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Stormwater Management Program

November 2024

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Stormwater Management Program

November 2024

Minneapolis/Minneapolis Park and Recreation Board Stormwater Management Program

Municipal Separate Storm Sewer System (MS4)

Phase I Permit

NPDES/SDS Permit No. MN0061018

Prepared by:

Minneapolis Public Works, Surface Water & Sewers Division

Minneapolis Park and Recreation Board Environmental Stewardship, Environmental Management Department

Approved by Minneapolis City Council: November 23, 2024

Approved by Minneapolis Park and Recreation Board: October 23, 2024

NPDES MS4 Phase I Permit

Stormwater Management Program

NPDES/SDS Permit No. MN0061018

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

Elizabeth Stout, PE

Principal Professional Engineer

Date: September 24, 2024 Registration No. 46328

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List of Acronyms

BCWMC	Bassett Creek Watershed Management Commission
BMP	Best Management Practice
BWSR	Board of Water and Soil Resources
CaCo3	Calcium Carbonate
CEAC	Citizen Environmental Advisory Committee
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
City	City of Minneapolis
CPED	Community Planning and Economic Development
CPTF	Capital Project Task Force
COD	Chemical Oxygen Demand
CSO	Combined Sewer Overflow
Cu	Copper
CWA	Clean Water Act
DWSMA	Drinking Water Supply Management Area
EPA	Environmental Protection Agency
ERP	Enforcement Response Procedure
EMC	Event Mean Concentration
FEMA	Federal Emergency Management Agency
H&H	Hydrologic and Hydraulic
GIS	Geographic Information Systems
IAP	Incident Accident Plan
ID	Identification
IDDE	Illicit Discharge and Detection Elimination
I/I	Inflow and Infiltration
ISS	Inorganic Suspended Solids
MDH	Minnesota Department of Health
MED	Maximum Extent Possible
Mg/L	Milligram per Liter
MIDS	Minimal Impact Design Standards
MNDNR	Minnesota Department of Natural Resources
MnDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency
MPRB	Minneapolis Park and Recreation Board
MS4	Municipal Separate Storm Sewer System
MCES	Metropolitan Council Environmental Services
MCWD	Minnehaha Creek Watershed District
MWMO	Mississippi Watershed Management Organization
N	Nitrogen
N/A	Not Applicable
NASSCO	National Association of Sewer Service Companies
NPDES	National Pollutant Discharge Elimination System
NPDES/SDS	National Pollutant Discharge Elimination System/State Disposal System
O&M	Operations and Maintenance

List of Acronyms

PACP	Pipeline Assessment Certification Program
P	Phosphorus
Pb	Lead
PCAB	Pollution Control Annual Billing
PDR	Preliminary Development Review
PW-SWS	Public Works – Surface Water and Sewers
QA	Quality Assurance
SARA	Superfund Amendments and Reauthorization Act
SCWMC	Shingle Creek Watershed
SMP	Stormwater Management Practice
SOP	Standard Operating Procedure
SWMP	Stormwater Management Program
SWPPP	Storm Water Pollution Prevention Plan
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TP	Total Phosphorus
TSS	Total Suspended Solids
U of M	University of Minnesota
USACE	United States Army Corps of Engineers
VSS	Volatile Suspended Solids
WLA	Water Load Allocation
WQS	Water Quality Standards
WRMP	Water Resource Management Plan
Zn	Zinc

Executive Summary

The City of Minneapolis and Minneapolis Park and Recreation Board (MPRB) Stormwater Management Program (SWMP) is prepared in accordance with the requirements of the National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Permit No. MN0061018, issued by the Minnesota Pollution Control Agency (MPCA) under the federal Clean Water Act (CWA) to the City of Minneapolis (City) and the Minneapolis Park and Recreation Board (MPRB) on December 12, 2023. This permit is also known as the Municipal Separate Storm Sewer System (MS4) Phase I Permit. This SWMP, as approved by the City of Minneapolis City Council and the Minneapolis Park and Recreations Board of Commissioners, serves as the agreement required under Section 7.5 of the NPDES permit issued on December 12, 2023.

The objective of the SWMP is to provide clear, comprehensive, and effective structure and guidance for operation of the MS4 conveyance and treatment system in accordance with the MS4 Permit to minimize discharge of pollutants.

In 2024, the City and the MPRB, budgeted approximately $57 million to be used to manage 24 individual stormwater management practices (SMPs), organized into 11 minimum control measures:

1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management
6. Pollution Prevention and Good Housekeeping for Municipal Operations
7. Stormwater Discharge Monitoring and Analysis
8. Progress Toward Waste Load Allocation for Approved Total Maximum Daily Loads
9. Coordination and Cooperation with Other Entities
10. Stormwater Management Program Assessment, Modification, and Annual Reporting
11. Integrated Infrastructure Management

This SWMP is a revision of the Stormwater Management Program that was adopted by the Minneapolis City Council on July 26, 2019 and revised on June 16, 2022. This 2024 update to the SWMP is written to be in accordance with the requirements of the December 12, 2023 MS4 Permit.

Major changes to the 2023 MS4 Permit and incorporated into this SWMP include:

- Requirements that a trash reduction program be developed and implemented for Lake Hiawatha.
- Additional specificity around education and outreach activities including requiring a focus on pet waste and chlorides.
- Requirement that industrial, commercial, and institutional facilities address non-stormwater discharges to the permittees' MS4 through a new regulatory and inspection program.

This report is organized into three sections, as follows:

Section 1 contains general information about the City's and MPRB's approach to stormwater management, MS4 Permit requirements, the relationship between the SWMP and other water resource programs, funding for stormwater programs, and pollutants in stormwater runoff.

Section 2 contains specific information on the individual SMPs managed by the City and the MPRB. Each specific SMP summary sheet includes a general description of the program, ongoing and new permit tasks conducted by the City and the MRPB with a schedule for implementation for new tasks and specific organization assignments, measurable goals, and annual reporting requirements.

Appendix A contains tables of detailed information, including comprehensive information on city impaired waters and TMDL status, City and MPRB staff responsible for each SMP, and a list of targeted pollutants and sources.

Section 1 – Introduction

Organization of the Stormwater Management Program

This Stormwater Management Program (SWMP) is organized into two main sections with an appendix of supplementary tables. Section 1 provides background and general information about the City of Minneapolis's (City) and Minneapolis Park and Recreation Board's (MPRB) stormwater management programs. Section 2 provides detailed descriptions of stormwater management practices (SMPs), organized according to the following stormwater management control categories:

- Public Education and Outreach
- Public Participation and Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post-Construction Stormwater Management
- Pollution Prevention and Good Housekeeping for Municipal Operations
- Stormwater Discharge Monitoring and Analysis
- Progress Toward Waste Load Allocation for Approved Total Maximum Daily Loads
- Coordination and Cooperation with Other Entities
- Stormwater Management Program Assessment, Modification, and Annual Reporting
- Integrated Infrastructure Management

The objective of this SWMP is to provide clear, comprehensive, and effective structure and guidance for operation of the municipal conveyance and treatment system in accordance with the NPDES MS4 Permit requirements to minimize discharge of pollutants.

Regulatory Requirements

History

The Clean Water Act (CWA), the primary federal law governing water pollution, was enacted in 1972. It established the goals of elimination of pollutant discharges and restoration of surface water quality as necessary for beneficial uses such as aquatic habitat, water supply, and recreation. The United States Environmental Protection Agency (EPA) manages the CWA and subsequent regulations in partnership with state environmental agencies. Major amendments were enacted in the CWA of 1977 and the Water Quality Act of 1987. The CWA requires a National Pollutant Discharge Elimination System (NPDES) permit to discharge pollutants to waters of the United States.

NPDES Stormwater Permits in Minnesota

The EPA has authorized the Minnesota Pollution Control Agency (MPCA) to issue all NPDES permits in the State of Minnesota. The MPCA issues different types of NPDES permits, including wastewater discharge, industrial discharge, and stormwater construction activities. The NPDES permit addressed by this SWMP is a Municipal Separate Storm Sewer System Permit, commonly referred to as an MS4 Permit. Additionally, within the MS4 type of NPDES permit, there are two categories: Phase I and Phase II. Phase I covers systems serving a population of 100,000 or more. Phase II covers systems not already covered by Phase I. The City and MPRB holds a Phase I permit. The City of Saint Paul is the only other city in Minnesota to also hold a Phase I permit.

The MPCA issued the first MS4 Permit to the City and the MPRB as co-permittees on December 1, 2000. The permit was re-issued on January 21, 2011, February 16, 2018, and December 12, 2023. MS4 permits require regulated municipalities to use Best Management Practices (BMPs) to reduce pollutants in stormwater runoff to the Maximum Extent Possible (MEP). This SWMP is a document that describes activities related to the City's and MPRB's programs for management of stormwater within their jurisdiction, in accordance with the MS4 Permit requirements. This SWMP is a revision of the Stormwater Management Program that was most recently adopted by the Minneapolis City Council in September 2022. This 2024 revision of the SWMP is written to be in accordance with the requirements of the December 12, 2023 NPDES/SDS Permit.

Comparison of Stormwater Management Program and Water Resource Management Plan

This SWMP document is a federal requirement of the MS4 Permit, which is issued under authority of the Federal CWA. The City of Minneapolis Water Resource Management Plan (WRMP) is a parallel document that is a state requirement, prepared in response to Minnesota Statute 103B and Rule 8410, governing watershed management in Minnesota. The 2018 WRMP is the water resource and sanitary sewer chapter of the Minneapolis Comprehensive Plan, which is issued every 10 years. It describes a broad view of surface water management in the city, which includes water resource management activities, management of the sanitary sewer collection system, and management of the stormwater drainage system. This SWMP is a detailed document that focuses specifically on the management of the stormwater drainage system. This SWMP has additional details not included in the WRMP, including detailed descriptions of City and MPRB activities, responsible individuals or position titles, annual report requirements, and schedules for revision or creation of new stormwater program activities. The City and MPRB's SWMP is revised on a 5-year cycle after issuance of updated NPDES permits.

Description of Permitted Areas, Systems, and Surface Waters

Minneapolis is a fully developed city located in Hennepin County, Minnesota. The City owns and operates an estimated 650 miles of mainline storm drain and 16 miles of storm tunnels. The Minnesota Department of Transportation, Hennepin County, and the University of Minnesota are other MS4s that have regulated storm sewer systems within the city. The MPRB owns and operates approximately another 30 miles of storm sewer system. The storm drainage system of catch basins, maintenance holes, pipes, and deep tunnels conveys runoff from all areas of within the city, which totals approximately 59 square miles in area. The land use is approximately 56 percent residential, 24 percent commercial/industrial/institutional, 9.2 percent parks/open space, and 2 percent rail/airport. The system also includes structural stormwater practices installed to improve the quality of stormwater runoff. These include stormwater ponds and basins, bio-(in)filtration areas, grit chambers, and other controls and treatment facilities. A more detailed description of the city can be found in Section 4 of the WRMP.

The oldest city sewers were built in 1870 and were designed to carry both sewage and stormwater directly to the Mississippi River. In 1922, construction started for separate storm drain systems around the city lakes, as well as in newly developing areas. However much of the City was developed prior to this and older areas continued to be served by combined sewers. In the 1930s, the first sewage treatment plant was built along with a system of interceptor sewers in Minneapolis (and elsewhere) to collect sanitary and combined sewer flows and convey them to the treatment plant. Overflow regulators were installed along the river that allowed for overflows directly into the river only in large rainfall

events. In 1960, the City banned stormwater drainage to the sanitary sewer system and since 1960 has been actively working to separate the stormwater from the sanitary sewers by constructing separate storm drains that discharge to lakes, streams, or the Mississippi River. This effort has been successful as evidenced by the last rainfall triggered discharge of combined stormwater and sewage in 2006. As of 2023 over 99.75% of the sewer system is separated.

Approximately 25 miles of the Mississippi River, Shingle Creek, Bassett Creek, and Minnehaha Creek wind through the city. These streams and their tributary lakes and wetlands are the primary surface waters receiving stormwater runoff from the City and MPRB stormwater drainage systems. Those lakes that exist partially or wholly within the city and those that receive Minneapolis generated stormwater runoff but are outside the municipal boundaries are shown in Figure 1.1. The lakes within the municipal boundaries are integrated into MPRB parks, which are the focus of the city's park system, providing residents and visitors with numerous opportunities for land and water-based recreation. Table 1.1 provides details of the streams and lakes within the city that are listed by the Minnesota Department of Natural Resources (MNDNR) as public waters. As property owner of record for much of the shoreline in the city, the MPRB is responsible for maintaining the shoreline and has created an effective program for lake management, further detailed in the Annual NPDES Reports along with management of their own portion of the storm sewer system.

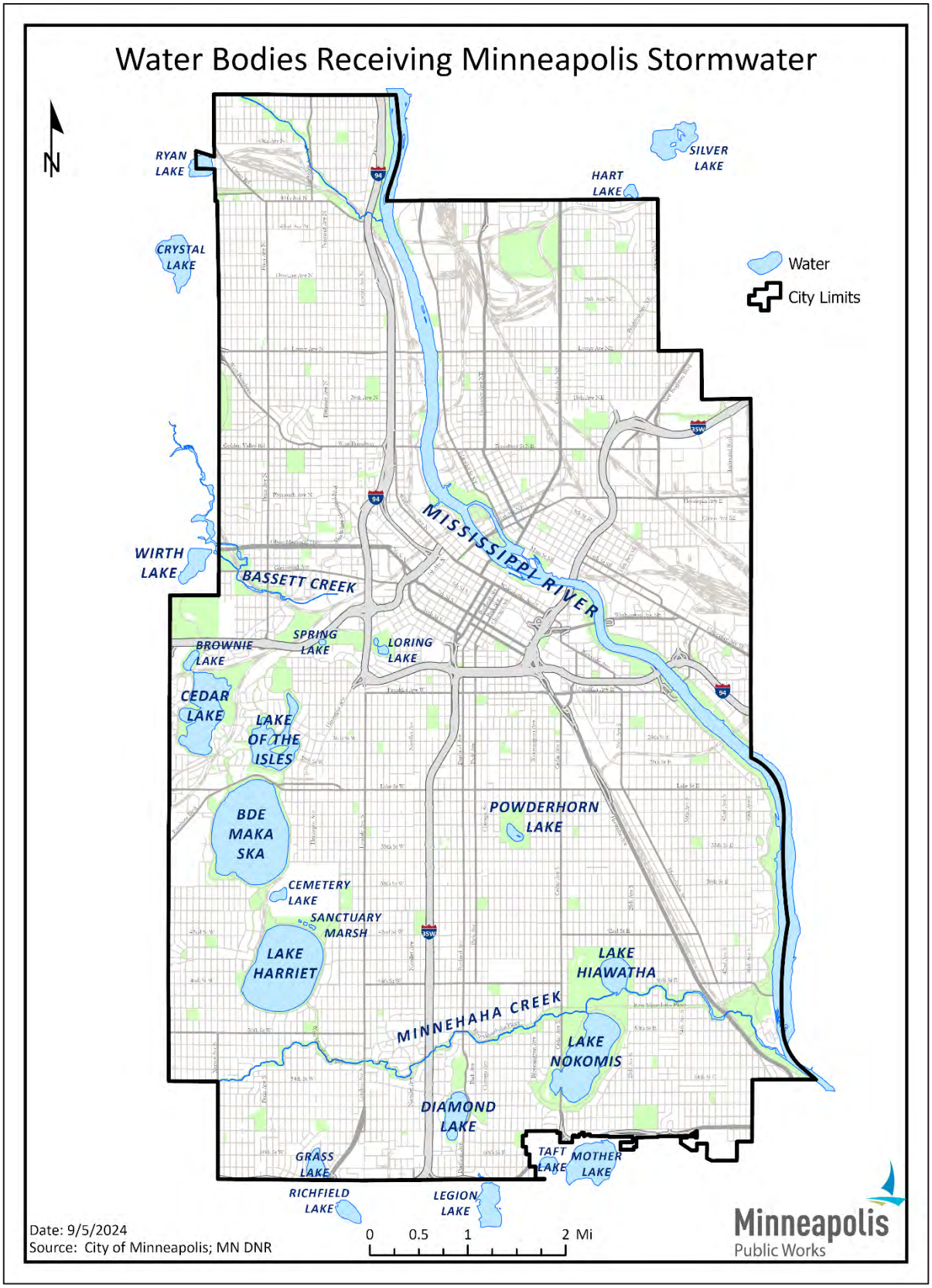
Water Bodies Receiving Minneapolis Stormwater
N
RYAN LAKE
SILVER LAKE
HART LAKE
CRYSTAL LAKE
Water
City Limits
MISSISSIPPI RIVER
WIRTH LAKE
BASSETT CREEK
SPRING LAKE
BROWNIE LAKE
LORING LAKE
CEDAR LAKE
LAKE OF THE ISLES
BDE MAKA SKA
POWDERHORN LAKE
CEMETERY LAKE
SANCTUARY MARSH
LAKE HARRIET
LAKE HIAWATHA
MINNEHAHA CREEK
LAKE NOKOMIS
DIAMOND LAKE
TAFT LAKE
MOTHER LAKE
GRASS LAKE
RICHFIELD LAKE
LEGION LAKE
0 0.5 1 2 Mi
Date: 9/5/2024
Source: City of Minneapolis; MN DNR
Minneapolis
Public Works

Figure 1.1 – Water Bodies Receiving Minneapolis Stormwater

Table 1.1 Water Bodies that receive runoff from the City or MPRB

Surface Water	DNR ID	Minneapolis Stormwater Runoff Pipeshed (acres)
Surface Waters Within Minneapolis		
Bassett Creek	07010206-538	1501
Bde Maka Ska	27003100	1,183
Birch Pond	27065300	16
Brownie Lake	27003800	69
Cedar Lake	27003900	216
Diamond Lake	27002200	643
Grass Lake	27068100	318
Lake Harriet	27001600	1,098
Lake Hiawatha	27001800	1,219
Lake Nokomis	27001900	643
Lake of the Isles	27004000	689
Loring Lake	27006500	5
Minnehaha Creek	07010206-539	3,056
Mississippi River	07010206-805 07010206-814	19,793
Powderhorn Lake	27001400	278
Ryan Lake	27005800	56
Shingle Creek	07010206-506	1,372
Spring Lake	27065400	39
Surface Waters Outside Minneapolis		
Bassett's Pond [a]	27003600	--
Crystal Lake	27003400	421
Hart Lake	02008100	3
Legion Lake	27002400	2
Mother Lake	27002300	3
Richfield Lake	27002100	57
Silver Lake	62008300	28
Taft Lake	27068300	131
Wirth Lake	27003700	37
[a] Pipeshed area for Bassett Pond included in pipeshed area for Bassett Creek		

Water Quality Standards and Total Maximum Daily Loads

Water quality standards (WQS) are risk-based requirements (also called hazard-based requirements) which set allowable general and site-specific parameters for individual waterbodies, such as rivers, lakes, streams, and wetlands. States set WQS by designating uses for a waterbody (e.g., recreation,

water supply, aquatic life, agriculture) and applying allowable water quality concentrations and requirements designed to protect the designated uses. Minnesota Rule 7050 classifies all surface waters in Minnesota according to specific uses. Each use has a defined numerical water quality standard that protects the physical, biological, and chemical integrities of each classification of surface water. The only surface water in the city that has a special Class 1 designation under Minnesota Rule 7050.0470 is the segment of the Mississippi River that is above St. Anthony Falls, which is protected for domestic consumption. All other surface waters in the city are Class 2 waters, protected for aquatic life and recreation, or are wetlands without numerical standards. Within the city, there are no Outstanding Resource Value waters designated for special protection under the non-degradation classifications, as defined in Rule 7050.0180.

The EPA requires that the MPCA maintain a list of surface waters that do not meet the numerical standards set by the State of Minnesota for its designated use classifications, called the Impaired Waters, or 303(d), list. A TMDL study of each Impaired Water may be conducted to determine the sources of pollutant(s) that are causing the impairment. An implementation plan may then be developed that identifies activities and capital projects to reduce the pollutant loading to meet water quality standards. The MPCA provides additional information on impaired waters and TMDL studies at the following web page: Minnesota's Impaired Waters and TMDL Status.

The TMDL study produces list of factors that, when combined, totals the maximum amount of pollutant the impaired waterbody can assimilate. Often, these TMDL studies target stormwater runoff as a pollutant that needs to be reduced for the surface water to meet its water quality standards. In this case, one of the factors in the TMDL equation is a Waste Load Allocation (WLA) from permitted sources, including entities holding wastewater permits, MS4 permits, industrial stormwater permits, and construction stormwater permits. For a given TMDL, an MS4 can be assigned an individual WLA, or can be one of a group of MS4s with a shared categorical WLA. The Minneapolis NPDES MS4 Permit requires that the permittees document progress towards meeting the WLA through structural or non-structural stormwater BMPs. Those surface waters in the city that have been listed as impaired and the status of current TMDL studies are listed in the Appendix in **Table A.1**.

As of 2023, the City and MPRB are fully compliant with the requirements of the recommendations of three TMDL studies:

- South Metro Mississippi River TMDL (Metro) – There is a zero percent (0%) reduction required from the permittees for this TMDL. However, most BMPs that are implemented for water quality improvement will positively impact this impairment.
- Wirth Lake – In 2012, the BCWMC (in cooperation with the MPRB and the City of Golden Valley and with a grant from the Clean Water Legacy Fund) completed a project which modified the Wirth Lake outlet to prevent backflow from Bassett Creek into Wirth Lake during periods of high water in the creek. This project, along with other improvements in the watershed, reduced total phosphorus levels in the lake considerably. The lake has been removed from the impaired waters list.
- Twin (Upper, Middle, and Lower) and Ryan Lakes – These lakes were removed from the 303(d) Impaired Waters List and are meeting water quality standards.

The MPCA maintains a TMDL Glossary of Terms that defines the technical terminology that is used in Table A.1 and other TMDL reports referenced in this SWMP.

Program Management and Coordination

Legal Authority

The City of Minneapolis (City), a municipal corporation in the State of Minnesota, has broad general powers to enact legislation for the health and welfare of the community. The City Charter and Code of Ordinances include provisions that protect the water resources of the city.

The Minneapolis Park and Recreation Board (MPRB) is an independent agency governed by an elected board. As an independent agency, it maintains a separate Code of Ordinances that apply to lands owned and operated by the MPRB.

The primary ordinances governing stormwater management can be found in the Minneapolis Code of Ordinances Title 3 (Air Pollution and Environmental Protection), and Title 19 (Waters, Sewers, and Sanitary Sewage) and in MPRB Code of Ordinances Chapter 3 (Bathing and Beaching), Chapter 4 (Boating), Chapter 10 (Trees and Vegetation), and Chapter 12 (Environmental Protection, Shoreland, and Floodplain Preservation). A comprehensive list of City and MPRB ordinances related to stormwater and surface water management can be found in Table 5.1 and Table 5.2 of the 2018 WRMP.

Relationship Between Comprehensive Plan, the SWMP, and Other Public Entities

In addition to meeting the requirements of the MS4 permit, the City's stormwater management activities must also conform to various other policies, including the City Council goals, WRMP goals, and the policies and goals of the comprehensive plan.

Stormwater management programs required by the MS4 permit have been established in a manner that follows these adopted policies and goals. Detailed information on the relationship between all goals and practices is contained in Section 2 of the 2018 WRMP.

Co-Permittee Coordination

This SWMP has been jointly developed by the City of Minneapolis Public Works Department, Surface Water & Sewer Division, Regulatory Section and MPRB Environmental Stewardship Division, Environmental Management Department. These two groups are generally responsible for measuring, tracking, and documenting permit compliance. Generally, the City is responsible for managing the storm drain system within the public right of way and the MPRB is responsible for managing the storm drain systems that exclusively serve park infrastructure along with shoreline and lake management. The two entities are jointly responsible for the completion of the required Permit submittals and for ensuring full regulatory compliance. Each organization works for joint compliance while reducing unnecessary duplication of work. This SWMP, as approved by the City of Minneapolis City Council and the Minneapolis Park and Recreations Board of Commissioners, serves as the agreement required under Section 7.5 of the NPDES permit issued on December 12, 2023.

