where failure, misoperation, or other occurrences or conditions would probably result in:

A. Class I: any loss of life or serious hazard, or damage to health, main highways, high-value industrial or commercial properties, major public utilities, or serious direct or indirect, economic loss to the public;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

B. Class II: possible health hazard or probable loss of high-value property, damage to secondary highways, railroads or other public utilities, or limited direct or indirect economic loss to the public other than that described in Class III; and

C. Class III: property losses restricted mainly to rural buildings and local county and township roads which are an essential part of the rural transportation system serving the area involved.

Any dam whose failure, misoperation, or other occurrences or conditions would result only in damages to the owner and would not otherwise affect public health, safety, and welfare as described in Classes I, II, and III, shall not be subject to this hazard classification. A dam which is not classified as a hazard Class I, II, or III dam, and those which are not included in the definition of dam at part 6115.0230, subpart 5, definition of dam, shall be subject to applicable provisions of parts 6115.0200 to 6115.0260, and shall not be subject to these dam safety rules. Changes in development in the vicinity of the dam may result in future reclassification.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0350 GENERAL PROCEDURES FOR ALTERATION, REPAIR, OR REMOVAL OF A DAM.

Subpart 1. **Application.** Before commencing action, the owner shall make a separate application for each existing dam proposed to be changed upon forms provided by the commissioner, except as provided in subpart 2 for emergencies. The application shall contain:

A. name and address of owner(s);

B. proposed changes;

C. maps, plans, and specifications which set forth pertinent details including location, type, dimensions, and storage capacity; and

D. proposed date of start and completion of construction.

A filing fee of $15 shall accompany the application in the form of a check or money order payable to the commissioner of management and budget.

Subp. 2. **Emergency work.** Emergency work:

A. Actions by the owner. Where immediate action is necessary for public health, safety, and welfare, repairs may be started, but the owner shall notify the commissioner at once. As soon as practicable, the owner shall apply for a permit for the emergency necessary permanent repairs.

B. Commissioner's actions. Where necessary to protect public health, safety, and welfare, if the condition of any dam or impoundment is imminently dangerous to the safety or life or property or imminent floods threaten the safety of a dam or impoundment, the commissioner may, in an emergency, require and enforce lowering or completely emptying of the water level from the impoundment and taking any other steps essential to safeguard life and property.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 3. **Removal.** Before commencing removal, the owner shall comply with the application requirements of subpart 1. After removal, the owner shall submit evidence as to the manner in which the work was performed and the conditions obtained after the removal. The commissioner shall inspect to determine that a sufficient portion of the dam has been removed to eliminate the hazard directly attributable to the presence of the dam.

Statutory Authority: *MS s 105.535*

History: *L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*

Published Electronically: *August 7, 2009*

6115.0360 INSPECTIONS.

Subpart 1. **Hazard classification.** The commissioner shall make initial inspections of each dam in the state to determine the appropriate hazard classification or exemption according to criteria in part 6115.0340.

Subp. 2. **Dam safety.** The commissioner shall make an initial detailed systematic technical inspection and evaluations of every Class I, II, or III dam in order to assess the general safety conditions including:

A. a review and analysis of available data on the design, construction, and operation;

B. a visual inspection of the dam and downstream and upstream areas:

(1) an examination of significant structural, geotechnical, hydraulic, and hydrologic features including, where applicable, electrical and mechanical equipment for the operation of control facilities;

(2) evidence of leakage, erosion, seepage, slope instability, undue settlement, displacement, tilting, cracking, deterioration, and improper functioning of drains and relief wells; and

(3) adequacy and quality of maintenance and operating equipment and procedures;

C. a report on general condition including, when possible, an assessment of storage capacity, hydraulic and hydrologic capabilities, structural stabilities, and any other conditions which constitute a hazard based upon current prudent design considering the size and hazard class of the dam.

The safety evaluations involve constraints on water control such as blocked entrances, restrictions on operation of spillway and outlet gates, if any, inadequate energy dissipators or restrictive channel conditions, significant reduction in impoundment capacity by sediment deposits and for waste impoundments, the material balance. Where essential design data are lacking, evaluations of watershed characteristics, rainfall, and impoundment records may be used to evaluate effects of the dam.

The report shall determine the need for emergency measures or actions; corrective actions relating to design, construction, and operation; and additional detailed studies, investigations, and analyses.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 3. **Timing.** Subject to the availability of staff and funds:

A. The commissioner shall make initial inspections of all Class I, II, and III dams as soon as reasonably possible based on the degree of hazard involved.

B. After the initial detailed inspections, the commissioner shall make periodic inspections of dams based on the following schedule: Class I dams, at least one time every year; Class II dams, at least one time every four years; and Class III dams, at least one time every eight years. The commissioner shall utilize the services of governmental agencies to the maximum extent feasible to provide for periodic inspections.

Subp. 4. **Reports on inspections.** Upon completion of each inspection, the commissioner shall notify the owner of the dam, in writing, of the results of the inspection and if the dam needs corrective action, the commissioner shall order such action.

Statutory Authority: *MS s 103G.515; 105.535*

History: *25 SR 1916*
Published Electronically: *June 11, 2008*

6115.0370 TRANSFER OF DAM OWNERSHIP.

The owner shall not transfer the ownership of any Class I or II dam without a permit from the commissioner. For Class III dams, the owner, or the party to whom a dam is transferred, shall apply to the commissioner for a permit for the transfer of ownership within 30 days after the ownership changes. Permits shall be issued based on evaluation of the hazard class, the conditions, and the financial capabilities of the transferee.

No state agency or political subdivision may purchase or accept as a gift any privately owned dam subject to department permit requirements until after compliance with the commissioner and legislative action provided in Minnesota Statutes, section 103G.525.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0380 OPERATION AND MAINTENANCE.

Subpart 1. **Responsibilities.** The owner shall operate and maintain the dam. Regulation of maintenance and operation for public health, safety, and welfare is vested with the commissioner.

Subp. 2. **Reports and records.** Owners may be required to keep records and report on maintenance, operation, staffing, and engineering and geologic investigations and any other data necessary to protect the public health, safety, and welfare. In addition, the owner shall fully and promptly advise the commissioner of any unusual or alarming circumstance or occurrence affecting the dam.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0390 TERMINATION OF OPERATIONS AND PERPETUAL MAINTENANCE.

Subpart 1. **Owner's duty.** Unless the dam is removed, the owner shall perpetually maintain the dam and appurtenances so as to ensure the integrity of the structure.

Subp. 2. **Financial responsibility.** The commissioner may impose such requirements as may be necessary prior to the ultimate termination of the owner's operation to ensure that the owner will be financially responsible for carrying out the activities required for perpetual maintenance, and that adequate funding will exist.

Subp. 3. **Plans for termination.** In respect to dams utilized for waste disposal, the owner shall prepare and submit to the commissioner plans for termination of operations and perpetual maintenance which will address the owner's plans for both an unanticipated or premature termination of operations and for the ultimate intended termination of operations. The plans for termination of operations and perpetual maintenance shall, at a minimum, address the following issues, where applicable:

A. perpetual maintenance and safety of the dam including adequate monitoring programs;

B. disposal and treatment of ponded and channeled waters;

C. monitoring and mitigation of surface water and groundwater pollution;

D. silt, sedimentation, and erosion control; and

E. vegetation and landscaping.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0400 REPORTS TO LEGISLATURE ON PUBLICLY OWNED DAMS.

As required by Laws of Minnesota 1978, chapter 779, section 7 (Minnesota Statutes, section 103G.511), the commissioner shall make an annual report to the legislature on the status of dams owned by the state or local governmental units which shall include recommendations for action including any requests for state share or matching funds for grants-in-aid to local governments.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0410 NEW DAMS OR ENLARGEMENTS.

Subpart 1. **Waivers for Class III dams.** For Class III dams which are sponsored by a governmental agency which will be responsible for operation and maintenance or for which the design, construction supervision, and inspection is performed by a federal agency, the commissioner may waive certain details of the required submittals, provided that the federal agency will furnish the commissioner with adequate facts on the design and construction inspection to allow the commissioner to adequately evaluate the permit and approvals.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 2. **Permit application.** A separate application, including a preliminary report for each new dam or each dam proposed to be enlarged, shall be filed with the commissioner upon forms provided by the commissioner which shall contain the following:

A. name and address of the owner(s) or prospective owner;

B. purpose;

C. location, type, size, and height of the dam; and

D. storage capacity of the impoundment.

For waste impoundment dams, the permit application shall include facts necessary for the issuance of a permit which extends throughout the life of the impoundment project.

Subp. 3. **Preliminary report.** The preliminary report shall consist of:

A. A general statement setting forth the effect on the environment.

B. Maps showing the location of county, township, and section lines; the outline of the impoundments; the location of state, county, and township roads; the locations of utilities, e.g. pipelines, transmission, telegraph, and telephone lines; the topography; and other structure or facilities including dwellings affected by the proposed dam. State, county, and USGS maps and aerial photographs may be used for this purpose.

C. A written report of surface conditions, i.e. geology, topography, which is based on a field examination by the applicant's engineer and other qualified personnel.

D. Typical cross-sections of the dam accurately showing elevations, proposed impoundment levels, and top width.

E. Logs of borings in the foundation and in the borrow areas, and results of seismic and resistivity subsurface investigations, when they are readily available.

F. Preliminary design assumptions, operational aspects, tentative conclusions, and references. The design assumptions shall pertain to such hydrologic features as drainage area, rainfall data, runoff, inflow, area-capacity-elevation data, and flood routing, in addition to structural, geologic, and geotechnical assumptions.

G. A preliminary cost estimate.

H. Where applicable, future plans on ultimate project size including dams and impoundments.

I. A general description of all other activities and elements related to and part of the total dam project, such as operational plans and details of smaller dams, dikes, diversions, reclaim water facilities, and other facility and utility lines including pipelines, roads, and railroads. The report shall identify each element or activity of the total dam project which would require a permit under the provisions of parts 6115.0150 to 6115.0260.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 4. **Filing fees.** Each application for a permit must include a $15 fee in the form of a check or money order payable to the commissioner of management and budget.

Subp. 5. **Professional engineer's requirements.** The applicant must engage professional engineer(s) registered in the state of Minnesota or acting solely as officers or employees of the United States as provided in Minnesota Statutes, section 326.13, clause (3), who are proficient in dam engineering to prepare the engineering documents, plans, and specifications, to inspect the construction, or enlargement, and to establish operation and maintenance procedures for the structure.

Subp. 6. **Final design requirements.** Upon acceptance and agreement by the commissioner of the preliminary report, the applicant shall submit to the commissioner, for approval, a final design report, together with plans and specifications and the initial inspection fee. The final design report shall include, but is not limited to, the following:

A. general description of the project, such as its service life, production rates, required storage and area(s); geological considerations such as physiography, topography, geology, seismicity, groundwater conditions, and maps; hydrologic studies such as physical features, climatology, design, storm and design flood characteristics, flood routing, water-material balance, free-board requirements, dam-break flood; geotechnical information, such as rock-soil sampling and logging, geophysical investigations, field and lab testing, instrumentation data; considerations of construction materials and their properties, such as quantities required, borrow and aggregate locations and volumes, field and lab work and investigations, concrete, waste materials generation and placement techniques, investigation of the stored waste materials such as generations, transportation, mechanical/chemical/special testing, disposal practice;

B. analytical determinations, such as seepage and underseepage studies, stability, deformation and settlement analysis; analytical and design details of facilities, such as dam, foundation, impoundment, abutments, spillways (for the purpose of these rules, spillway means any facility appurtenant to the dam available to discharge excess water and/or waste from the impoundment) or decant facilities, diversions, outlet works, instrumentation; operational aspects, such as impoundment operating criteria, initial filling criteria, responsibility and coordination, emergency procedures and warning systems: air, water, and solid pollution controls, sedimentation, and erosion controls: operational and postoperational maintenance and abandonment considerations; surveillance and inspection programs; and

C. a detailed cost estimate.

Subp. 7. **Plans and specifications.** Plans shall consist of a bound portfolio of the drawings with all sheets being of the same size, and shall be of such scale that specifications can be drafted, and construction accomplished. Specifications shall contain:

A. general provisions, specifying the rights, duties, responsibilities of the owner, designer, contractor; the prescribed order of work;

B. technical provisions describing approved work methods, equipment materials, and desired end results; and

C. special conditions.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 8. **Permit standards.** Approval or denial shall be based on the potential hazards to the health, safety, and welfare of the public and the environment including probable future development of the area downstream or upstream. The applicant may be required to take measures to reduce risks, and the commissioner shall furnish information and recommendations to local governments for present and future land use controls to minimize risks to downstream areas.

The commissioner shall determine if the proposal is adequate with respect to:

A. For Class I, a showing of lack of other suitable feasible and practical alternative sites, and economic hardship which would have a major adverse effect on population and socioeconomic base of the area affected.

B. For Class II, a showing of lack of other suitable feasible and practical alternative sites and that the dam will benefit the population or socioeconomic base of the area involved.

C. The need in terms of quantifiable benefits.

D. The stability of the dam, foundation, abutments, and impoundment under all conditions of construction and operation, including consideration of liquefaction, shear, or seepage failure, overturning, sliding, overstressing and excessive deformation, under all loading conditions including earthquake. This determination must be based on current, prudent engineering practice, and the degree of conservatism employed must depend on hazards.

E. Discharge and/or storage capacity capable of handling the design flood based on current, prudent engineering practice and the hazard classification.

F. Compliance with prudent, current environmental practice throughout its existence.

Subp. 9. **Work inspection and construction reports.** Work inspection and construction reports:

A. Conformity with approved designs, plans, and specifications.

(1) The permittee shall be responsible for providing adequate controls of construction and operation activities and for the development of data in the ordinary course of those activities on design, construction, and operation assumptions. The owner may engage a professional engineer to operate and inspect the construction, but the designer should also periodically monitor construction.

(2) All construction shall be carried out in accordance with the approved design, plans, and specifications. No alteration, modification, or addition to the approved designs, plans, and specifications that could adversely affect the safety or environmental impact of the dam shall be made by the permittee without prior permission of the commissioner. Such approvals shall be provided, if a proper margin of safety is maintained, as rapidly as possible to preclude interference with construction work schedules. Emergency short-term revisions may be made by the permittee followed by prompt notice to the commissioner. Records of alterations, modifications, or additions to the approved design, plans, and specifications, for which written approval of the commissioner was not required shall be submitted with the construction report as provided in item C.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(3) The commissioner shall make inspections for the purpose of securing conformity with approved designs, plans, and specifications and shall require the owner to perform, at the permittee's expense, work or tests as found necessary to disclose sufficient information to determine if there is conformity.

(4) If, at any time as work progresses, the commissioner finds that changes are necessary to protect health, safety, welfare, and the environment, the commissioner shall order the owner to revise designs, plans, and specifications.

(5) At the commissioner's discretion, the commissioner may observe and approve foundation preparation and may approve construction material placement on an intermittent or continuing basis when field conditions dictate. The commissioner shall be notified at least three days in advance of start of construction.

B. Permanent markers. At least one permanent marker for vertical and horizontal control shall be established in the natural ground by the permittee in the vicinity of each dam so as to be accessible and protected against disturbance throughout its existence. The permanent marker for vertical control must be based upon datum and degree of accuracy based upon considerations of the hazards involved and the size of the dam, as specified by the commissioner.

The permittee shall submit the locations of these permanent markers plotted on the best available maps or plans within time limits prescribed in the permit.

C. Construction report. The permittee may be required to submit monthly reports on construction observation and quality control, when construction is complex or hazardous, including: daily construction documentation; foundation preparation and treatment, quality control tests; records and summaries of actual tests of foundation and construction materials, cutoff trench, grouting, etc; instrumentation installation and maintenance of records and readings; geologic mapping, if any, of exposed foundations; of logs of drill holes and other exploration features, if any, completed during construction; review and evaluation of disclosed field conditions by the designer; and any other items which may be pertinent to a construction quality assurance program.

Subp. 10. **As-built plans and data.** Immediately upon completion of construction the permittee shall file supplementary drawings or descriptions of the dam as actually constructed, or any other items which may be of permanent value bearing on the adequacy and permanency of the dam. In enlargements the data need apply only to the new work.

Subp. 11. **Statement of completion and affidavit of cost.** Within 90 days following completion of construction, the permittee shall notify the commissioner, by certified mail, including a statement of the designer or professional engineer in charge of construction inspection that to the best of knowledge the dam was completed in accordance with the approved designs, plans, and specifications and any revisions thereof.

As soon as practicable thereafter, the permittee shall file an affidavit stating the actual cost in detail or that the permittee is unable to report the actual cost stating the reasons therefor. In the latter event the commissioner shall make at the owner's expense an appraisal of the cost of construction or enlargement and determine what further fee, if any, is required. If a further fee is

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

required, the commissioner shall notify the owner by certified mail of the amount within 15 days including notice that permittee may appear within 60 days thereafter to protest the amount of the fee, in whole or in part and the sufficiency of the appraisal upon which such determination was based.

Subp. 12. **Issuance of impoundment approval.** Impoundment approvals may be necessary for Class I and Class II dams to allow adequate time for inspection before actual impoundment begins.

The type, location, hazard involved, and the purpose served by the dam will be considered in respect to the degree and nature of impoundment approval needed. Certain waste disposal dams which will not be constructed to maximum storage elevation in five years will require a series of impoundment approvals for various stages of construction.

Pending issuance of an impoundment approval (or reissuance in the event of termination) where required the owner of the dam shall not, through action or inaction, allow an impoundment.

The impoundment approval shall contain such terms and conditions as the commissioner may prescribe.

The commissioner may also revoke or amend the terms and conditions of any approval.

Subp. 13. **Performance reports.** The permittee may be required in the case of complex or hazardous dams to submit yearly a performance report detailing the instrumentation data and analysis and interpretation of these data as they relate to the safety of the dam and design assumptions. The frequency of submission may be modified if field conditions so dictate.