Minneapolis Comprehensive Plan

The current comprehensive plan for the City, Minneapolis 2040, was approved by the Minneapolis City Council in December 2018. The purpose of Minneapolis 2040 is to establish housing, transportation, wastewater collection, and water resource management strategies to guide the growth of the City in a

manner that is both consistent with Metropolitan Council strategies, as well as consistent with goals and policies established by the City. The Minneapolis WRMP also approved in December 2018, an appendix to the Minneapolis 2040 Plan, focuses specifically on water resource and stormwater management systems and planning.

The current WRMP was prepared in accordance with the watershed planning requirements in Minnesota Statutes Section 103B.235 and Minnesota Rules Part 8410. This plan is developed to comply with the policies of each watershed organization in the City, as well as the planning requirements set in the City's comprehensive plan. The WRMP is a broad document that guides water resource management activities by the City, including stormwater management, flood control, sanitary sewer collection system management, and surface water management.

The City worked to integrate stormwater, sanitary sewer, and surface water decision-making and activities into the 2018 WRMP. This practice was approved by the Metropolitan Council in the last generation of City plans and by the MPCA in the City's NPDES permit and is preferred by the City because it allows the City to better maximize investments and manage needs for overall system management and water quality investments.

Minneapolis Park and Recreation Board Comprehensive Plan

The MPRB adopted its Parks for All: MPRB Comprehensive Plan that is effective through 2036. This plan contains policies that guide the planning, development, and operations of parks, including environmental operations. Additionally, MPRB's Ecological System Plan, adopted in 2020, outlines guiding principles, strategies, and specific goals for environmental management within parks.

Coordination with Other Jurisdictions

The City and the MPRB coordinate with several other public jurisdictions for water resource management, including:

- Bassett Creek Watershed Management Commission
- Minnehaha Creek Watershed District
- Mississippi Watershed Management Organization
- Shingle Creek Watershed Management Commission
- Metropolitan Council
- Minnesota Pollution Control Agency
- Minnesota Department of Natural Resources
- Minnesota Board of Water and Soil Resources
- United States Environmental Protection Agency
- United States Army Corps of Engineers
- Federal Emergency Management Agency
- United States National Park Service

Other public entities own storm drainage systems that are interconnected with the Minneapolis stormwater drainage system and are subject to Phase II MS4 NPDES permit requirements. These systems are not governed by the Minneapolis/MPRB MS4 permit:

- University of Minnesota

- Minnesota Department of Transportation
- Hennepin County Department of Transportation
- Hennepin County – County Ditch 13 (Shingle Creek)
- Minnehaha Creek Watershed District – Ditch 14, Ditch 17, and Ditch 29
- Upstream cities of Edina, Golden Valley, Richfield, Robbinsdale, and St Louis Park

Although the City or MPRB do not operate these storm drainage systems, they do in some cases have the responsibility and authority to manage the land area that may drain to these systems. An exception is land within a right-of-way operated by another road authority (MnDOT, Hennepin County, or the University of Minnesota). Another exception is University of Minnesota (U of M) land tributary to the U of M storm drainage system and U of M outfalls. Where U of M land is tributary to City storm drains and/or City outfalls, City utility connection permits or extension permits are necessary. There are some U of M outfalls that cross through MPRB property and are located on MPRB land.

More details regarding these publicly-owned systems are included in Section 4 of the WRMP. A detailed description of each of these jurisdictions, responsibilities, and agreements is included in Section 2 of the WRMP.

Stormwater Management Program

The City and MPRB have developed a stormwater management program that is based on the recognition that many City and MPRB departments have involvement in programs or activities that impact success of effective water quality improvement programs. This document details how stormwater management practices are embedded into the responsibilities of many departments across the organizations. The result is a combination of ordinances, inspections, education, monitoring, maintenance, and capital projects managed by various departments of the City and the MPRB.

Budgets and Funding

The 2024 adopted budget for operational stormwater spending by the City and MPRB is approximately $29.5 million. The budget includes storm sewer maintenance, rehabilitation, engineering, street cleaning, capital improvement projects, and regulatory activities. The City budget is current only for the year that it is adopted. Projected budgets are presented for planning purposes, and there is no certainty that future funding will follow the projected budgets.

Table 1.3 provides the current budget and funding for the stormwater program. The City and MPRB work to keep their activities, such as repair/rehabilitation projects, capital improvement projects, or regulatory activity, within the limits of available funding. To accomplish this goal, prioritization is critical.

Table 1.3 – Stormwater Management Program Budget and Funding

	Budget (in millions)				
	Adopted	Proposed	Proposed	Proposed	Proposed
	2024	2025	2026	2027	2028
PUBLIC WORKS – SURFACE WATER & SEWERS Primary revenue source is Stormwater Utility Fee. Other sources include bond sales, General Fund, grant proceeds, maintenance agreement payments. [1]					
Stormwater Operating Budget	$26.9	$27.9	$29.0	$30.2	$31.3

Stormwater Capital Improvement Budget	$19.0	$20.7	$21.3	$21.7	$21.0
Street Sweeping	$9.1	$9.1	$9.1	$9.2	$9.2
Health Department – Environmental Services Primary revenue source is permit fees. [2, 3]					
Detection and enforcement activities	$1.9	$2.0	$2.0	$2.1	$2.1
MINNEAPOLIS PARK and RECREATION BOARD Primary revenue source is MPRB Stormwater Fund via Stormwater Utility fee. [4]					
Stormwater monitoring, management, and education activities	$1.32	$1.36	$1.7	$1.8	$1.9

[1] Based on adopted 2024 City Budget

[2] Based on 5-year projected activities

[3] Budget amount includes all environmental inspection, detection, and enforcement activities, including air quality, illicit discharge, and erosion and sediment control

4 MPRB General fund supports additional monitoring, management, education, volunteer, and natural resources management beyond the scope of work outlined in this document.

Funding Mechanisms

Stormwater Utility Funds

In 2005, the City began implementing a stormwater utility fee. Implementation of this fee did not create new revenue, but instead changed how each property was billed for stormwater services. The stormwater utility fee is similar to other fees the City charges its residents for services provided, such as the sanitary sewer fee, and trash and recycling fee. The stormwater utility rate is set each year, and the monthly fees are based on numeric units calculated from actual or assumed imperviousness of a specific property. The revenues collected are dedicated to stormwater management activities.

Bonds

In certain years, the City may decide to issue bonds to raise money to pay for capital project infrastructure upgrading and replacement. The debt service on bonds sold for stormwater improvements is paid for by the stormwater utility.

General Fund

Property taxes spread capital, operations, and maintenance costs of the surface water system over the entire city. General fund revenues are not a major source of funding for water resource projects or programs in the city; however, these funds may pay for a storm drainage improvement that is part of a larger capital improvement project, such as a highway reconstruction project. General funds are also used to fund some activities of the MPRB.

Grants

Though subject to budgetary constraints, a few state and other grant programs are available for surface water management programs. Grants are used to supplement locally available resources.

Targeted Pollutants and Target Sources

The Minneapolis Stormwater Management Program (SWMP) targets pollutants typically present in urban stormwater runoff and, as possible, also targets sources of these pollutants. **Table A.2** is used by

the City as an aid in cross-referencing pollutants typically present in urban stormwater runoff to likely sources of pollutants.

Annual Report

The City and the MPRB prepare annual reports that are made available for public review and comment. The annual reports provide an overall description and evaluation of the activities, accomplishments, progress towards goals, special studies, financial information, and other assessments for each stormwater management practice. Current and previous year reports are available on the websites for each organization, at Minneapolis MS4 Permit Annual Report, and Minneapolis Park and Recreation Board Water Resources Reports. These websites will also contain future year reports as they are developed.

Any proposed modifications to this SWMP will be presented in the Minneapolis MS4 Stormwater Annual Report when it has been determined that a stormwater management practice requires replacement or modification. SMP 10 describes the annual reporting requirements and process for modification of the SWMP.

Section 2 – Stormwater Management Practices

Stormwater Management Practice (SMP) Sheets

Section 2 of this Stormwater Management Program (SWMP) details the activities for each of 11 overview sheets summarizing the SMPs for each category. These practices are organized within the minimum control measure category that most closely matches the specific activity. The following summarizes the information contained on each SMP sheet.

An overview sheet precedes each group of practice sheets. Each of the 11 overview sheets (one for each minimum control measure) includes name of the minimum control measure, permit references, a program overview, program goals, and specific implementation responsibilities. Each of the detailed SMP sheets includes a general description of the program, ongoing and proposed new permit tasks conducted by City and/or the MPRB with a schedule for implementation and the organization, department, division, and section responsible for each task, measurable goals, and annual reporting requirements.

Table 2.1 lists the SMP sheets summary, arranged by stormwater management category.

The specific information contained in each minimum control measure overview sheet includes the following.

Program Overview

This section generally describes the activities of the SMP.

Program Goals

This section details what the minimum control measure is proposed to accomplish. MS4 Permit References

Implementation Responsibility

This section lists all the department and division specific group with responsibility for implementation under the section

Specific information contained on each individual SMP sheet includes the following:

MS4 Permit references for users that are interested in the detailed requirements set in the permit.

Permit Tasks

This section describes ongoing and new permit tasks performed by the City and the MPRB for each individual SMP. For each task there is a schedule for implementation and the part of the City and/or MPRB responsible for the task. A cross-reference table is also provided in the Appendix as Table **A-3**.

Measurable Goals

This section describes the measurable goals for each individual SMP.

Annual Reporting

The MS4 Permit requires assessment procedures that will be documented in the Annual Report. There are both general assessment requirements and some SMP-specific assessment requirements included on the individual SMP sheets.

Table 2.1 – Stormwater Management **Minimum Control Measures (MCMs)** and Practices

MCM 1 – Public Education and Outreach on Stormwater Impacts	
1.1	Stormwater Public Education
1.2	Stormwater Education and Training for Staff
MCM 2 – Public Participation and Involvement	
2.1	Stormwater Public Participation Activities
MCM 3 - Illicit Discharge Detection and Elimination	
3.1	Illicit Discharge Detection and Elimination Program
3.2	Facility Regulatory Oversight Program
3.3	Lake Hiawatha Trash Reduction Program
MCM 4 – Construction Site Stormwater Runoff Control	
4.1	Erosion and Sediment Control for Private Construction Projects
4.2	Erosion and Sediment Control for Public Construction Projects
MCM 5 – Post-Construction Stormwater Management	
5.1	Private Development and Redevelopment Projects
5.2	Linear Projects
MCM 6 – Pollution Prevention and Good Housekeeping for Municipal Operations	
6.1	Operations and Maintenance
6.2	Street Sweeping and Cleaning Program
6.3	Facilities Management

6.4	Chloride Management
6.5	Retrofit Plan
6.6	Localized Flood Mitigation Capital Projects
	MCM 7 – Stormwater Discharge Monitoring and Analysis
7.1	Stormwater Runoff Monitoring and Analysis
	MCM 8 – Progress Toward Waste Load Allocations for Approved Total Maximum Daily Loads
8.1	Total Maximum Daily Load (TMDL) Program
	MCM 9 – Coordination and Cooperation with Other Entities
9.1	City of Minneapolis and Minneapolis Park and Recreation Board Responsibilities
9.2	City of Minneapolis and Metropolitan Council Responsibilities
9.3	Coordination and Cooperation with Other Entities
	MCM 10 – Stormwater Management Program Assessment, Modification, and Annual Reporting
10.1	Stormwater Management Program Assessment, Modification, and Annual Reporting
	MCM 11 – Sanitary Sewer Reporting Requirements
11.1	Integrated Infrastructure Management Program

Overview of Minimum Control Measure 1

Public Education and Outreach on Stormwater Impacts

(MS4 Permit Reference: 16.1 – 16.8)

Program Overview

A successful stormwater management program involves participation and good management from everyone in the city, including residents, business owners, park visitors, facility managers, contractors, developers, City and MPRB staff, and all others who live, work, and recreate in Minneapolis. A long-term component of the City's and MPRB's stormwater program is public education that serves to provide new or updated information on the importance of water quality, the impacts of stormwater runoff, the sources of pollutants in stormwater runoff, and the activities that the public should adopt to fulfill their collective responsibilities towards improved water quality. The SMPs contained in this minimum control measure work to maintain and improve the ongoing stormwater education efforts.

Program Goals

The goals of these stormwater education activities are to increase the awareness of local water quality, sources of pollutants, and important practices that must be adopted to improve overall water quality. Behavior change around water quality protection is the desired program results. These goals are accomplished through the hosting of education events, distribution of education materials, regular updates of web-based information, staff training, and other activities.

Implementation Responsibility

- City - Minneapolis Public Works, Surface Water & Sewers Division
- City - Communications Department
- Minneapolis Park and Recreation Board - Environmental Stewardship Division
- Minneapolis Park and Recreation Board – Planning Services Division

Minimum Control Measure 1 SMP Sheets

SMP 1.1 – Stormwater Public Education

SMP 1.2 – Stormwater Education and Training for Staff

SMP 1.1 – Stormwater Public Education

(MS4 Permit Reference: 16.1 – 16.8, 30.3)

The City of Minneapolis (City) and Minneapolis Park and Recreation Board (MPRB) implement public education and outreach programs to reduce the pollutant load to receiving waters, and to promote, publicize, and facilitate the proper management of stormwater discharges to the storm sewer system. The stormwater management objective of this program is to promote public knowledge, understanding, responsibility, accountability, creativity, and innovation towards reduction of stormwater pollutants through public education. This program aims to continue to use a multi-faceted approach of stormwater education programs that engage volunteers, nurtures citizen involvement, encourages accountability, and involves youth in environmental stewardship. The desired program result is behavior change in ways that will improve water quality.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Continue to implement a public education program to inform the public of the impact stormwater discharges have on waterbodies.	City - PW, SWS, Regulatory City - Communications MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X
Implement a multi-lingual program to increase awareness on stormwater runoff impacts.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	Once per permit term				
Educate the public, businesses, and commercial applicators on pesticides, herbicides, and fertilizers.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	One per permit term				
Educate developers and contractors on construction and post-construction stormwater BMPs.	City - PW, SWS, Regulatory	Once per permit term				
Educate the public about impaired waters and TMDLs.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	Once per permit term				

Educate the public, business, and the industry on illicit discharges, their hazards, how to prevent them, how to report them, and how to contain them.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X
Educate the public, business, and commercial applicators, commercial facilities, and institutions on the impacts of chlorides, how to reduce usage, and proper storage.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X
Educate the public on pet waste including the impacts on water bodies, proper disposal, and ordinance requirements.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	Once per permit term				
Provide multiple public involvement activities that include pollution prevention or water quality themes.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X
Develop an education and outreach plan for the permit term to meet all permit requirements.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X				
Annually evaluate the effectiveness of the education and outreach program efficacy.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X

Measurable Goals

- Education plan is developed and implemented. Plan components must include:
  - specific activities and schedules
  - target audiences for each activity
  - measurable goals for each activity and target audience, measurable goals can include increased awareness, increased understanding, acquired skills, and/or desired changes in behavior
  - an annual evaluation

Annual Reporting

- Quantities and descriptions of educational materials distributed and the number of visits by the public to stormwater education websites.
- A summary of the education and outreach activities held including dates of events and estimated audience.
- Any modifications made to the program as a result of the annual evaluation.
- A summary of activities conducted by partners through agreements or contracts if those are used to meet permit requirements.

SMP 1.2 Stormwater Education and Training for Staff

(MS4 Permit Reference: 18.26-18.28 18.39, 19.13-19.17,20.18, 20.21, 21.7,21.17)

The objective of this program is to deliver training related to the Stormwater Management Program into all relevant parts of the business of the City and MPRB staff government in a coordinated, cost-effective way, and to fulfill federal and state requirements under the MS4 Permit.

Permit Tasks

These are all activities at are to be completed within the permit term. This includes existing and new activities. The description should indicate a timeline for completion of the take during the 5-year permit term.

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Implement a training program for appropriate staff regarding illicit discharges including identification, hazards, reporting, enforcement, prevention, and containment.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Staff training commensurate with their responsibilities as they relate to the construction site stormwater runoff control program.	City - PW, SWS, Regulatory, Design, and Operations City - PW, TED, Street Design & Survey and Construction Engineering City - PW, TMR, Maintenance & Repair City - PW, Water, Distribution MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Individuals receive training commensurate with their responsibilities as they relate to the permittee's Post-Construction Stormwater Management program.	City - PW, SWS, Regulatory, Design, and Operations City - PW, TED, Street Design & Survey, and Construction Engineering, and Construction MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Winter maintenance activities training for staff.	City - PW, SWS, Regulatory City - PW, TMR, Maintenance & Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X

Implement a stormwater management training program commensurate with employees' job duties as they relate to the SWMP.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X

Measurable Goals

- The City and MPRB will develop a training plan that will include the following measures:
    - Create training criteria related to job- specific duties
    - Keeping records including general subject matter covered, names and departments of employees in attendance, and date of event
    - Develop a tracking system for training completion

Annual Reporting

- Annual reporting for all our staff training will include the following:
    - A description of the training activities, implemented during the reporting year
    - Title and topic of training
    - Date of training
    - Names and departments of employees in attendance

Overview of Minimum Control Measure 2

Public Participation and Involvement

(MS4 Permit Reference: 17.1-17.12, 30.4)

Program Overview

The City of Minneapolis' (City) and Minneapolis Park and Recreation Board's (MPRB) Stormwater Management Program (SWMP) taps into numerous public participation and public involvement activities to solicit input on specific stormwater-related activities and decisions that affect the residents and businesses of the city. As with Minimum Control Measure 1– Public Education and Outreach, this Stormwater Management Practice (SMP) embeds participation and involvement activities into the workplan of specific stormwater control practices whenever opportunities are closely linked to other activities contained in other programs.

Program Goals

The City and MPRB will give the public an opportunity to play an active role in the development and implementation of the SWMP.

Implementation Responsibility

- City - Public Works, Surface Water & Sewers
- City - Communications Department
- Minneapolis Park and Recreation Board - Environmental Stewardship Division

Minimum Control Measure 2 SMP Sheets

SMP 2.1 – Stormwater Public Participation Activities

SMP 2.1 Stormwater Public Participation Activities

(MS4 Permit Reference: 17.1-17.12, 30.4)

The citizens of Minneapolis are actively engaged in many aspects of the City and MPRB governance, being involved through commissions, neighborhood associations, and volunteer organizations. The stormwater management program works to solicit input from these existing public participation and public involvement activities on specific activities and decisions that affect the residents and businesses of the city. Public involvement techniques include annual meeting, workshops, webpage accessibility, electronic communication, 311 reporting, and outreach by elected officials.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Conduct annual meeting to solicit public input unto the City's and MPRB's Stormwater Management Program.	City - PW, SWS, Regulatory	X	X	X	X	X
Maintain documentation of: • Dates and locations of events held to receive public input. • Notices provided to the public of events scheduled to meet SWMP requirements. • All relevant input submitted regarding SWMP. • All responses to written input, including modifications to SWMP made because of input. • Notices of any event scheduled to meet MS4 Permit requirements, including electronic correspondence.	City - PW, SWS, Regulatory	X	X	X	X	X
Maintain websites with current MS4 documents, including: • MS4 Permit. • SWMP. • Annual Report. • MPRB Water Resources Report. • Other special reports as required by the MS4 Permit.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Submit Annual Report to the MPCA	City - PW, SWS, Regulatory	X	X	X	X	X

Measurable Goals

- Provide a minimum of 30-days notice of the SWMP Annual Meeting. Notice will include a reference to the SWMP and the annual report, and the date, time, and location of the public meeting.

- Notice will be published locally and made available to the Agency Commissioner, appropriate county officials, any governmental entities that have jurisdiction within the MS4, all other persons who have requested that they be informed of public meetings regarding the SWMP or MS4 program.
- Revise SWMP per input from SWMP Annual Meeting and public comments received.
- Annual Report is prepared and submitted to MPCA by June 30.
- 311 access is provided and kept up to date for citizens to report problems, to get information, or to provide comments. 311 information is available in English, Spanish, Hmong, Lao, Oromo, Somali, and Vietnamese, and translation services are available in additional languages.

Annual Reporting

- Summary of oral and written input received regarding the SWMP and the City's response(s).
- Resolution(s) adopted that formally approve the SWMP and Annual Report. Resolution(s) must be submitted to the MPCA with the Annual Report. Refer to SMP 10.1.
- Summary of modifications made to the SWMP because of the input received during the public meeting.
- The date and location of the public meeting

Overview of Minimum Control Measure 3

Illicit Discharge Detection and Elimination

(MS4 Permit References: 18.1 -18.40, 23.1 – 23.8, 30.5 – 30.6, 30.22)

Program Overview

The stormwater management objective of these programs is to regulate the illicit discharge of pollutants to the MS4, in accordance with the MS4 Permit to discharge stormwater to surface waters including lakes, creeks, wetlands, and the Mississippi River. This is defined and regulated under Chapter 54.140. – Prohibited discharges to storm sewer system.

Program Goals

This program serves to minimize the adverse effects caused by unauthorized (illicit) discharges of materials to receiving waters via the stormwater drainage system. Illicit discharges may be random, frequent, infrequent, accidental, or other, and may be introduced and occur anywhere along the stormwater drainage pathways including, but not limited to, pavements, gutters, catch basins, maintenance holes, or permitted connections to the storm drain.

Implementation Responsibility

- City - Public Works, Surface Water & Sewers
- City - Regulatory Services Department
- City - Health Department
- City - Fire Department
- City - Minneapolis 311
- Minneapolis Park and Recreation Board –Superintendent's Office
- Minneapolis Park and Recreation Board –Deputy Superintendent's Office
- Minneapolis Park and Recreation Board – Environmental Stewardship Division

Minimum Control Measure 3 SMP Sheets

SMP 3.1 – Illicit Discharge Detection and Elimination Program

SMP 3.2 – Facilities Regulatory Oversight Program

SMP 3.3 – Lake Hiawatha Trash Reduction Program

SMP 3.1 – Illicit Discharge Detection and Elimination Program

(MS4 Permit References: 18.3 – 18.26, 30.5)

The stormwater management objective of this program is to minimize the discharge of pollutants to the maximum extent practicable (MEP) by detecting, investigating, and resolving illegal dumping and disposal of unpermitted, non-stormwater flows in receiving waters and in the stormwater drainage system, including pipes, gutters, swales, and other conveyance infrastructure.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Maintain an electronic inventory and map of: • all receiving waters • the storm sewer system, including pipes, ditches, and swales with direction of stormwater flow • structural stormwater BMPs, including subwatershed area and design capacity or size of the BMP • land use types • City and MPRB-owned facilities • Outfalls with subwatershed and identification information • stormwater inflows to MS4	City - PW, SWS, Business MPRB - Deputy Superintendent's Office, Information Technology Department	X	X	X	X	X
Implement a regulatory mechanism that: • effectively prohibits illicit discharges into the permittee's MS4; • require owners or custodians of pets to remove and properly dispose of feces on permittee-owned land areas; • require proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities • contains appropriate enforcement responses procedures (ERPs)	City - PW, SWS, Regulatory MPRB – Superintendent's Office	X	X	X	X	X
Continue to develop and implement a program to: • receive, track, and investigate complaints of illicit discharges; • identify the source of the illicit discharges; • eliminate illicit discharges; and • enforce violations of prohibitions on illicit discharges.	City – Health Department, Environmental Services City – 311, Operations City – Regulatory Services, Operations & Engagement MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Continue to develop and implement a dry weather field screening program to detect and eliminate illicit discharges.	City - PW, SWS, Regulatory	X	X	X	X	X

	MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources					
Maintain and update organization websites and the 311 system with information on illicit discharges and how to report them.	City – 311 City – PW, SWS, Regulatory	X	X	X	X	X
Maintain a central contact, including a phone number for complaints and spill reporting	City – 311	X	X	X	X	X
Update and maintain spill response plan and procedures.	City – PW, SWS, Operations City – Regulatory Services, Operations & Engagement MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X

Measurable Goals

- Annually, (20) percent of outfalls will undergo inspections, specifically conducted during dry weather conditions to screen for potential illicit discharges.
- Maintain written procedures for prioritizing and investigating illicit discharges based on field screenings, land use, and the presence of potential sources of illicit discharges within the subwatershed.
- Reports of unauthorized discharges and illicit connections are responded to and investigated including, source determination, corrective action and cleanup, enforcement of violations, and documentation.
- Prioritize and investigate portions of the MS4 for illicit discharge.
- Maintain written ERPs, including a description of enforcement tools available and timeframes for corrective action.
- Develop a regulatory mechanism that requires proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities.
- Maintain documentation of spill response and clean-up, including date(s), location(s), sources, and identification of outfalls.
- Report spills as appropriate to the MPCA Duty Officer.

Annual Reporting

- The status of the regulatory mechanisms required.
- A description and the date of the most recent update to the electronic storm sewer system inventory and map completed during the reporting year.
- The number of spills and illicit discharges that occurred and a description of the response, containment, and cleanup of the spills and illicit discharges.

- The number of illicit discharge inspections and/or screening activities completed during the reporting year and including a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharges.
- Reports of alleged illicit discharges received, including:
    - date(s) of the report(s),
    - a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharge(s),
    - identified sources of illicit discharges,
    - including a description and the responsible party if known,
    - identification of outfalls or other areas where illicit discharges have been discovered,
    - a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharge(s).
- Description of the training activities, implemented during the reporting year, to train municipal staff about reporting, responding to, and eliminating illicit discharges.

SMP 3.2 – Facilities Regulatory Oversight Program

(MS4 Permit References: 18.31 – 18.37, 30.6)

The City must develop, implement, and enforce an inspection and regulatory oversight program to monitor and control pollutants from industrial, commercial, and institutional facilities that discharge to the City's MS4.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Develop, implement, and enforce a regulatory mechanism that provides legal authority for the permittee to inspect, require implementation of appropriate BMPs, and conduct enforcement at industrial, commercial, and institutional facilities to address non-stormwater discharges to the MS4.	City – PW, SWS, Regulatory			X		
Maintain a mapped inventory of industrial, commercial, and institutional facilities that discharge any flow other than stormwater to the MS4 including discharge location to the MS4, receiving water, and discharge description.	City – PW, SWS, Regulatory			X	X	X
Develop, implement, and enforce an inspection and regulatory oversight program to monitor and control pollutants from industrial, commercial, and institutional facilities that discharge into the MS4.	City – PW, SWS, Regulatory			X	X	X

Measurable Goals

- Within 36 months develop and implement a program to inspect industrial, commercial, and institutional facilities.
- Develop inventory of industrial, commercial, and institutional facilities that discharge any flow other than stormwater to the MS4.
- Develop written procedures to prioritize industrial, commercial, and institutional facilities for inspection.
- Categorize each facility as high-priority, medium-priority, or low-priority.
- Inspect all high-priority facilities once per year.

Annual Reporting

- Inventory of industrial, commercial, and institutional facilities that discharge any flow other than stormwater to the permittee's MS4.
- Number of facility inspections completed and a summary of inspection findings.

SMP 3.3 – Lake Hiawatha Trash Reduction Program

MS4 Permit References: 23.1 – 23.8, 30.22

The permittee must develop and implement a trash reduction program focused on the long-term reduction of discharges of trash into Lake Hiawatha. The permittee must incorporate the requirements of this Section into their program.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Develop and implement a written trash reduction plan to reduce the discharges of trash into Lake Hiawatha.	City – PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X				
Evaluate the trash reduction plan.	City – PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources		X	X	X	X
Implement and maintain a structural BMP to capture trash at the 43rd Street outfall which discharges into Lake Hiawatha.	City – PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Conduct supplemental cleanup events to collect trash along the shoreline of Lake Hiawatha in priority areas.	City – PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Volunteers and Community Gardens	X	X	X	X	X

Measurable Goals

- Identify of types of trash, suspected sources, and outfall hotspots into Lake Hiawatha.
- Evaluate the trash reduction plan annually.

Annual Reporting

- Provide a summary of the Lake Hiawatha trash reduction program including:
    - the status of the structural BMP, including date(s) of implementation,
    - dates and a description of findings from visual monitoring conducted around outfall hotspots,
    - dates and description of inspection findings on the structural BMP,

- dates and descriptions of maintenance performed on the structural BMP, including an estimated breakdown of the types of trash removed and an estimate of the total amount of trash (in pounds) collected from the BMP,
- for each cleanup event, estimate the total amount of trash (in pounds) collected,
- each calendar year, a cumulative estimate of the total amount of trash (in pounds) collected from all structural stormwater BMPs located upgradient of Lake Hiawatha and identified in the trash reduction plan, and
- any modifications to the trash reduction plan and justification for those modifications.

Overview of Minimum Control Measure 4

Construction Site Stormwater Runoff Control

(MS4 Permit References: 19.1 – 19.20, 30.7)

Program Overview

The stormwater management objective of these programs is to prevent or minimize discharge of sediment or pollutants from public or private construction activities to the MS4.

Program Goals

The goal of this category is to ensure that the City's and MPRB's erosion and sediment control practices and requirements continues to be an effective tool in minimization of the discharge of sediment and pollutants from construction sites and that these practices and requirements continue to evolve and improve.

Implementation Responsibility

- City - Health Department
- City - Public Works Department
- Minneapolis Park and Recreation Board – Planning Services Division

Minimum Control Measure 4 SMP Sheets

SMP 4.1 – Erosion and Sediment Control for Private Construction Projects

SMP 4.2 – Erosion and Sediment Control for Public Construction Projects

SMP 4.1 – Erosion and Sediment Control for Private Construction Projects

(MS4 Permit References: 19.1 - 19.20, 30.7)

The stormwater management objective of this program is to minimize the discharge of pollutants from private construction sites by requiring management of construction site stormwater. The Minneapolis Code of Ordinances Chapter 52 requires Erosion and Sediment Permits that must be obtained before commencement of land- disturbing activities for activities that will disturb more than five cubic yards or 500 square feet. For activities that disturb greater than 5,000 square feet, an Erosion and Sediment Control Plan must be submitted and approved. For sites that disturb one or more acres, a Stormwater Pollution Prevention Plan (SWPPP) must be submitted and approved.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Enforce a regulatory mechanism that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the most current Construction Stormwater General Permit.	City - PW, SWS, Regulatory City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services City - Community Planning & Economic Development, Development Services	X	X	X	X	X
Implement written procedures for site plan reviews conducted to ensure compliance with requirements of the regulatory mechanism.	City - PW, SWS, Design	X	X	X	X	X
Provide the opportunity for the public to report non-compliant erosion, sediment, and waste controls.	City - 311 Service Center	X	X	X	X	X
Implement an inspection program that includes written procedures for conducting site inspections to determine compliance with the regulatory mechanism.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X
Maintain written procedures for identifying high-priority and low-priority sites for inspection.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X
Implement a written checklist to document each site inspection when determining compliance with the regulatory mechanism.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X
The permittee must maintain written ERPs to compel compliance with the regulatory mechanism.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X
Maintain a database of construction sites.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X

Maintain documentation of any enforcement conducted, including verbal warnings.	City - Health, Sustainability, Environment, and Healthy Homes, Environmental Services	X	X	X	X	X

Measurable Goals

- Review the regulatory mechanism within six (6) months of the issuance date of that permit and revise if necessary.
- Site plan reviews procedures must include:
    - written notification to owners and operators proposing construction activity of the need to apply for and obtain coverage under the CSW Permit; and
    - use of a written checklist to document the adequacy of each site plan.
- Provide various methods to the public for reporting noncompliant erosion, sediment, and waste controls, including website application, phone calls, and/or email communication.
- Procedures for identifying high-priority and low-priority sites for inspection. At a minimum, the written procedures must include:
    - a detailed explanation describing how sites will be categorized as either high-priority or low-priority;
    - a frequency at which the permittee will conduct inspections for high-priority sites;
    - a frequency at which the permittee will conduct inspections for low-priority sites; and
    - name(s) of individual(s), position title(s), or department/division/section responsible for conducting site inspections.
- At a minimum, the checklist for site inspections must include the inspection findings on the following areas, as applicable to each site:
    - stabilization of exposed soils (including stockpiles);
    - stabilization of ditch and swale bottoms;
    - sediment control BMPs on all downgradient perimeters of the project and upgradient of buffer zones;
    - storm drain inlet protection;
    - energy dissipation at pipe outlets;
    - vehicle tracking BMPs;
    - preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils;
    - owner/operator of construction activity self-inspection records;
    - containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials); and
    - BMPs maintained and functional.
- At a minimum, the written ERPs must include:
    - a description of enforcement tools available to the permittee and guidelines for the use of each tool; and
    - name(s) of individual(s), position title(s), or department/division/section responsible for conducting enforcement.
- Database of construction sites must track:

    - site plan review;
    - construction progress; and
    - erosion, sediment, and waste control compliance.
- For any enforcement conducted maintain documentation including:
    - name of person responsible for violation
    - date and location
    - description of violation
    - corrective action including schedule
    - date violation resolved

Annual Reporting

- Status of the regulatory mechanism.
- Number of construction site plans reviewed and confirmed to meet regulatory mechanism requirements.
- Number of construction stormwater complaints received and a summary of responses to those complaints.
- Number of site inspections completed and a summary of inspection findings.
- Number of violations of the permittee regulatory mechanism and the types of enforcement response procedures utilized.
- Title of the construction stormwater training attended by permittee staff.

SMP 4.2 – Erosion and Sediment Control for Public Construction Projects

(MS4 Permit References: 19.1 - 19.20, 30.7)

The City and the MPRB objective of this program is to minimize the discharge of pollutants through the proper construction management of public construction projects, including capital, maintenance, and emergency repair projects. These projects include streets, sidewalks, bridges, trails, buildings, parking lots, park development, and public utilities.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Require City and MPRB construction projects with land-disturbing activities to implement and maintain erosion and sediment control practices.	City - PW, All Divisions City - Finance & Property Services, Property Services MPRB - All Departments	X	X	X	X	X
Implement an inspection program that includes written procedures for conducting site inspections to determine compliance.	City - PW, All Divisions MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Implement a written checklist to document each site inspection when determining compliance.	City - PW, All Divisions MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
The permittee must maintain a database of public construction sites.	City - PW, All Divisions MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X

Measurable Goals

- All City and MPRB construction sites are in compliance with erosion and sediment control requirements.

Annual Reporting

- Number of site inspections completed and a summary of inspection for sites that required a MPCA Construction Stormwater Permit.
- Title of the construction stormwater training attended by permittee staff.

Overview of Minimum Control Measure 5

Post-Construction Site Stormwater Runoff Control

(MS4 Permit References: 20.1-20.22)

Program Overview

Redevelopment of existing properties and roadways, especially those created before regulation under the Clean Water Act (CWA), offer the opportunity to employ stormwater practices that reduce the negative environmental impacts of urbanization on the lakes, creeks, and the Mississippi River in the City of Minneapolis (City). The stormwater management objective of these SMPs is to reduce the discharge of pollutants and stormwater runoff from public and private development and redevelopment sites and from reconstructed streets, as compared to conditions before the project construction.

Program Goals

The overall goal of these SMPs is to ensure that the City's regulatory structure and procedures are up to date, to ensure that development and redevelopment projects and public roadway projects incorporate stormwater management and that violations to the City's regulations are mitigated. Specifically, both co-permittees will revise their program as needed and will enforce it to minimize pollution from post-construction. The co-permittees will also create maintenance and operation.

Implementation Responsibility

- City - Community Planning and Economic Development
- City - Finance & Property Services Department
- City - Public Works Department
- City - Health Department
- Minneapolis Park and Recreation Board – Deputy Superintendent's Office
- Minneapolis Park and Recreation Board - Planning Services Division

Minimum Control Measure 5 SMP Sheets

SMP 5.1 – Private Development and Redevelopment Projects

SMP 5.2 – Linear Projects

SMP 5.1 –Private Development and Redevelopment Projects

(MS4 Permit References: 20.1-20.6, 20.8 – 20.9, 20.15, 20.17 - 20.22)

Construction activities and development projects are reviewed through the City's site plan review process. All non-linear City and MPRB projects will conform to this process and requirements along with private development and redevelopment. The Surface Water and Sewers Division Design Section reviews and approves for compliance with runoff and pollutant loading reduction requirements, including ongoing operation and maintenance commitments under Minnesota Code of Ordinances Chapter 54. The Surface Water and Sewers Division Regulatory Section follows up on post-construction ordinance implementations to minimize the discharge of pollutants to stormwater and local water resources.

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Review and approve stormwater management plans of land-disturbing projects for compliance with post-construction stormwater management requirements.	City - PW, SWS, Design City - Community Planning & Economic Development, Development Services	X	X	X	X	X
Ensure compliance with post-construction stormwater management requirements for projects not covered by City development review process.	City - PW, SWS, Design MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Implement written procedures for site plan reviews to ensure compliance with requirements of Chapter 54 Ordinance.	City - PW, SWS, Design	X	X	X	X	X
Maintain an inventory and map of structural stormwater BMPs not owned or operated by the permittees that were installed to meet post-construction stormwater requirements.	City - PW, SWS, Regulatory MPRB - Planning Services Division, Design and Project Management Department MPRB - Deputy Superintendent's Office, Information Technology Department	X	X	X	X	X
Conduct periodic compliance inspections.	City - PW, SWS, Regulatory	X	X	X	X	X
The permittee must maintain written ERPs to compel compliance with the regulatory mechanism.	City - PW, SWS, Regulatory	X	X	X	X	X
Develop, implement, and document supporting policies, design guides, enforcement processes, checklists, and training for administering and implementing Chapter 54.	City - PW, SWS, Regulatory and Design	X	X	X	X	X

Review and update current ordinances and guidance documents to ensure compliance with permit requirements.	City - PW, SWS, Regulatory	X				

Measurable Goals

- All applicable site plans for development and redevelopment are reviewed and in compliance with permanent stormwater management requirements.
- Water quality volume and pollutant load reductions are documented and tracked.
- Maintain practicing and written procedure for the many phases of site plan reviews
- Document the following for each site plan review:
    - supporting documentation used to determine compliance including calculations for permanent treatment systems
    - water quality volume that will be treated through volume reduction practices compared to the total water quality volume required to be treated
- Ordinances, regulatory mechanisms, and guidance documents are in compliance with current permit requirements.
- All new structural best management practices on private property are inspected by the City upon completion.
- Existing private best management practices are inspected by the City at least every permit cycle.
- Maintain documentation for any enforcement conducted including:
    - name of person responsible for violation
    - date and location
    - description of violation
    - corrective action including schedule
    - date(s) and type(s) of enforcement used to compel compliance
    - referrals to other regulatory organizations if needed
    - date resolved.

Annual Reporting

- Status of regulatory mechanism
- Number of plan reviews
- Number and type of structural stormwater management practices installed per Chapter 54 requirements.

SMP 5.2 – Linear Projects

(MS4 Permit References: 20.7)

Public roadways, sidewalks, trails, and bikeways make up nearly 25% of the city. When opportunities such as road or bikeway construction or reconstruction project arise, implementation of stormwater management requirements allow for previously untreated impervious surface to be better management for volume reduction and water quality. The objective of this program is to ensure the appropriate management of the design, review, and construction of new stormwater best management practices on linear projects.

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Review and approve stormwater management plans for linear projects for compliance with post-construction stormwater management requirements.	City - PW, SWS, Design	X	X	X	X	X
Ensure compliance with post-construction stormwater management requirements for projects not covered by City review process.	City - PW, all divisions MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Implement written procedures for site plan reviews to ensure compliance with requirements of the Chapter 54 ordinance.	City - PW, SWS, Design City - PW, TED, Street Design & Survey	X	X	X	X	X
Review and update current ordinances and guidance documents for compliance with new permit requirements.	City - PW, SWS, Regulatory	X				
Maintain documentation of project reviews including project checklists, water quality volume and pollutant load reductions, and operation and maintenance plans.	City - PW, SWS, Design City - PW, TED, Street Design & Survey	X	X	X	X	X

Measurable Goals

- All applicable site plans for public linear projects are reviewed and in compliance with permanent stormwater management requirements.
- Water quality treatment and quantity reduction calculations are conducted per Chapter 54 requirements and specifications.
- Volume reduction practices are implemented in the design of stormwater treatment systems for all applicable projects.
- Water quality volume and pollutant load reductions are tracked and maintained.
- Ordinances, regulatory mechanisms, and guidance documents are in compliance with current permit requirements.

Annual Reporting

- Number of plan reviews.

- Number and type of structural stormwater management practices installed.

Overview of Minimum Control Measure 6

Pollution Prevention and Good Housekeeping for Municipal Operations

(MS4 Permit References: 21.1-21.19, 30.9 – 30.14)

Program Overview

The City and the MPRB collaborate to oversee the maintenance, planning, design, and operation of the city's sanitary sewer and drainage systems, ensuring efficient management and regulatory compliance for community benefit. Together, they ensure that public works systems maintain structural integrity, prevent impacts to health, safety, property, infrastructure, the environment, and provide sufficient hydraulic capacity to prevent flooding and property damage while minimizing pollutant discharge. This is achieved through a series of practices to insure proper operation and maintenance of stormwater management practices, public streets, bridges, alleys, parks, golf courses, municipal properties, parking lots, and municipal equipment yards.

Program Goals

The overall goal of these SMPs is to follow operation, inspection, and maintenance practices in a manner that prevents or reduces the discharge of pollutants from the City and the MPRB MS4 system, streets and alleys, facilities, parks, and golf courses.

Implementation Responsibility

- City - Public Works Department – All Divisions
- City - Finance and Property Services Department
- Minneapolis Park and Recreation Board – Environmental Stewardship Division
- Minneapolis Park and Recreation Board – Planning Services Division
- Minneapolis Park and Recreation Board – Recreation Services Division, Golf

Minimum Control Measure 6 SMP Sheets

SMP 6.1 – Operations and Maintenance

SMP 6.2 – Street Sweeping and Cleaning Program

SMP 6.3 – Facilities Management

SMP 6.4 – Chloride Management

SMP 6.5 – Retrofit Plan

SMP 6.6 – Localized Flood Mitigation Capital Projects

SMP 6.1 – Operations and Maintenance

(MS4 Permit References: 21.8- 21.10, 21.12 - 21.13, 21.19, 30.11 - 30.13)

The stormwater management objectives of this program area are focused on conveyance and protecting water resources. Maintaining system flow is critical to minimizing the risk of localized flooding, while regulatory activities protect public waters from pollutants associated with stormwater runoff. General operations and maintenance efforts include inspections, cleaning, repairs, rehabilitation, and reconstruction. All Minneapolis residents and MPRB visitors benefit from the function of this critical infrastructure and its role in protecting human health and the environment.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Maintain procedures for determining TSS and TP treatment effectiveness of all owned/operated stormwater ponds.	City - PW, SWS, Regulatory	X	X	X	X	X
Maintain documentation of BMP treatment capacity.	City - PW, SWS, Regulatory City - PW, SWS, Operations MPRB - Environmental Stewardship Division	X	X	X	X	X
Inspect structural stormwater BMPs (excluding stormwater ponds) annually unless an every-other year schedule is warranted.	City - PW, SWS, Operations MPRB - Environmental Stewardship Division	X	X	X	X	X
Annually inspect twenty (20) percent of outfalls and ponds.	City - PW, SWS, Operations and Regulatory MPRB - Environmental Stewardship Division	X	X	X	X	X
Based on inspection findings determine if repair, replacement, or maintenance measures are necessary and plan repairs.	City - PW, SWS, Operations and Regulatory MPRB - Environmental Stewardship Division	X	X	X	X	X
Document pond sediment excavation and removal activities.	City - PW, SWS, Operations and Regulatory MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Implement SOPs and BMPs that prevent or reduce pollutants in stormwater discharges from municipal operations.	City - PW, All Departments MPRB - All Departments	X	X	X	X	X

Measurable Goals

- Model all City and MPRB owned stormwater ponds in the city water quality model.

- All structural stormwater management practices are inspected annually unless a every other year schedule is warranted to determine structural integrity, proper function, and maintenance needs.
- Complete necessary maintenance as soon as possible to prevent or reduce the discharge of pollutants to the MS4. If necessary, maintenance cannot be completed within one year of discovery, document a plan(s) for completing the maintenance.
- 20% of outfalls are inspected annually to determine structural integrity, proper function, and maintenance needs.
- 20% of stormwater ponds are inspected annually to determine structural integrity, proper function, and maintenance needs.
- All inspection, maintenance, and repair activities for the MS4 system are documented.
- All appropriate staff are trained based on their job duties and responsibilities.
- SOPs are developed for municipal activities to reduce or prevent the discharge of pollutants. These could include street sweeper operation procedures for lawn maintenance, fertilizer and pesticide usage, equipment cleaning, and vehicle maintenance).

Annual Reporting

- Provide a brief description of all outfall inspection findings including any improvement projects completed at the outfall locations.
- The permittee must provide information about stormwater management training events, including:
    - title and topic of training;
    - date of training; and
    - names and departments of employees in attendance.
- Provide a list of the MS4 components that need to be replaced, repaired, or maintained and a schedule for completing the replacement, repair, or maintenance activity.
- Provide the results of structural stormwater BMP inspections, assessments, maintenance, and repair activities including:
    - date;
    - estimation of sediment storage capacity and percent capacity remaining;
    - the date of maintenance and/or repairs completed;
    - the dates and quantity of removed substances from structural stormwater BMPs.

SMP 6.2 – Street Sweeping and Cleaning Program

(MS4 Permit References: 21.13, 30.13)

The stormwater management objectives of the street sweeping program are to protect public health and safety, improve cleanliness and livability, and improve water quality. The program is divided into several categories that vary in frequency and work practices, to systematically address the approximately 1,100 miles of streets in the city (including streets under MPRB jurisdiction) and the City's approximately 400 miles of alleys. They can be described by two general programs:

1. Spring and fall citywide comprehensive sweeping programs, and
2. general sweeping activities.

The stormwater management objective of this program is to minimize the discharge of pollutants to the storm drain system and receiving waterbodies by removing leaf litter, sediment, and debris from streets and gutters before the materials and the pollutants can be washed into storm drain inlets.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Operate and maintain parking lots, streets, roads, and highways to reduce the discharge of pollutants.	City - PW, TMR, Maintenance and Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X

Measurable Goals

- Sweep public parking lots, streets, roads, and highways under its jurisdiction including prioritizing areas based on land use, trash, and stormwater pollutant levels generated.
- Sweep streets at least two (2) times per year, once in the spring and once in the fall.
- Sweep higher priority areas more frequently.
- Sweep alleys at least once per year.
- Maintain a map of planned sweeping frequency.

Annual Reporting

- The estimated quantity of material removed by street sweeping (seasonal sweepings for spring sand and fall leaves must be itemized as part of the total quantity).