Statutory Authority: *MS s 105.535*

History: *17 SR 1279; L 2003 c 112 art 2 s 50; L 2009 c 101 art 2 s 109*
Published Electronically: *August 7, 2009*

6115.0420 LEGAL CLAIMS.

Any permit shall be permissive only and shall not be construed as estopping or limiting any legal claims of persons other than the state against the permittee, or as estopping or limiting any legal claims of the state against the permittee for violation of any of the terms or conditions of the permit.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0430 LIABILITY OF OWNER AND PERMITTEE.

Nothing in these parts shall be construed to relieve an owner of a dam or permittee of the legal duties, obligations, or liabilities incident to the ownership or operation of the dam.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0440 OWNER'S RIGHTS.

Nothing in these parts shall be construed to deprive any owner of such recourse to the courts.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0450 INSPECTIONS.

Owners of dams shall allow the commissioner prompt access to and inspection of all records, plants, structures, facilities, and operations at all reasonable times. Entry is subject to reasonable compliance with the owner's safety rules and avoidance of unreasonable impairment of or interference with construction and operation. Inspection shall be limited to testing and observing rather than supervising and shall not relieve the owner from the full responsibility of providing adequate inspection and supervision.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0460 COMPLIANCE WITH OTHER LAWS.

The owner of a dam shall comply with all other state and federal laws and regulations and shall obtain such other permits as may be required including particularly any laws and rules regarding mineland reclamation.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0470 ACQUISITION OF PROPERTY.

Where activities authorized by a permit involve the rights or interests of any other persons, or of any public interests, the permittee, before proceeding, shall acquire all necessary interests or permissions, including paying the costs of the alteration, relocation, or replacement of any publicly owned facility.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0480 ASSIGNMENT OF PERMITS.

Permits may be assigned in whole or in part only if the commissioner is notified and approves the assignment in writing. Provisions of the permit shall extend to and bind the successors in authority of the commissioner and the legally assigned successors in interest of the permittee.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0490 WARNING SYSTEMS AND EMERGENCY PROCEDURES.

Class I dam owners shall prepare and file for approval a contingency plan for notifying any persons whose lives, property, or health may be endangered by failure, misoperation, or other circumstances or occurrence affecting the dam, identifying most practical and expeditious means for warning considering the time factor involved based on the proximity of the dam to affected parties. If there is no feasible or practical means to provide for adequate evacuation warning in sufficient time if a catastrophe occurs the owner shall be responsible for notifying affected downstream property owners of that fact.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0500 PERMIT AND HEARING PROCEDURES.

Parts 6115.0300 to 6115.0520 are subject to the permit and public hearing provisions of Minnesota Statutes, sections 103G.251, 103G.295, 103G.297, and 103G.301 to 103G.315, including:

A. The commissioner must act on permit applications within 30 days of the time that all required data and fees are filed in the commissioner's office.

B. The commissioner may cancel or modify a permit at any time if the commissioner deems it necessary for any cause for the protection of the public interests.

C. Whether or not a dam is under permit, on determining that it is unsafe or needs repair or alteration, the commissioner shall notify the owner to repair, alter, or remove the dam as the exigencies of the case may require.

D. An order requiring immediate action is effective on the date thereof, but shall not be in effect for more than 30 days from that date unless the permittee is on the same date mailed written notice of the order which includes notice of a Minnesota Statutes, section 103G.311, public hearing on a date not more than 30 days from the date of the notice.

E. If at any time during construction of a project, the commissioner finds that the work is not being done in conformance with approved designs, plans, and specifications, except as provided in part 6115.0410, subpart 9, item A, subitem (2), the commissioner shall notify the permittee and shall order immediate compliance and may order that no further work be done until such compliance has been effected and approved.

F. If the permittee fails to comply with approved designs, plans, and specifications or if conditions are revealed which will not permit the construction of a safe dam, the permit may be revoked.

G. Initiating any work by the permittee, authorized in an issued permit or approval, constitutes acceptance of all terms and conditions contained therein.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *17 SR 1279*
Published Electronically: *June 11, 2008*

6115.0510 REQUIRED INFORMATION AND WAIVERS.

When necessary to assess the safety of a dam or proposed project, the applicant or owner may be required to submit additional information at personal expense. Whenever information or conditions required by these parts is unnecessary, the commissioner shall waive those provisions and shall allow appropriate revisions to make the requirements less burdensome.

Statutory Authority: *MS s 105.535*

History: *17 SR 1279*
Published Electronically: *June 11, 2008*

6115.0520 INSPECTION FEES.

Subpart 1. **Exemption.** No inspection fee shall be charged for dams owned or sponsored by a governmental agency or for any Class III dam for which the design, construction supervision, and inspection is provided by a federal agency.

Subp. 2. **Fee schedule.** The initial fee required by part 6115.0410, subpart 6, shall be based on the following formula and no fees pursuant to parts 6115.0010 to 6115.0040 shall be charged:

A. for the first $100,000 of estimated cost (as defined in part 6115.0320, that portion of engineering evaluations and studies relating to safety which is also part of the final design report performed for the applicant which were included with environmental assessment worksheets and with environmental impact statements required by law shall be subtracted provided that the applicant provides a notarized detailed accounting of expenditures), a rate of 2-1/2 percent;

B. for the next $400,000, 1-1/2 percent;

C. for the next $500,000, one percent;

D. one-half of one percent of all costs in excess of $1,000,000; and

E. if the final total cost exceeds the estimate, the difference as provided in part 6115.0410, subpart 11.

For dams which will not be constructed to maximum storage elevation within five years of the date construction begins (such as dams for storage of mining waste materials) computation will be based on applicant's work schedule outlining proposed staging and a certified estimate of costs based on staging and a certified estimate of costs based on staging intervals not exceeding five years in duration. At the end of each stage, or at intervals not exceeding five years in duration, until completion, the applicant shall file an affidavit of actual costs for each stage or interval not exceeding five years. Whenever the actual costs exceeds the estimate the applicant shall pay the difference.

Subp. 3. **Periodic fees.** Periodic fees shall be charged to owners for each year and inspection is made pursuant to part 6115.0360, subpart 3, of $30 per dam plus an additional fee based on

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

surface (as defined in part 6115.0320) of $0.01 per square foot for the first 1,000 and $0.001 for each square foot in excess of 1,000, payable on or before the end of the state fiscal year, June 30.

Subp. 4. **Annual records.** The commissioner shall keep annual records of inspection costs which shall be provided upon request of any applicant who paid inspection fees.

Statutory Authority: *MS s 105.535*
Published Electronically: *October 8, 2013*

WATER APPROPRIATION AND USE PERMITS

6115.0600 POLICY.

The purpose of these parts is to provide for the orderly and consistent review of permit applications for appropriation and use of waters of the state in order to conserve and utilize the water resources of the state in the public interest. In the application of these parts, the Department of Natural Resources shall be guided by the policies and requirements declared in Minnesota Statutes, section 84.083, and chapters 103A, 103B, 103E to 103G, and 116D.

Any appropriation must be consistent with laws and rules of federal, state, and local governments.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0610 PURPOSE AND STATUTORY AUTHORITY.

These parts set forth minimum standards and criteria pertaining to the regulation, conservation, and allocation of the water resources of the state, including the review, issuance, and denial of water appropriation applications and the modification, suspension, or termination of existing permits.

Further provisions for the administration of these parts are found in Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G. Permits for water appropriation for mining shall be in agreement with provisions of Minnesota Statutes, section 103G.297.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0620 SCOPE.

Permits shall be required for, and these parts shall apply to, any appropriation of waters of the state, except for the following:

A. Appropriation of water for domestic uses serving less than 25 persons for general residential purposes.

B. Test pumping of a groundwater source.

C. Withdrawal for any use at a rate not to exceed 10,000 gallons per day and totaling no more than 1,000,000 gallons per year.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. Agricultural field tile or open ditch drainage systems, including pumping, to remove water from crop lands. This shall not preclude the need for compliance with Minnesota Statutes, chapter 103E and for permits for changes in course, current, or cross-section of public waters in the event that the agricultural drainage system adversely affects public waters. Adverse effects on public waters may include partial or complete drainage of public waters, high water or flooding conditions on surrounding lands, and accelerated erosion and sedimentation.

E. Reuse and discharge of waters resulting from an appropriation of waters of the state for which a permit has been granted, subject to applicable laws, and rules of other state and federal governmental agencies.

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*

History: *L 1985 c 172*
Published Electronically: *June 11, 2008*

6115.0630 DEFINITIONS.

Subpart 1. **Scope; shall.** For the purpose of these rules, the terms or words defined in this part have the meanings given therein, except where the context clearly indicates otherwise. The word "shall" is mandatory, not permissive.

Subp. 2. **Aquifer.** "Aquifer" means any water-bearing bed or stratum of earth or rock capable of yielding groundwater in sufficient quantities that can be extracted.

Subp. 3. **Appropriation.** "Appropriation" shall have the meaning prescribed in Minnesota Statutes, section 105.37, subdivision 5, "appropriation includes but is not limited to taking, regardless of the use to which the water is put."

Subp. 4. **Artesian aquifer or confined aquifer.** "Artesian aquifer" or "confined aquifer" means a water body or aquifer overlain by a layer of material of less permeability than the aquifer. The water is under sufficient pressure so that when it is penetrated by a well, the water will rise above the top of the aquifer. A flowing artesian condition exists when the water flow is at or above the land surface.

Subp. 5. **Basin.** "Basin" means a depression capable of containing water which may be filled or partly filled with waters of the state. It may be a natural, altered, or artificial depression.

Subp. 6. **Commissioner.** "Commissioner" refers to the commissioner of the Department of Natural Resources or the commissioner's authorized representative.

Subp. 7. **Consumptive use or consumption.** "Consumptive use" or "consumption" refers to water withdrawn and not directly returned to the same waters as the source for immediate further use in the area.

Subp. 8. **Division.** "Division" means the Division of Waters, Department of Natural Resources.

Subp. 9. **Domestic use.** "Domestic use" means use for general household purposes for human needs such as cooking, cleaning, drinking, washing, and waste disposal, and uses for on-farm

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

livestock watering excluding commercial livestock operations which use more than 10,000 gallons per day and 1,000,000 gallons per year.

Subp. 10. **Dug pit.** "Dug pit" means an artificial excavation such as sump, trench, pond, water hole, or other basin constructed for the purpose of intercepting and capturing surface and ground water, and often involving groundwater under water table or unconfined conditions.

Subp. 11. **Groundwater.** "Groundwater" means subsurface water in the saturated zone. The saturated zone may contain water under atmospheric pressure (water table condition), or greater than atmospheric pressure (artesian condition).

Subp. 12. **Protected flow.** "Protected flow" is defined as the amount of water required in the watercourse to accommodate instream needs such as water-based recreation, navigation, aesthetics, fish and wildlife habitat, water quality, and needs by downstream higher priority users located in reasonable proximity to the site of appropriation.

Subp. 13. **Protection elevation.** "Protection elevation" is defined as the water level of the basin necessary to maintain fish and wildlife habitat, existing uses of the surface of the basin by the public and riparian landowners, and other values which must be preserved in the public interest.

Subp. 14. **Public water supply.** "Public water supply" refers to the various supplies of water used primarily for domestic supply purposes and obtained from a source or sources by a municipality, a water district, a person, or corporation where water is delivered through a common distribution system, as further defined in Minnesota Statutes, section 144.382, subdivision 4.

Subp. 15. **Safe yield for water table condition.** "Safe yield for water table condition" means the amount of groundwater that can be withdrawn from an aquifer system without degrading the quality of water in the aquifer and without allowing the long term average withdrawal to exceed the available long term average recharge to the aquifer system based on representative climatic conditions.

Subp. 16. **Safe yield for artesian condition.** "Safe yield for artesian condition" means the amount of groundwater that can be withdrawn from an aquifer system without degrading the quality of water in the aquifer and without the progressive decline in water pressures and levels to a degree which will result in a change from artesian condition to water table condition.

Subp. 17. **Water table aquifer or unconfined aquifer.** "Water table aquifer" or "unconfined aquifer" means an aquifer where groundwater is under atmospheric pressure.

Subp. 18. **Waters of the state.** "Waters of the state" means any waters, surface or underground, except those surface waters which are not confined but are spread and diffused over the land. "Waters of the state" includes all boundary and inland waters (Minnesota Statutes, section 103G.005, subdivision 17).

Subp. 19. **Watercourse.** "Watercourse" means any natural, altered, or artificial channel having definable beds and banks capable of conducting confined runoff from adjacent lands (Minnesota Statutes, section 103G.005, subdivisions 3, 5, and 13).

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 20. **Well.** "Well" means any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed where the intended use is for the location, diversion, or acquisition of groundwater (Minnesota Statutes, section 103I.005, subdivision 21).

Statutory Authority: *MS s 103G.515; 103G.531; 105.535*
Published Electronically: *June 11, 2008*

6115.0640 COORDINATION WITH OTHER AGENCIES.

Nothing in these parts is intended to supersede or rescind the laws, rules, regulations, standards, and criteria of other international, federal, state, regional, or local governmental subdivisions with the authority to regulate the appropriation of waters of the state. The issuance of a permit shall not confer upon an applicant the approval of any other unit of government for the proposed project. The department shall coordinate the review of permit applications with other units of government having jurisdiction in such matters.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0650 SEVERABILITY.

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof, shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 105.535*
Published Electronically: *June 11, 2008*

6115.0660 APPLICATION FOR PERMIT.

Subpart 1. **Requirement.** Applications shall be submitted for each surface or ground water source from which water is proposed to be appropriated. A separate application shall be required for the following:

A. for each distribution system if the water is used in more than one common distribution system;

B. for each well(s) completed in different aquifers if groundwater is to be appropriated from separate wells completed in more than one aquifer; and

C. for each basin or watercourse involved if surface water is to be appropriated from several different basins or watercourses.

Subp. 2. **Evidence of ownership.** The applicant must provide written evidence of ownership, or control of, or a license to use, the land overlying the groundwater source or abutting the surface water source from which water will be appropriated.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 3. **Information required.** All applicants shall submit the following information when it is reasonably available. Additional submittals may be required as prescribed in parts 6115.0680 to 6115.0720 and where deemed necessary by the commissioner in order to adequately evaluate the applications:

A. A completed application on forms supplied by the commissioner.

B. The required application fee (Minnesota Statutes, sections 103G.301, subdivisions 2 to 5, and 103G.315, subdivision 12).

C. Aerial photographs, maps, sketches, detailed plat, topographic maps, or other descriptive data sufficient to show:

(1) the location of the area of use;

(2) the outline of the property owned, or controlled by the applicant in proximity to the area of use;

(3) the location of the proposed point of appropriation such as well(s) location, stream bank pump(s) or the location of other facilities for appropriation of water;

(4) if ground water is involved, the location of test hole borings which have been drilled on the property from which the appropriation will be made.

D. Signed statement that copies of the application and accompanying documents have been sent to the mayor of the city, secretary of the board of supervisors of the soil and water conservation district, or the secretary of the board of managers of the watershed district if the proposed project is within a city or within or affects a watershed district or soil and water conservation district or a city (Minnesota Statutes, section 103G.301, subdivision 6).

E. Statement of justification supporting the reasonableness and practicality of use with respect to adequacy of the water source, amounts of use, and purposes, including available facts on:

(1) hydrology and hydraulics of the water sources involved, including for surface waters the applicant's analysis of the effect of proposed withdrawals on levels and flows and anticipated impacts, if any, on instream flow or lake level conditions to the extent that such facts are not already available to the commissioner;

(2) proposed pumping schedule including rates, times, and duration;

(3) amounts of water to be appropriated on a maximum daily, monthly, and annual basis;

(4) means, methods, and techniques of appropriation;

(5) alternative sources of water or methods which were considered, to attain the appropriation objective and why the particular alternative proposed in the application was selected.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

F. Information on any water storage facilities and capabilities and any proposed reuse and conservation practices.

G. Application for use of surface water shall include the following additional data:

(1) A contingency plan which describes the alternatives the applicant will utilize if at any time appropriation is restricted to meet instream flow needs or to protect the level of a basin. The contingency plan shall be feasible, reasonable, and practical; otherwise the applicant shall submit as part of the application a written statement agreeing in such case to withstand the results of no appropriation (Minnesota Statutes, section 103G.285, subdivision 6).

(2) For appropriation from natural basins or natural watercourses, facts to show that reasonable alternatives for appropriating water have been considered including use of water appropriated during high flows and levels and stored for later use and the use of ground water.

(3) For basins less than 500 acres in surface area the applicant shall notify all riparian landowners and provide the commissioner with a list of all landowners notified; attempt to obtain a signed statement from as many riparian landowners as the applicant is able to obtain stating their support to the proposed appropriation; and provide an accounting of number of signatures of riparian owners the applicant is unable to obtain (Minnesota Statutes, section 103G.285, subdivision 4).

H. Application for use of groundwater, except for agricultural irrigation (part 6115.0680) shall include the following data:

(1) test hole logs (if any) and water well record(s);

(2) hydrologic test data; and

(3) hydrologic studies, if the above data are insufficient to allow the commissioner to properly assess the capability of the aquifer system in the area of withdrawal or are inadequate to allow assessment of the effects of the proposed appropriation on the water resource and on nearby wells.

Subp. 4. **Waiver.** Whenever information required by parts 6115.0660 and 6115.0680 to 6115.0720 is unnecessary or inapplicable, the commissioner shall waive those requirements.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0670 COMMISSIONER'S ACTIONS ON PERMIT APPLICATIONS.

Subpart 1. **In general.** Upon receipt of the information required from the applicant under parts 6115.0660 and 6115.0680 to 6115.0720, where applicable, the commissioner shall take action on the application as follows.