SMP 6.3 – Facilities Management

(MS4 Permit References: 21.3 - 21.4, 21.11, 30.10, 30.12)

The stormwater management objective of these activities is to prevent or reduce the stormwater discharge and the associated pollutants generated at City and MPRB owned facilities. Facilities include, but are not limited to: composting sites, equipment storage and maintenance, hazardous waste disposal, hazardous waste handling and transfer, landfills, solid waste handling and transfer, parks, pesticide storage, public parking lots, public golf courses, public swimming pools, public works yards, recycling sites, salt storage yards, vehicle storage and maintenance yards, and materials storage yards. Pollutant control is most commonly managed through proper storage of materials, routine maintenance, effective application of winter salt and deicers, and, where necessary, installation of structural stormwater management practices.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Maintain an inventory of sites owned and operated that contribute pollutants to stormwater discharges.	City - PW, SWS, Regulatory City - Finance & Property Services, Property Services MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities.	City - PW, SWS, Regulatory City - Finance & Property Services, Property Services MPRB - Planning Services Division, Design and Project Management Department	X	X	X	X	X
Inspect all stockpile, storage, and material handling areas that contribute pollutants to stormwater.	City - PW, All Divisions City - Finance & Property Services, Property Services MPRB - Environmental Stewardship Division & Planning Services Division, Design and Project Management Department & Recreation Services Division, Athletic Programs, Golf, and Ice Arenas Department	X	X	X	X	X

Measurable Goals

- All City and MPRB facilities are inventoried.
- Track facilities and employ BMPs to reduce stormwater pollutants from each site
- Employ BMPs to reduce pollutants from municipal operations that contribute pollutants to stormwater runoff.
- Stockpile, storage, and material handling areas

- weekly inspections when material is being actively handled, used, or disturbed on daily basis
- monthly inspections when material is not being actively handled, used, or disturbed

Annual Reporting

- A description of facilities and operations that contribute pollutants to stormwater discharges and the BMPs implemented to prevent polluted runoff from discharging to the MS4.

SMP 6.4 – Chloride Management

(MS4 Permit References: 21.5 - 21.7, 30.13 - 30.14)

The stormwater management objective of these activities is to monitor and report on the application of deicers for snow and ice control on streets and alleys, with a focus on reducing the use of chlorides. The most used deicing and anti-icing chemical is salt (chloride) and salt brine. Public Works also performs snow and ice control on some public sidewalks such as on bridges, as well as on various plazas, pedestrian bridges, stairways, and miscellaneous areas.

The City's winter plowing and clearing includes: 1,040 miles of streets, 57 miles of parkways, 3,700 alleys (about 400 miles), 100 dead-end streets and cul-de-sacs, 250 bridge sidewalks, 7 pedestrian bridges, and 40 miles of trails and protected bike lanes.

140 miles of paths and sidewalks and 119 parking lots are plowed and cleared by MPRB's winter maintenance operations.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Implement chloride reduction BMPs at owned or operated salt storage areas.	City - PW, TM&R, Maintenance and Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X
Implement a written snow and ice management policy for winter maintenance activities.	City - PW, TM&R, Maintenance and Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X
Ensure all individuals that perform winter maintenance activities receive training.	City - PW, TM&R, Maintenance and Repair City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Asset Management Department & Recreation Services Division - Youth and Recreation Center Programs Department	X	X	X	X	X

Measurable Goals

- Snow and Ice Management Policies for the City and MPRB are developed and implemented to establish practices and procedures for snow and ice control operations (e.g., plowing, or other snow removal practices, sand use, and application of deicing compounds).
- The following BMPs are implemented at all salt storage areas:
    - cover or store salt indoors;
    - store salt on an impervious surface; and

- implement practices to reduce exposure when transferring material from salt storage areas (e.g., sweeping, diversions, and/or containment).

- All individuals who perform winter maintenance activities annually receive training on:
  - the importance of protecting water quality;
  - BMPs to minimize the use of deicers (e.g., proper calibration of equipment and benefits of pretreatment, pre-wetting, and anti-icing); and
  - tools and resources to assist in winter maintenance (e.g., deicing application rate guidelines, calibration charts, Smart Salting Assessment Tool).

Annual Reporting

- Provide information about stormwater management training events, including:
  - title and topic of training;
  - date of training; and
  - names and departments of employees in attendance

- The quantity of deicing materials, chemicals, and sand applied to roadways.
- The location and description of all storage facilities for sand, deicing materials, and anti-icing solution used during winter maintenance activities.

SMP 6.5 – Retrofit Plan

(MS4 Permit References: 21.16)

The City of Minneapolis retrofit plan is to address stormwater quality from existing developed areas. While new development and redevelopment are regulated existing older developed areas, including right of way, may have been constructed before stormwater management was required or modern criteria were established. Retrofitting existing unmanaged or inadequately managed stormwater runoff will help the City and MPRB to improve water quality in lakes, creeks, wetlands, and the Mississippi River.

Retrofits include new installations or upgrades to existing BMP in developed areas where there is a lack of adequate stormwater treatment. Stormwater retrofit goals may include, among other things, the correction of prior design or performance deficiencies, flood mitigation, disconnecting impervious areas, improving recharge and infiltration performance, addressing pollutants of concern, demonstrating new technologies and supporting stream restoration activities.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Review and update existing retrofit plan.	City - PW - SWS - Regulatory MPRB - Planning Services Division, Strategic Planning Department			X		

Measurable Goals

- The retrofit plan includes a discussion of the following:
  - retrofits on lands the permittees own, including public parcels of land or public right-of-way areas for implementation of structural stormwater BMPs; and
  - strategies to encourage privately owned parcels to install stormwater retrofits to reduce and/or treat stormwater runoff from privately owned impervious surfaces.

Annual Reporting

- No annual reporting requirements

SMP 6.6 – Localized Flood Mitigation Projects

(MS4 Permit References: 21.14 - 21.15, 30.13)

The stormwater management objectives of this practice are to look for the causes of flooding in specific areas and use modeling software to determine how to reduce or eliminate the possibility of flooding. The models help identify flood-prone areas where future flood studies should be focused. The City also receives flooding complaints that help identify problem areas. The worst problem areas are currently being studied.

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Ensure flood control improvement projects are designed to minimize the impacts to water quality of the receiving water.	City - PW, SWS, Design	X	X	X	X	X
When repairs, improvements, or changes are planned for existing flood control devices, evaluate the feasibility of retrofitting the existing devices to provide volume reduction and pollutant removal from stormwater discharges.	City - PW, SWS, Design, Regulatory, and Operations	X	X	X	X	X
Maintain an inventory of flood control detention facilities that provide rate control.	City - PW, SWS, Design and Business	X	X	X	X	X

Measurable Goals

- All flood control improvement projects are designed to minimize the impacts on the water quality of the receiving water.
- All flood control detention facilities that provide rate control are inventoried.

Annual Reporting

- The number, type, and schedule of flood control improvement projects completed, including a description of the pollutant removal capabilities associated with each project.

Overview of Minimum Control Measure 7

Stormwater Discharge Monitoring and Analysis

(MS4 Permit References: 24.1 - 24.5, 30.23 – 30.27)

The goal of stormwater runoff monitoring and analysis is to quantify stormwater volumes and pollutant loads from the MS4, evaluate the efficiency of stormwater practices for the purpose of adaptive management, and to comply with stormwater management programs. This revised SWMP is a document that describes activities related to the City's and MPRB's programs for management of stormwater within each jurisdiction, in accordance with the MS4 Permit requirements.

Sampling is conducted year-round at various sites as detailed on SMP Sheet 7.1. The monitoring program will meet the requirements of this Section so it can be incorporated into both permittees, Minneapolis and MPRB, programs [Minn. R. 7090].

Program Overview

Monitoring results are used to track long-term improvements in stormwater quality, to assess the effectiveness of structural stormwater management practices, and to influence future stormwater management practice design and operations and maintenance decisions. The MPRB leads the field water quality monitoring of stormwater, creeks, and lakes, as detailed in the joint workplan and according to the MS4 permit.

Implementation Responsibility

- City – Public Works, Surface Water & Sewers
- Minneapolis Park and Recreation Board – Environmental Stewardship

Minimum Control Measure 7 SMP Sheets

SMP 7.1 – Stormwater Runoff Monitoring and Analysis

SMP 7.1 – Stormwater Runoff Monitoring and Analysis

(MS4 Permit References: 24.1 - 24.5, 30.23 – 30.27)

The overarching objective of monitoring stormwater is to better understand MS4 conditions and to improve stormwater management program effectiveness, as described in the Overview of Category 7. The three types of sites for sampling are stormwater, to, in the order to support the priorities established in the MS4 Permit:

Type 1 – To determine and improve system/BMP effectiveness through adaptive management (highest priority);

Type 2 – Representative land use management sites selected by the Permittee (second priority); and,

Type 3 – To determine contributions from upstream jurisdictions (third priority).

Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Monitor water quality at a minimum of six (6) sites.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Continued operation of the weather station at SSOC.	MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Maintain a Quality Assurance Project Plan.	MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Tasks are annually reviewed through the joint City and MPRB stormwater monitoring workplan.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Reporting as noted in Table 7-1.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X

Measurable Goals

- Annual monitoring and analyses are completed and reported in the MS4 Annual Report each year.
- Reasonable effort is made to monitor for at least two consecutive years at a site

- Implement monitoring and analysis programs in accordance with the permit.

Annual Reporting

- Proposed modifications to substitute sources of monitoring and analysis data. Include discussion of how data will be used to demonstrate compliance and to characterize nature of stormwater discharge.
- Description of significant operational differences in monitoring and monitoring protocols.
- Monitoring annual reporting as outlined in Table 7-1.
- Narrative of monitoring results for each monitoring site, including tabulations, statistics, summary tables, and summary graphics.
- Continuous flow data.
- Sample analytical data identified as composite or grab with corresponding flows and storm event periods.
- Estimate of rainfall for storm event that generated sampled discharge including approximate duration between storm event sampled and previous storm event greater than 0.10-inch rainfall.
- Loading calculations of estimated annual and seasonal loads from continuous monitoring station for Total Phosphorus, Chloride, Total Suspended Solids, Volatile Suspended Solids, Inorganic Suspended Solids (TSS-VSS=ISS), and Total Nitrogen.
- Summary information for each site:
    - Drainage area,
    - Estimated annual total discharge volume,
    - Storm event discharge volume,
    - Storm event discharge values used to calculate event-scale pollutant loads,
    - Runoff yield (inches per year),
    - Analyte flow weighted mean concentrations. Analyte annual mean concentrations.
- Map showing receiving waters and representative land use management sites.
- Currently there are no Alum or Ferric Chloride Phosphorus Treatment Systems operated within the city to report on.

Table 7.1: Analysis and Modeling Reporting Tasks

Each item is applicable to the six monitoring sites.

Task	Notes	Implementation Responsibility
Estimated pollutant Event Mean Concentration (EMC)		MPRB - Environmental Stewardship Division, Environmental Management Department- Water Resources
Estimated total annual pollutant load to receiving waters		City - PW, SWS, Regulatory
Estimated total annual volume to receiving waters		City - PW, SWS, Regulatory
Estimated effectiveness of structural stormwater management practices (removal efficiency, load reduction, etc.).	Not always applicable	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Calibration and verification of stormwater models		MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Continuous flow data		MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Sample analytical data	Identifies samples as composite/grab, Includes corresponding flows and storm event periods	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Estimated rainfall for storm events that generated sampled discharge	Includes approximate duration between each sampled storm event and previous storm event	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Loading calculations of estimated annual and seasonal loads using continuous flow monitoring data	Includes Total Phosphorus, Chloride, Total Suspended Solids, Volatile Suspended Solids, Inorganic Suspended Solids (TSS-VSS=ISS), and Total Nitrogen	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Site summary information	Includes drainage area, estimated annual discharge volume, storm event discharge volume, runoff yield in inches/year, analyte flow-weighted mean concentrations, analyte annual mean concentrations	City - PW, SWS, Regulatory (drainage area only) MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Map showing receiving waters and representative land use management sites	Not always applicable	City - PW, SWS, Regulatory

Reporting Tasks

Task	Notes	Implementation Responsibility
Proposed modifications to substitute sources of monitoring and analysis data	Includes discussion of how data will be used to demonstrate compliance and to characterize nature of stormwater discharge.	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Description of significant operational differences in monitoring and monitoring protocols	When applicable	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Monitoring and data analysis results	Includes all information described in Analysis/Modeling task table	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources
Brief narrative description of the monitoring results	Includes data with tabulations, statistics, summary tables and graphics, by monitoring site with receiving water location description	MPRB - Environmental Stewardship Division, Environmental Management Department - Water Resources

Table 7-2: Monitoring and analysis

Analytical data for samples			Sites 1-6 Monitored by the permittee (Types 1, 2, 3)					
Parameter	**Sample Type**	**Frequency** (Note2)	**Site 1**	**Site 2**	**Site 3**	**Site 4**	**Site 5**	**Site 6**
Chloride, Total	Flow-paced composite samples over non-ice time period (approx. March through November) Grab samples at least two times during typical winter thaw (approx. December to March)	10 samples/year, select from events 0.10 inch or greater over range of seasons and events	X	X	X	X	X	X
Copper, Total (as Cu)			X	X	X	X	X	X
Lead, Total (as Pb)			X	X	X	X	X	X
Zinc, Total (as Zn)			X	X	X	X	X	X
Hardness, Carbonate (as CaCo3)			X	X	X	X	X	X
Nitrate + Nitrite, Total (as N)			X	X	X	X	X	X
Nitrogen, Total			X	X	X	X	X	X
Phosphorus, Total (as P)			X	X	X	X	X	X
Solids, Total Suspended (TSS)			X	X	X	X	X	X
Solids, Volatile Suspended (VSS)			X	X	X	X	X	X
Solids, Inorganic Suspended by difference (TSS-VSS=ISS)			X	X	X	X	X	X
Carbon, Organic Dissolved			X	X	X	X	X	X
Chemical Oxygen Demand (COD)			X	X	X	X	X	X
Phosphorus, Total Dissolved or Ortho			X	X	X	X	X	X
Solids, Total Dissolved (TDS)			X	X	X	X	X	X
Flow	Measurement	Continuous during period when flow-paced composite samples are collected as required for other parameters in this table Point-estimated when grab samples are collected as required for other parameters in this table	X	X	X	X	X	X
Precipitation	Measurement, at 3800 Bryant Avenue South location	Daily	N/A	N/A	N/A	N/A	N/A	N/A
Oil and grease	Grab	Quarterly (spring, summer, fall, winter)	X	X	X	X	X	X
Escherichia coli (E. coli)			X	X	X	X	X	X
pH (Note1)	Grab, measured by multi-parameter probe	Quarterly (spring, summer, fall, winter)	X	X	X	X	X	X

- Note 1: Field analysis.
- Note 2: Taking into consideration weather and safety.
- X: Monitoring of parameter is applicable
- N/A: Not applicable
- Type 1. To determine and improve system/BMP effectiveness through adaptive management (highest priority)
- Type 2. Representative land use management sites selected by the permittee (second priority).
- Type 3. To determine contributions from upstream jurisdictions (third priority)

Overview of Minimum Control Measure 8

Progress Toward Waste Load Allocations for Approved Total Maximum Daily Loads

(MS4 Permit Reference: 9.1-9.5, 26.1-26.11)

Program Overview

Total maximum daily loads (TMDL) are one of the many tools Congress authorized in the Clean Water Act (CWA) to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." which will lead to waters that are fishable and swimmable. A successful TMDL study includes significant stakeholder involvement, characterizes the watershed to identify the waterbody, watershed and impairment conditions, requires sound data, emphasizes the importance of locally led decisions on where and how to spend local money to address water quality issues, and provides [equitable] allocations for known sources.

A TMDL study determines the level of pollution the impaired waterbody could assimilate if it were meeting State water quality standards, models the mass of pollutants associated with various pollutant sources including stormwater runoff, and develops an equation with allocations for regulated sources (waste load allocations or WLAs), unregulated sources, future growth if applicable, and a margin of safety to account for uncertainty. The MS4 WLA is a numerical maximum pollutant discharge goal for pollutants in stormwater runoff from each MS4 (individual WLA) or all the MS4s in the study (categorial WLA).

Program Goals

The goal of the TMDL program is to improve water quality. In order to accomplish this goal and understand what work is still needed, the permittees must develop and maintain a tracking system to assess and report on the progress towards compliance with TMDL established maximum pollutant discharges. Additionally, this program aims to work closely with the MPCA, neighboring cities, and other water resource partners during the study and implementation phases of each TMDL study which is being conducted for a waterbody that receives stormwater runoff from the Minneapolis/MPRB MS4 system. TMDLs are established on a watershed basis to assign pollutant reductions to all regulated MS4s that drain to a waterbody rather than making the water quality only the responsibility of the municipality containing the impaired water resources. The City and MPRB can work to solve pollutant problems within their regulated areas but have no control over flows received from upstream entities.

Implementation Responsibility

- City - Public Works, Surface Water and Sewers Division
- Minneapolis Park and Recreation Board - Environmental Stewardship Division

Minimum Control Measure 8 SMP Sheets

SMP 8.1 – Total Maximum Daily Load (TMDL) Program

SMP 8.1 Total Maximum Daily Load (TMDL) Program

Permit Reference: *9.1-9.5, 26.1-26.11*

Stormwater runoff from the City and MPRB's MS4 system discharges to 30 surface waterbodies located within the city or outside of the city boundaries. 19 of these have been listed on the 2022 MPCA Section 303(d) Impaired Waters List for having the presence of concentrations of certain pollutants identified in the water column or fish tissue at levels higher than Minnesota standards, as defined in Minnesota Rule 7050. TMDL studies have been completed for 18 of the surface waters that are listed as impaired. Of these, the City and MPRB are responsible for pollutant reductions in 12 individual TMDLs. The purpose of this SMP is to develop and maintain a system that tracks and reports on compliance with TMDL goals set for the MS4.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Assess winter maintenance operations to reduce the amount of salt applied.	City - Public Works, TMR, Maintenance and Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X
Document the amount of deicer applied annually.	City - Public Works, TMR, Maintenance and Repair MPRB - Environmental Stewardship Division, Asset Management Department	X	X	X	X	X
Maintain a written or mapped inventory of potential areas and sources of concern for bacteria.	City - Public Works, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Maintain a written plan to prioritize reduction activities to address the areas and sources of concern for bacteria.	City - Public Works, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources Stewardship, Environmental Management	X	X	X	X	X
On a form provided by the MPCA, provide a summary of the progress towards achieving applicable WLAs.	City - Public Works, SWS, Regulatory	X	X	X	X	X
Educate the public about impaired waters and TMDLs.	City - Public Works, SWS, Regulatory	Once per permit term				

	MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education					
Submit to the MPCA a compliance schedule for each WLA not being met for oxygen demand, nitrate, TSS, and TP and a description of BMPs for bacteria and chloride.	City - Public Works, SWS, Regulatory					X

Measurable Goals

- Long-term and measurable improvement in the water quality of impaired waters for factors within the permittees' purview and within MEP.

Annual Reporting

- A summary of the City and MPRB's progress towards achieving the applicable WLAs on a form provided by the MPCA.

Overview of Minimum Control Measure 9

Coordination and Cooperation with Other Entities

(MS4 Permit Reference: 7.1-7.5 17.6 c, 20.9 30.2,30.8c)

Program Overview

The City and MPRB interact with numerous agencies involved in surface water systems or stormwater management. The SMPs contained in this category serve to facilitate communications and develop cooperative agreements such that water quality efforts and MS4 permit responsibilities are defined and documented.

Federal level:

- Environmental Protection Agency (EPA)
- Army Corps of Engineers

State level:

- Minnesota Pollution Control Agency (MPCA),
- Minnesota Department of Transportation (MnDOT),
- Minnesota Department of Health (DOH),
- Minnesota Department of Natural Resources (DNR)

Regional level:

- Metropolitan Council.
- Mississippi Watershed Management Organization (MWMO),
- Minnehaha Creek Watershed District (MCWD),
- Bassett Creek Watershed Management Commission (BCWMC),
- Shingle Creek Watershed Management Commission (SCWMC)

Local level:

- Hennepin County,
- neighboring cities,
- University of Minnesota (U of M)

Program Goals

The goal of these SMPs is to work cooperatively with all water resource agencies towards improvements in water resource management. Specifically, this category of SMPs aims to establish new, or to re-establish previous cooperative agreements with the City's primary partners, including the Minneapolis Park and Recreation Board and the Metropolitan Council, to ensure that all required activities are properly defined and managed.

Implementation Responsibility

- Minneapolis Park and Recreation Board - Environmental Stewardship Division
- Minneapolis Park and Recreation Board - Planning Services Division
- Public Works Department - Surface Water and Sewers Division - Regulatory
- Public Works Department - Surface Water and Sewers Division - Design

Minimum Control Measure 9 SMP Sheets

SMP 9.1 – City of Minneapolis and Minneapolis Park and Recreation Board Responsibilities

SMP 9.2 – City of Minneapolis and Metropolitan Council Responsibilities

SMP 9.3 – Coordination and Cooperation with Other Entities

SMP 9.1: City of Minneapolis and Minneapolis Park and Recreation Board Responsibilities

Permit Reference: 7.5

The MS4 permit has been issued jointly to the City of Minneapolis (City) and the Minneapolis Park and Recreation Board (MPRB). The SWMP itself clearly outlines all appropriate delineations of roles and responsibilities between the City and the MPRB. The SWMP is approved by both governing boards and will be used to guide all work.

Permit Tasks

These are all activities that are to be completed within the permit term. This includes existing and new activities. The description should indicate a timeline for completion of the take during the 5-year permit term.

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Gain approval of the SWMP from both the City Council and MPRB Commission.	City, PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X				
Maintain and update the annual workplan.	City, PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X

Measurable Goals

- Completed SWMP

Annual Reporting

- None

SMP 9.2 City of Minneapolis and Metropolitan Council Responsibilities

Permit Reference: 22.1-22.17

The cooperative agreement developed through this SMP serves to define the specific responsibilities that the City and the Metropolitan Council will undertake to meet the conditions of the Integrated Infrastructure Management Program responsibilities contained in the current MS4 permit (Category 11). This agreement will guide communications and activities such that there are no overlaps or gaps in MS4 permit compliance.

The MS4 permit addresses interconnected sanitary sewer and stormwater system requirements that in the past were contained in a NPDES permit jointly issued to the City of Minneapolis (City) and the Metropolitan Council. The overall aim of these requirements is to improve and manage the stormwater and sanitary sewer systems such that excessive flows in the sanitary sewers are not discharged to the Mississippi River at existing overflow structures, termed regulators. Generally, the City is responsible for working to reduce non-sanitary flows through efforts to eliminate inflow and infiltration (I/I) into the City-owned sanitary sewers. The Metropolitan Council, as owner of the sanitary interceptor sewers and the regulators, is also required to maintain and operate their system in a manner that does not contribute to sanitary sewage overflows. In the past, the City and the Metropolitan Council would execute a cooperative agreement that detailed the responsibilities of each organization under the previous CSO NPDES permits.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Review and amend existing cooperative agreement between the City and Metropolitan Council	City - Public Works, Surface Water and Sewers, Design Section	As Needed				

Measurable Goals

- Maintain and up to date cooperative agreement with the Metropolitan Council.

Annual Reporting

- Status of compliance with the cooperative agreement.

SMP 9.3 Coordination and Cooperation with Other Entities

Permit Reference: 16.7, 25.2, 30.3

The stormwater management objective of this SMP is to execute cooperative agreements or contracts, where needed, to meet permit requirements and to document coordination with other local government units (LGUs), non-profits, and other entities as they relate to improving stormwater management within the city. Coordination efforts happen most frequently around the development and implementation of water quality education and engagement efforts, coordinated stormwater monitoring, and TMDL development and implementation along with individual projects, tasks, and efforts to improve water quality.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Maintain a list of formal agreements, contracts, or partnerships related to Public Education and Outreach.	City - Public Works, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Environmental Education	X	X	X	X	X
Maintain records of agreements, contracts, or partnerships required to meet specific SWMP requirements including rights, roles, and responsibilities of each party.	City - Public Works, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Develop cooperative agreements where needed to meet permit requirements	City - Public Works, SWS, Regulatory MPRB - Planning Services Division, Design and Project Management Department & Environmental Stewardship Division, Environmental Management Department, Water Resources	As needed				
Document coordination with other entities	City - Public Works, SWS, Regulatory MPRB - Planning Services Division, Design and Project Management Department & Environmental Stewardship Division, Environmental Management Department, Water Resources	As needed				

Measurable Goals

- Agreements, contracts, and partnerships related to implementing required parts of the SWMP, including completing water quality monitoring and public education, are executed and enforced. These agreements are periodically assessed and updated to remain responsive to current needs.

Annual Reporting

- Summary of any partnership or activities coordinated with other local governments or organizations to assist with implementing the SWMP.
- List of any agreements related to implementation of the SWMP.
- Annual assessment of any agreements related to implementation of the SWMP.

Overview of Minimum Control Measure 10

Stormwater Management Program Assessment, Modification, and Annual Reporting

(MS4 Permit Reference: 28.1-28.6, 29.1-29.6, 30.1-30.29)

Program Overview

The City and MPRB continue to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP), to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act and the conditions of this permit. The SWMP must utilize an adaptive management strategy by which monitors, analyzes, and adjusts the SWMP to achieve pollutant reductions to the MEP.

The City and the Minneapolis Park and Recreation Board (MPRB), as co- permittees, have annual and ongoing responsibilities for SWMP assessment, SWMP modifications, recordkeeping, and annual reporting to the MPCA.

Program Goals

The goals of completing SWMP assessments and updating the program are to ensure permit compliance and to ensure that less effective BMPs identified in the SWMP are replaced with more effective practices. The annual assessment is used to provide information for improving performance of the MS4, reduce pollutant loadings, and to support improvements to associated planning and design, construction, operation, and maintenance of the MS4. Annual reporting is used to understand and communicate the status of compliance with the permit terms and conditions.

Implementation Responsibility

- City - Public Works, Surface Water and Sewers
- Minneapolis Park and Recreation Board - Environmental Stewardship Division

Minimum Control Measure 10 SMP Sheets

SMP 10.1 – Stormwater Management Program Assessment, Modifications, and Annual Reporting

SMP 10.1 Stormwater Management Program Assessment, Modifications, and Annual Reporting

Permit Reference: 28.1-28.6, 29.1-29.6, 30.1-30.29

The stormwater management objective of this program is to provide coordination and oversight of the SWMP assessment, modification, and reporting requirements.

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Update SWMP to comply with current MS4 Permit within 12 months of permit coverage.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X				
Prepare an Annual Report for submission to the Minnesota Pollution Control Agency (MPCA) by June 30th.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department	X	X	X	X	X
Track assessment of progress being made for stormwater management practices (SMPs), prepare or coordinate revisions to SMPs or other portions of the SWMP.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X
Modify SWMP and compliance schedules as required by the MPCA.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	As needed				
Complete an annual assessment of the SWMP based on information collected and analyzed during the reporting period.	City - PW, SWS, Regulatory MPRB - Environmental Stewardship Division, Environmental Management Department, Water Resources	X	X	X	X	X

Measurable Goals

- Submit Annual Report by June 30 of each year.
- Annual program assessments completed.
- Keep all program records for three (3) years beyond the date of the permit expiration.

Annual Reporting

- Discussion of modifications to SWMP which do not require MPCA approval.
- Results of SWMP annual assessment for SMP Categories 1 through 8.
- Change in SMPs or measurable goals for SMP Categories 1 through 8.
- Status of compliance with permit terms and conditions.

- All reporting requirements contained on individual SMP sheets.
- Modifications to SWMP required by MPCA.

Overview of Minimum Control Measure 11

Sanitary Sewer Reporting Requirements

(MS4 Permit Reference: 22.1 – 22.17, 30.15-30.21)

Program Overview

In 2019, Minneapolis transitioned from a Combined Sewer Overflow (CSO) permit to an Integrated MS4 permit. This transition is possible because of the success of the efforts of the City of Minneapolis and MCES to reduce the risk of releases of untreated wastewater through storm drain separation, improvements to hydraulic performance and programs to reduce Inflow & Infiltration (I & I)

There are seven (7) control structures on the Metropolitan Council interceptor system that are capable of releasing sanitary sewage to either the Mississippi River or the stormwater drainage system during an extreme rain event. Improvements made to the Minneapolis sanitary sewer system, through the removal of inflow and infiltration sources, has dramatically reduced the number and volume of releases as compared to historic records. In fact, there have been no releases of raw sewage caused by a rain event since 2006. However, these structures must remain in place as a safeguard to prevent the future release of raw sewage into basements or onto streets should an extreme event occur.

The Minnesota Pollution Control Agency (MPCA) has written specific conditions into the Minneapolis / Minneapolis Park and Recreation Board NPDES Municipal Stormwater Permit that the City must follow to allow for these control structures to remain in operation. This Minimum Control Measure and SMP sets up program requirements around monitoring and reporting to meet the obligations of the permit. Some of these program requirements are met by the Metropolitan Council Environmental Services (MCES) through a cooperative agreement with the City.

Program Goals

Manage the sanitary sewer infrastructure in a manner that:

- Maximizes public investment.
- Minimizes risk to human health.
- Minimizes risk to the environment.
- Prevents the loss of life and personal injury.
- Prevents property damage.
- Prevent releases of untreated sewage from the Minneapolis sanitary sewer system.

Implementation Responsibility

- City - Public Works, Surface Water & Sewers
- Metropolitan Council Environmental Services (MCES) – through joint cooperative agreement with the City

Minimum Control Measure 11 SMP Sheets

SMP No. 11.1 – Integrated Infrastructure Management Program

SMP 11.1 Integrated Infrastructure Management Program

Permit Reference: 22.1-22.17, 30.15-30.21

The objective of this program is to maximize public investments to minimize risk to human health and the environment, to prevent loss of life, personal injury, or severe property damage, and to prevent releases of untreated wastewater and improve water quality.

There are control structures located on Metropolitan Council Interceptors at the following locations:

- Minnehaha Parkway and 39th Avenue South
- East 38th Street and 26th Avenue South
- Southwest Meters at West River Parkway between 28th Street East and Dorman Avenue
- Northwest Meters at West River Parkway between 28th Street East and Dorman Avenue
- Eastside Meters at East River Terrace and Emerald Street Southeast
- East 26th Street and Seabury Avenue South
- Portland Avenue South and Washington Avenue South

Permit Tasks

Task	Implementation Responsibility	Implementation Year				
		1	2	3	4	5
Develop and implement Standard Operating Procedures (SOPs) for addressing releases of untreated wastewater.	City - PW, SWS, Design and Operations	X	X	X	X	X
Regulate users of the sanitary sewer system to prevent the introduction of pollutants or materials that may contribute to a system violation.	City - PW-SWS-Business	X	X	X	X	X

Measurable Goals

- No discharge of a toxic pollutant except as allowed by applicable state and federal laws.
- No nuisance conditions are created including floating solids, scum, and visible oil film, or other adverse impacts on the receiving water.
- Flow meters pumps, flumes, lift stations, or other flow monitoring equipment used to determine compliance with this program are checked and/or monitored at least twice per year.
- Records required by this program are kept for at least three (3) years. These include:
  - The exact place, date, and time of the sample or measurement,
  - The date of analysis,
  - The name of the person who performed the sample collection, measurement, analysis, or calculation,
  - The analytical techniques, procedures, and methods used, and
  - The results of the analysis.

- Upon discover of a release the following are completed:
  - Take all reasonable steps to immediately end the release
  - In concert with the MCES notify the state Duty Officer as soon as possible
  - Recover all substances as rapidly and thoroughly as possible.
  - Collect representative samples of the release
  - Submit the sampling results on the Release Report form on the MPCA's website.

Annual Reporting

- Any partnerships or activities coordinated with the MCES to assist with implementing this section.
- Efforts to minimize inflow and infiltration.
- A description of any release events from sanitary or combined sewer systems.
- A summary of studies, investigations, and monitoring activities initiated to identify sources of inflow and infiltration.
- An updated inventory of all identified areas of inflow to the sanitary sewer system.
- A map and summary of projects completed in the past year to minimize inflow and infiltration, including sewer separation projects, lined sewer pipes, maintenance hole lining and repairs, and Rainleader disconnections.
- A description of collaborative arrangements with external partners to minimize releases.
- A description of annual expenditures in this program.

Appendix A

Introduction:
The federal Clean Water Act requires states to adopt water quality standards to protect waters from pollution. The goal is to protect high-quality waters and improve the quality of impaired waters, so that beneficial uses (such as fishing, swimming and protection of aquatic life) are maintained and restored, where these uses are attainable. *Adapted from MPCA 12/2011 Guidance Manual for Assessing the Quality of Minnesota Surface Waters.*

The process includes the following steps: Assess waters, Determine whether impaired, Place water on the impaired list, Monitor and study the water body, Complete a pollutant load allocation formula (called a "Total Maximum Daily Load", or TMDL), Develop a restoration strategy, Implement the strategy, Monitor changes in water quality, and then De-list if standards are being achieved, or Determine next steps. The list of impaired water bodies, or 303(d) List, is updated every two years.

City of Minneapolis TMDL Status

Name of Surface Water (includes lakes, creeks, wetlands and Mississippi River). Alphabetical order. * indicates waterbody is not in Minneapolis.	Receives Minneapolis municipal stormwater runoff?	State ID	Next-in-line Receiving Water	Status of Impairment and TMDL Study	Designated Use that is Affected by the Impairment
BASSETT CREEK	yes (and from upstream municipalities)	07010206-538	Mississippi River ("new" tunnel designed for 1,000 cfs, "old" tunnel obligated to be available for additional 50 cfs)	1) FISHES BIOASSESSMENTS (listed 2004) - TMDL study not started yet, may be reassessed.	Aquatic Life
				2) BACTERIA (listed 2008) - TMDL approved Nov. 2014 (metro-wide).	Aquatic Recreation
				3) CHLORIDE (listed 2010) - TMDL approve June 2016 (metro-wide).	Aquatic Life
				4) BENTHIC MACROINVERTEBRATES BIOASSESSMENTS (listed 2022) - TMDL study not started yet, may be reassessed.	Aquatic Life
BASSETT'S POND (Part of Bassett Creek. Located in City of Golden Valley, in Wirth Park owned and managed by Minneapolis Park & Recreation Board)	yes	27-0036	Bassett Creek	No impairments.	
BDE MAKA SKA	yes (and from upstream municipalities)	27-0031	Lake Harriet	1) MERCURY IN FISH TISSUE (listed 1998) - statewide TMDL completed 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PFOS IN FISH TISSUE (listed 2008) - regulatory action by MPCA in lieu of TMDL is underway (pollutant source in St. Louis Park).	Aquatic Consumption
				3) FISH BIOASSESSMENTS (listed in 2024)	Aquatic Life
BIRCH POND	yes (portion of southbound Wirth Parkway)	27-0653	Landlocked (historic pumping to Chain of Lakes)		
BROWNIE LAKE	yes (and from City of Saint Louis Park)	27-0038	Cedar Lake	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) EXCESS NUTRIENTS (listed 2004) - **DE-LISTED** 2010 (could be listed again if TP rises again).	
				3) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
CEDAR LAKE	yes (and from City of Saint Louis Park)	27-0039	Lake of the Isles	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) FISH BIOASSESSMENTS (listed in 2024)	Aquatic Life
CEMETERY LAKE	no	27-0017	Bde Maka Ska	No impairments.	
CRYSTAL LAKE * (Located in Robbinsdale)	yes (and from City of Robbinsdale)	27-0034	Shingle Creek	1) EXCESS NUTRIENTS (listed 2002) - TMDL approved 2009.	Aquatic Recreation
				2) PERFLUOROOCTANE SULFONATE (PFOS) IN FISH TISSUE (listed in 2024)	Aquatic Consumption
DIAMOND LAKE	yes	27-0022	Minnehaha Creek	1) Was formerly listed for EXCESS NUTRIENTS, but removed from list in 2008 because it was determined to be a wetland (or game lake) that had been mischaracterized by DNR as a lake. There are no nutrient standards for wetlands at this time.	
				2) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
FERDINAND POND (see Legion Lake)	yes (and MnDOT Crosstown)	--	Legion Lake	No impairments. Status as a "wetland" to be determined.	
GRASS LAKE (Officially a wetland. Was previously part of Richfield Lake, which was divided by construction of Highway 62)	yes	27-0681		1) Was formerly listed for EXCESS NUTRIENTS, but removed from list in 2008 because it was determined to be a wetland (or game lake) that had been mischaracterized by DNR as a lake. There are no nutrient standards for wetlands at this time.	
LAKE HARRIET	yes	27-0016	Minnehaha Creek	1) MERCURY IN FISH TISSUE (listed 1998) - statewide TMDL completed 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PFOS IN FISH TISSUE (listed 2008) - regulatory action by MPCA in lieu of TMDL is underway (pollutant source in St. Louis Park).	Aquatic Consumption
				3) FISH BIOASSESSMENTS (listed in 2024)	Aquatic Life

Name of Surface Water (includes lakes, creeks, wetlands and Mississippi River). Alphabetical order. * indicates waterbody is not in Minneapolis.	Receives Minneapolis municipal stormwater runoff?	State ID	Next-in-line Receiving Water	Status of Impairment and TMDL Study	Designated Use that is Affected by the Impairment
LAKE HIAWATHA (Part of Minnehaha Creek)	yes (and from upstream municipalities)	27-0018	Minnehaha Creek	1) EXCESS NUTRIENTS (listed 2002) - part of Minnehaha Creek *E. Coli* Bacteria/Lake Hiawatha Nutrients TMDL Study. TMDL approved 2014.	Aquatic Recreation
				2) CHLORIDE (listed 2024) - TMDL approved June 2016 (metro-wide).	Aquatic Life
LAKE NOKOMIS	yes (and from Richfield and a portion of MSP Airport)	27-0019	Minnehaha Creek	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PCB IN FISH TISSUE (listed 1998) - TMDL study not started.	Aquatic Consumption
				3) EXCESS NUTRIENTS (listed 2002) - TMDL study approved 2011, in implementation stage. (TMDL name: Minnehaha Creek Watershed Lakes)	Aquatic Recreation
				4) FISH BIOASSESSMENTS (listed in 2024)	Aquatic Life
LAKE OF THE ISLES	yes	27-0040	Bde Maka Ska	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PFOS IN FISH TISSUE (listed 2008) - regulatory action underway by MPCA in lieu of TMDL (pollutant source in St. Louis Park), target completion 2022.	Aquatic Life
LEGION LAKE * (Located in Richfield; the former Legion Lake wetland area in Minneapolis is now Ferdinand Pond)	no (lake is in Richfield; a wetland area formerly considered part of Legion Lake is now Ferdinand Pond)	27-0024	Taft Lake	No impairments for Legion Lake, but Legion Lake is involved in the TMDL for Lake Nokomis.	Aquatic Recreation
LORING LAKE (commonly called Loring Pond)	yes (little direct runoff BUT takes runoff on occasion from 35W Tunnel)	27-0655	Mississippi River	1) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
MINNEHAHA CREEK	yes (and from upstream municipalities)	07010206-539	Mississippi River	1) FISHES BIOASSESSMENTS (listed 2004) - TMDL study not started, may reassess (baseflow not constant).	Aquatic Life
				2) CHLORIDE (listed 2008) - TMDL approved June 2016 (metro-wide).	Aquatic Life
				3) BACTERIA (listed 2008) - part of Minnehaha Creek *E. Coli* Bacteria/Lake Hiawatha Nutrients TMDL study. TMDL approved 2014.	Aquatic Recreation
				4) DISSOLVED OXYGEN (listed 2010) - TMDL study not started, may reassess (baseflow not constant).	Aquatic Life
				5) BENTHIC MACROINVERTEBRATE BIOASSESSMENTS (listed 2014) - TMDL study not started.	Aquatic Life
MISSISSIPPI RIVER (the specific reach upstream of Upper Saint Anthony Falls, to Coon Creek)	yes (and from upstream municipalities)	07010206-509	n/a	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PCB IN FISH TISSUE (listed 1998) - TMDL study not started.	Aquatic Consumption
				3) BACTERIA (listed 2002) TMDL approved Nov. 2014 (metro-wide).	Aquatic Recreation
MISSISSIPPI RIVER (the specific reach between Upper and Lower Saint Anthony Falls)	yes (and from upstream municipalities)	07010206-513	n/a	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) PCB IN FISH TISSUE (listed 1998) - TMDL study not started.	Aquatic Consumption
				3) BACTERIA (not listed, but part of TMDL approved Nov. 2014 (metro-wide).	Aquatic Recreation
MISSISSIPPI RIVER (the specific reach downstream of Lower Saint Anthony Falls, to Lock and Dam #1)	yes (and from upstream municipalities)	07010206-503	n/a	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) BACTERIA (listed 2002) TMDL approved Nov. 2014 (metro-wide).	Aquatic Recreation

Name of Surface Water (includes lakes, creeks, wetlands and Mississippi River). Alphabetical order. * indicates waterbody is not in Minneapolis.	Receives Minneapolis municipal stormwater runoff?	State ID	Next-in-line Receiving Water	Status of Impairment and TMDL Study	Designated Use that is Affected by the Impairment
MISSISSIPPI RIVER * (impaired downstream of confluence with Minnesota R., to Lake Pepin)	this impairment is downstream of the Minneapolis segments	07010206-xxx	n/a	1) TOTAL SUSPENDED SOLIDS (TSS) (listed 1998) (replaced turbidity standard with site-specific TSS standard) - South Metro Ms. R. TSS TMDL study near completion. **Zero reduction required for Minneapolis.**	Aquatic Life
LAKE PEPIN * (widening of MISSISSIPPI RIVER) (as tributary to Lake Pepin nutrient/eutrophication biological indicators TMDL)	this impairment is downstream of the Minneapolis segments	25-0001	n/a	1) EXCESS NUTRIENTS (listed 2002) - Lake Pepin TMDL study approved May 2021	Aquatic Recreation
MOTHER LAKE * (formerly in Minneapolis, now Airport)	no	27-0023	Lake Nokomis	No excess nutrients impairment for Mother Lake, but Mother Lake is involved in the TMDL for Lake Nokomis.	Aquatic Recreation
POWDERHORN LAKE	yes	27-0014	Landlocked (has been pumped to Mississippi River in the past)	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) EXCESS NUTRIENTS (listed 2002) - **DE-LISTED** in 2012, due to improved water quality.	
				2) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
				4) NUTRIENTS (relisted in 2018)	Aquatic Recreation
RYAN CREEK (primarily conveyed by storm drain pipe, about two blocks exposed, on industrial property)	yes (and Ryan Lake)	don't know	Shingle Creek	No impairments.	
RYAN LAKE part * (located in Minneapolis and in Cities of Robbinsdale and Brooklyn Center)	yes (and from upstream municipalities)	27-0058	Ryan Creek	1) EXCESS NUTRIENTS (listed 2002) - TMDL Study approved 2007, **DE-LISTED** 2014 because of restoration activities under TMDL Implementation Plan.	
SANCTUARY MARSH	no	27-0665	Lake Harriet	No impairments.	
SHINGLE CREEK	yes (and from upstream municipalities)	07010206-506	Mississippi River	1) CHLORIDE (listed 1998) - TMDL approved 2007, now in implementation stage.	Aquatic Life
				2) DISSOLVED OXYGEN (listed 2004) - TMDL approved 2011, now in implementation stage.	Aquatic Life
				3) AQUATIC MACROINVERTEBRATE BIOASSESSMENTS (listed 2006) - TMDL approved 2011, now in implementation stage.	Aquatic Life
				4) BACTERIA (listed 2014) - TMDL approved Nov. 2014, modified June 2019 (metro-wide).	Aquatic Recreation
				5) FISH BIOASSESSMENTS (listed 2022)	Aquatic Life
SILVER LAKE * (located in Cities of New Brighton and Columbia Heights)	yes, from a very small corner of Minneapolis (and from New Brighton, Columbia Heights and St. Anthony Village)	62-0083	Ramsey County Ditch 3, then Rice Creek	1) EXCESS NUTRIENTS (listed 2002) - TMDL approved 2010, now in implementation stage.	Aquatic Recreation
				1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
SPRING LAKE	yes (and from I-394)	27-0654	Landlocked?	1) CHLORIDE (listed 2014) - TMDL approved June 2016 (metro-wide).	Aquatic Life
TAFT LAKE * (formerly in Minneapolis, now Airport)	no (formerly part of Minneapolis, now Airport)	27-0683	Lake Nokomis	1) No excess nutrients impairment for Taft Lake, but Taft Lake is involved in the TMDL for Lake Nokomis.	Aquatic Recreation
				2) CHLORIDE (listed 2024) - part of Metro wide TMDL	Aquatic Life

Name of Surface Water (includes lakes, creeks, wetlands and Mississippi River). Alphabetical order. * indicates waterbody is not in Minneapolis.	Receives Minneapolis municipal stormwater runoff?	State ID	Next-in-line Receiving Water	Status of Impairment and TMDL Study	Designated Use that is Affected by the Impairment
WEBBER POND	no (reconstructed 2013-2015 with no stormwater outfalls to it)	27-1118	Shingle Creek	No impairments.	
WIRTH LAKE * (located in City of Golden Valley, in Wirth Park owned and managed by Minneapolis Park & Recreation Board)	no apparent Minneapolis municipal runoff (MPRB only; parkway runoff appears to be only in Golden Valley)	27-0037	Bassett Creek	1) MERCURY IN FISH TISSUE (listed 1998) - Statewide TMDL approved 2008, not stormwater-related, no MS4 responsibilities.	Aquatic Consumption
				2) EXCESS NUTRIENTS (listed 2002) - TMDL approved 2010 (Wirth Lake Excess Nutrients TMDL Report). **DE-LISTED** 2014 because of activities carried out under TMDL Implementation Plan.	
				3) CHLORIDE (listed 2016) part of Metro-wide TMDL	Aquatic Life

Color Key:

Chloride.
Bacteria.
Excess nutrients.
related to Lake Nokomis Excess Nutrients TMDL.
Total Suspended Solids (TSS)
Dissolved oxygen, or bioassessments for fish or aquatic macroinvertebrates.
PFOS or PCB
Mercury - no MS4 responsibilities.

Notes:

MERCURY -- Presence of mercury is primarily airborne, not stormwater runoff. Statewide Mercury TMDL is being carried out by MPCA. No MS4 responsibilities.

PFOS -- Presence of perfluorooctane sulfonate (PFOS) is primarily related to industrial discharge. Regulatory action in lieu of TMDL is underway.

PCB -- Polychlorinated biphenyls.

* indicates waterbody is not in Minneapolis.

Message from Minnesota's Clean Water Council: We recognize that people are hungry for immediate results; however, managing water resources is an ongoing task, and some clean water outcomes may take several decades to achieve. Once a best management practice has been implemented, it often takes many years, or decades, before a positive environmental outcome is achieved in a highly degraded river, lake or groundwater source.

Table A.2. Sources of Pollutants Targeted for Reduction

	Coal Tar Sealants	Construction Activity	Fertilizers and Pesticides	Grass clippings, leaves, and other plant matter	Illicit Discharges	Illegal Dumping	Road deicers	Pet waste	Soil Erosion
Bacteria/Pathogens		X			X	X		X	
Chlorides					X	X	X		
Metals					X	X			
Nutrients				X	X	X		X	
Organic Chemicals		X	X		X	X			
Organic Matter		X		X	X	X			
PAHs	X				X	X			
Sediment		X			X	X			X
Trash		X			X	X			

*To meet water-quality standards for Mercury, the MPCA Statewide Mercury TMDL determined that human-caused, air-deposited mercury would need to be reduced by 93% from 1990 levels. Mercury is not a pollutant targeted for reduction. (Minnesota Pollution Control Agency, 2009)

** PFAS are synthetic chemicals commonly found in a range of industrial and consumer products. They are used in firefighting foams, waterproof coatings, and non-stick cookware, and can leach into the environment. Industrial sites are major contributors to PFAS pollution. These chemicals often enter stormwater through runoff from industrial sites, urban areas, and products like firefighting foams and waterproof coatings. During rainfall, PFAS can wash into stormwater systems, contaminating surface waters. Despite their widespread presence and environmental impact, there are no stormwater regulatory requirements or guidance for PFAS. PFAS are not currently prioritized for reduction.