Subp. 2. **Review and analysis of data.** Review and analysis of data:

A. The commissioner shall consider the following factors, as applicable:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) the location and nature of the area involved and the type of appropriation and its impact on the availability, distribution, and condition of water and related land resources in the area involved;

(2) the hydrology and hydraulics of the water resources involved and the capability of the resources to sustain the proposed appropriation based on existing and probable future use;

(3) the probable effects on the environment including anticipated changes in the resources, unavoidable detrimental effects, and alternatives to the proposed appropriation;

(4) the relationship, consistency, and compliance with existing federal, state, and local laws, rules, legal requirements, and water management plans;

(5) the public health, safety, and welfare served or impacted by the proposed appropriation;

(6) the quantity, quality, and timing of any waters returned after use and the impact on the receiving waters involved;

(7) the efficiency of use and intended application of water conservation practices;

(8) the comments of local and regional units of government, federal and state agencies, private persons, and other affected or interested parties;

(9) the adequacy of state water resources availability when diversions of any waters of the state to any place outside of the state are proposed;

(10) the economic benefits of the proposed appropriation based on supporting data when supplied by the applicant.

B. The commissioner shall further consider the following factors for appropriation from watercourses:

(1) historic streamflow records, and where streamflow records are not available, estimates based on available information on the watershed, climatic factors, runoff, and other pertinent data;

(2) physical characteristics such as discharge, depth, and temperature, and an analysis of the hydrologic characteristics of the watershed;

(3) aquatic system of the watercourse, riparian vegetation, and existing fish and wildlife management within the watercourse;

(4) frequency of occurrence of high and low flows;

(5) feasibility and practicability of off-stream storage of high flows for use in providing water supply during periods of normal low flows, when supply is limited by existing and anticipated use.

C. The commissioner shall further consider the following factors for appropriation from basins:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) total volume of water within the basin;

(2) slope of the littoral zone;

(3) available facts on historic water levels of the basin and other relevant hydrologic factors;

(4) cumulative long-range ecological effects of the proposed appropriation;

(5) natural and artificial controls which affect the water levels of the basin.

D. The commissioner shall further consider the following factors for appropriation of groundwater:

(1) type and thickness of the aquifer;

(2) subsurface area of the aquifer;

(3) area of influence of the proposed well(s);

(4) existing water levels in the aquifer and projected water levels due to the proposed appropriation;

(5) other hydrologic and hydraulic characteristics of the aquifer involved; and

(6) probable interference with neighboring wells.

Subp. 3. **Decision on applications.** The commissioner is authorized to grant permits, with or without conditions, or deny them. In all cases, the applicant, the managers of the watershed district, the board of supervisors of the soil and water conservation district, or the mayor of the city may demand a hearing in the manner specified in Minnesota Statutes, section 103G.311, subdivision 5, within 30 days after receiving mailed notice outlining the reasons for denying or modifying an application.

Decisions by the commissioner are further subject to the administrative provisions of Minnesota Statutes, sections 103G.241, 103G.251, 103G.295, 103G.297, and 103G.301 to 103G.315. These sections include information and requirements on procedure, authority, timing of actions, fees, notice, investigations, violations and penalties, and special provisions regarding mining operations.

Based on these statutory requirements and other applicable provisions of Minnesota Statutes, section 84.083, and chapters 103A, 103B, and 103E to 103G, the commissioner shall make decisions as follows:

A. No permit shall be granted if:

(1) for application involving diversion of any waters of the state, surface or ground water, to a place outside the state, the remaining waters in the state will not be adequate to meet the state water resources needs during the specified life of the diversion (Minnesota Statutes, section 103G.265, subdivision 2);

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(2) there is no conflict between competing users but the quantity of available waters of the state, in the area involved, are inadequate to provide the amounts of water proposed to be appropriated;

(3) the appropriation is not reasonable, practical, and does not adequately protect public safety and promote the public welfare (Minnesota Statutes, section 103G.315);

(4) the appropriation is not consistent with approved state, regional, and local water and related land resources management plans, provided that regional and local plans are consistent with statewide plans (Minnesota Statutes, section 103G.271, subdivision 2);

(5) there is an unresolved conflict between competing users for the waters involved and the conflict has not been resolved pursuant to provision of part 6115.0740.

B. Approval of any surface water appropriation application shall be further subject to the following:

(1) For all watercourses, proposals for appropriation during periods of flood flows and high water levels shall be given first consideration unless this is not practical, reasonable, or feasible (Minnesota Statutes, section 103G.261).

(2) For natural and altered watercourses, except for drainage ditches established under Minnesota Statutes, chapter 103E, consumptive appropriation may be limited consistent with Minnesota Statutes, section 103G.285, subdivision 2, provided that adequate data are available to set such limits for watercourses. Where protected flow is designated by the commissioner, no appropriation shall be allowed when the flow is below that protected flow.

(3) Permits to appropriate water for any purpose from streams designated trout streams by rule, pursuant to Minnesota Statutes, section 97C.021, shall be limited to temporary appropriations when not in conflict with the special designation, such as during periods of high flows or high water levels (Minnesota Statutes, section 103G.285, subdivision 5).

(4) For natural and altered basins the commissioner shall:

(a) Establish a protection elevation below which no appropriation shall be allowed (Minnesota Statutes, section 103G.285, subdivision 3, paragraph (b)).

(b) Limit the collective maximum annual withdrawals to not exceed a total volume of water amounting to one-half acre-foot per acre of surface water basin based on Minnesota Department of Natural Resources Bulletin No. 25, "An Inventory of Minnesota Lakes." The actual collective annual allocation may be considerably less than the maximum. This limitation is as provided by Minnesota Statutes, section 103G.285, subdivision 3, paragraph (a).

(c) For natural and altered basins less than 500 acres, an application shall not be approved if the commissioner determines that the proposed appropriation would lower the water level in the basin to an extent which would deprive the public and riparian property owners of reasonable use of and access to the water.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(5) The establishment of protection elevation and limitation on maximum withdrawals contained in units (a) and (b), shall not apply to artificial and altered basins constructed primarily for the purpose of storing high waters and flood flows as water conservation or contingency flow alternatives when such alternatives are approved by the commissioner.

(6) Protected flows and protection elevations shall be established for the purposes as defined in part 6115.0630 and shall be based on available information considered in subpart 2, items B and C. For new applications the proposed establishment of protected flows or protection elevations shall be part of the permit process outlined in subpart 3 including opportunity for public hearing. Existing permittees who will be affected by the proposed establishment of protected flows or protection elevations shall be notified of such proposals and shall be provided opportunity for public hearing before modification of their permits based on the procedures outlined in part 6115.0750, subpart 5, item B. Upon the submission of data set forth in part 6115.0670, subpart 2, item A or B for the specified watercourse segment or basin by a state agency agreeing to pay the costs of any necessary public hearings, the commissioner shall establish requested protected flows and elevations.

C. Approval of appropriation from ground water shall be further subject to the following:

(1) The amounts and timing of water appropriated shall be limited to the safe yield of the aquifer to the maximum extent feasible and practical.

(2) If the commissioner determines, based on substantial evidence, that a direct relationship of ground and surface waters exists such that there would be adverse impact on the surface waters through reduction of flows or levels below protected flows or protection elevations the amount and timing of the proposed appropriation from ground water shall be limited.

(3) Appropriation of ground water shall not be approved or shall be issued on a conditional basis in those instances where sufficient hydrologic data are not available to allow the commissioner to adequately determine the effects of the proposed appropriation. If a conditional appropriation is allowed, the commissioner shall make further approval, modification, or denial when sufficient hydrologic data are available.

(4) The commissioner shall limit the use of dug pits for appropriating water when such pits are so located that they may reasonably be expected to affect protected flows of watercourses or protection elevations of basins.

Subp. 4. **Waiver.** The commissioner shall waive any of the provisions of subpart 3 if it is determined that conditions are such that implementation of a provision would be unnecessary or inapplicable or if an applicant provides sufficient evidence to show just cause why such provision would not be reasonable, practical, or in the public interest. In the event the commissioner does not grant an applicant's request for waiver the applicant may demand a hearing.

Subp. 5. **Specific types of appropriation and use.** Additional requirements and decisions governing agricultural irrigation, public water supplies, dewatering, water level maintenance, and mining are also contained in parts 6115.0680 to 6115.0720.

Statutory Authority: *MS s 103G.315; 105.415*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *L 1985 c 172; L 1991 c 259 s 23*
Published Electronically: *June 11, 2008*

6115.0680 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR AGRICULTURAL IRRIGATION.

Subpart 1. **Additional application information.** For ground water appropriation, the applicant must submit to the commissioner the following data in addition to the requirements of part 6115.0660:

A. If the application is for use of groundwater from an aquifer system for which adequate groundwater availability data are available and therefore is designated by the commissioner as a Class A application, (Minnesota Statutes, section 103G.295, subdivision 3):

(1) copies of test hole log(s) to identify the aquifer the proposed well will penetrate;

(2) copies of the water well record(s) and production test data;

(3) additional aquifer test data as may be required by the commissioner if the test holes, water well records, and production test data are insufficient to allow the commissioner to properly assess the capability of the aquifer system in the area of withdrawal, or are inadequate to allow assessment of the effects of the proposed appropriation on other nearby wells.

B. If the application is for use of groundwater from an aquifer system for which inadequate groundwater availability data are available and therefore is designated by the commissioner as a Class B application, (Minnesota Statutes, section 103G.295, subdivision 3) the applicant shall supply the following additional information as required by Minnesota Statutes, section 103G.295, subdivision 4, including:

(1) copies of test hole log(s) to identify the aquifer the proposed well will penetrate;

(2) copies of water well record(s) and production test data;

(3) the anticipated groundwater quality in terms of the measures of quality commonly specified for the proposed water use, when existing data indicate the water supply is not suitable for irrigation;

(4) the location of each domestic well, for which information is readily available, located within the area of influence or within 1-1/2 mile radius of the proposed irrigation well, whichever is less;

(5) readily available information from water well records, reports, studies, and field measurements regarding the domestic wells within the area of influence or a 1-1/2 mile radius of the proposed irrigation well whichever is less, such as:

(a) owner's name, address, and phone number;

(b) depth of well in feet;

(c) diameter of well and casing type (concrete curb, steel, wooden, clay tile, etc.);

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(d) nonpumping water level (in feet) below land surface;

(e) age of well (when constructed);

(f) type of pump (shallow-jet, deep well jet, submersible reciprocating, etc.) and rate of discharge; and

(g) length of drop pipe in well;

(6) results of a pumping test of the aquifer system as required in Minnesota Statutes, section 103G.295, subdivision 4, paragraph (a), clause (5).

(7) The commissioner shall in any specific application, waive any of the requirements of subitems (1) to (6), when the necessary data are already available, as required in Minnesota Statutes, section 103G.295, subdivision 4.

Subp. 2. **Commissioner's actions.** The commissioner shall analyze and evaluate applications based on facts supplied by the applicant pursuant to parts 6115.0660 and subpart 1 of this part. Decisions shall be subject to the applicable procedures outlined in part 6115.0670 and based on recommendations of the soil and water conservation district, soil surveys, and other available data on soil characteristics relating to soil suitability for agricultural irrigation and adequacy of existing or proposed soil and water conservation measures in order to protect water quality and prevent erosion and sedimentation.

The commissioner shall determine the amount of water allowed to be used under the above paragraph based on:

A. Acreage of lands involved.

B. Climatic characteristics of the area involved.

C. Dominant soil types of the acreage to be irrigated and major crops to be irrigated.

D. Best available technology, methodology, and crop-water use requirement information including, but not limited to, Irrigation Guide for Minnesota, Soil Conservation Service, U.S. Department of Agriculture, Saint Paul, Minnesota, 1976.

E. When adequate data on soil moisture and local climatic conditions are available for the area, the commissioner may in cooperation with irrigators and agricultural experts establish an irrigation scheduling system to provide for improved conservation of water.

F. For irrigation from surface water, where stream flow or lake level records are unavailable or when available records indicate that flows or levels during the irrigation season would be inadequate if all potential riparian landowners would use the water for irrigation, the amount of appropriation shall be limited to no more than one-half acre-foot per acre of riparian land owned or controlled by the applicant except for appropriation for wild rice paddies as is provided in item G. Riparian lands for the purpose of these rules shall be those 40-acre tracts or government lots, or portions thereof, that directly abut a basin or watercourse. This provision shall apply until a protected

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

flow or protection elevation has been established in accordance with part 6115.0670, subpart 3, item B.

G. The amount of appropriation for wild rice paddies shall be based on consideration of climatic characteristics of the area and the best available technology relating to amounts of water needed to raise wild rice.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0690 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR PUBLIC WATER SUPPLIES.

Subpart 1. **Additional application information.** The applicant shall be required to submit to the commissioner all or portions of the following data in addition to the requirements of part 6115.0660:

A. the number of domestic users;

B. reasonable projection of population growth;

C. the number and type of industrial and commercial users of the public water supply system;

D. the amount of water to be supplied to domestic, industrial, and commercial users respectively;

E. other users by type of use and amount to be used from the public water supply system such as golf courses, recreational lake level maintenance, water transferred to other supply systems;

F. information regarding the quantity of the appropriated water to be used in distribution and waste water treatment facilities, not including volume of actual waste water; and

G. details on emergency plans for water shortage periods outlining public information programs, priorities for limitations of discretionary water use, and alternate sources of public water supplies.

Subp. 2. **Commissioner's actions.** The commissioner shall allow the appropriation of water for public water supply systems based on evaluation and analysis of the data submitted by the applicant under provisions of parts 6115.0660 and subpart 1 of this part and the procedures outlined in part 6115.0670 and subject to subpart 3.

Subp. 3. **Other requirements.** Appropriation permits issued to public water supply authorities shall be subject to requirements of Minnesota Statutes, section 103G.291, relating to critical water deficiency periods and restriction of nonessential uses.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0700 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR WATER LEVEL MAINTENANCE FOR BASINS.

Subpart 1. **Additional application information.** For water appropriation applications for the purpose of establishing and maintaining water levels for basins the applicant shall submit the following data in addition to the requirements of part 6115.0660:

A. information on the basin and proposed source of supply or source of discharge, including facts indicating how the water will be appropriated and discharged and the proximity of the basin to the proposed source of supply or source of discharge; and

B. information on the design of any discharge facility into or out of the basin.

Subp. 2. **Commissioner's actions.** The commissioner shall evaluate and make decisions on applications based on facts supplied by the applicant and subject to the applicable procedures outlined in part 6115.0670 and the following determinations:

A. effects on public welfare of the proposed appropriation;

B. the proposed appropriation is reasonable, practical, technically feasible, and effectively accomplishes its purpose;

C. the proposed appropriation will have minimal or no detrimental effect on the basin, the proposed source of supply, or the receiving water and property of riparian owners;

D. the quality of the water of the basin or the receiving water source will not be detrimentally impaired by the appropriation; and

E. the proposed appropriation is consistent with part 6115.0221, item A, subitem (2), public waters permits rules.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0710 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR DEWATERING.

Dewatering, which involves appropriation of water from ground or surface water sources for purpose of removing excess water, shall be subject to water appropriation permit requirements, unless otherwise exempted by these parts. The commissioner shall evaluate and make decisions on such application based on applicable provisions of parts 6115.0660 and 6115.0670 and the following additional requirements:

A. The applicant must show there is a reasonable necessity for such dewatering and the proposal is practical.

B. The applicant must show that the excess water can be discharged without adversely affecting the public interest in the receiving waters, and that the carrying capacity of the outlet to which waters are discharged is adequate.

C. The proposed dewatering is not prohibited by any existing law.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0720 ADDITIONAL REQUIREMENTS AND CONDITIONS FOR MINING AND PROCESSING OF METALLIC MINERALS AND PEAT.

Subpart 1. **Additional application information.** All applicants for permits for mining and processing of metallic minerals and peat must provide the following information in addition to the requirements of Minnesota Statutes, section 103G.297 and part 6115.0660:

A. all plans and specifications regarding withdrawal, use, storage, and disposal of waters of the state;

B. details of the rates, volumes, and source of water to be appropriated and consumed in the processing, including all losses such as uncontrolled seepage, evaporation, plant losses, and discharge volumes;

C. criteria used in estimating the proposed appropriation, distribution, and discharge based on climatic averages and extremes;

D. details of the sources, rates, and volumes of water released from the mining operations involved;

E. details of the hydrologic and hydraulic impacts and effects of the operation on the watershed(s) including changes in basins, watercourses, and groundwater systems.

Subp. 2. **Commissioner's actions.** The commissioner shall analyze, evaluate, and make decisions on appropriations for mining and processing of metallic minerals based on facts submitted by the applicant pursuant to subpart 1 and part 6115.0660, subject to the conditions outlined in part 6115.0670 and the following considerations:

A. The commissioner shall direct the applicant to utilize available surplus water from preexisting mining operations or facilities, whether owned or controlled by the applicant or others, whenever feasible and practical unless justification is provided on why such practice should not be allowed. If the commissioner finds that an existing permittee has available unused water, for which there is inadequate justification, the commissioner, after notice and opportunity for hearing, shall amend the existing permit to promote better utilization of the water.

B. The commissioner shall base the allocation of water on consideration of the legal requirements for water quality, the impact of the appropriation on those requirements, and the following order of priorities of water supply sources located within reasonable distance to the mining or processing site:

(1) runoff from the mining areas;

(2) water from active mine pits and tailing basins when such water is not utilized for other purposes or operations;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(3) water from existing mining operation reservoirs where such water is not utilized for other purposes or operations;

(4) water from other mining and processing operations;

(5) water from inactive mine pits;

(6) water from streams appropriated during periods of high flows;

(7) water from groundwater sources;

(8) water collected and stored behind off-stream impoundments;

(9) water collected and stored behind impoundments on streams; and

(10) water from natural basins greater than 500 acres in size.

C. If the disposal of excess water is necessary and if any mining operation in the area has caused or will cause a substantial reduction in watercourse flow, the commissioner shall where feasible and practical require the permittee to discharge excess water in a manner that would restore the flow. Such action shall consider the existing and anticipated use of excess water by higher priority users and must be in compliance with appropriate rules of the Minnesota Pollution Control Agency.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0730 WELL INTERFERENCE PROBLEMS INVOLVING APPROPRIATION.