		City - 311 Service Center	City - Communications	City - Community Planning & Economic Development	City - Finance & Property Services	City - Health, Environmental Services	City - Public Works, Surface Water & Sewers	City - Public Works, Traffic & Parking Services	City - Public Works, Transportation, Engineering & Design	City - Public Works, Transportation Maintenance & Repair	City - Public Works, Transportation Planning & Programming	City - Public Works, Water Treatment & Distribution	City - Regulatory Services	MPRB - Deputy Superintendent's Office, Information Technology	MPRB - Environmental Stewardship, Asset Management	MPRB - Environmental Stewardship, Environmental Management	MPRB - Office of the Superintendent	MPRB - Planning Services, Design and Project management	MPRB - Planning Services, Strategic Planning	MPRB - Recreation Services Division
Minimum Control Measure 1 -Public Education and Outreach on Stormwater Impacts																				
1.1	Stormwater Public Education		X				X									X				
1.2	Stormwater Education and Training for Staff					X	X	X	X	X		X			X	X		X		
Minimum Control Measure 2 -Public Participation and Involvement																				
2.1	Stormwater Public Participation Activities		X				X									X				
Minimum Control Measure 3 - Illicit Discharge Detection and Elimination																				
3.1	Illicit Discharge Detection and Elimination Program	X				X	X						X	X		X	X			
3.2	Facilities Regulatory Oversight Program						X													
3.3	Lake Hiawatha Trash Reduction Program						X									X				
Minimum Control Measure 4 - Construction Site Stormwater Runoff Control																				
4.1	Erosion and Sediment Control for Private Construction Projects	X		X		X	X													
4.2	Erosion and Sediment Control for Public Construction Projects				X		X	X	X	X	X	X		X	X	X	X	X	X	X
Minimum Control Measure 5 - Post-Construction Stormwater Management																				
5.1	Private Development and Redevelopment Projects			X			X							X				X		
5.2	Linear Projects						X		X											
Minimum Control Measure 6 Pollution Prevention and Good Housekeeping for Municipal Operations																				
6.1	Operations and Maintenance						X	X	X	X	X	X			X	X		X		X
6.2	Street Sweeping and Cleaning Program									X					X					
6.3	Facilities Management				X		X	X	X	X		X			X	X		X		X
6.4	Chloride Management						X			X					X					X
6.5	Retrofit Plan						X												X	
6.6	Localized Flood Mitigation Capital Projects						X													
Minimum Control Measure 7 - Stormwater Discharge Monitoring and Analysis																				
7.1	Stormwater Runoff Monitoring and Analysis						X									X				
Minimum Control Measure 8 - Progress Toward Waste Load Allocations for Approved Total Maximum Daily Loads																				
8.1	Total Maximum Daily Load (TMDL) Program						X			X					X	X				

		City - 311 Service Center	City - Communications	City - Community Planning & Economic Development	City - Finance & Property Services	City - Health, Environmental Services	City - Public Works, Surface Water & Sewers	City - Public Works, Traffic & Parking Services	City - Public Works, Transportation, Engineering & Design	City - Public Works, Transportation Maintenance & Repair	City - Public Works, Transportation Planning & Programming	City - Public Works, Water Treatment & Distribution	City - Regulatory Services	MPRB - Deputy Superintendent's Office, Information Technology	MPRB - Environmental Stewardship, Asset Management	MPRB - Environmental Stewardship, Environmental Management	MPRB - Office of the Superintendent	MPRB - Planning Services, Design and Project management	MPRB - Planning Services, Strategic Planning	MPRB - Recreation Services Division
Minimum Control Measure 9 - Coordination and Cooperation with Other Entities																				
9.1	City of Minneapolis and Minneapolis Park and Recreation Board Responsibilities						X									X				
9.2	City of Minneapolis and Metropolitan Council Responsibilities						X													
9.3	Coordination and Cooperation with Other Entities						X									X		X		
Minimum Control Measure 10Stormwater Management Program Assessment, Modification, and Annual Reporting																				
10.1	Stormwater Management Program Assessment, Modifications, and Annual Reporting						X									X				
Minimum Control Measure 11 - Sanitary Sewer Reporting Requirements																				
	Integrated Infrastructure Management Program						X													

Appendix B

MINNESOTA POLLUTION CONTROL AGENCY

National Pollutant Discharge Elimination System/State Disposal System
Municipal Separate Storm Sewer System (MS4)
MN0061018

Permittee:	City of Minneapolis and the Minneapolis Park and Recreation Board
Issuance date:	December 12, 2023
Expiration date:	December 11, 2028

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the permittee to operate a large municipal separate storm sewer system (MS4) and to discharge from the large MS4 to receiving waters, in accordance with the requirements of this permit.

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: Duane Duncanson *for the* Minnesota Pollution Control Agency

This document has been electronically signed.

Duane Duncanson
Supervisor
Municipal Stormwater Unit
Municipal Division

If you have questions about this permit, including specific permit requirements, permit reporting, or permit compliance status, please contact the MPCA at:

Municipal Stormwater Program
Municipal Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194
Telephone: 651-296-6300 or toll free in Minnesota: 800-657-3864

1. Permit requirements

1.1	**Eligibility**. [Minn. R. 7090]
1.2	To be eligible for authorization to discharge stormwater under this permit, the applicant must be an owner and/or operator (owner/operator) of a large municipal separate storm sewer system (MS4) as defined in 40 C.F.R. 122.26(b)(4). [40 CFR 122.26(b)(4)]
2.1	**Authorized Stormwater Discharges**. [Minn. R. 7090]
2.2	This permit authorizes stormwater discharges from the MS4. [Minn. R. 7090]
3.1	**Authorized Non-Stormwater Discharges**. [Minn. R. 7090]
3.2	The following categories of non-stormwater discharges or flows are authorized under this permit to enter the permittee's MS4 only if the permittee does not identify them as significant contributors of pollutants (i.e., illicit discharges), in which case the discharges or flows must be addressed in the permittee's Stormwater Management Program (SWMP): water line flushing, landscape irrigation, diverted stream flows, rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 C.F.R. 35.2005(b)(20)), uncontaminated pumped groundwater, discharges from potable water sources, foundation drains, air conditioning condensation, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges of flows from firefighting activities. [Minn. R. 7090]
4.1	**Limitations on Authorization**. [Minn. R. 7090]
4.2	The following discharges or activities are not authorized by this permit: a. non-stormwater discharges, except those authorized by the permittee in item 3.2; b. discharges of stormwater to the MS4 from activities requiring a separate National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) permit. This permit does not replace or satisfy any other permitting requirements; c. this permit does not replace or satisfy any environmental review requirements, including those under the Minnesota Environmental Policy Act (Minn. Stat. ch. 116D), or the National Environmental Policy Act (42 U.S.C. 4321 et seq.); d. this permit does not replace or satisfy any review requirements for endangered or threatened species, from new discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species, or adversely modify a designated critical habitat; e. this permit does not replace or satisfy any review requirements for historic places or archeological sites, from new discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites; and f. this permit does not authorize discharges to wetlands unless the permittee is in compliance with the requirements of Minn. R. 7050.0186. Only the permittee's MS4 and the portions of the storm sewer system under the permittee's operational control are authorized by this permit. [Minn. R. 7090]
5.1	**Permit Authorization**. [Minn. R. 7001]
5.2	For an applicant to be authorized to discharge stormwater from a large MS4 under this permit the Commissioner will communicate to the permittee as to whether this permit should be issued or denied in accordance with Minn. R. ch. 7001. Upon receipt of written notification from the Commissioner of permit coverage, the permittee is authorized to discharge stormwater from the large MS4 under the terms and conditions of this permit. [Minn. R. 7001]
6.1	**Rights and Responsibilities**. [Minn. R. 7001, Minn. R. 7090]
6.2	The Commissioner may modify this permit or issue other permits, in accordance with Minn. R. ch. 7001, to include more stringent effluent limitations or permit requirements that modify or are in addition to Sections 15 through 27 of this permit, or both. These modifications may be based on the Commissioner's determination that such modifications are needed to protect water quality. [Minn. R. 7001]

6.3	The permittee must manage, operate, and maintain the storm sewer system and areas drained by the storm sewer system within the permittee's jurisdiction to reduce the discharge of pollutants to the Maximum Extent Practicable (MEP). Management may consist of a combination of Best Management Practices (BMPs), education, other control techniques, system design and engineering methods, and such other provisions as the permittee and/or Commissioner determine to be appropriate. [Minn. R. 7090]
7.1	**Joint Permittees**. [Minn. R. 7090]
7.2	The following entities are joint permittees under this permit. The titles "joint permittee" and "permittee" are considered the same and are used interchangeably: a. City of Minneapolis by and through its City Council; and b. City of Minneapolis by and through its Minneapolis Park and Recreation Board. [Minn. R. 7090]
7.3	Each joint permittee is individually liable for: a. permit compliance for the discharges from portions of the storm sewer system of which it is the owner and/or operator; and b. stormwater management for discharges from portions of the storm sewer system of which it is the owner and/or operator. [Minn. R. 7090]
7.4	The joint permittees are jointly and severally liable for: a. compliance with annual reporting requirements; b. ensuring funding for representative monitoring according to established agreements; c. ensuring implementation of any system-wide management program elements; d. compliance on portions of the storm sewer system where operation, maintenance, or other authority has been transferred from one joint permittee to another in accordance with legally binding interagency agreements; and e. compliance on portions of the storm sewer system where the joint permittees jointly own or operate the system. [Minn. R. 7090]
7.5	The joint permittees must enter into an agreement to define their individual responsibilities for meeting the requirements and conditions of this permit (Agreement). As part of the Agreement, the joint permittees must define their individual responsibilities to assure the operation, maintenance, monitoring, and management of the SWMP to comply with this permit. This Agreement must become part of the SWMP and must include, but not be limited to the following: a. a designation of an authorized representative to serve as the coordinator of the joint permittees; b. a delineation of responsibilities to assure all parts of the SWMP are implemented and managed according to the conditions of this permit; and c. a delineation of responsibilities for submittal of the annual report. [Minn. R. 7090]
8.1	**Application for Permit Reissuance**. [Minn. R. 7001, Minn. R. 7090]
8.2	The permittee must submit an application for permit reissuance: Due by 180 days prior to permit expiration. [Minn. R. 7001.0040, subp. 3]
8.3	If the permittee has submitted a timely application for permit reissuance, the permittee must continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the Agency takes final action on the application, unless the Agency determines one of the following: a. the permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the permittee into compliance with this permit; b. the Agency, as a result of an action or failure to act by the permittee, has been unable to take final action on the application on or before the expiration date of the permit; or c. the permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies. [Minn. R. 7001.0160]
8.4	The permittee must submit with an application for permit reissuance a revised SWMP. [Minn. R. 7090]
8.5	The permittee's application for permit reissuance must include Sections 9 through 11, as applicable. [Minn. R. 7090]

9.1	**Application Requirements for Discharges to Impaired Waters with a U.S. Environmental Protection Agency (EPA)-Approved Total Maximum Daily Load (TMDL) that includes an Applicable Waste Load Allocation (WLA)**. [Minn. R. 7090]
9.2	For each applicable WLA approved prior to the submittal of the application for permit reissuance, the permittee must submit the information required in this Section, in a manner determined by the Agency, with an application for permit reissuance. [Minn. R. 7090]
9.3	The permittee must submit a compliance schedule for each applicable WLA not being met for oxygen demand, nitrate, total suspended solids (TSS), and total phosphorus (TP). The permittee may develop a compliance schedule to include multiple WLAs. The permittee's compliance schedule must include the following information: a. proposed BMPs or progress toward implementation of BMPs to be achieved during the permit term; b. the year each BMP is expected to be implemented; c. a target year the applicable WLA(s) will be achieved; and d. if the permittee has an applicable WLA for TSS or TP, a cumulative estimate of TSS and TP load reductions (in pounds) to be achieved during the permit term and the Agency-approved method used to determine the estimate. Agency-approved methods include "Program for Predicting Polluting Particle Passage thru Pits, Puddles, and Ponds (P8) Urban Catchment Model", "Source Loading and Management Model for Windows (WinSLAMM)", "Minimal Impact Design Standards (MIDS) calculator", "Minnesota Pollution Control Agency (MPCA) simple estimator tool", or any other method that receives Agency-approval. [Minn. R. 7090]
9.4	For each applicable WLA where a reduction in pollutant loading is required for bacteria or chloride, the permittee must provide a description of any existing BMPs the permittee has developed and implemented to satisfy the requirements of items 26.8 through 26.11, including: a. the BMPs the permittee has implemented for each required component at the time of application; b. the status of each required component; and c. name(s) of individual(s), position title(s), or department/division/section responsible for implementing and/or coordinating each required component. [Minn. R. 7090]
9.5	If the permittee is claiming to meet an applicable WLA where a reduction in pollutant loading is required for oxygen demand, nitrate, TSS, or TP, the permittee must provide documentation to demonstrate the applicable WLA is being met. At a minimum, the permittee must provide the following information: a. a list of all structural stormwater BMPs implemented to achieve the applicable WLA, including the BMP type (e.g., constructed basin, infiltrator, filter, swale or strip, etc.), location in geographic coordinates, owner, and year implemented; and b. documentation using an Agency-approved method, which demonstrates the estimated reductions of oxygen demand (or its surrogate pollutants), nitrate, TSS, or TP from BMPs meet the MS4 WLA reductions included in the TMDL report, if that information is available (e.g., percent reduction or pounds reduced); or c. documentation using an Agency-approved method, which demonstrates the permittee's existing load meets the WLA. [Minn. R. 7090]
10.1	**Application Requirements for Alum or Ferric Chloride Phosphorus Treatment Systems**. [Minn. R. 7090]
10.2	For the requirements of Section 27, alum or ferric chloride phosphorus treatment systems, if applicable, the permittee must submit the following information: a. location of the system in geographic coordinates; b. name(s) of individual(s), position title(s), or department/division/section responsible for the operation of the system; c. information described in item 27.11, if the system is constructed at the time the permittee submits the application to the Agency; and d. indicate if the system complies with the requirements in Section 27. [Minn. R. 7090]

11.1	**Antidegradation Assessment**. [Minn. R. 7050.0290, subp. 2]
11.2	The permittee must submit with an application for permit reissuance, data and information requested by the Commissioner for an anti-degradation assessment of impacts from stormwater runoff in accordance with Minn. R. 7050.0290, subp. 2. [Minn. R. 7050.0290, subp. 2]
12.1	**Submitting the Application for Permit Reissuance**. [Minn. R. 7090]
12.2	The permittee must use an electronic submittal process, when provided by the Agency, for submitting an application for permit reissuance developed in accordance with Sections 8 through 11 of this permit. When electronic application submittal is not possible, the permittee must use the following mailing address: Supervisor, Municipal Stormwater Unit Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194. [Minn. R. 7090]
13.1	**Application for Permit Reissuance Record Retention**. [Minn. R. 7001.0080]
13.2	The applicant must retain copies of the application for permit reissuance, all data and information used by the applicant to complete the application, and any additional information requested by the Commissioner during the review of the application, for a period of at least three years from the date the application is signed. This period is automatically extended during the course of an unresolved enforcement action regarding the MS4 or as requested by the Commissioner. [Minn. R. 7001.0080]
14.1	**Stormwater Management Program (SWMP)**. [Minn. R. 7090]
14.2	The permittee must continue to develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the MS4 to the Maximum Extent Practicable (MEP), to protect water quality and to satisfy the appropriate water quality requirements of the Clean Water Act and the conditions of this permit. The SWMP is an enforceable part of this permit. [Minn. R. 7090]
14.3	The SWMP must utilize an adaptive management strategy by which the permittee monitors, analyzes, and adjusts the SWMP to achieve pollutant reductions to the MEP. The SWMP must consist of Sections 15 through 27. The permittee may modify the SWMP as described in Section 28. [Minn. R. 7090]
15.1	**Minimum Control Measures (MCMs)**. [Minn. R. 7090]
15.2	The permittee must incorporate the following MCMs into the SWMP. The permittee must define appropriate BMPs and measurable goals for each MCM. [Minn. R. 7090]
16.1	**MCM 1: Public Education and Outreach**. [Minn. R. 7090]
16.2	The permittee must revise their current program, as necessary, and continue to implement a public education program to distribute educational materials or equivalent outreach that informs the public of the impact stormwater discharges have on waterbodies and that includes actions citizens, developers, businesses, elected officials, policy makers, and other local organizations can take to reduce the discharge of pollutants to stormwater. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
16.3	At least once throughout the permit term, the permittee must: a. implement a multi-lingual program for residents and businesses to increase the level of awareness about stormwater runoff impacts to receiving waters. This program must utilize a variety of communication tools and methods to reach the target audiences and inform them of strategies to reduce pollutants in stormwater runoff; b. educate the public, businesses, and commercial applicators on the proper application of pesticides, herbicides, and fertilizers and the benefits of retaining grass clippings and leaf litter on lawn surfaces; c. educate developers and contractors on construction site and post-construction stormwater management BMP design, construction, and maintenance methods; and d. educate the public about impaired waters within the jurisdiction and the TMDLs developed to address the impairments. [Minn. R. 7090]

16.4	At least once each calendar year, the permittee must conduct communication and outreach to inform the public, businesses, and industry on the following: a. identifying illicit discharges and illicit connections to the MS4; b. hazards associated with illicit discharges and illicit connections to the MS4; c. reporting illicit discharges and illicit connections to the permittee; d. preventing illicit discharges and illicit connections to the MS4; and e. containment and response to illicit discharges and spills that may discharge to the MS4. [Minn. R. 7090]
16.5	At least once each calendar year, the permittee must distribute educational materials or equivalent outreach to the public, businesses, commercial applicators, commercial facilities, and institutions, focused on the following: a. impacts of deicing salt use on receiving waters; b. methods to reduce deicing salt use; and c. proper storage of salt or other deicing materials. [Minn. R. 7090]
16.6	At least once throughout the permit term, the permittee must distribute educational materials or equivalent outreach to the public focused on pet waste. The educational materials or equivalent outreach must include information on the following: a. impacts of pet waste on receiving waters; b. proper pet waste disposal; and c. any existing permittee regulatory mechanism(s) for pet waste. [Minn. R. 7090]
16.7	The permittee must develop and implement an education and outreach plan that consists of the following: a. specific activities and schedules to meet the requirements in items 16.3 through 16.6; b. target audiences for each activity; c. measurable goals for each activity and target audience. Measurable goals must be stated in terms of increased awareness, increased understanding, acquired skills, and/or desired changes in behavior; d. a description of coordination with other stormwater education and outreach programs being implemented by other organizations, if applicable. Include a list of formal agreements or partnerships describing the roles performed by the other organizations on behalf of the permittee; e. an annual evaluation to measure the extent to which measurable goals for each activity and target audience are attained; and f. the name or title of the municipal staff responsible for plan implementation. [Minn. R. 7090]
16.8	The permittee must document the following information: a. all information required under the permittee's education and outreach plan in item 16.7; b. activities held, including dates, to reach measurable goals described in item 16.7.c; c. quantities and descriptions of educational materials distributed, including dates distributed; d. estimated audience (e.g., number of participants, viewers, readers, listeners, etc.) for each completed education and outreach activity; and e. any modifications made to the program as a result of the annual evaluation in item 16.7.e. [Minn. R. 7090]
17.1	**MCM 2: Public Participation and Involvement**. [Minn. R. 7090]
17.2	The permittee must revise their current program, as necessary, and continue to implement a public participation and involvement program to solicit public input on the SWMP and involve the public in activities that improve or protect water quality. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
17.3	The permittee must hold at least one public meeting per year for the public to provide input on the adequacy of the SWMP and the annual report. The permittee must hold the public meeting prior to the submittal of the annual report to the Commissioner. The meeting and notice must meet the requirements in items 17.4 through 17.6. [Minn. R. 7090]
17.4	The public meeting must be held within the jurisdiction of the permittee. [Minn. R. 7090]

17.5	The permittee must prepare and publish a notice of the public meeting at least 30 days before the meeting. The notice of the public meeting must include the following information: a. a reference to the SWMP, the annual report, and the proposed modifications to the SWMP; b. the date, time, and location of the public meeting; and c. a description of the manner in which the public meeting will be conducted and information about where a copy of the SWMP and annual report are available for public review. [Minn. R. 7090]
17.6	The permittee must publish the notice in a newspaper or similar publication of general circulation in the vicinity of the permittee's jurisdiction. A copy of the notice must be made available to the following: a. the Agency Commissioner; b. appropriate county officials; c. any governmental entities that have jurisdiction over activities that directly or indirectly relate to stormwater management in the permittee's jurisdiction; and d. all other persons who have requested that they be informed of public meetings regarding the SWMP and annual report. [Minn. R. 7090]
17.7	The permittee must provide access to the following stormwater-related public documents on the permittee's website: a. current Phase I MS4 individual permit; b. current SWMP; c. current annual report; and d. current stormwater runoff monitoring and analysis report. [Minn. R. 7090]
17.8	The permittee must collect public input on the adequacy of the SWMP, including input from the public meeting. The permittee must provide the public a reasonable opportunity to make oral statements concerning the SWMP. [Minn. R. 7090]
17.9	The permittee must consider the public input received on the SWMP and make appropriate adjustments. [Minn. R. 7090]
17.10	The permittee must include a formal resolution from the permittee's governing body adopting the annual report and the SWMP with the annual report. [Minn. R. 7090]
17.11	Each calendar year, the permittee must provide multiple public involvement activities that include a pollution prevention or water quality theme (e.g., rain barrel distribution event, rain garden workshop, cleanup event, storm drain stenciling, volunteer water quality monitoring, adopt a storm drain program, household hazardous waste collection day, etc.). [Minn. R. 7090]
17.12	The permittee must document the following information: a. all relevant written input submitted by persons regarding the SWMP; b. all responses from the permittee to written input received regarding the SWMP, including any modifications made to the SWMP as a result of the written input received; c. date(s), location(s), and estimate number of participants at events held for purposes of compliance with item 17.3; d. notices provided to the public of any events scheduled to meet item 17.3, including any electronic correspondence (e.g., website, e-mail distribution lists, notices, etc.); and e. date(s), location(s), description of activities, and estimated number of participants at events held for the purpose of compliance with item 17.11. [Minn. R. 7090]
18.1	**MCM 3: Illicit Discharge Detection and Elimination (IDDE)**. [Minn. R. 7090]
18.2	The permittee must revise their current program, as necessary, and continue to implement and enforce a program to detect and eliminate illicit discharges into the MS4. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
18.3	The permittee must update an electronic inventory and map of the storm sewer system which identifies the features and data elements in items 18.4 through 18.10. [Minn. R. 7090]
18.4	The permittee's inventory and map must identify all receiving waters. [Minn. R. 7090]