Subpart 1. **For new applications.** If the commissioner determines that an adequate supply of water is available and that the proposed project is reasonable and practical as determined based on parts 6115.0670 and 6115.0680 to 6115.0720, but that there is a probable interference with public water supply well(s) and private domestic well(s) which may result in reducing the water levels beyond the reach of those wells, the following procedures shall apply:

A. The applicant shall be responsible for obtaining and providing to the commissioner, available information including depth, diameter, nonpumping and pumping levels, quality, and well construction details for all domestic and public water supply wells located within the area of influence of the proposed appropriation well.

B. The commissioner may require aquifer tests or other field tests to be conducted.

C. The commissioner shall determine the probable interference with the domestic and public water supply wells based on theoretic computations using available information regarding the aquifer characteristics obtained from aquifer tests and/or from hydrologic studies, and the probable effects of lowering the water levels in the domestic and public water supply wells due to the proposed appropriation in the area. For public supply wells only the probable interference with that portion which is used for domestic water supply is considered.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. The commissioner shall provide the prospective appropriator with an evaluation of the nature and degree of effect of the appropriation on the water levels of the domestic well(s) and public water supply well(s).

E. The commissioner shall not issue the permit until the applicant agrees to exercise any of the following options within 30 days after written notification by the commissioner:

(1) accept a modification or restriction of the permit application to provide for an adequate domestic water supply; or

(2) submit a written agreement signed by the applicant and all parties identified under item C as having probable interference. Such agreement shall outline the measures that will be taken to ensure maintenance of water supplies to such identified parties to the extent that would have existed absent the proposed appropriation. In cases where no agreement can be reached, the commissioner shall implement the settlement procedure identified in item D.

Subp. 2. **For existing permits.** If complaints are made to the commissioner by private domestic well owner(s) or public water supply authority regarding the effects of a water appropriation on the domestic water supplies, the following procedures shall be followed:

A. The commissioner shall provide complaint forms to the parties making the complaint, thereafter referred to as "complainant."

B. Upon receipt of the completed complaint forms the commissioner shall notify the permittee, the applicable watershed district, and the soil and water conservation district and any other governmental agency or person who may be affected or has expressed interest in the complaint.

C. The commissioner shall investigate and assess the complaint by:

(1) Analyzing and evaluating the submitted complaint forms, hydrologic facts and characteristics of the water supply systems involved.

(2) Requesting additional facts from the complainant(s) and the permittee when necessary. In order to assure that available data on domestic well(s) are provided, the complainant shall cooperate with the permittee in providing such facts as may be available and allowing the commissioner access to obtain necessary available facts. If the complainant does not cooperate in providing available facts or allowing the commissioner access to the domestic well(s), the commissioner shall dismiss the complaint.

(3) Conducting, if necessary, a field investigation.

(4) Additional hydrologic tests and evaluation shall be required if hydrologic information is unavailable or inadequate to make a determination of necessary facts in the matter. For irrigation appropriations, the timing and conduct of such tests shall be in accordance with the provision of Minnesota Statutes, section 103G.271, subdivision 3, relating to modifying or restricting appropriation for irrigation.

(5) In evaluating the probable influence of the water appropriation on the domestic well(s) and public water supply well(s) the commissioner shall consider whether the domestic

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

well(s) provides a dependable water supply while meeting the appropriate health requirements for the existing use of the affected well. For public water supply wells only the probable interference with that portion which is used for domestic water supply is considered.

D. Where adverse effects on the domestic well(s) are substantiated, the commissioner shall notify the permittee of the facts and findings of that complaint evaluation. In the event that the commissioner determines that the domestic water supply is endangered the commissioner shall, pursuant to part 6115.0750, subpart 7, unless a temporary solution is worked out, restrict or cancel the appropriation until such time as a decision has been made by either negotiation, settlement, or hearing.

E. The permittee shall within 30 days after written notification by the commissioner take appropriate action by exercising any of the following options:

(1) Requesting the commissioner to modify or restrict the permit in order to provide for an adequate domestic water supply.

(2) Negotiating a reasonable agreement with the affected well owner(s). If no agreement is reached, the settlement procedure outlined in subpart 4 shall apply; or

(3) Requesting a public hearing.

Subp. 3. **New domestic wells installed after appropriation permits have been issued.** In the event that new domestic wells, exempt from permit requirements, are installed in area of adequate ground water supplies where permits have been issued for appropriation the following shall apply:

A. It shall be the responsibility of the prospective new domestic well owner to ensure that the new domestic well will be constructed at adequate depth so that it will provide an adequate domestic water supply which will not be limited by the permitted appropriation.

B. Holders of valid permits for appropriation of water in areas where adequate water supplies are available shall not be responsible for well interference problems, involving new domestic wells exempt from permit, when such exempt domestic wells are installed subsequent to authorized appropriation.

Subp. 4. **Settlement.** If the applicant or permittee and the complainant(s) have been unable to negotiate a reasonable agreement pursuant to subparts 1, item E and 2, item E, the following procedure shall be implemented:

A. The applicant or permittee shall submit to the complainant a notarized written offer including a statement that the complainant must respond in writing to the commissioner within ten days from the receipt of the offer either accepting the offer or explaining why it is rejected. The offer must be submitted to the complainant with a copy to the commissioner within 40 days after the receipt of the written notification provided in subparts 1, item E and 2, item E, based on the following:

(1) If an existing domestic well provides an adequate domestic water supply which meets state health standards, and such well no longer serves as an adequate supply because of the

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

proposed or permitted appropriation in the vicinity the applicant or permittee shall be responsible for all costs necessary to provide an adequate supply with the same quality and quantity as prior to the applicant's or permittee's interference.

(2) If an existing well provides an adequate domestic water supply but does not meet state health standards and such well would no longer serve as an adequate supply because of the proposed or permitted appropriation in the vicinity, the applicant or permittee shall be responsible for that portion of costs of providing an adequate water supply, but shall not be responsible for those costs necessary to bring the domestic well(s) to state health standards.

B. The complainant shall, within ten days from the receipt of the notarized written offer, respond to the commissioner in writing either accepting the offer or making argument on why the offer is not reasonable. If no response is received from the complainant, within the time limit, the commissioner shall dismiss the complaint.

C. If the offer is not accepted, the commissioner shall make a decision based on the written offer and arguments and available facts, within ten days as follows:

(1) that the applicant or permittee has submitted a reasonable offer, the commissioner shall issue or continue the permit involved;

(2) that the applicant or permittee has not submitted a reasonable offer, the commissioner, after notice and opportunity for hearing, shall deny, modify, or terminate the permit involved;

(3) that there is a need for a public hearing in which case it is ordered.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0740 WATER USE CONFLICTS.

Subpart 1. **Conflict defined.** For the purpose of these rules a conflict occurs where the available supply of waters of the state in a given area is limited to the extent that there are competing demands among existing and proposed users which exceed the reasonably available waters. Existing and proposed appropriations could in this situation endanger the supply of waters of the state so that the public health, safety, and welfare would be impaired.

Subp. 2. **Procedure.** Whenever the total withdrawals and uses of ground or surface waters would exceed the available supply based on established resource protection limits, including protection elevations and protected flows for surface water and safe yields for groundwater, resulting in a conflict among proposed users and existing legal users the following shall apply:

A. In no case shall a permittee be considered to have established a right of use or appropriation by obtaining a permit.

B. The commissioner shall analyze and evaluate the following:

(1) the reasonableness for use of water by the proposed and existing users;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(2) the water use practices by the proposed and existing users to determine if the proposed and existing users are or would be using water in the most efficient manner in order to reduce the amount of water required;

(3) the possible alternative sources of water supply available to determine if there are feasible and practical means to provide water to satisfy the reasonable needs of proposed and existing users.

C. If conflicts can be resolved by modifying the appropriation of the proposed and existing users, the commissioner shall do so.

D. If conflicts cannot be resolved through modification of proposed and existing permits the commissioner shall base the decision regarding issuance of new applications and retention, modification, or termination of existing permits on the basis of existing priorities of use established by the legislature as follows:

(1) If the unresolved conflict involves users who are or would be in the same priority class, the commissioner shall require the proposed users and existing permitted users to develop and submit a plan which will provide for proportionate distribution of the limited water available among all users in the same priority class. The commissioner shall withhold consideration of new applications and shall, if the existing permitted appropriations endanger the supply of waters of the state, suspend or limit existing permits until a plan is approved by the commissioner.

The plan must include proposals for allocating the water which address the following: possible reduction in the amounts of appropriation so that each user would receive a proportionate amount of water for use; and possible restrictions in the timing of withdrawals so that each user would be allowed to withdraw a proportionate share of water for use over certain periods of time.

If the commissioner approves the proposed plan, new permits will be issued and existing permits will be amended in accordance with that plan.

If the commissioner determines that the proposed plan is not practical or reasonable, the commissioner shall develop a new plan or modify the proposed plan to provide proportionate share of water among the users involved. The commissioner shall issue new permits and amend existing permits based on that plan.

(2) If the unresolved conflict involves users who are or would be in a different priority class the available water supply shall be allocated to existing and proposed users based on the relative priority of use. Highest priority users shall be satisfied first. Any remaining available water supply shall be allocated to the next succeeding priority users, until no further water is available. Users in the same priority class shall be offered the same options as provided in subitem (1).

Subp. 3. **Notice and hearing.** All actions by the commissioner shall be made after notice and opportunity for public hearing.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0750 PROVISIONS AND CONDITIONS OF WATER APPROPRIATION PERMITS.

Subpart 1. **In general.** Water appropriation permits shall include the following provisions and conditions, unless otherwise required by law.

Subp. 2. **Term of permits.** Permits shall be issued for temporary or for long-term appropriation.

Temporary permits involve a one-time, limited life, not more than 12 months, nonrecurring appropriation of waters of the state, such as for highway construction, exploratory drilling for minerals, hydrostatic testing of pipelines and other short-term projects. Requested time extensions shall be permitted, but in no case shall the total length of time the permit remains in force exceed two years.

Long-term permits will remain in effect subject to applicable permit provisions and conditions of the permit, the law, and these parts, provided that in cases where the permittee is not the landowner of record, the term of the permit shall be the same as that of the property rights or license held.

Subp. 3. **Monitoring.** Monitoring:

A. All permittees shall measure and keep monthly and yearly records of the quantity of water used or appropriated at the point of taking from each source under permit.

B. Each installation for appropriating or using water shall be equipped with a device or employ a method to measure the quantity of water appropriated to within ten percent of actual withdrawal.

The commissioner shall determine the method to be used for measuring water appropriated based on: the quantity of water appropriated or used; the source and location of the appropriation; the method of appropriating or using water; other facts supplied by the permittee.

The commissioner shall require flow meters to be used whenever the rate of appropriation is greater than 1,500 gallons per minute, unless the permittee can show justification why flow meters cannot practically be used or are not necessary considering the factors contained in the two preceding paragraphs. Such justification must be supported by facts which indicate the technical difficulties which would be encountered if flow meters were required.

C. For surface water appropriations, where applicable, the permittee shall measure flows or levels in the watercourse or basin at a specific gauge designated by the commissioner and located within the area of appropriation. The commissioner shall require permittees to pay necessary costs of establishing and maintaining such gages as provided in parts 6115.0010 to 6115.0100, rules for permit fees.

For groundwater appropriation, the commissioner, based on availability of hydrologic data on the aquifer involved, frequency and rate of pumping, and probability of conflict or well interference, shall require the permittee to measure and keep records of the water levels in each production well at reasonable times prescribed in the permit. Observation wells may be required as a condition of the permit to better evaluate hydrologic conditions and effects in areas where hydrologic data are

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

unavailable, where probable conflict or well interference problems may occur and where such wells are required by law.

Subp. 4. **Reporting.** Annual calendar year monthly records of the amount of water appropriated or used and the water level measurements shall be recorded for each installation. Such readings and the total amount of water appropriated and used shall be reported annually to the commissioner, on or before February 15 of the following year upon forms to be supplied by the commissioner unless otherwise specified in the permit.

Such records shall be submitted with an annual water appropriation processing fee as required by Minnesota Statutes, sections 103G.271, subdivision 6, and 103G.281, subdivision 3, for each permit whether or not any water was appropriated during the year.

Additional information shall be required such as acreage irrigated, identification of water disposal sites, and amount of water discharged, when necessary for the statewide water information system (Minnesota Statutes, section 103G.275, subdivision 2).

Failure to report and pay the fee shall be sufficient cause for terminating a permit 30 days following written notice by the commissioner of the violation of the permit.

No fee is required from any state agency as defined in Minnesota Statutes, section 16B.01, subdivision 2, or any federal agency.

Subp. 5. **Amendments to permits.** Amendments to permits:

A. Major modification of any water appropriation permit shall not be made before obtaining the written permission from the commissioner. Major modification includes changes such as substantial increase or decrease in the rate and quantity of water withdrawn, any change in source of appropriation or substantial change in the amount of land irrigated, when applicable.

Request for amendment can be made by letter or on forms supplied by the commissioner. New applications shall be required when there are changes in the source of supply, the purpose of appropriation, or when the proposed increases in rates and amounts of water would probably create conflict or well interference.

Requests for amendments shall be reviewed as if they were for a new application, subject to provisions of parts 6115.0600 to 6115.0800.

B. Pursuant to authority in Minnesota Statutes, section 103G.315, subdivision 11, the commissioner may modify or amend any existing permits based on the following procedures and the criteria in parts 6115.0670 to 6115.0720, where applicable.

The commissioner shall notify the permittee of the intent to amend the permit. The notice will include details on modifications to be implemented by the permittee and the timing to complete the modifications.

The permittee shall respond within 30 days from receipt of the notice. Such response period shall be thereafter extended by the commissioner for good cause shown.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

If no response is received in 30 days and no extension of response time is authorized by the commissioner, the proposed amendments shall be made.

The commissioner based on the permittee's response and the criteria established in these rules shall either modify the proposed amendment or adopt the original proposed amendment.

C. All amendments and modifications are made after notice and opportunity for hearing.

Subp. 6. **Transfers or assignments of permits.** If the property involving a water appropriation permit is sold, transferred, or assigned to another person, the permit may be transferred to the transferee without the necessity of reapplication, subject to the following.

The transferee shall, within 90 days after date of property sale, transfer, or assignment, or within a longer period of time allowed by the commissioner for good cause shown, submit written notification to the commissioner stating the intention to continue the appropriation as stated in the permit. If the transferee intends to make major modifications to the existing permit, a new application shall be required subject to the provisions of subpart 5.

No permit is assigned except with the written consent of the commissioner.

Subp. 7. **Limitations on permits.** All permits issued by the commissioner since 1949 are subject to the provisions of Minnesota Statutes, section 103G.315, subdivision 11, relating to cancellation and conditions of permits and Minnesota Statutes, section 103G.315, subdivisions 2 to 6, 8, and 9, relating to terms and reservations with respect to the amount and manner of such use or appropriation or method of construction or operation of controls as appears reasonably necessary for the safety and welfare of the people of the state.

The commissioner, subject to the terms and conditions of such existing permits, may modify, restrict, or cancel an existing appropriation or use until such time as a decision has been reached by either negotiation, settlement, or after a public hearing. If a permit does not contain a provision which restricts appropriation or use for the protection of safety or welfare of the people of the state the commissioner cannot modify or restrict an existing appropriation until opportunity is provided for a public hearing and where ordered a public hearing has been completed.

Subp. 8. **Terminations.** Permits shall be terminated under the following:

A. Request by the permittee.

B. When any of its provisions are violated.

C. When the permittee sells, transfers, or assigns the property described in the permit and the transferee does not wish to continue appropriating.

D. Upon finding that the permittee has violated the provisions of any applicable laws and rules.

E. Where the permittee has not for five consecutive years, from the date of issuance of the permit, appropriated the water. Such time shall be extended by the commissioner for good cause shown.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

F. When the lease or contract for deed is forfeited or canceled.

G. Permits for agricultural irrigation shall be subject to termination by the commissioner upon justifiable recommendation of the supervisors of the soil and water conservation district, wherein the land irrigated is located, regarding the inadequacy of the soil and water conservation measures.

H. When the commissioner deems it necessary for the conservation of the water resources of the state or in the interest of public health, safety, and welfare.

I. When the commissioner deems it necessary pursuant to parts 6115.0730 and 6115.0740.

J. Any action pursuant to items B and D to I shall be subject to appropriate notice and opportunity for hearing, except as provided in subpart 7.

K. In the case of permits for mining issued in conjunction with Minnesota Statutes, section 103G.297, procedures for termination shall be subject to provisions of Minnesota Statutes, section 103G.297, subdivision 8.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0760 LOCAL PERMITS.

The commissioner, pursuant to Minnesota Statutes, section 103G.271, subdivision 4, shall delegate to municipal, county, or regional level of government the authority to process and approve permit applications for the appropriation and use of waters of the state in amounts of more than 10,000 gallons per day and more than 1,000,000 gallons per year, but less than 3,600,000 million gallons per year. Such delegation shall be made at the municipal, county, or regional level which means a governmental entity, or several governmental entities in combination, having authority or jurisdiction over areas of geographical extent beyond the limits of a single county, or a watershed district. The delegation by the commissioner shall be subject to the following requirements:

A. The authorized unit of government has established an administrative process which includes provisions for establishing a water appropriation management planning process consistent with part 6115.0810.

B. The review and approval of applications are consistent with the applicable provisions of these parts.

C. A formalized agreement is made and signed by the commissioner and the appropriate municipal, county, or regional level authority involved.

D. Copies of all applications and records of local actions on applications are provided to the commissioner upon receipt and action.

E. Records of water appropriation amounts and the processing fee shall be submitted by the permittee to the commissioner as required by part 6115.0750, subparts 3 and 4, and Minnesota Statutes, sections 103G.271, subdivision 6, and 103G.281, subdivision 3.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0770 WATER CONSERVATION.

In order to maintain water conservation practices in the water appropriation and use regulatory program it is necessary that existing and proposed appropriators and users of waters of the state employ the best available means and practices based on economic considerations for assuring wise use and development of the waters of the state in the most practical and feasible manner possible to promote the efficient use of waters.

Based on data submitted by applicants and permittees and current information on best available water conservation technology and practice the commissioner, in cooperation with the owners of water supply systems, may analyze the water use practices and procedures and may require a more efficient use of water to be employed by the permittee or applicant, subject to notice and opportunity for hearing.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0780 ABANDONMENT OF WELLS.

The permittee shall notify the commissioner prior to abandoning, removing, covering, plugging, or filling the well or wells by means of which a water appropriation was made. The commissioner shall require abandonment procedures and methods consistent with the Minnesota Department of Health rules, parts 4725.2300 to 4725.3200.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0790 FIELD INVESTIGATIONS.

In order to fully evaluate water appropriations, the commissioner shall conduct field investigations to determine the nature and scope of the appropriation and the impact it has or will have on water and related land resources. Such field inspection shall be made in a timely fashion and shall be coordinated with one or more of the following divisions of the department: Enforcement, Fish and Wildlife, Forestry, Minerals, Lands, and Parks and Recreation. A fee shall be charged for field inspections subject to rules for permit fees, part 6115.0080.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0800 INFORMATION ON APPROPRIATION PERMIT LAWS.

The applicants or existing permittees shall, upon request to the commissioner, be furnished copies of applicable portions of the law or synopsis, where they exist, relating to their proposed or existing appropriation.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

6115.0810 WATER APPROPRIATION AND USE MANAGEMENT PLANS.

Subpart 1. **In general.** In order to address the provisions of Minnesota Statutes, sections 103B.155, 103G.261, 103G.265, and 103G.271, subdivision 2, the commissioner, in cooperation with other state and federal agencies, regional commissions and authorities, local governments and citizens, establishes the following process for the preparation and implementation of the elements of any state, regional, and local plan relating to water appropriation and use.

Subp. 2. **Criteria and procedures.** Since the availability, distribution, and utilization of waters of the state and the character and use of related land resources vary considerably throughout the state, a comprehensive water appropriation management planning process must be based on these considerations and according to the following principles and procedures:

A. Water appropriation management plans should be prepared for specific definable areas of the state on consideration of:

(1) The hydrologic and physical characteristics of the water and related land resources for which a management plan is necessary. The area must be of sufficient size and areal extent so that the interrelationship of geohydrologic and climatic factors can be adequately defined and managed.

(2) The determination by the commissioner of the need for establishment of a water appropriation management plan for the waters of the state within a specific definable area based on:

(a) areas where development of the waters of the state is, or is likely to, increase considerably within the next five to ten years;

(b) areas where severe water availability problems exist or are soon likely to exist;

(c) areas where there are adequate facts and available geohydrologic data relating to the availability, distribution, and use of the waters of the state and where there is local interest in establishing water appropriation management plans.

B. Upon establishment of the need for a water appropriation management plan pursuant to item A, the commissioner shall establish a management planning process including procedures, a public participation process, and development of a planning team consisting of representatives of the department, permittees, any other interested, concerned, and involved government or citizen group listed in subpart 1 to review and cooperate in preparation of the plan.

Subp. 3. **General requirements and contents of plans.** Every water appropriation plan should, at a minimum, include:

A. An evaluation of the amount and dependability of information on the hydrologic systems of the area and the adequacy of the information to provide necessary facts on the amounts of water

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

which can be reasonably withdrawn from the waters of the state in the area without creating major environmental problems or diminishing the long-term seasonal supply of water for various purposes. This will provide essential background information for establishing protected flows and protection elevations, part 6115.0670, subpart 3, item B, subitem (6).

B. An evaluation of data on stream quality and flows, lake water quality and levels, groundwater quality and levels, and climatic factors. This will provide essential data useful to the applicant and the commissioner in permit application considerations, parts 6115.0660 to 6115.0720.

C. An evaluation of present and anticipated future use of waters and lands and the amounts and distribution of use within the area. This will facilitate the determinations necessary under part 6115.0670, subpart 2, item A, subitem (2).

D. An evaluation of the problems and concerns relating to use of the waters within the area.

E. Water conservation alternatives and methods and procedures for dealing with water shortages or excesses during periods of deficient or excess water. See parts 6115.0660, subpart 3, item F; 6115.0690, subpart 1, item G; and subpart 2 of this part.

F. Considerations of the relationship of the water appropriation and use management plan to other water resources programs of the state, such as floodplain management, shoreland management, water surface use management, water quality management, soil and water conservation management, and agricultural land management.

Statutory Authority: *MS s 103G.315; 105.415*
Published Electronically: *June 11, 2008*

LAKE IMPROVEMENT DISTRICTS

6115.0900 PURPOSE.

In order to provide for the orderly establishment of lake improvement districts in a manner that will preserve and protect the lakes of Minnesota and increase and enhance the use and enjoyment of these lakes, the commissioner of the Department of Natural Resources does hereby provide guidelines, criteria, and standards for establishment of lake improvement districts by counties, cities, and towns, as authorized by Minnesota Statutes, sections 103B.511 to 103B.581, 103G.605, 103G.621, and 459.20, in furtherance of the policies declared in Minnesota Statutes.

These rules establish minimum guidelines, criteria, and requirements relating to:

A. procedures by which proposed lake improvement districts shall be reviewed prior to establishment;

B. standards and criteria which all proposed lake improvement districts shall meet before establishment, modification, or termination.

Statutory Authority: *MS s 103B.511; 378.41*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0910 SCOPE.

These parts shall apply to all existing and proposed lake improvement districts. These parts shall not apply to lake conservation districts established by special legislation of the Minnesota state legislature.

Statutory Authority: *MS s 378.41*
Published Electronically: *June 11, 2008*

6115.0920 DEFINITIONS.

Subpart 1. **Shall.** For the purpose of these parts, certain terms or words used herein shall be interpreted as follows: the word "shall" is mandatory, not permissive.

Subp. 2. **Agency.** "Agency" means the Minnesota Pollution Control Agency.

Subp. 3. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources or authorized representative.

Subp. 4. **Direct drainage basin.** "Direct drainage basin" means that portion of a lake's total watershed which is not drained to an upstream water basin, as defined herein. The determination of size and physical limits of a lake's direct drainage basin shall be made by the commissioner.

Subp. 5. **District boundaries.** "District boundaries" means, for the purpose of these parts, the territorial boundaries of a lake improvement district. All lands and waters within the direct drainage basin, as defined herein, shall be included within the district boundaries, except those exclusions for which written approval is obtained from the commissioner. The boundaries shall include a sufficient amount of the lake's watershed and related land to develop and implement feasible solutions to the problems the district intends to address. The boundaries shall also include all lands and waters which can reasonably be considered adversely affected by the proposed programs, plans, or actions of the lake improvement district.

Subp. 6. **Lake.** "Lake" means, for the purpose of these parts, any public water basin identified and classified in the shoreland management ordinances of the local county or municipal unit of government.

Subp. 7. **Lake improvement district.** "Lake improvement district" means a district formed around a lake in accordance with Minnesota Statutes, sections 103B.501 to 103B.581. A lake improvement district is a local unit of government established by resolution of appropriate county boards and/or city governing bodies, or by the commissioner, for the implementation of defined lake management projects and for the assessment of the costs thereof.

Subp. 8. **Natural hydrologic boundaries.** "Natural hydrologic boundaries" means the boundaries of a lake's direct drainage basin, as defined herein.

Subp. 9. **Resident.** "Resident" means a person 18 years of age or older who meets the residency requirements of Minnesota Statutes, section 200.031.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 10. **Resident owner.** "Resident owner" means a Minnesota resident who is the owner of land or the contract purchaser of land within the boundaries of a lake improvement district.

Subp. 11. **Water basin.** "Water basin" means an enclosed basin normally partly or completely filled with water. The water basin may have inlet and outlet streams, it may have only an inlet or outlet, or it may be completely enclosed.

Subp. 12. **Watershed.** "Watershed" means the entire surface drainage area that contributes water to a lake.

Statutory Authority: *MS s 103B.511; 378.41*

History: *17 SR 1279*

Published Electronically: *June 11, 2008*

6115.0930 SEVERABILITY.

The provision of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 378.41*

Published Electronically: *June 11, 2008*

6115.0940 GOALS FOR LAKE IMPROVEMENT DISTRICTS.

Proposals for the establishment of lake improvement districts shall be evaluated according to the degree to which they promote the following goals:

A. lake protection and rehabilitation;

B. protection and enhancement of environmental values by preventing degradation of fish and wildlife habitat, surface and ground water quality, natural beauty and unique scientific values, recreational values, and the quality of life generally;

C. preservation of the public rights in the public waters of the state and to provide the public use of the lake consistent with the preservation of environmental values;

D. ensuring local involvement in the project and a commitment to future lake management;

E. conformity with federal, state, regional, and local laws, rules, and water and related land management policies; and

F. fair and objective resolution of conflicts between competing lake related interests in and around the district.

Statutory Authority: *MS s 378.41*

Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0950 ELIGIBILITY FOR LAKE IMPROVEMENT DISTRICTS.

The types of lake improvements in items A to H are eligible for the creation of a lake improvement district:

A. studying the sources of and solutions to lake problems;

B. preserving and improving water quality by means of water and related land management, excluding land use zoning authority; and in-lake water treatment;

C. sedimentation and siltation control;

D. shoreline erosion control;

E. aquatic nuisance control;

F. preserving and improving fish and wildlife habitat;

G. preserving and improving recreational potential of the lake; and

H. any other purposes approved by the county board pursuant to Minnesota Statutes, sections 103B.551, subdivision 3; 103G.605; and 103G.621.

Statutory Authority: *MS s 103B.511; 378.41*
Published Electronically: *June 11, 2008*

6115.0960 CRITERIA AND STANDARDS FOR ESTABLISHMENT OF LAKE IMPROVEMENT DISTRICTS.

Subpart 1. **In general.** Proposals for the establishment of lake improvement districts shall be evaluated based on the extent to which they demonstrate the following.

Subp. 2. **Local need for district.** The proposal shall demonstrate the need for the district and why another unit of government with similar powers, or a voluntary lake association, cannot or will not satisfactorily accomplish the district's proposed purposes.

Subp. 3. **Appropriateness of proposed boundaries.** The proposed boundaries shall be consistent with district boundaries as defined in part 6115.0920. The proposed boundaries shall include all lands and waters within the lake's direct drainage basin, unless justification is provided for including a lesser area and approved in writing by the commissioner. The proposed boundaries shall include a sufficient amount of the lake's watershed and related land to develop and implement feasible solutions to the identified problems. The proposed boundaries shall include those lands and waters which can reasonably be considered adversely affected by the proposed actions of the district. The proposed boundaries shall be delineated so as to provide appropriate public representation and the equitable distribution of benefits and levying of costs.

Subp. 4. **Appropriateness of proposed purposes.** The proposed purposes shall be consistent with existing state, federal, regional, and local laws, policies, objectives, and plans pertaining to water and related land management, fish and wildlife habitat, surface and ground water quality, natural beauty and unique scientific values, economic and recreation values, and the quality of life.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

The proposed purposes shall be consistent with the public rights in the public waters of the state. When a district is proposed for the purpose of conducting a feasibility study of the sources of and solutions to lake problems, the proposal shall demonstrate an understanding that subsequent lake restoration measures may require modification of the district's boundaries and statement of purposes, pursuant to part 6115.0980, subpart 1, and Minnesota Statutes, section 103B.575.

Subp. 5. **Technical feasibility of proposed plans and programs.** The proposal shall demonstrate the technical feasibility of the proposed plans and programs, or provide for the determination of technical feasibility.

Subp. 6. **Adequacy of proposed means of financing.** The proposal shall demonstrate capability of raising sufficient funds to meet district purposes, to ensure continuity of district operations, and to meet the requirements of these parts.

Subp. 7. **Adequacy of procedures for planning, decision-making, and public involvement.** The proposal shall assure consideration of the interests of concerned citizens both within and outside the boundaries of the proposed district. The proposal shall include the identification of varying and often conflicting interests regarding water and related land management in and around the proposed district, and procedures to assure the consideration of such diverse interests so that decisions are made in the best overall interests of fairness and public health, safety, and welfare.

Subp. 8. **Public access.** The proposed plan shall provide for public access when adequate public access consistent with size of the lake, the extent of public interest in using the lake, and the combined uses of the lake is unavailable. Service charges may not be imposed on the use of a public access if other units of government cost share the acquisition, development, or maintenance of the public access.

Subp. 9. **Adequacy of long-range monitoring of environmental effects of district programs.** The proposed plan shall demonstrate an understanding of potential environmental effects of the proposed district plans and programs, and provide for a long-range monitoring of such effects.

Subp. 10. **Coordination with other special purpose districts.** The proposal shall demonstrate how the proposed district programs will be coordinated with existing special purpose districts formed for water and related land management. Examples of such units of government are watershed districts, sanitary districts, drainage and conservancy districts, lake conservation districts, and soil and water conservation districts. Lake improvement districts shall not be established where a special purpose unit of government for water and related land management exists which can implement the purposes of the proposed lake improvement district, unless written approval is acquired from such unit of government or from the commissioner. The proposal should demonstrate efforts in good faith to resolve at the local level any conflicts between an existing special purpose district and the proposed lake improvement district.

Statutory Authority: *MS s 103B.511; 378.41*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0970 CREATION OF LAKE IMPROVEMENT DISTRICT.

Subpart 1. **Petition or county board document.** A county board document proposing the creation of, or a petition to create, a lake improvement district shall contain the following elements:

A. A written statement of lake problems and objectives.

B. The proposed type or types of water and related land resource management programs to be undertaken by the proposed district. This shall include a detailed statement of intended studies, management programs, remedial actions, and construction projects.

C. A statement of the means by which the programs will be financed.

D. A map showing the boundaries of the proposed lake improvement district. The map shall show the number and location of permanent homes and seasonal dwellings in the district. The scale of the map, and basic geographical information, such as range, township, and section numbers, shall be clearly indicated on the map.

E. The number of directors proposed for the district.

F. Copies of local ordinances which regulate use of the lake or any public access.

G. Any information indicating the degree of local interest and commitment to future management.

H. The identification of any lands and waters which may be adversely affected by the implementation of district purposes, and a preliminary assessment of these adverse effects.

I. A statement outlining the adequacy and ownership of public accesses, including public lands and beaches.

J. An estimate of the total equalized valuation of the property within the district.

K. Any other information demonstrating accordance with the criteria and standards for establishment as contained in part 6115.0960.

Subp. 2. **Submission of petition or resolution.** Initial submittal of petition or resolution to county board, the commissioner, and the agency for:

A. Creation by petition. No later than five days after the official filing of a petition for the establishment of a lake improvement district with the county board, the citizens or organization sponsoring the petition shall provide a certified copy of the petition to the commissioner and the agency. This is necessary in order to facilitate preliminary review of the proposed district boundaries prior to the notification of the public hearing.

B. Creation by resolution. At least 40 days prior to the public hearing, the county board shall provide a certified copy of the document containing the information required by this part to the commissioner and the agency. This is necessary to facilitate preliminary review of the proposed district boundaries prior to notification of the public hearing.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 3. **Notification of public hearing.** At least 21 days prior to the public hearing, the county board shall give notice of the public hearing to the commissioner and the agency, and make a reasonable attempt to notify every resident and every resident owner within the proposed district of the pending resolution or petition and the public hearing. A reasonable attempt to notify shall consist of mailing notice to the last known address of each landowner within the proposed district, publication of notice in two successive issues of a newspaper widely circulated in the proposed district, and posting notice in public buildings and several leading commercial establishments in or near the proposed district, as appropriate and reasonable. All local and regional units of government, special purpose districts, and development commissions within and adjacent to the boundaries of the proposed district shall be given notice of the public hearing. All corporations and utilities owning real estate or corporate property within the proposed district shall be given notice of the public hearing.

As part of the notification procedure, a statement shall accompany the notice setting forth the following:

A. a description of the proposed purposes, programs, funding, and boundaries of the proposed district, and the name proposed for the district;

B. the time and place of the public hearing; and

C. the following paragraph shall be included:

"The establishment of the proposed lake improvement district requires review by the commissioner of natural resources and the approval of the (as appropriate) county board(s) (and/or city governing body). Concerned citizens may submit evidence at a public hearing to be held prior to the passage of any resolution establishing the proposed lake improvement district. Concerned citizens may also submit evidence and opinions to the commissioner of natural resources. A copy of the petition (or document, as appropriate) for the establishment of the lake improvement district is available for public review at the (as appropriate) county courthouse (or other appropriate public building; give address and telephone number where interested citizens can review the document)."

If the establishment of the lake improvement district is proposed by the county board pursuant to subpart 2, item B and Minnesota Statutes, section 103B.515, the following paragraph shall be included in the notice of the public hearing:

"Citizens may call for a referendum on the question of whether or not to establish a lake improvement district by filing a petition requesting such a referendum. The petition shall be signed by 25 percent of the land owners within the territory of the proposed district, who are Minnesota residents. Upon receipt of such a petition prior to the effective date of creation of the district, the county board shall hold the creation in abeyance pending the referendum vote of all qualified voters residing within the boundaries of the proposed district."

Subp. 4. **Public review of petition or resolution.** The county board shall make the petition or document containing the information required by this part available for review by concerned citizens, at the county courthouse or other appropriate public building.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Subp. 5. **Review by commissioner and agency.** Upon receipt of a copy of the petition or document, the commissioner shall:

A. Review the petition or document and any evidence presented by the agency or concerned citizens pertaining to the establishment of the proposed district. This review shall include an evaluation of the statement of district purposes and its relation to existing laws, rules, and regulations, units of government, water and related land management programs and policies. The proposed district boundaries shall be examined to assess their consistency with these parts. When one or more of the stated purposes of the proposed district relate to pollution control, this review shall be conducted with the assistance of the agency.