18.5	The permittee's inventory and map must identify structural stormwater BMPs (except catch basins and storm drain inlets without sumps), including: a. the size of the subwatershed area draining to the structural stormwater BMP; and b. the design capacity, estimated design capacity, or size of the structural stormwater BMP. [Minn. R. 7090]
18.6	The permittee's inventory and map must identify land use types. [Minn. R. 7090]
18.7	The permittee's inventory and map must identify all pipes, ditches, and swales, including stormwater flow direction. Catch basin lead pipes must be added, when applicable. [Minn. R. 7090]
18.8	The permittee's inventory and map must identify permittee-owned facilities. [Minn. R. 7090]
18.9	The permittee's inventory and map must identify outfalls, including: a. outfall identification number; b. geographic coordinate of outfall location; c. size of outfall pipe; d. size of the subwatershed area draining to each outfall; e. percent of impervious surfaces in the subwatershed area draining to each outfall; and f. the number and type of structural stormwater BMPs in the subwatershed area that drains to each outfall. [Minn. R. 7090]
18.10	The permittee's inventory and map must identify stormwater inflows from other MS4s. [Minn. R. 7090]
18.11	To the extent allowable under state or local law, the permittee must continue to develop, implement, and enforce a regulatory mechanism(s) and appropriate enforcement responses procedures (ERPs), that effectively prohibits illicit discharges into the permittee's MS4. The regulatory mechanism(s) must also include items 18.12 and 18.13. [Minn. R. 7090]
18.12	The permittee's regulatory mechanism(s) must require owners or custodians of pets to remove and properly dispose of feces on permittee-owned land areas. [Minn. R. 7090]
18.13	The permittee's regulatory mechanism(s) must require proper salt storage at commercial, institutional, and non-NPDES permitted industrial facilities. At a minimum, the regulatory mechanism(s) must require the following: a. designated salt storage areas must be covered or indoors; b. designated salt storage areas must be located on an impervious surface; and c. implementation of practices to reduce exposure when transferring material in designated salt storage areas (e.g., sweeping, diversions, and/or containment). [Minn. R. 7090]
18.14	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) required in this Section. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; b. timeframes to complete corrective actions; and c. name(s) of individual(s), position title(s), or department/division/section responsible for conducting enforcement. [Minn. R. 7090]
18.15	The permittee must continue to develop and implement the following processes and procedures: a. receive, track, and investigate complaints of illicit discharges including goals for responding to and eliminating illicit discharges; b. identify the source of the illicit discharges; c. enforce violations of prohibitions on illicit discharges; and d. limit infiltration of seepage from municipal sanitary sewers to the MS4. [Minn. R. 7090]
18.16	The permittee must continue to develop and implement a dry weather field screening program to detect and eliminate illicit discharges (except non-stormwater discharges as identified in item 3.2), including illegal dumping, to the MS4. The dry weather field screening may be implemented in conjunction with the outfall inspection and monitoring programs required in item 21.10 as well as during routine maintenance activities performed in areas included in the permittee's jurisdiction. The permittee's field screening program must include items 18.17 through 18.25. [Minn. R. 7090]

18.17	The permittee must maintain written procedures that describe how the permittee will prioritize and investigate portions of the MS4 where there is a reasonable potential to contain illicit discharges or other sources of illicit discharges. The permittee must prioritize investigations based on the results of field screening, the presence of potential sources of illicit discharges in the geographic area drained by that portion of the MS4, history, land use, sanitary sewer system, proximity to sensitive waters, and other appropriate information. [Minn. R. 7090]
18.18	The permittee's field screening program must identify areas or locations to be evaluated. [Minn. R. 7090]
18.19	The permittee must maintain a schedule for the field screening activities. [Minn. R. 7090]
18.20	The permittee's field screening program must identify pollutants of interest. [Minn. R. 7090]
18.21	The permittee must develop and implement evaluation procedures including non-sampling evaluation (e.g., visual observations, odors, etc.). [Minn. R. 7090]
18.22	The permittee must develop and implement sampling procedures. [Minn. R. 7090]
18.23	The permittee must maintain records of field screening activities to detect and eliminate illicit discharges. [Minn. R. 7090]
18.24	Upon discovery of an illicit discharge, the permittee must immediately notify the Department of Public Safety Duty Officer if the source of the illicit discharge is a spill or leak as defined in Minn. Stat. 115.061. [Minn. R. 7090]
18.25	The permittee must implement ERPs when the permittee discovers an illicit discharge and identifies the responsible party. [Minn. R. 7090]
18.26	The permittee must implement a training program for appropriate municipal staff regarding illicit discharges. The permittee must incorporate items 18.27 and 18.28 into their program. [Minn. R. 7090]
18.27	At least once each calendar year, the permittee must train appropriate municipal staff on the following: a. identifying illicit discharges and illicit connections to the MS4; b. hazards associated with illicit discharges and illicit connections to the MS4; c. reporting illicit discharges and illicit connections to appropriate municipal staff; d. preventing illicit discharges and illicit connections to the MS4; and e. containment and response to illicit discharges and spills that may discharge to the MS4. [Minn. R. 7090]
18.28	At least once each calendar year, the permittee must train municipal staff to notify the Department of Public Safety Duty Officer as required in item 18.24 and cover the internal procedures for appropriate municipal staff to respond and contain illicit discharges and spills. In addition, the permittee must ensure municipal staff responsible for conducting enforcement are knowledgeable about the permittee's ERPs in item 18.14. [Minn. R. 7090]
18.29	The permittee must maintain written procedures to promote, publicize, and facilitate public reporting of illicit discharges or water quality impacts associated with illicit discharges. [Minn. R. 7090]
18.30	The permittee must maintain a central contact, including a phone number for complaints and spill reporting. [Minn. R. 7090]
18.31	The permittee must develop, implement, and enforce an inspection and regulatory oversight program to monitor and control pollutants from industrial, commercial, and institutional facilities that discharge to the permittee's MS4. The program must incorporate the measures described in items 18.32 through 18.37. [Minn. R. 7090]
18.32	Within 36 months of the issuance date of this permit, the permittee must develop, implement, and enforce a regulatory mechanism(s) that provides legal authority for the permittee to inspect, require implementation of appropriate BMPs, and conduct enforcement at industrial, commercial, and institutional facilities to address non-stormwater discharges to the permittee's MS4. [Minn. R. 7090]
18.33	The permittee must maintain a written or mapped inventory of industrial, commercial, and institutional facilities that discharge any flow other than stormwater to the permittee's MS4. The inventory must include the following information for each facility: a. name; b. location; c. discharge location to the permittee's MS4; d. the receiving water; e. discharge description (such as Standard Industrial Classification codes) which best identifies the activity or pollutant sources (e.g., outdoor process/manufacturing areas, outdoor material storage areas, outdoor waste storage and

	disposal areas, outdoor vehicle and equipment storage and maintenance areas, outdoor wash areas, outdoor drainage from indoor areas, and outdoor fueling, washing, etc.); f. any NPDES permit issued for the discharge (the Agency will provide a list of permitted facilities to the permittee upon request); and g. inspection priority categorization as required in item 18.36 (i.e., high-priority, medium-priority, or low-priority). [Minn. R. 7090]
18.34	The permittee must develop written procedures to review and update the inventory required in item 18.33, including modifying the inspection priority categorization as the permittee discovers new information (e.g., based on complaints, inspection findings, changes to a facility, etc.). When the permittee changes the inspection priority categorization for a facility, the permittee must document the date and reason for the change. [Minn. R. 7090]
18.35	The permittee must develop written procedures to prioritize industrial, commercial, and institutional facilities for inspection. Based on the inventory required in item 18.33, the permittee must evaluate and categorize each facility as high-priority, medium-priority, or low-priority. Except for facilities that have obtained a No Exposure Exclusion as described in the Agency's most current Industrial Stormwater General Permit (MNR050000), the permittee must categorize municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that are contributing a substantial pollutant loading to the permittee's MS4 as high-priority. The permittee must consider the following factors when categorizing the remaining facilities: a. stormwater hotspots, to the extent possible, using industrial/commercial stormwater risk factors and input from Hennepin County Environmental Services and Minneapolis Inspections Departments; b. proximity to impaired waters; and c. the permittee's compliance and enforcement history with the facility. [Minn. R. 7090]
18.36	The permittee must maintain written procedures to identify the permittee's inspection frequency for each priority categorization (i.e., high-priority, medium-priority, or low-priority) with high-priority facilities receiving more frequent inspections. At a minimum, the permittee must inspect high-priority facilities each calendar year. [Minn. R. 7090]
18.37	Within 36 months of the issuance date of this permit, the permittee must develop and implement a program to inspect industrial, commercial, and institutional facilities included in the permittee's inventory as required in item 18.33. Each inspection conducted by the permittee must include: a. evaluation of BMPs implemented and maintained to control pollutant sources; b. visual observations for evidence of illicit discharges (including conditions which could cause illicit discharges) and illicit connections; and c. written documentation of the inspection, including date of the inspection, facility name, and location. [Minn. R. 7090]
18.38	The permittee must maintain documentation of the following information: a. date(s) and location(s) of illicit discharge inspections conducted; b. reports of alleged illicit discharges received, including date(s) of the report(s), and any follow-up action(s) taken by the permittee; c. date(s) of discovery of all illicit discharges; d. identification of outfalls, or other areas, where illicit discharges have been discovered; e. sources (including a description and the responsible party) of illicit discharges (if known); and f. action(s) taken by the permittee, including date(s), to address discovered illicit discharges. [Minn. R. 7090]
18.39	For each training in items 18.26 through 18.28, the permittee must document: a. general subject matter covered; b. names and departments of employees in attendance; and c. date of each event. [Minn. R. 7090]
18.40	The permittee must document any enforcement conducted pursuant to the ERPs in this Section, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee;

	e. date(s) and type(s) of enforcement used to compel compliance (e.g., verbal warning, written notice, citation, stop work order, withholding of local authorizations, etc.); f. referrals to other regulatory organizations (if any); and g. date(s) violation(s) resolved. [Minn. R. 7090]
19.1	**MCM 4: Construction Site Stormwater Runoff Control**. [Minn. R. 7090]
19.2	The permittee must revise their current program, as necessary, and continue to implement and enforce a construction site stormwater runoff control program. The program must address construction activity with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and discharges to the permittee's MS4. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
19.3	To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the Agency's most current Construction Stormwater General Permit (MNR100001), herein referred to as the CSW Permit. [Minn. R. 7090]
19.4	When the CSW Permit is reissued, the permittee must revise their regulatory mechanism(s), if necessary, within six (6) months of the issuance date of that permit, to be at least as stringent as the requirements for erosion, sediment, and waste controls described in the CSW Permit. [Minn. R. 7090]
19.5	The permittee's regulatory mechanism(s) must require that owners and operators of construction activity develop site plans that must be submitted to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to the start of construction activity. The regulatory mechanism(s) must require the owners and operators of construction activity to keep site plans up-to-date with regard to stormwater runoff controls. The regulatory mechanism(s) must require that site plans incorporate the following erosion, sediment, and waste controls that are at least as stringent as described in the CSW Permit: a. erosion prevention practices; b. sediment control practices; c. dewatering and basin draining; d. inspection and maintenance; e. pollution prevention management measures; f. temporary sediment basins; and g. termination conditions. [Minn. R. 7090]
19.6	The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of all construction activity, to ensure compliance with requirements of the regulatory mechanism(s). At a minimum, the procedures must include: a. written notification to owners and operators proposing construction activity, including projects less than one acre that are part of a larger common plan of development or sale, of the need to apply for and obtain coverage under the CSW Permit; and b. use of a written checklist, consistent with the requirements of the regulatory mechanism(s), to document the adequacy of each site plan required in item 19.5. [Minn. R. 7090]
19.7	The permittee must provide the opportunity for the public to report non-compliant erosion, sediment, and waste controls within the permittee's jurisdiction. The permittee must provide various methods to the public for reporting noncompliant erosion, sediment, and waste controls, including website application, phone calls, and/or email communication. [Minn. R. 7090]
19.8	The permittee must implement an inspection program that includes written procedures for conducting site inspections to determine compliance with the permittee's regulatory mechanism(s). The inspection program must also meet the requirements in items 19.9 and 19.10. [Minn. R. 7090]
19.9	The permittee must maintain written procedures for identifying high-priority and low-priority sites for inspection. At a minimum, the written procedures must include: a. a detailed explanation describing how sites will be categorized as either high-priority or low-priority; b. a frequency at which the permittee will conduct inspections for high-priority sites; c. a frequency at which the permittee will conduct inspections for low-priority sites; and

	d. name(s) of individual(s), position title(s), or department/division/section responsible for conducting site inspections. [Minn. R. 7090]
19.10	The permittee must implement a written checklist to document each site inspection when determining compliance with the permittee's regulatory mechanism(s). At a minimum, the checklist must include the permittee's inspection findings on the following areas, as applicable to each site: a. stabilization of exposed soils (including stockpiles); b. stabilization of ditch and swale bottoms; c. sediment control BMPs on all downgradient perimeters of the project and upgradient of buffer zones; d. storm drain inlet protection; e. energy dissipation at pipe outlets; f. vehicle tracking BMPs; g. preservation of a 50 foot natural buffer or redundant sediment controls where stormwater flows to a surface water within 50 feet of disturbed soils; h. owner/operator of construction activity self-inspection records; i. containment for all liquid and solid wastes generated by washout operations (e.g., concrete, stucco, paint, form release oils, curing compounds, and other construction materials); and j. BMPs maintained and functional. [Minn. R. 7090]
19.11	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) in item 19.3. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and b. name(s) of individual(s), position title(s), or department/division/section responsible for conducting enforcement. [Minn. R. 7090]
19.12	The permittee must maintain a database of construction sites subject to the permittee's regulatory mechanism(s) to track site plan review, construction progress, and erosion, sediment, and waste control compliance. [Minn. R. 7090]
19.13	The permittee must ensure that staff receive training commensurate with their responsibilities as they relate to the permittee's construction site stormwater runoff control program. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. The permittee must ensure trainings address the job-specific duties for the position titles or municipal staff identified in items 19.14 through 19.17. [Minn. R. 7090]
19.14	The permittee must ensure erosion and sediment control/stormwater inspectors receive training on the following: a. erosion, sediment, and waste control requirements in the CSW Permit; b. compliant and noncompliant erosion, sediment, and waste control BMPs at construction sites; c. appropriate BMP selection, installation, and maintenance practices; and d. erosion, sediment, and waste control inspection documentation and use of enforcement response procedures. [Minn. R. 7090]
19.15	The permittee must ensure other construction inspectors receive training on the following: a. erosion, sediment, and waste control BMPs for construction sites; and b. procedures for notifying the appropriate permittee staff of noncompliance. [Minn. R. 7090]
19.16	The permittee must ensure construction site plan reviewers receive training on the following: a. erosion, sediment, and waste control BMPs required in the CSW Permit; and b. other erosion and sediment control design standards. [Minn. R. 7090]
19.17	The permittee must ensure staff involved in conducting enforcement are knowledgeable about the permittee's ERPs in item 19.11. [Minn. R. 7090]

19.18	For each site plan review conducted by the permittee, the permittee must document the following: a. project name; b. location; c. total acreage to be disturbed; d. owner and operator of the proposed construction activity; e. proof of notification to obtain coverage under the CSW Permit, as required in item 19.6, or proof of coverage under the CSW Permit; and f. any stormwater related comments and supporting completed checklist, as required in item 19.6, used by the permittee to determine project approval or denial. [Minn. R. 7090]
19.19	For each training in items 19.13 through 19.17, the permittee must document: a. general subject matter covered; b. names and departments of employees in attendance; and c. date of each event. [Minn. R. 7090]
19.20	The permittee must document any enforcement conducted pursuant to the ERPs in this Section, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. date(s) and type(s) of enforcement used to compel compliance; f. referrals to other regulatory organizations (if any); and g. date(s) violation(s) resolved. [Minn. R. 7090]
20.1	**MCM 5: Post-Construction Stormwater Management**. [Minn. R. 7090]
20.2	The permittee must revise their current program, as necessary, and continue to implement and enforce a post-construction stormwater management program that prevents or reduces water pollution after construction activity is completed. The program must address construction activity with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and that discharge to the permittee's MS4. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
20.3	To the extent allowable under state or local law, the permittee must develop, implement, and enforce a regulatory mechanism(s) that incorporates items 20.4 through 20.15. [Minn. R. 7090]
20.4	The permittee's regulatory mechanism(s) must require owners of construction activity to submit site plans with post-construction stormwater management BMPs designed with accepted engineering practices to the permittee for review and confirmation that regulatory mechanism(s) requirements have been met, prior to start of construction activity. [Minn. R. 7090]
20.5	The permittee's regulatory mechanism(s) must require owners of construction activity to treat the water quality volume on any project where the sum of the new impervious surface and the fully reconstructed impervious surface equals one or more acres. [Minn. R. 7090]
20.6	For construction activity (excluding linear projects), the water quality volume must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface. [Minn. R. 7090]
20.7	For linear projects, the water quality volume must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made. Volume reduction practices must be considered first, as described in item 20.8. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, owners of construction activity must maximize the treatment of the water quality volume prior to discharge from the MS4. [Minn. R. 7090]

20.8	Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. This permit does not consider wet sedimentation basins and filtration systems to be volume reduction practices. If this permit prohibits infiltration as described in item 20.9, other volume reduction practices, a wet sedimentation basin, or filtration basin may be considered. [Minn. R. 7090]
20.9	Infiltration systems must be prohibited when the system would be constructed in areas: a. that receive discharges from vehicle fueling and maintenance areas, regardless of the amount of new and fully reconstructed impervious surface; b. where high levels of contaminants in soil or groundwater may be mobilized by the infiltrating stormwater. To make this determination, the owners and/or operators of construction activity must complete the Agency's site screening assessment checklist, which is available in the Minnesota Stormwater Manual, or conduct their own assessment. The assessment must be retained with the site plans; c. where soil infiltration rates are more than 8.3 inches per hour unless soils are amended to slow the infiltration rate below 8.3 inches per hour; d. with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock; e. of predominately Hydrologic Soil Group D (clay) soils; f. in an Emergency Response Area (ERA) within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, classified as high or very high vulnerability as defined by the Minnesota Department of Health; g. in an ERA within a DWSMA classified as moderate vulnerability unless the permittee performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; h. outside of an ERA within a DWSMA classified as high or very high vulnerability unless the permittee performs or approves a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater; i. within 1,000 feet up-gradient or 100 feet down-gradient of active karst features; or j. that receive stormwater runoff from these types of entities regulated under NPDES for industrial stormwater: automobile salvage yards; scrap recycling and waste recycling facilities; hazardous waste treatment, storage, or disposal facilities; wood preserving facilities (Standard Industrial Classification Code 2491); or air transportation facilities that conduct deicing activities. See "higher level of engineering review" in the Minnesota Stormwater Manual for more information. [Minn. R. 7090]
20.10	For non-linear projects, where the water quality volume cannot cost effectively be treated on the site of the original construction activity, the permittee must identify, or may require owners of the construction activity to identify, locations where off-site treatment projects can be completed. If the entire water quality volume is not addressed on the site of the original construction activity, the remaining water quality volume must be addressed through off-site treatment and, at a minimum, ensure the requirements of items 20.11 through 20.14 are met. [Minn. R. 7090]
20.11	The permittee must ensure off-site treatment project areas are selected in the following order of preference: a. locations that yield benefits to the same receiving water that receives runoff from the original construction activity; b. locations within the same Department of Natural Resource (DNR) catchment area as the original construction activity; c. locations in the next adjacent DNR catchment area up-stream; or d. locations anywhere within the permittee's jurisdiction. [Minn. R. 7090]
20.12	Off-site treatment projects must involve the creation of new structural stormwater BMPs or the retrofit of existing structural stormwater BMPs, or the use of a properly designed regional structural stormwater BMP. Routine maintenance of structural stormwater BMPs already required by this permit cannot be used to meet this requirement. [Minn. R. 7090]
20.13	Off-site treatment projects must be completed no later than 24 months after the start of the original construction activity. If the permittee determines more time is needed to complete the treatment project, the permittee must provide the reason(s) and schedule(s) for completing the project in the annual report. [Minn. R. 7090]
20.14	If the permittee receives payment from the owner of a construction activity for off-site treatment, the permittee must apply any such payment received to a public stormwater project, and all projects must comply with the requirements in items 20.11 through 20.13. [Minn. R. 7090]
20.15	The permittee's regulatory mechanism(s) must include the establishment of a legal mechanism(s) for structural

	stormwater BMPs not owned or operated by the permittee, that have been constructed to meet the requirements in this Section. The legal mechanism(s) must include provisions that, at a minimum: a. allow the permittee to conduct inspections of structural stormwater BMPs not owned or operated by the permittee, perform necessary maintenance, and assess costs for those structural stormwater BMPs when the permittee determines the owner of that structural stormwater BMP has not ensured proper function; b. are designed to preserve the permittee's right to ensure maintenance responsibility, for structural stormwater BMPs not owned or operated by the permittee, when those responsibilities are legally transferred to another party; and c. are designed to protect/preserve structural stormwater BMPs. If structural stormwater BMPs change, causing decreased effectiveness, new, repaired, or improved structural stormwater BMPs must be implemented to provide equivalent treatment to the original BMP. [Minn. R. 7090]
20.16	The permittee must maintain a written or mapped inventory of structural stormwater BMPs not owned or operated by the permittee that meet all of the following criteria: a. the structural stormwater BMP is covered by a legal mechanism(s) for the long-term maintenance, as required in item 20.15; and b. the structural stormwater BMP was implemented on or after January 21, 2011. [Minn. R. 7090]
20.17	The permittee must implement written procedures for site plan reviews conducted by the permittee prior to the start of construction activity, to ensure compliance with requirements of the permittee's regulatory mechanism(s). [Minn. R. 7090]
20.18	The permittee must ensure that individuals receive training commensurate with their responsibilities as they relate to the permittee's Post-Construction Stormwater Management program. Individuals includes, but is not limited to, individuals responsible for conducting site plan reviews and/or enforcement. The permittee must ensure that previously trained individuals attend a refresher-training every three (3) calendar years following the initial training. [Minn. R. 7090]
20.19	The permittee must maintain written enforcement response procedures (ERPs) to compel compliance with the permittee's regulatory mechanism(s) required in this Section. At a minimum, the written ERPs must include: a. a description of enforcement tools available to the permittee and guidelines for the use of each tool; and b. name(s) of individual(s), position title(s), or department/division/section responsible for conducting enforcement. [Minn. R. 7090]
20.20	For each site plan review conducted by the permittee, the permittee must document the following: a. supporting documentation used to determine compliance with this Section, including any calculations for the permanent stormwater treatment system; b. the water quality volume that will be treated through volume reduction practices (e.g., infiltration or other) compared to the total water quality volume required to be treated; c. documentation associated with off-site treatment projects authorized by the permittee, including rationale to support the location of permanent stormwater treatment projects in accordance with items 20.10 and 20.11; d. payments received and used in accordance with item 20.14; and e. all legal mechanisms drafted in accordance with item 20.15, including date(s) of the agreement(s) and name(s) of all responsible parties involved. [Minn. R. 7090]
20.21	For each training in item 20.18, the permittee must document: a. general subject matter covered; b. names and departments of employees in attendance; and c. date of each event. [Minn. R. 7090]
20.22	The permittee must document any enforcement conducted pursuant to the ERPs in this Section, including verbal warnings. At a minimum, the permittee must document the following: a. name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s); b. date(s) and location(s) of the observed violation(s); c. description of the violation(s); d. corrective action(s) (including completion schedule) issued by the permittee; e. date(s) and type(s) of enforcement used to compel compliance; f. referrals to other regulatory organizations (if any); and

	g. date(s) violation(s) resolved. [Minn. R. 7090]
21.1	**MCM 6: Pollution Prevention and Good Housekeeping for Municipal Operations**. [Minn. R. 7090]
21.2	The permittee must revise their current program, as necessary, and continue to implement an operations and maintenance program that prevents or reduces the discharge of pollutants to the MS4 from permittee owned/operated facilities and operations. The program must include written standard operating procedures for preventing pollution during municipal operations (e.g., street sweeper operation, procedures for lawn maintenance, fertilizer and pesticide usage, equipment cleaning, and vehicle maintenance). The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
21.3	The permittee must maintain a written or mapped inventory of permittee owned/operated facilities that contribute pollutants to stormwater discharges. The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from all inventoried facilities. Facilities to be inventoried may include, but is not limited to: a. composting; b. equipment storage and maintenance; c. hazardous waste disposal; d. hazardous waste handling and transfer; e. landfills; f. solid waste handling and transfer; g. parks; h. pesticide storage; i. public parking lots; j. public golf courses; k. public swimming pools; l. public works yards; m. recycling; n. salt storage; o. snow storage; p. vehicle storage and maintenance (e.g., fueling and washing) yards; and q. materials storage yards. [Minn. R. 7090]
21.4	The permittee must implement BMPs that prevent or reduce pollutants in stormwater discharges from the following municipal operations that may contribute pollutants to stormwater discharges, where applicable: a. waste disposal and storage, including dumpsters; b. municipal landfills, hazardous waste treatment, disposal and recovery facilities and industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); c. management of temporary and permanent stockpiles of materials such as street sweepings, snow, sand and sediment removal piles (e.g., effective sediment controls at the base of stockpiles on the downgradient perimeter); d. vehicle fueling, washing, and maintenance; e. routine street and parking lot sweeping; f. emergency response; g. cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater; h. use, storage, and disposal of significant materials; i. landscaping, park, and lawn maintenance; j. road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving; k. right-of-way maintenance, including mowing; and l. application of herbicides, pesticides, and fertilizers. [Minn. R. 7090]