B. Prepare an advisory report stating findings as to whether the proposed lake improvement district should be established. The commissioner shall set forth in the report any matters pertaining to the district which should be further investigated and evaluated. On determining that the establishment of the proposed district is not in the public interest, the commissioner shall so report the specific reasons and inadequacies. The commissioner may request additional time for review of the proposed district in such cases where additional time can be shown to be necessary for proper evaluation. The commissioner's report may contain reports by the agency.

Subp. 6. **Request for continuance or postponement of hearing.** The county board may grant requests by citizens, the commissioner, or the agency for postponement or continuance of the public hearing to a time more than 30 days after receipt of the petition and verification of the signatures thereon. Such requests may be granted if the county board determines that the additional time requested is appropriate and reasonable in order for the requesting organization or citizens to adequately prepare for the public hearing, and consistent with the goals of promptness and fairness in the proceedings.

Subp. 7. **Advisory report.** The commissioner's advisory report shall be publicly read into the record at the public hearing.

Subp. 8. **Modification of findings.** The commissioner may modify findings based on evidence presented during and subsequent to the public hearing.

Subp. 9. **Formal meeting to approve or disapprove district.** No sooner than ten days but within 30 days following the holding of the public hearing, the county board shall formally convene to approve or disapprove the establishment of the proposed lake improvement district. At least ten working days' notice shall be given to the commissioner of the time and place where the board will formally convene for this purpose. If the commissioner or the commissioner's representative does not appear, any modifications of the commissioner's advisory report shall be publicly read into the record.

Statutory Authority: *MS s 103B.511; 378.41*

History: *17 SR 1279*

Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.0980 ADMINISTRATION OF LAKE IMPROVEMENT DISTRICTS.

Subpart 1. **Modification.** No program, remedial action, project, or change of district boundaries which is not specified in the resolution creating a lake improvement district may be undertaken, except by modifying the appropriate items listed in part 6115.0970, subpart 1, items A to E.

For an established district, any of the items listed in part 6115.0970, subpart 1, items A to E, may be modified by petition to or resolution by the county board, in the same manner that a district is created.

Subp. 2. **Legal responsibilities and liabilities of lake improvement districts.** Nothing in these parts shall be construed to relieve a lake improvement district of the legal duties, obligations, or liabilities incident to the programs, plans, or actions of the district.

The lake improvement district shall assume all legal risks and liabilities, including those for damages or any injury to persons or property, arising from the construction, operation, maintenance, alteration, or abandonment of its programs, plans, or actions.

In the event of termination of the district, or failure of the district to meet its obligations, these responsibilities and liabilities shall fall upon the unit or units of government which established the lake improvement district.

Subp. 3. **Limited state liabilities.** The establishment of a lake improvement district shall not impose any liability upon the state of Minnesota, its officers, employees, agents, or consultants, for any damage or injury to any persons or property resulting from the activities of the lake improvement district.

Subp. 4. **Rights of lake improvement districts.** Nothing in these parts shall be construed to deprive any lake improvement district of such recourse to the courts as it may be entitled to under the laws of this state.

Subp. 5. **Inspections.** The commissioner shall be given prompt access to and inspection of all records, structures, facilities, and operations at all reasonable times as may be necessary to monitor compliance with the terms of existing permit and to ensure protection of the public health, safety, and welfare. The commissioner's inspections shall not relieve the lake improvement district from the full responsibility of providing adequate inspection and supervision for all programs and projects undertaken by the district.

Subp. 6. **Compliance with other laws and water management policies.** Lake improvement districts shall conform to federal, state, regional, and local laws, rules, and fish and wildlife, water, and related land management policies. Lake improvement districts shall obtain all necessary permits, as required by law, prior to implementing district purposes and programs.

Subp. 7. **Compliance by preexisting lake improvement districts.** Within one year following promulgation of these parts, lake improvement districts in existence prior to the promulgation of these rules shall submit to their county board and to the commissioner a certified copy of a document containing the information required by part 6115.0970. This document shall also contain a report on the past and current activities and financial condition of the district.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

The commissioner shall review the document and prepare an advisory report stating findings as to whether the district is consistent with these parts. The report may contain such recommendations as the commissioner determines is necessary to bring the district into compliance with these parts.

Within 60 days following the official filing of the commissioner's report with the county board, the board shall formally convene to consider the report. The county board shall give ten working days' notice to the commissioner of the time and place where it will convene to consider the commissioner's report. If the commissioner or the commissioner's representative does not appear, the report shall be publicly read into the record.

Statutory Authority: *MS s 378.41*

History: *17 SR 1279*
Published Electronically: *October 8, 2013*

6115.1000 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1010 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1020 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1030 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1040 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1050 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1060 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1070 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1080 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1090 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1100 MR 1997 [Obsolete, MS s 14.47, subd. 6, paragraph (b)]
Published Electronically: *June 11, 2008*

6115.1150 [Repealed by amendment, L 1979 c 199]
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

STATE WATER BANK PROGRAM

6115.1200 STATUTORY AUTHORITY AND PURPOSE.

These parts are promulgated under the authority of Minnesota Statutes, sections 103F.601, subdivisions 1 and 2, and 103G.315, subdivision 15. Their purpose is to implement and make specific the state water bank program and the indemnification process established by Minnesota Statutes, sections 103G.211 and 103G.221, for the purpose of compensating farmers for not converting certain kinds of wetlands to cropland.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*
Published Electronically: *June 11, 2008*

6115.1210 DEFINITIONS.

Subpart 1. **Adjacent land.** "Adjacent land" means any lands abutting a basin that is eligible for inclusion in the state water bank program.

Subp. 2. **Commissioner.** "Commissioner" means the commissioner of the Department of Natural Resources or designated agents.

Subp. 3. **Drain.** "Drain" means to conduct drainage activities that will remove or reduce the surface water from the basin. Acts constituting draining include, but are not limited to pumping, lowering the outlet, enlarging the outlet, tiling, or reducing the amount of water entering the basin. (Drainage does not include temporary water level reduction for conservation purposes.)

Subp. 4. **Fair market value.** "Fair market value" is an estimate of a property's value based upon standard and accepted land appraisal methods. The appraisal for eligible wetlands will estimate the potential value of the area as agricultural cropland less the cost of drainage.

Subp. 5. **Less than 50 acres in area.** "Less than 50 acres in area" means the area of a plane bounded by the ordinary high water mark which is a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. The ordinary high water mark is commonly that point where the vegetation changes from predominantly aquatic to predominantly terrestrial.

Subp. 6. **Professional soil classifier.** "Professional soil classifier" is a person who qualifies as a professional soil classifier on the basis of criteria specified by the Minnesota Association of Professional Soil Classifiers. The requirements are a bachelor of science degree in soil science or adequate credits (15 semester or 23 quarter hours) in soil science, and four years of field experience in mapping soils.

Subp. 7. **Public waters.** "Public waters" for the purposes of these rules means waters of the state so designated in a county by the process described in Minnesota Statutes, section 103G.201, and those waters that have been determined to be public waters or navigable waters by the district court or if appealed, by the state or federal supreme court.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

History: *17 SR 1279*
Published Electronically: *September 10, 2018*

6115.1220 PROCEDURES.

Subpart 1. **Permit applications.** Application for a permit to drain basins that are potentially eligible for compensation from the department because of being declared public waters shall be made on such forms as the commissioner may provide and shall include all data specified by the form and any required application fees.

The applicant shall include the following information to enable the commissioner to determine the feasibility, practicality, and lawfulness of the proposed drainage:

A. a statement by the owner that there are no burdens on the property or agreements which drainage would violate;

B. a demonstration by the owner that the right to use the outlet can be obtained;

C. a description of the proposed drainage project;

D. a demonstration of the project costs, showing how the costs were estimated, together with an explanation of why the investment would be profitable; and

E. a statement by a professional soil classifier that the basin would be high quality cropland. The determination shall be based on the following criteria. The kinds of soils that will that will qualify as high quality cropland are based on the following method arranged from best to poorest.

Rating Value	Soil Properties
1.	Loamy or clayey mineral soils (loamy or clayey average particle size in the control section.)
2.	Deep organic soils (Typic subgroups,) and shallow organic soils with a loamy or clayey substratum (Terric subgroups with loamy or clayey particle size.)
3.	Shallow organic soils with a sandy or gravelly substratus (Terric subgroups with sandy or sandy skeletal particle size.)
4.	Sandy or gravelly mineral soils (Aquents, aquepts, and Aquolls with sandy or sandy skeletal average particle size in the control section.)
5.	Other soils (mostly soils with limnic materials dominating the control section.)

Growing degree days (GDD) will be used as a climatic parameter to use for accessing soil quality. The groups from best to poorest are:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Rating Value	Climate Parameter
1.	More than 4400 GDD
2.	3400 - 4400 GDD
4.	Less than 3400 GDD

The following counties fall within the individual climate parameters:

More than 4400 GDD

Anoka	Lac Qui Parle	Rice
Big Stone	Le Sueur	Rock
Blue Earth	Lincoln	Scott
Brown	Lyon	Sibley
Carver	McLeod	Steele
Chippewa	Martin	Stevens
Cottonwood	Meeker	Swift
Dakota	Mower	Traverse
Dodge	Murray	Wabasha
Faribault	Nicollet	Waseca
Fillmore	Nobles	Washington
Freeborn	Olmsted	Watonwan
Goodhue	Pipestone	Wilkin
Hennepin	Ramsey	Winona
Houston	Redwood	Wright
Jackson	Renville	Yellow Medicine
Kandiyohi		

3400 - 4400 GDD

Aitkin	Hubbard	Otter Tail
Becker	Isanti	Pennington

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Beltrami	Itasca	Pine
Benton	Kanabec	Polk
Carlton	Kittson	Pope
Cass	Koochiching	Red Lake
Chisago	Lake of the Woods	Roseau
Clay	Mahnomen	Sherburne
Clearwater	Marshall	Stearns
Crow Wing	Mille Lacs	Todd
Douglas	Morrison	Wadena
Grant	Norman	

Less than 3400 GDD

Cook	Lake	St. Louis

To arrive at a value, an index is determined by multiplying the soil property rating by the GDD rating. A value of four or less shall be considered high quality cropland.

The determination of soil properties shall be done by a professional soil classifier with at least one observation of soil properties to depths of 50 inches for each ten acres of the wetland. Points of observations should be located systematically in the wetland, recorded on a map, and a log of soil made for each observation. The information shall be included with the permit application.

Subp. 2. **Eligible water basins.** If the public water basin is eligible for compensation the commissioner shall mail to the applicant, within 60 days of receipt of an application for a permit to drain, the various choices of indemnification, to include:

A. An offer:

(1) to place the basin in the state water bank program, together with a sample water bank agreement;

(2) to acquire the basin and such interest as is necessary to make entry upon the acquired area available to the public;

(3) to acquire an easement in the nature of a conservation restriction as described by Minnesota Statutes, sections 84.64 and 84.65, together with a sample of such an easement; or

(4) to acquire a lease on the basin, together with a sample lease agreement.

B. A statement:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

(1) If such be the case, that the wetland appears to be eligible for the federal water bank program and who the landowner should contact. The state program, however, does not incur any obligations on the federal program and if the landowner chooses to select this option the landowner will be subject to the federal program's priorities and procedures.

(2) That the landowner may suggest any other appropriate indemnification method, along with the proposed terms and conditions that the landowner would like to have included.

(3) That the landowner and commissioner may agree to include adjacent property in the terms of the agreements.

(4) That the landowner may choose any one of the indemnification offers or any other method of indemnification that the commissioner will agree to.

C. An explanation of the balance of these procedures in order to establish the dollar amount of each offer as soon as the landowner specifies what adjacent land, if any, the landowner would like to have included.

Subp. 3. **Ineligible areas.** If the area is ineligible for compensation the commissioner will so inform the applicant and advise the applicant that a Minnesota Statutes, section 103G.311 hearing on the issue of eligibility may be demanded.

Subp. 4. **Right to drain basin.** If within 60 days of receipt of an application for a permit to drain, the commissioner does not mail the landowner a choice of indemnification, the landowner is entitled to drain the basin.

Subp. 5. **Adjacent land.** Upon receipt of an offer of indemnification, the landowner shall inform the commissioner of the amount, if any, and location of adjacent land that the landowner would like to have included in the agreement, and what alternative, if any, methods of indemnification the landowner would like the commissioner to consider.

Subp. 6. **Certification.** Within 60 days of receiving the above information the commissioner shall complete an appraisal of the property and submit it to the Department of Administration for certification. If it is not so submitted within the 60-day period, the landowner may drain the basin.

Subp. 7. **Negotiations.** When an appraisal has been certified, the commissioner shall inform the landowner of the dollar amount of each offer, and begin negotiations. The outcome of the negotiations can be either:

A. the landowner accepts one of the offers made or agreed to by the commissioner;

B. the landowner places the basin in a federal water bank program;

C. the landowner signs a consent to condemnation pursuant to Minnesota Statutes, section 84.027, subdivision 9, specifying which of the methods of indemnification offered or agreed to by the commissioner that the landowner has selected; or

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. the landowner does none of the above, in which case the basin cannot be drained unless and until a new application for a permit to drain is submitted and the commissioner does not make an offer of indemnification.

Subp. 8. **Sale of basin to commissioner.** If the landowner chooses to sell the basin and access area to the commissioner the landowner shall obtain from the county board of commissioners the approval to sell the property as required by Minnesota Statutes, section 97A.145. The commissioner must be supplied with a copy of the board's resolution and if the county board refuses approval, the applicant must select from among those options not requiring county board approval. This procedure does not apply in those counties where blanket approval to sell the property to the state has been granted to those landowners who are eligible for compensation under Minnesota Statutes, section 105.391, subdivision 3.

Subp. 9. **Recording and indexing documents.** Water bank, lease, and easements obtained on an area shall be recorded and indexed in the office of the county recorder in the county where the basin lies.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *L 1986 c 386 art 1 s 28; 17 SR 1279*

Published Electronically: *June 11, 2008*

6115.1230 EFFECTIVE DATE.

These parts apply to applications for permits to drain received after the water basin involved has been designated a public water pursuant to Minnesota Statutes, section 103G.201, or has been identified as public waters or navigable waters by a district court or if appealed, by the state or federal supreme court.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

Published Electronically: *September 10, 2018*

6115.1240 PAYMENT RATES.

Subpart 1. **Water bank program.** Annual payment rates for the state water bank program will be determined by multiplying the fair market value of the water basin and any adjacent lands by five percent.

Subp. 2. **Water basin and adjacent lands.** Annual lease payments for the water basin and any adjacent lands will be based on a fair market rental rate.

Subp. 3. **Easements.** Conservation restrictions in the form of easements will be established by an appraisal and their lengths will be subject to negotiation.

Subp. 4. **Other method of indemnification.** The rate for any other method of indemnification that is agreed to will be negotiated with the landowner and judged on its merits based upon the proposed restrictions and their relationship to the other payment rates.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*
Published Electronically: *June 11, 2008*

6115.1250 TERMS FOR WATER BANK AND LEASE AGREEMENTS.

Subpart 1. **Agreement period and beginning date.** Agreement period and beginning date:

A. Eligible basins are placed in the state water bank program for a period of ten calendar years and under a lease agreement for, not to exceed, 20 calendar years.

B. The lease agreement is continuous and shall transfer with the property if ownership changes during the time of the lease agreement.

C. A water bank or lease agreement finalized during the current calendar year shall be effective January 1 of that year. Exception: in cases where compliance with the terms of agreement cannot be rendered during the current calendar year, the beginning date of the agreement shall be January 1 of the following year.

D. Water bank or lease payments for the first year of an agreement will be made as soon as possible after an agreement has been finalized. Payments for the duration of a water bank or lease agreement will be made on or about August 1 of each continuous year thereafter.

Subp. 2. **Terms.** Terms:

A. Waterbasins. In return for receipt of an annual payment the landowner must agree not to adopt any practice which would tend to defeat the purposes of the agreement. At a minimum, the designated basin may not be:

(1) Drained, burned, filled, clipped, or otherwise used in such a manner that would effect its wetland character. Exception: noxious weeds may be controlled by the landowner by spot clipping and spot spraying. If cutting is used the area should not be clipped closer than six inches so as to protect nesting wildlife.

(2) Harvested for agricultural purposes.

(3) Grazed.

(4) Used as a source of irrigation water.

(5) Used as a receptacle for draining other wetlands.

Exception: the commissioner may approve designated acreage to receive limited drainage waters if such use is in keeping with sound wetlands management and prescribed in a mutually agreed upon conservation plan.

B. Adjacent lands. On finding it desirable the commissioner may mutually agree with the landowner upon the amount and location of adjacent lands to include in the agreement. Up to one acre of adjacent land may be obtained for each acre of water basin. The commissioner may negotiate and outline a conservation plan for the water basin and adjacent lands. Upon signing the agreement,

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

the landowner shall agree to effectuate the wetland conservation and development plan. Terms that may be included are:

(1) development of food and/or cover plots;

(2) specified planting and harvesting dates;

(3) areas desirable for permanent cover;

(4) habitat improvement methods such as: clearing, tilling, reestablishment of former wetlands or the creation of new wetlands, fencing to protect the area;

(5) advice on conservation and development practices; and

(6) any other mutually agreed upon practice that would effectuate wetland conservation and development.

Subp. 3. **Signatures.** The agreement shall be on forms provided by the commissioner and shall be signed by the owner of the designated acreage, and the commissioner.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*
Published Electronically: *June 11, 2008*

6115.1260 MODIFICATIONS OF WATER BANK AND LEASE AGREEMENTS.

Subpart 1. **In general.** The commissioner and the landowner may mutually agree to any modification of agreement terms that may be desirable to carry out the purposes of the program or facilitate its administration. Exception: no changes in payment rates for acreage under agreement is authorized during the term of the water bank or lease agreement.

Subp. 2. **Change in ownership of lands underlying public waters.** All landowners shall notify the commissioner of the sale of property that is covered by the water bank or lease agreement. Upon transfer of an individual's right and interest in lands subject to a water bank agreement during the agreement period, the former landowner forfeits all rights to further payments under the agreement and refunds to the state all payments received thereunder during that year of the transfer. Forfeiture of payments is not required for those participating in a lease agreement nor if the transferee of any such land agrees with the commissioner to assume all obligations of the former owner.

The new landowner may choose not to participate in the water bank program; however, any water declared public shall not be drained. If an alternative form of indemnification is desired, or if the new owner wishes to have payment rates adjusted on the existing water bank agreement, a permit application will have to be submitted to the commissioner to initiate the procedures in these parts. The requirement for soils information and borings shall be waived on those basins that have been determined eligible for the water bank program by previous permit applications.

When two or more farms are combined that share mutual public waters the landowner who is adding property shall have the option of adding the new property to the original agreement,

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

continuing the former owners' agreement, or decide not to participate in the program and not be able to drain the basin.

When a transfer of ownership occurs on or before August 1 of the current calendar year and the new owner agrees to continue the former owner's obligation, payments due will be made to the new owner.

Subp. 3. **Registration of modification.** All modifications will be completed on amendment forms provided by the commissioner. Modifications will be noted on the original agreement and the original amendment forms will be retained by the commissioner.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*

Published Electronically: *June 11, 2008*

6115.1270 AGREEMENT TERMINATIONS.

Subpart 1. **Forfeit of rights to further payments.** Upon termination of an agreement the landowner shall forfeit all rights to further payments.

Subp. 2. **Termination by mutual consent.** The commissioner may terminate any agreement with mutual consent of the landowner if the commissioner determines that termination would be in the public interest. If such be the case, no refund of payments made under the agreement is required.

Subp. 3. **Refund of payments.** The landowner must refund to the state all payments, partial or in full, received under the agreement upon any violation of the agreement terms during the time that the landowner has control of the property.

A. Subject to the commissioner's determination that the violation is material and of the nature that warrants termination of the agreement the landowner shall:

(1) refund to the state all payments received;

(2) forfeit all rights to further payments;

(3) not be entitled to drain the affected basin; and

(4) not have the basin considered for a permit to drain or be allowed compensation under Minnesota Statutes, sections 103G.211 and 103G.221, until a transfer of ownership has taken place.

B. Subject to determining that the violation does not warrant termination of the agreement, the commissioner may require partial refunds or make payment adjustments as the commissioner deems appropriate.

Subp. 4. **Termination action.** The commissioner shall notify each party to the agreement of the termination:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. the reason for termination;

B. the amount of payment refund due;

C. that the landowner is no longer required to comply with the agreement terms and that the public waters cannot be drained; and

D. that the landowner may challenge the termination by demanding a hearing under Minnesota Statutes, section 103G.311.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*
Published Electronically: *June 11, 2008*

6115.1280 EXTENSION OF WATER BANK OR LEASE AGREEMENT.

At the end of an agreement period the commissioner shall offer the landowner the landowner's choice of the five indemnification offers without requiring a new application for a permit to drain. The landowner has 60 days to notify the commissioner, in writing, if the landowner will be:

A. continuing the former agreement terms, subject to any rate redetermination; or

B. dissolving the former agreement; and

C. changing to another form of indemnification; or

D. deciding not to participate in the program with the knowledge that the basin cannot be drained.

If the landowner chooses to select another indemnification method, the choice must be specified in the landowner's notice to the commissioner.

If the notification of the landowner's intent to continue in the program is not given, the landowner will be required to submit an application for a permit to drain the basin to establish future eligibility to the water bank program.

Upon receipt of the landowner's choice, the commissioner shall conduct an appraisal to establish the fair market value of the property. Once completed, the agreement may be finalized.

Statutory Authority: *MS s 103F.601; 103G.315; 105.392; 105.415*

History: *17 SR 1279*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

AGRICULTURAL DIKE CONSTRUCTION ALONG THE RED RIVER OF THE NORTH AND BOIS DE SIOUX RIVERS

6115.1300 PURPOSE.

The purpose of these parts is to provide for the orderly and consistent review of permit applications to construct, relocate, rebuild, or alter agricultural dikes along the Red River of the North and Bois de Sioux Rivers in order to assure that the granting of such permits would be in the best interests of the people of Minnesota and North Dakota. These parts are mutually applicable in both states. The authority to establish these joint criteria is granted to the commissioner of Natural Resources in Minnesota Statutes, sections 103G.105, 103G.245, and 471.59 and to the North Dakota State Water Commission by Sections 61-02-24 and 61-16-15 of the North Dakota Century Code. The two states recognize that establishment of these parts governing the issuance, review, and denial of permits to construct, relocate, rebuild, or alter agricultural dikes along the boundary rivers is but the first step in the exercise of joint control over those activities which could contribute to an increased flood potential of these rivers. The two states further recognize the need to exercise this joint control in that water management decisions which appear logical in a local or statewide context may have negative interstate and international impacts.

These parts are being established at this time because there is a current need to provide a basis for the review of existing, unauthorized agricultural dikes and permit applications for the construction of additional agricultural dikes along the boundary waters. Local land owners view such dikes as interim solutions to local flood problems.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Published Electronically: *June 11, 2008*

6115.1310 SCOPE.

These parts governing the review, issuance, and denial of permits to construct, relocate, rebuild, or alter agricultural dikes along the boundary rivers pertain to all such dikes located within the floodplains of the Red River of the North and the Bois de Sioux Rivers. Floodplain areas of the Red River of the North are defined by Appendix O, Volume 8, of the Souris-Red-Rainy Basins Comprehensive Study as Red River of the North Main Stem Regional Floodplain Area, and the floodplain of the Bois de Sioux River is defined by the U.S. Geological Survey one percent chance of recurrence area flood quadrangles. These rules apply to dikes constructed on tributaries within the floodplains of these boundary rivers. These parts shall be superseded by local authority adoption of commissioner approved floodplain ordinances which include agricultural diking provisions as conditional uses.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.1320 DEFINITIONS.

Subpart 1. **Scope.** For the purposes of these parts certain terms or words used herein shall be interpreted as follows.

Subp. 2. **Boundary rivers.** "Boundary rivers" means the Red River of the North and the Bois de Sioux River as they form a natural boundary between the states of Minnesota and North Dakota.

Subp. 3. **Dike.** "Dike" means an embankment constructed of earth and/or other suitable materials to protect agricultural lands.

Subp. 4. **Farmstead.** "Farmstead" means a farm dwelling and/or associated farm buildings.

Subp. 5. **Flood frequency.** "Flood frequency" means the average frequency, statistically determined, for which it is expected that a specific flood stage or discharge may be equalled or exceeded. This frequency is usually expressed as having a probability of occurring, on the average, once within a specified number of years.

Subp. 6. **Flood waters.** "Flood waters" means those waters which temporarily inundate normally dry areas adjoining a watercourse. This inundation results from an overflow of the watercourse caused by excessive amounts of rainfall and/or snowmelt which exceed its capacity.

Subp. 7. **Public waters.** "Public waters" means all natural and altered natural watercourses with a total drainage area greater than two square miles, except that trout streams officially designated by the commissioner shall be public regardless of the size of their drainage area.

Subp. 8. **Watercourse.** "Watercourse" means a channel in which a flow of water occurs either continuously or intermittently in a definite direction. The term applies to either natural or artificially constructed channels.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

6115.1330 SEVERABILITY.

The provisions of these rules shall be severable, and the invalidity of any paragraph, subparagraph, or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision, or any other part.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

6115.1340 DESIGN CRITERIA.

Subpart 1. **Dike setbacks and elevation.** Dikes are to be constructed at a location and elevation so as not to cause an increase in elevation of the 100-year frequency flood of more than one-half foot at any point along the river. Calculation of the effects of the dikes shall be based on an assumed equal degree of encroachment along the opposite side of the river. If mutual agreement has been reached between persons on both sides of the river, dikes on one side may utilize up to the entire

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

increase in flood elevation allowable. In all instances the applicants maintain the liability for damages resulting from any and all activities.

Subp. 2. **Dike dimensions.** Dike top width shall not be less than six feet. Side slopes shall not be steeper than 3:1, except where slope stability analysis and slope erosion control can justify steeper slopes. No organic soil or material shall be allowed in the foundation of the fill of dikes.

Subp. 3. **Vegetative cover and riprap.** A protective cover of grasses shall be established on all exposed surfaces of the dike. Riprap shall be used where required for control of erosion.

Subp. 4. **Interior drainage.** Dikes shall have provisions for interior drainage. The design shall include plans to handle the discharge from the drainage area based on drainage design requirements for the local area.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

6115.1350 HYDROLOGIC DATA FOR DESIGN.

The North Dakota State Water Commission and the Minnesota Department of Natural Resources shall provide the discharges and corresponding elevations of the various frequency floods (and other available flood data), in relation to known historic floods, for use in dike design.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

6115.1360 DIKES ACROSS NATURAL WATERWAYS AND LEGAL DRAINS.

Dikes shall not be constructed across public waters or watercourses without permit from the commissioner of natural resources, under Minnesota Statutes, section 103G.245. Dikes constructed across legal drains or public ditch systems shall require the approval of the appropriate local authority (watershed district, county, city, etc.).

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

6115.1370 FARMSTEAD DIKING.

Within an existing dike system, ring dikes around individual farmsteads shall not require dike permits if they are not provided with tiebacks to existing roadways or dikes. Ring dikes provided with tiebacks shall be considered part of the overall dike system and will be required to secure diking permits. Outside the dike system there shall be no limitations on tiebacks of dikes around farmsteads. However, appropriate authorization must be obtained from the local land use authority consistent with adopted codes or ordinances.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.1380 PERMIT APPLICATION.

Subpart 1. **Forms; plans and specifications.** All applications submitted by the owner to construct, to relocate, rebuild, or alter dikes shall be made on forms provided by the commissioner and shall be accompanied by two complete sets of plans and specifications. Such plans and specifications shall include the following:

A. a general location map with a minimum scale of 1" = 800' showing the following: location of the dike with respect to the watercourse; location of field inlets to provide for internal drainage; and location of legal drains and natural channels tributary to the main river channel;

B. detailed cross-sections of the dike showing elevation, in relation to mean sea level, and side slopes; and

C. other data as deemed appropriate by the commissioner to properly evaluate the application for permit.

Subp. 2. **Cross-sections.** After review of the information required above and other available data, the state agency to which the application is made shall determine the location and number of required cross-sections of the river channel and overland areas. These locations shall be provided to the applicant who shall then provide the required cross-section data. The applicant shall undertake and agree to pay the expenses incurred in securing these cross-sections.

Subp. 3. **Joint permit applications.** Joint permit applications involving two or more landowners or a permit application on behalf of two or more landowners will be accepted by the state agencies. These permit applications, taken together, must meet the above rules.

Subp. 4. **Joint administration.** A copy of each application for a permit shall be forwarded by the state agency receiving the initial application to the other state for comment and recommendation before final approval is granted. If no response is received within 30 days, the commissioner shall process the permit without such comments or recommendations.

Subp. 5. **Permit revocation.** The applicant shall provide for certification by a licensed land surveyor, engineer, or other qualified person or agency that the finished dike elevations are not higher than those approved by the commissioner. The permit will be revoked for failure to provide this certification. The permit may be revoked for failure to construct the dike in accordance with the plans and specifications submitted. Structural alteration of the dike without permission of the appropriate state agency will also result in having the permit revoked.

Subp. 6. **Reconstruction; maintenance.** Reconstruction of any authorized dike may be performed after notification to the commissioner of the repair needed. Permittee shall again certify the repair concurrent with this section. The maintenance of dikes must include periodic removal of woody vegetation (for example, trees and shrubs) which may become established on the embankment.

Subp. 7. **General administration.** All applicants for permit to construct dikes shall be subject to the provisions of parts 6115.0240 to 6115.0260.

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

History: *L 1998 c 324 s 9*

Published Electronically: *June 11, 2008*

6115.1390 EXCEPTION TO CRITERIA.

Under special circumstances, exceptions to the dike rules may be authorized on an individual basis but they must have the concurrent approval of the North Dakota state engineer, local water management board in North Dakota, Minnesota Department of Natural Resources, and local watershed district in Minnesota. Factors that will be considered include but shall not be limited to dike setback line, location of farmsteads, property lines, existing roads, stream velocity, environmental effects, and acquisition of flowage rights. Request for exceptions must be accompanied by a plan satisfactory to all agencies.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Published Electronically: *June 11, 2008*

6115.1400 APPLICATION OF RULES TO EXISTING DIKES.

These parts shall apply to all unauthorized dikes constructed in the past for the protection of those agricultural lands located within the floodplains of the Red River of the North and the Bois de Sioux, as defined in part 6115.1310. Exceptions are farmstead dikes if they meet the provisions of part 6115.1370.

The commissioner shall have the authority to order removal, modification, or reconstruction of dikes not conforming to these parts.

Statutory Authority: *MS s 103G.105; 103G.315; 105.415; 105.49; 471.59*

Published Electronically: *June 11, 2008*

CONSOLIDATED CONSERVATION AREAS; DRAINAGE PROJECTS

6115.1500 PURPOSE.

The purpose of parts 6115.1500 to 6115.1550 is to establish criteria and procedures for determining drainage benefits to state-owned lands in consolidated conservation (con-con) areas administered under Minnesota Statutes, chapter 84A. Con-con areas are found in parts of Aitkin, Beltrami, Koochiching, Lake of the Woods, Mahnomen, Marshall, and Roseau Counties.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

6115.1510 DEFINITIONS.

Subpart 1. **Scope.** The terms used in parts 6115.1500 to 6115.1550 have the meanings given in this part.

Subp. 2. **Commissioner.** "Commissioner" means the commissioner of natural resources or the commissioner's designated representative.

Subp. 3. **Department.** "Department" means the Department of Natural Resources.

Subp. 4. **Drainage.** "Drainage" means any method for removing or diverting waters from wetlands. The methods include, but are not limited to, excavating an open ditch, installing subsurface drainage tile, filling, diking, or pumping.

Subp. 5. **Drainage authority.** "Drainage authority" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 9.

Subp. 6. **Drainage project.** "Drainage project" means a new drainage system, an improvement of a drainage system, an improvement of an outlet, a lateral, a repair, or a redetermination of benefits involving state-owned lands in consolidated conservation areas administered under Minnesota Statutes, chapter 84A, where:

A. the drainage authority will make assessments to state-owned lands; or

B. the commissioner will be asked or must consider whether to participate in the project through assessments or a lump sum, by joining the petition, by consent, or by approval.

Subp. 7. **Drainage system.** "Drainage system" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 12.

Subp. 8. **Improvement.** "Improvement" means the tiling, enlarging, extending, straightening, or deepening of an established and constructed drainage system, including construction of ditches to reline or replace tile and construction of tile to replace a ditch.

Subp. 9. **Lateral.** "Lateral" has the meaning given under Minnesota Statutes, section 103E.005, subdivision 15.

Subp. 10. **Public waters.** "Public waters" has the meaning given in Minnesota Statutes, section 103G.005, subdivision 15.

Subp. 11. **Public waters wetlands.** "Public waters wetlands" has the meaning given in Minnesota Statutes, section 103G.005, subdivision 15a.

Subp. 12. **Repair.** "Repair" means to restore all or a part of a drainage system as nearly as practicable to the same condition as originally constructed and subsequently improved, including resloping of ditches and leveling waste banks if necessary to prevent further deterioration, realignment to original construction if necessary to restore the effectiveness of the drainage system, and routine operations that may be required to remove obstructions and maintain the efficiency of the drainage system. "Repair" also includes:

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

A. incidental straightening of a tile system resulting from the tile-laying technology used to replace tiles; and

B. replacement of tiles with the next larger size that is readily available, if the original size is not readily available.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Published Electronically: *June 11, 2008*

6115.1520 DRAINAGE PROJECTS.

Subpart 1. **Notification and documentation.** For the commissioner to consider participating in a drainage project that would have assessments within a consolidated conservation area, the drainage authority must follow the procedures described in this subpart. The drainage authority must notify the commissioner, in writing and as soon as practicable, with specifics about the proposed project. The specifics must describe the purpose of the project and what kind of project it is. The drainage authority must show the extent of the project on a map. The drainage authority must provide the commissioner with copies of all written documents, including any petition and engineer's report that have been filed or used in connection with the drainage project proceedings, as they are available.

Subp. 2. **Investigation.** After receiving notification and all documentation required under subpart 1, the commissioner must complete an investigation to determine whether the proposed drainage project benefits state-owned lands for the purposes for which they were established. In the investigation, the commissioner must:

A. determine, which, if any, state-owned lands are positively impacted by the proposed drainage project according to subpart 3; and

B. determine which, if any, state-owned lands are negatively impacted by the proposed drainage project according to subpart 4.

Subp. 3. **Positive impacts.** Positive impacts to state-owned lands occur when a proposed drainage project allows the department or department's lessee to continue to use or enhances its ability to use drainage to achieve management purposes as provided in Minnesota Statutes, section 84A.55. The following criteria are evidence that the department uses drainage to achieve a management purpose:

A. the department utilizes a drainage system to outlet water into a public ditch from agricultural cropland it manages;

B. the department leases the land for commercial purposes such as agriculture, agro-forestry, aquaculture, wild rice paddies, peat mining, or mineral extraction, and the lessee utilizes a drainage system to outlet water into a public ditch from the leased lands;

C. the department petitions for a drainage project;

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

D. the department outlets water from state-owned lands into a public ditch from an impoundment that is designed and used exclusively for wildlife management purposes;

E. timber production is improved by the project; or

F. wildlife habitat is improved by the project.

Subp. 4. **Negative impacts.** Negative impacts to state-owned lands occur when a drainage project adversely affects the management of the land for its intended purposes. The following criteria are evidence that a drainage project negatively impacts state-owned lands. The drainage project:

A. degrades public waters, public waters wetlands, or wetlands on state-owned lands;

B. causes direct physical disturbance to rare species or significant natural communities through project activities such as, but not limited to, ditching and depositing soils;

C. causes an alteration of the hydrology that disturbs rare species, natural communities, or peatland features;

D. causes an alteration of the hydrology that degrades designated peatland scientific and natural areas;

E. restricts management options for state-owned lands; or

F. results in the reduction or elimination of access to state-owned lands.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Published Electronically: *June 11, 2008*

6115.1530 DETERMINING BENEFIT AND PARTICIPATION.

Subpart 1. **Commissioner's determination.** Following the investigation under part 6115.1520, for all drainage projects except those classified as repairs, the commissioner must determine whether the drainage project benefits state-owned lands and whether to participate in the project. In making the determination, the commissioner shall evaluate state-owned lands, on a parcel-by-parcel basis, with each parcel consisting of no more than 40 acres. A drainage project benefits a parcel of state-owned land only when the investigation shows that the positive impacts outweigh the negative impacts to that parcel of state-owned land. Where the commissioner determines that the project results in a net benefit to state-owned lands, the commissioner shall participate in the project. Having determined to participate, the commissioner shall authorize the imposition of assessments for the project on the lands in any amounts the commissioner determines or may make lump sum contributions to the county or other public funds established for the payment of the cost of the project. The commissioner may also set conditions to modify the project before approving or joining a petition. Before cooperating in a project by joining in the petition or consenting to or approving it, the commissioner may identify conditions that must be satisfied or modifications that must be

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

made in the proposed project if such conditions or modifications are necessary to ensure that the project will benefit state-owned lands in con-con areas.

Subp. 1a. **Commissioner's determination for repairs.** Following the investigation under part 6115.1520, for drainage projects considered repairs, the commissioner must determine whether the repair project benefits state-owned lands and whether to participate in the project. In making the determination, the commissioner, following consultation with drainage authorities, shall develop a table that identifies the benefits for each 40-acre parcel. A repair project benefits a parcel of state-owned land only when the investigation shows that the positive impacts outweigh the negative impacts to that parcel of state-owned land. Where the commissioner determines the project results in a net benefit to state-owned lands, the commissioner shall participate in the project. Having determined to participate, the commissioner shall authorize the imposition of assessments for the projects on the lands in any amounts the commissioner determines or may make lump sum contributions to the county or other public funds established for the payment of the cost of the project. The commissioner may also set conditions to modify the project before approving or joining the petition. Before cooperating in a project by joining in the petition or consenting to or approving it, the commissioner may identify conditions that must be satisfied or modifications that must be made in the proposed project if such conditions or modifications are necessary to ensure that the project will benefit state-owned lands in con-con areas.

Subp. 2. **Routine repair exception.** If a drainage authority's notification and documentation made under part 6115.1520, subpart 1, shows that the total cost of a proposed drainage repair under Minnesota Statutes, section 103E.705, is less than $20,000 and the commissioner has previously determined the benefits to the state-owned lands within that drainage system, the commissioner may, without investigation, authorize the imposition of assessments for the proposed repair proportionate to the overall benefits to the state-owned lands as previously determined by the commissioner. If the commissioner authorizes assessments under this subpart, the commissioner need not issue the findings and report required under part 6115.1540. Where the commissioner does not authorize an assessment for a repair under this subpart, the commissioner shall issue the findings and report as set forth in part 6115.1540.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*

Published Electronically: *June 11, 2008*

6115.1540 FINDINGS AND REPORT.

Upon completion of the table described in part 6115.1530, subpart 1a, for repairs and following the investigation under part 6115.1520, the commissioner must provide the drainage authority with findings within 60 days after the commissioner has received all notifications and documentation required under part 6115.1520, subpart 1. For repairs over $20,000, and upon completion of the table described in part 6115.1530, subpart 1a, the commissioner must provide the drainage authority with findings within 60 days. The findings must convey the results of the investigation, state whether the commissioner will participate in the project, and state the reasons for the commissioner's decisions. The findings must identify which state-owned lands are benefited and which are not and

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

set forth any conditions the commissioner attaches to the project and the amount of the contribution if the commissioner will participate.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*
Published Electronically: *June 11, 2008*

6115.1550 APPEAL.

The findings and report of the commissioner under part 6115.1540 may be reviewed by a declaratory judgment action in the district court of the county wherein the proposed project, or any part thereof, would be undertaken. Judicial review under this part must be initiated within 60 days after receipt of the findings by the drainage authority.

Statutory Authority: *MS s 84A.55*

History: *32 SR 1697*
Published Electronically: *June 11, 2008*

Copyright © 2019 by the Revisor of Statutes, State of Minnesota. All Rights Reserved.

From:	Richter, Joe G (DNR)
To:	Leonard Linton; John Nelson
Cc:	Mielke, Sara (DNR); Daniels, Jeanne M (DNR); Scollan, Daniel (DNR); Gleason, John (DNR); Nelson, Carmelita M (DNR); Youngsma, Lucas (DNR); Baratta, Vanessa (DNR); Esmaeili, Raya; Elhassan, Ali
Subject:	Approval of the City of Ramsey water supply plan.
Date:	Thursday, October 15, 2020 4:10:47 PM
Attachments:	image003.png image004.png image005.png image001.png CERTIFICATE OF ADOPTION.docx GWLevelTemplate.xlsx waterusageinacriticalwateremergency.docx Ramsey Groundwater Technical Review Report - Water Supply Plan Review final 8.18.17.pdf 2020-10-14-WSPApprovalChecklist-Ramsey.docx 2020-10-14-RamseyWSPApprovalLetter.docx

---

Dear Mr. Nelson:

Please find attached, documents **approving** the water supply plan submitted to the DNR dated 09/24/2020.

To complete the water supply planning process, we ask that you:

- Please complete the attached "Certification of Adoption" form and upload it to MPARS as an attachment as soon as the City officially adopts the Plan.
- Determine whether or not you need to send the updated water supply plan to the Metropolitan Council.

You will find more details in the attached approval letter and water supply plan checklist.

We wish to remind the City of Ramsey of the need to collect hourly water level information from the City production wells using its SCADA system. This information is to be submitted to the DNR on an annual basis along with your water use report. The DNR requests that the water level information be submitted to the DNR at: region3s_waterdata.dnr@state.mn.us using the Ground Water Level Monitoring Spreadsheet (available on the DNR Water Appropriations webpage) on an annual basis.

The approval of the City of Ramsey Water Supply Plan is not a pre-approval of either proposed future volumes or proposed wells that are indicated in the water supply plan. Between six months and 1 year before surpassing the authorized volume of DNR Water Appropriation Permit 1985-6005, an amendment request must be submitted to the DNR for increasing the authorized volume of the permit. We require a DNR preliminary well construction assessment submittal 6-12 months before a new well is constructed. The DNR will evaluate the well construction preliminary assessment against the most current laws and geologic information available at the time before making a decision on the requests.

The ordinance that is included as appendix 7 is not a Critical Water Deficiency Ordinance. The City of Ramsey is required to adopt a Critical Water Deficiency Ordinance within six months of the approval of the City of Ramsey water supply plan. Attached to this e-mail is a copy of a

sample Critical Water Deficiency Ordinance that was written by the Minnesota League of Cities that can be used by the City of Ramsey.

Feel free to contact me if you have any questions.

Kind regards,

Joe Richter
District Appropriations Hydrologist | Ecological & Water Resources Division
Minnesota Department of Natural Resources
1200 Warner Road
St Paul, MN, 55106
Phone: 651-259-5877
Email: Joe.Richter@state.mn.us





Sec. 58-118. - Sprinkling; limitation municipal water system.

(a) In the case of fire or other emergencies that may be declared by the city administrator in any area served by the municipal water system, all lawn hoses must be shut off and all unnecessary use of water must be stopped.

(b) Customers shall maintain taps, faucets valves and other water facilities so that water waste is eliminated. Irrigation systems shall be adjusted to avoid sprinkling of city streets and driveways.

(c) Odd-even sprinkling. A ban on sprinkling shall be in effect between Memorial Day and Labor Day. Residents may water on odd-numbered days if their address ends in an odd number, and on even-numbered days if their address ends in an even number.

(d) During the period from Memorial Day through Labor Day, no watering shall be permitted between 10:00 a.m. and 8:00 p.m. since a significant amount of water is lost due to evaporation during the hot portions of the day.

(e) Exemptions. Newly sodded or seeded yards will be exempt from the odd-even restriction for a period of two weeks. Overseeding or spot repair of existing established yards may be watered every day with a hand controlled hose. No watering will be allowed between 12:00 noon and 6:00 p.m. for these exemptions. Other exemptions not subject to the afternoon restriction include car washing, filling of children's swimming pools, and children playing in hose operated sprinklers or water toys.

(f) Sanctions for violations of this section shall be as follows. All fees shall be added to and become a part of the water bill for the premises serviced.

(1) First violation: a written notice shall be given by registered mail.

(2) Second violation: a fee as established by ordinance shall be imposed.

(3) Third violation: a fee as established by ordinance shall be imposed.

(4) Fourth violation: water service shall be turned off.

(Code 1978, § 4.40.06, subd. 10; Ord. No. 92-05, 6-29-1992; Ord. No. 04-24, 7-12-2004)

CC Work Session **2. 4.**

Meeting Date: 02/23/2021

Information

Title:

Overview of Emergency Management Role for Elected Officials

Purpose/Background:

The purpose of this case is to provide Ramsey City Council with information relating to their roles during disasters and other emergency situations. Also included will be the emergency communication process and working with the media.

Timeframe:

15 minutes

Funding Source:

No funding required

Responsible Party(ies):

Fire Chief/Emergency Management Director Matt Kohner

Outcome:

Information only. No action necessary.

Attachments

Emergency Management Overview

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	02/18/2021 02:57 PM
Form Started By: Matt Kohner		Started On: 02/18/2021 09:18 AM
Final Approval Date: 02/18/2021		

City of Ramsey
Emergency Management

Emergency Management
Overview for City of Ramsey Government Officials

Comprehensive Emergency Management
- The framework within communities to reduce the vulnerability to threat/hazards and cope with disasters.
- Creating a plan based on a risk analysis of the city.
- Threats/hazards exist- they always have and always will.
  Priorities:
  #1: Life Safety
  #2: Incident Stabilization
  #3: Property/Environmental Conservation
- Success in dealing with disasters depend primarily on how well prepared, organized and coordinated we are.



- All events start at the local level and grow outward as the needs increase. We reach out to our neighbors, then state resources and finally Federal support. It is a collaborated effort but what some may not realize is that the primary responsibility in coordinating any emergency or disaster is the local community.

Phases of Emergency Management
- Mitigation: public education, improved infrastructure
- Preparedness: staff training, Emergency Response Plans, sirens
- Response: life safety, protect property and environment
- Recovery. Stabilize infrastructure functions, debris management
- By being proactive and focusing on preparedness and mitigation efforts the more fluid the response and recovery efforts become.



Incident Command System
- A standardized, on-scene, all-hazards incident management concept.
- All levels of resources are structured within the same system to effectively coordinate response, deliver services and plan for needs as they arise
- A cost-effective and efficient management approach for both small and large situations

Emergency Operations Plan
- Specifies which groups within city staff have primary responsibility for key operations
- Basic plan: purpose, roles & responsibilities, hazard analysis
- Operations plan: operation functions, assignments



Emergency Operations Center (EOC)
- Provides a central location where coordination and decision making can support incident response
- Provide big picture, communications, manage public information authorizing emergency expenditures
- Primary: Ramsey City Hall, Backup- Ramsey Fire Station 2



Overview of Roles (collaborated effort/working together)
- Emergency Manager: carry out response plan, lead and direct, control scene
- Emergency Management Staff (Police, Fire and Public Works) Operations side of incident
  - Police: evacuation, traffic control, security
  - Fire: search & rescue, fire extinguishment, first aid
  - Public Works: Debris management
- The Mayor and City Council remain in control of overall city functions during an emergency or disaster (policy decisions, approve expenditures)

Role of Emergency Management Director

- Develops and maintains the city's Emergency Operations Plan
- Develops and implements a public warning system
- Develops standards and procedures for the emergency Operations Center (EOC) and manages EOC operations.

Role of City Administrator

- Activating the Ramsey Emergency Response & Operations Plan when needed.
- Coordination with the Mayor and City Council.
- Use all the available resources of the City as reasonably necessary to cope with the disaster.

Role of Mayor

- The authority to issue a declaration of a local emergency.
- Issuance of orders for evacuation.
- Maintain liaison with other elected officials.

Role of City Council

- The City Council works closely with the City Administrator in a *similar capacity* as they work with the City Administrator during normal operations.
- **The Mayor and council do not have an operational or response role during an emergency.**
- Your primary role during a disaster is one of policymaker, communicator, liaison, and oversight.
- Be patient. Information on what is happening and the impact of an emergency takes time to assess.
- Assist Mayor as requested.
- Facilitate communication between council and the community.
- **"Fly the flag"**, boost morale and provide comfort to residents affected by an emergency event.
- In the event of a disaster, the City Council will be notified by the City Administrator or designee.
- Depending on the size and scope of the disaster, it is recommended that **you do not respond to the** immediate disaster area because of safety concerns for you as well as emergency responders working at the scene.

Working with the Media

- In the event of a significant incident, City Council members will be contacted and briefed by the City Administrator.
- A Public Information Officer (PIO) for the City will be supported by EOC staff during an event.
- Public Information Officers or the Emergency Manager will confer with Council members to brief them on the situation and what response and recovery actions are underway.



Leadership

- Most importantly, Government Officials provide leadership.
- Leadership means . . .
  - Motivating and supporting trained, on-scene responders so that they can accomplish difficult tasks under dangerous, stressful circumstances.
  - Instilling confidence in the public that the incident is being managed effectively.

Matt Kohner
Fire Chief/Emergency Management Director
City of Ramsey
7550 Sunwood Drive NW
Ramsey MN, 55303
763-433-9859
mkohner@cityoframsey.com

CC Work Session **2. 5.**

Meeting Date: 02/23/2021

Information

Title:

Review City Meeting Security Procedures (**Portions of this discussion may be closed to the public).**

Purpose/Background:

Purpose: To review documents and procedures for meeting security in an emergency situation.

Background: The Continuum of Action and the Disruption Instructions have been updated to include information on security procedures for the Council Chambers.

Following a review of these documents, Chief Katers will review safety procedures in an emergency situation. As is allowed in State Statutes 13D.05 Subd. 3(d), this portion of the report/review may be closed to the public. This portion of the meeting may also be moved to the Council Chambers.

Timeframe:

30 minutes

Funding Source:

No funding required

Responsible Party(ies):

Police Chief Jeff Katers

Outcome:

That Council review the Continuum of Action and Disruption Instructions as well as receive information/training with regard to security procedures in the event of an emergency situation.

Attachments

No file(s) attached.

Form Review

Inbox	Reviewed By	Date
Kurt Ulrich	Kurt Ulrich	02/18/2021 02:50 PM
Form Started By: Jeff Katers		Started On: 02/16/2021 12:04 PM
Final Approval Date: 02/18/2021		

CC Work Session **3. 1.**

Meeting Date: 02/23/2021

By: Katie Schmidt, Administrative Services

Information

Title:

Review Future Topics/Calendar

Purpose/Background:

Attached is the current list of future topics for work session discussion. Items are drawn from Council requests at meetings, or are related to topics that have been identified in the City's strategic plan. Tentative dates have been assigned.

Recommendation:

N/A

Action:

For Council review - no formal action necessary.

Attachments

Future_Topics_List

Form Review

Inbox	Reviewed By	Date
Colleen Lasher	Colleen Lasher	02/18/2021 10:49 AM
Kurt Ulrich	Kurt Ulrich	02/18/2021 02:15 PM
Form Started By: Katie Schmidt		Started On: 02/10/2021 03:13 PM
Final Approval Date: 02/18/2021		

	City Council Future Topics – Work Session (Tentative Dates & Topics)	
Proposed Date	**Topic**	**Minutes (Estimate)**
03/09/21	Discussion Considering an ordinance prohibiting picketing in residential neighborhoods – Katers	20
03/09/21	Discussion Regarding the Remote Attendance Policy - Lasher	15
03/16/21	***Special Work Session Immediately Following Public Works Committee***	
03/16/21	Board and Commission Interviews	90
03/23/21 1st	Finalize or Continue Draft Communications Plan - Staff	45
03/23/21 2nd	Draft Trail Maintenance Policy – Westby/Riemer	30
03/23/21 3rd	Discuss Whether or Not to Waive Utility Bill Late Fees in 2021 – Lund	10
03/23/21 4th	Review the Citizen Survey-Ulrich	20-30
March/April	Strategic Planning Session	90
March/April	Review City Survey Results - Ulrich	20
04/20/21	***Special Work Session Immediately Following Public Works Committee***	
By 04/30/21	Discuss Chapter 4 of the Charter – Elections – Lasher	30
04/27/21	Fund Balance Quarterly Update – Diana Lund	15
04/27/21	Draft Stormwater Pond Maintenance Policy – Westby/Riemer	30
04/27/21	Discuss Employee Telecommuting – Lasher	
05/18/21	***Special Work Session Immediately Following Public Works Committee / Additional Special Meetings beyond May 18th TBD.***	
Spring 21	Discuss Central Park Re-naming event– Riverblood	
06/08/21	Discuss Non-union Compensation-Lasher	30
06/08/21	Review format of cash flows/fund balances - Lund	
June 21	City Communications Quarterly Update - Staff	15
07/27/21	Fund Balance Quarterly Update – Diana Lund	15
2021	Discuss the General Topic of Holding Joint Meeting(s) with the Council and Commissions & Other Cities. Based on discussion, future work sessions TBD.	20
2021	Discuss Historic Town Hall – Ulrich	30
2021	City Branding Presentation - Ulrich	40

2021	Fire Department Duty Crew Analysis - Kohner	20
2021	CR-5 Corridor Study Review - Westby	45
2021	Park System Plan – Riemer/Riverblood	60
2021	Accounting of City Engineering Staff Time for City Projects - Westby	30
2021	Discuss Enacting Ordinance Regulating Targeted Picketing in Residential Neighborhoods	15
10/26/21	Fund Balance Quarterly Update – Diana Lund	15
Nov. 21	Bi-Annual Communications Update	