21.5	The permittee must implement the following BMPs at permittee owned/operated salt storage areas: a. cover or store salt indoors; b. store salt on an impervious surface; and c. implement practices to reduce exposure when transferring material from salt storage areas (e.g., sweeping, diversions, and/or containment). [Minn. R. 7090]
21.6	The permittee must implement a written snow and ice management policy for individuals that perform winter maintenance activities for the permittee. The policy must establish practices and procedures for snow and ice control operations (e.g., plowing or other snow removal practices, sand use, and application of deicing compounds). [Minn. R. 7090]
21.7	Each calendar year, the permittee must ensure all individuals that perform winter maintenance activities for the permittee receive training that includes: a. the importance of protecting water quality; b. BMPs to minimize the use of deicers (e.g., proper calibration of equipment and benefits of pretreatment, pre-wetting, and anti-icing); and c. tools and resources to assist in winter maintenance (e.g., deicing application rate guidelines, calibration charts, Smart Salting Assessment Tool). The permittee may use training materials from the Agency's Smart Salting training or other organizations to meet this requirement. [Minn. R. 7090]
21.8	The permittee must maintain written procedures for the purpose of determining the TSS and TP treatment effectiveness of all permittee owned/operated ponds constructed and used for the collection and treatment of stormwater. [Minn. R. 7090]
21.9	The permittee must inspect structural stormwater BMPs (excluding stormwater ponds, which are under a separate schedule below) each calendar year to determine structural integrity, proper function, and maintenance needs unless the permittee determines either of the following conditions apply: a. complaints received or patterns of maintenance indicate a greater frequency is necessary; or b. maintenance or sediment removal is not required after completion of the first two calendar year inspections; in which case the permittee may reduce the frequency of inspections to once every two (2) calendar years. [Minn. R. 7090]
21.10	The permittee must inspect, at a minimum, twenty (20) percent of the MS4 outfalls and ponds each year on a rotating basis to determine structural integrity, proper function, and maintenance needs. [Minn. R. 7090]
21.11	The permittee must inspect all stockpile, storage, and material handling areas that contribute pollutants to stormwater as follows: a. weekly inspections when material is being actively handled, used, or disturbed on daily basis; and b. monthly inspections when material is not being actively handled, used, or disturbed. The permittee must install perimeter controls at stockpiles that are not covered to prevent material from discharging to the MS4. [Minn. R. 7090]
21.12	Based on inspection findings, the permittee must determine if repair, replacement, or maintenance measures are necessary to ensure the structural integrity, proper function, and treatment effectiveness of structural stormwater BMPs. The permittee must complete necessary maintenance as soon as possible to prevent or reduce the discharge of pollutants to the MS4. If the permittee determines necessary maintenance cannot be completed within one year of discovery, the permittee must document a plan(s) for completing the maintenance. When repair, replacement, or maintenance must be delayed, the permittee must prioritize the needed repair, replacement, or maintenance and implement the following: a. preventive maintenance for the MS4 components and structural stormwater BMPs; and b. dewater and dispose of solids, floatables, dredgings, or other pollutants resulting from the control and/or treatment of stormwater to prevent any pollutant from such materials from entering receiving waters. The permittee, in disposing of such materials, must comply with all applicable statutes and rules. [Minn. R. 7090]

21.13	The permittee must operate and maintain the permittee's parking lots, streets, roads, and highways to reduce the discharge of pollutants to the MEP. The permittee must, at a minimum: a. sweep public parking lots, streets, roads, and highways under its jurisdiction including prioritizing areas based on land use, trash, and stormwater pollutant levels generated; and b. sweep streets at least two (2) times per year, once in the spring and once in the fall and sweep higher priority areas more frequently. [Minn. R. 7090]
21.14	The permittee must ensure that any flood control improvement projects the permittee undertakes are designed to minimize the impacts on the water quality of the receiving water. When repairs, improvements, or changes are planned for existing flood control devices, the permittee must evaluate the feasibility of retrofitting the existing devices to provide volume reduction and pollutant removal from stormwater discharges. [Minn. R. 7090]
21.15	The permittee must document and maintain an inventory of flood control detention facilities that provide rate control of stormwater discharges. [Minn. R. 7090]
21.16	The permittee must maintain a retrofit plan to evaluate the ability to implement structural stormwater BMPs in areas of the permittee's jurisdiction that currently do not have stormwater runoff treatment or where existing structural stormwater BMPs could be enhanced to improve pollutant removal capability. At a minimum, the retrofit plan must include a discussion of the following: a. retrofits on lands the permittee owns, including public parcels of land or public right-of-way areas for implementation of structural stormwater BMPs; and b. strategies to encourage privately owned parcels to install stormwater retrofits to reduce and/or treat stormwater runoff from privately owned impervious surfaces. [Minn. R. 7090]
21.17	The permittee must implement a stormwater management training program commensurate with employees' job duties as they relate to the permittee's SWMP. The training program must: a. address the importance of protecting water quality; b. cover the requirements of this permit relevant to the job duties of the employee not already addressed in Sections 18, 19, and 20, and item 21.7; and c. include a schedule that establishes initial training for employees, including new and seasonal employees, and recurring training intervals to address changes in procedures, practices, techniques, or requirements. [Minn. R. 7090]
21.18	The permittee must maintain documentation of the following information: a. date(s) and description of findings, including whether or not an illicit discharge is detected, for inspections of structural stormwater BMPs, ponds, and outfalls conducted in accordance with this Section; b. any adjustments to inspection frequency as authorized in item 21.9; c. date(s) and a description of maintenance conducted as a result of inspection findings, including whether or not an illicit discharge is detected; d. plan(s) for maintenance of structural stormwater BMPs and outfalls as required in item 21.12; and e. employee stormwater management training events, including a list of topics covered, names and departments of employees in attendance, and date of each event. [Minn. R. 7090]
21.19	The permittee must document pond sediment excavation and removal activities, including: a. a unique ID number and geographic coordinates of each stormwater pond from which sediment is removed; b. the volume (e.g., cubic yards) of sediment removed from each stormwater pond; c. results from any testing of sediment from each removal activity; and d. location(s) of final disposal of sediment from each stormwater pond. [Minn. R. 7090]
22.1	**Integrated Infrastructure Management Program**. [Minn. R. 7090]
22.2	The permittee owns and operates a historically interconnected sanitary sewer system and storm sewer system. There are seven (7) controlled structures identified in the system that are capable of releases of untreated wastewater. The structures are located on Metropolitan Council's interceptors and are capable of discharging directly to the Mississippi River. The controlled structures are at the following locations in Minneapolis: a. Minnehaha Pkwy & 39th Ave South; b. East 38th Street & 26th Ave South;

	c. Southwest Meters - West River Parkway between 28th Street East & Dorman Ave; d. Northwest Meters - West River Parkway between 28th Street East & Dorman Ave; e. Eastside Meters - East River Terrace & Emerald Street Southeast; f. East 26th Street & Seabury Ave; and g. Portland Ave South & Washington. [Minn. R. 7090]
22.3	The permittee must continue to develop and implement an integrated infrastructure management program to maximize public investments to minimize risk to human health and the environment, to prevent loss of life, personal injury, or severe property damage, and to minimize releases and improve water quality. Requirements of the program include items 22.4 through 22.17. [Minn. R. 7090]
22.4	The following applicable federal and state laws are incorporated by reference in this program, are applicable to the permittee, and are enforceable parts of this program: 40 C.F.R. pt. 136; Minn. R. chs. 7001, 7050, and 7053; and Minn. Stat. chs. 115 and 116. [Minn. R. 7090]
22.5	Whether or not this program includes effluent limitations for toxic pollutants, the permittee must not discharge a toxic pollutant except according to 40 C.F.R. pt. 400 to 460 and Minn. R. chs. 7050, 7052, 7053, and any other applicable Agency rules. [Minn. R. 7090]
22.6	The permittee's discharge must not cause nuisance conditions including, but not limited to floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water. [Minn. R. 7090]
22.7	The permittee must regulate the users of its wastewater treatment facility to prevent the introduction of pollutants or materials that may result in the inhibition or disruption of the conveyance system, treatment facility or processes, or disposal system that would contribute to the violation of the conditions of this program under this Section of the permit or any federal, state, or local law or regulation. [Minn. R. 7090]
22.8	If the permittee monitors more frequently than required on the Release Report outlined in item 22.16, the results and the frequency of monitoring must be submitted with the Release Report. [Minn. R. 7090]
22.9	A laboratory certified by the Minnesota Department of Health and/or registered by the Agency must conduct analyses required by this program. Analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine) do not need to be completed by a certified laboratory but must comply with manufacturers specifications for equipment calibration and use. [Minn. R. 7090]
22.10	Sample preservation and test procedures for the analysis of pollutants must conform to 40 C.F.R. pt. 136 and Minn. R. 7041.3200. [Minn. R. 7041.3200, Minn. R. 7090]
22.11	Flow meters, pumps, flumes, lift stations, or other flow monitoring equipment used for purposes of determining compliance with this program must be checked and/or calibrated for accuracy at least twice annually. [Minn. R. 7090]
22.12	The permittee must keep the records required by this program for at least three years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The permittee must extend these record retention periods upon request of the Agency. The permittee must maintain records for each sample and measurement. The records must include the following information: a. the exact place, date, and time of the sample or measurement; b. the date of analysis; c. the name of the person who performed the sample collection, measurement, analysis, or calculation; d. the analytical techniques, procedures and methods used; and e. the results of the analysis. [Minn. R. 7090]
22.13	Noncompliance with a term or condition of this program subjects the permittee to penalties provided by federal and state law set forth in section 309 of the Clean Water Act; United States Code, Title 33, section 1319, as amended; and in Minn. Stat. 115.071 and 116.072, including monetary penalties, imprisonment, or both. [Minn. R. 7090]
22.14	It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this program. [Minn. R. 7090]

22.15	Upon discovery of a release, the permittee must: a. take all reasonable steps to immediately end the release; b. in concert with Metropolitan Council Environmental Services, notify the Minnesota Department of Public Safety Duty Officer at 800-422-0798 or 651-649-5451 (metro area) immediately upon discovery of the release. You may contact the Agency during business hours at 800-657-3864 or 651-296-6300 (metro area); and c. recover as rapidly and as thoroughly as possible all substances and materials released or immediately take other action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If the released materials or substances cannot be immediately or completely recovered, the permittee must contact the Agency. If directed by the Agency, the permittee must consult with other local, state, or federal agencies (such as the Minnesota Department of Natural Resources and/or the Wetland Conservation Act authority) for implementation of additional clean-up or remediation activities in wetland or other sensitive areas. [Minn. R. 7090]
22.16	Upon discovery of a release, the permittee must: a. collect representative samples of the release. The permittee must sample the release for parameters of concern immediately following discovery of the release. The permittee may contact the Agency during business hours to discuss the sampling parameters and protocol. In addition, fecal coliform bacteria samples must be collected where it is determined by the permittee that the release contains or may contain sewage. If the release cannot be immediately stopped, the permittee must consult with Agency regarding additional sampling requirements. Samples must be collected at least, but not limited to, two times per week for as long as the release continues; and b. submit the sampling results on the Release Report (wq-wwtp7-20a) located on the Agency's website (https://www.pca.state.mn.us). The Release Report must be submitted to the Agency within 30 days. [Minn. R. 7090]
22.17	The Agency may modify or revoke and reissue this program under this Section of the permit pursuant to Minn. R. 7001.0170. The Agency may revoke without reissuance this program under this Section of the permit pursuant to Minn. R. 7001.0180. [Minn. R. 7001.0170, Minn. R. 7001.0180]
23.1	**Lake Hiawatha Trash Reduction Program**. [Minn. R. 7090]
23.2	The permittee must develop and implement a trash reduction program focused on the long-term reduction of discharges of trash into Lake Hiawatha. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
23.3	The permittee must develop and implement a written trash reduction plan to reduce the discharges of trash into Lake Hiawatha. The plan must be submitted to the Agency for review and confirmation that the requirements in item 23.4 have been addressed. The permittee must submit the plan : Due by 60 days after permit issuance. [Minn. R. 7090]
23.4	The permittee's trash reduction plan must incorporate the following: a. identification of types of trash, suspected sources, and outfall hotspots into Lake Hiawatha; b. an inventory of existing BMPs that prevent or reduce discharges of trash to Lake Hiawatha; c. identification of new BMPs the permittee will implement over this permit term that will prevent or reduce discharges of trash to Lake Hiawatha; d. a description of the BMP that meets the requirements in item 23.6, including the design specifications and types of trash the BMP is designed to capture; e. a schedule for the implementation of new BMPs during this permit term; f. a schedule for the inspection and maintenance of the BMP required in item 23.6; g. a schedule and procedure, including identification of priority areas required in item 23.7, for periodic shoreline cleanup events and visual monitoring around outfall hotspots; and h. name(s) of individual(s), position title(s), or department/division/section responsible for the implementation of the trash reduction plan. [Minn. R. 7090]
23.5	Each calendar year, the permittee must evaluate the trash reduction plan required in item 23.4, including the extent to which schedules are being met, implemented BMP effectiveness, and determine if any modifications are necessary to more effectively reduce the discharges of trash into Lake Hiawatha. [Minn. R. 7090]

23.6	The permittee must implement and maintain a structural BMP to capture trash at the 43rd Street outfall which discharges into Lake Hiawatha. If the permittee chooses to implement a proprietary device to fulfill this requirement, the permittee must install, operate, and maintain the device in accordance with the manufacturer's specifications. At a minimum, the permittee must: a. complete initial installation of the BMP during calendar year 2023; b. each year following initial installation, ensure the BMP is safely implemented and functioning as designed following spring ice out until autumn when lake freezing conditions can be reasonably anticipated. At a minimum, the BMP must be implemented and functioning as designed from May 1 through November 1 of each year, unless the permittee notifies the Agency and receives written approval for an alternative schedule (e.g., the permittee may consider water temperatures, air temperatures, and weather conditions to account for safety of individuals responsible for installation or removal of the BMP); c. if the permittee discovers the BMP is not functioning as designed, the permittee must repair, replace, or supplement the nonfunctional BMP with a functional BMP no later than 15 business days after discovery, unless the permittee notifies the Agency and receives written approval for an alternative schedule; d. ensure adequate maintenance access for the BMP; and e. ensure proper disposal of all material captured by the BMP. [Minn. R. 7090]
23.7	The permittee must conduct supplemental cleanup events to collect trash along the shoreline of Lake Hiawatha in priority areas identified by the permittee. At a minimum, the permittee must conduct cleanup events at least once during each of the following timeframes (four total): a. April through May; b. June through July; c. August through September; and d. October through November. [Minn. R. 7090]
23.8	The permittee must document the following as it pertains to the trash reduction plan: a. the status of new BMPs identified in item 23.4, including date(s) of implementation; b. dates and a description of findings from visual monitoring conducted around outfall hotspots; c. dates and description of inspection findings (e.g., dated photos) on the structural BMP installed to meet item 23.6; d. dates and descriptions of maintenance performed on the structural BMP installed to meet item 23.6, including an estimated breakdown of the types of trash removed and an estimate of the total amount of trash (in pounds) collected from the BMP; e. for each cleanup event required in item 23.7, an estimate of the total amount of trash (in pounds) collected; f. each calendar year, a cumulative estimate of the total amount of trash (in pounds) collected from all structural stormwater BMPs located upgradient of Lake Hiawatha and identified in the trash reduction plan; and g. any modifications to the trash reduction plan and justification for those modifications. [Minn. R. 7090]
24.1	**Stormwater Runoff Monitoring and Analysis**. [Minn. R. 7090]
24.2	The goal of stormwater runoff monitoring and analysis is to quantify stormwater volumes and pollutant loads from the MS4 and to provide information on the effectiveness of the SWMP. The permittee must continue to develop and implement a monitoring and analysis program and incorporate the requirements of this Section into their program. [Minn. R. 7090]
24.3	The quality assurance project plan for lab and field methods and procedures must comply with the following EPA requirements and guidance or receive approval from the Agency for variations from these protocols: a. EPA Requirement for Quality Assurance Project Plans (EPA QA/R-5) (EPA/240/B-01/003); b. EPA Guidance for Quality Assurance Project Plans (EPA QA/G-5) (EPA/600/R98/018); and c. The permittee must utilize Minnesota Department of Health-certified laboratory(s). [Minn. R. 7090]
24.4	The permittee must monitor water quality at a minimum of six (6) sites. Each calendar year, the permittee must select sites to monitor for the following calendar year. Sites may be changed, or rotated, for cost-effective resource use, however reasonable effort must be made to monitor for at least two consecutive years at a site. In choice and location of stations and monitoring activities, the permittee must consider safety, backwatering effects, and access. The monitoring of selected sites must include:

	a. a determination of BMP effectiveness through adaptive management (highest priority); b. representative land use management sites selected by the permittee (second priority); and c. a determination of contributions from upstream jurisdictions (third priority). [Minn. R. 7090]
24.5	The permittee must implement its monitoring and analysis program in accordance with Table 1 in Appendix A of this permit. [Minn. R. 7090]
25.1	**Additional Requirements of the SWMP**. [Minn. R. 7090]
25.2	The permittee's SWMP must include the following for each Section from Sections 16 through 24: a. identification of the sources of pollutants targeted for reduction and the sensitivity of the receiving waters; b. a description of and the scope of the BMPs for each Section; c. identification of staff and financial resources, including estimated annual budgets, for the permit term dedicated to implementation of the Section; d. measurable goals for each Section that will be used to determine the success and/or benefits of the Section; e. schedules and a protocol for monitoring, recordkeeping, and reporting; f. an implementation schedule for new or revised BMPs; and g. a detailed description or copy of any agreement between the permittee and partner(s) to implement the Section describing the rights, roles, and responsibilities of each party to the agreement. [Minn. R. 7090]
26.1	**Discharges to Impaired Waters with an EPA-Approved TMDL that Includes an Applicable WLA**. [Minn. R. 7090]
26.2	The permittee must select and implement a program of appropriate BMPs and measurable goals to make progress towards meeting applicable WLAs. The permittee must incorporate the requirements of this Section into their program. [Minn. R. 7090]
26.3	If necessary, for each applicable WLA assigned to the permittee and approved by the EPA after the final application for permit reissuance submittal and prior to the issuance date of this permit, herein referred to as a new applicable WLA, the permittee must submit the information required in items 26.4 through 26.6. The permittee must submit this information to the Agency for review and confirmation the requirements have been addressed: Due by 150 days after the issuance date of this permit. Once confirmed by the Agency, the submittal will become an enforceable part of the SWMP. [Minn. R. 7090]

26.4	On a form provided by the Agency, the permittee must provide the following:
	a. TMDL project name(s);
	b. numeric WLA(s), including units;
	c. type of WLA (i.e., categorical or individual);
	d. pollutant(s) of concern; and
	e. applicable flow data specific to each new applicable WLA. [Minn. R. 7090]

26.5	For each new applicable WLA for oxygen demand, TSS, or TP not being met by the permittee, the permittee must provide a compliance schedule. Compliance schedules can be developed to include multiple WLAs. On a form provided by the Agency, the permittee must provide the following: a. interim milestones, expressed as BMPs or progress toward implementation of BMPs, to be achieved during the term of this permit; b. dates for implementation of interim milestones; c. strategies for continued BMP implementation beyond the term of this permit; and d. target dates the new applicable WLA(s) will be achieved. [Minn. R. 7090]
26.6	For each new applicable WLA for oxygen demand, TSS, or TP the permittee is reasonably confident is being met, on a form provided by the Agency, the permittee must provide the following documentation: a. implemented BMPs used to meet each new applicable WLA; and b. a narrative describing the permittee's strategy for long-term continuation of meeting each new applicable WLA. [Minn. R. 7090]

26.7	For any applicable WLAs not being met for oxygen demand, TSS, or TP, the permittee must provide a summary of the permittee's progress toward achieving those applicable WLAs with the annual report. The summary must include the following information: a. a list of all BMPs applied towards achieving applicable WLAs for oxygen demand, TSS, and TP; b. the implementation status of BMPs included in the compliance schedule at the time of final application submittal; and c. an updated estimate of cumulative TSS and TP load reductions. [Minn. R. 7090]
26.8	The permittee must maintain a written or mapped inventory of potential areas and sources of concern for bacteria (e.g., dense populations of waterfowl or other bird, dog parks). [Minn. R. 7090]
26.9	The permittee must maintain a written plan to prioritize reduction activities to address the areas and sources of concern identified in the inventory in item 26.8. The written plan must include BMPs the permittee will implement over the permit term, which may include, but is not limited to: a. water quality monitoring to determine areas of high bacteria loading; b. installation of pet waste pick-up bags in parks and open spaces; c. elimination of over-spray irrigation that may occur at permittee owned areas; d. removal of organic matter via street sweeping; e. implementation of infiltration structural stormwater BMPs; or f. management of areas that attract dense populations of waterfowl (e.g., riparian plantings). [Minn. R. 7090]
26.10	The permittee must document the amount of deicer applied each winter maintenance season to all permittee owned/operated surfaces. [Minn. R. 7090]
26.11	Each calendar year, the permittee must conduct an assessment of the permittee's winter maintenance operations to reduce the amount of deicing salt applied to permittee owned/operated surfaces and determine current and future opportunities to improve BMPs. The permittee may use the Agency's Smart Salting Assessment Tool or other available resources and methods to complete this assessment. The permittee must document the assessment. The assessment may include, but is not limited to: a. operational changes such as pre-wetting, pre-treating the salt stockpile, increasing plowing prior to deicing, monitoring of road surface temperature, etc.; b. implementation of new or modified equipment providing pre-wetting, or other capability for minimizing salt use; c. regular calibration of equipment; d. optimizing mechanical removal to reduce use of deicers; or e. designation of no salt and/or low salt zones. [Minn. R. 7090]
27.1	**Alum or Ferric Chloride Phosphorus Treatment Systems**. [Minn. R. 7090]
27.2	If the permittee uses an alum or ferric chloride phosphorus treatment system, the permittee must comply with the requirements of this Section. [Minn. R. 7090]
27.3	The permittee's alum or ferric chloride phosphorus treatment system must comply with the following: a. the permittee must use the treatment system for the treatment of phosphorus in stormwater. Non-stormwater discharges must not be treated by this system; b. the treatment system must be contained within the conveyances and structural stormwater BMPs of the MS4. The utilized conveyances and structural stormwater BMPs must not include any receiving waters; c. phosphorus treatment systems utilizing chemicals other than alum or ferric chloride must receive written approval from the Agency; and d. in-lake phosphorus treatment activities are not authorized under this permit. [Minn. R. 7090]
27.4	The permittee's alum or ferric chloride phosphorus treatment system must meet the following design parameters: a. the treatment system must be constructed in a manner that diverts the stormwater flow to be treated from the main conveyance system; b. a high flow bypass must be part of the inlet design; and c. a flocculant storage/settling area must be incorporated into the design, and adequate maintenance access must be provided (minimum of 8 feet wide) for the removal of accumulated sediment. [Minn. R. 7090]
27.5	A designated person must perform visual monitoring of the treatment system for proper performance at least once every

	seven (7) days, and within 24 hours after a rainfall event greater than 2.5 inches in 24 hours. Following visual monitoring which occurs within 24 hours after a rainfall event, the next visual monitoring must be conducted within seven (7) days after that rainfall event. [Minn. R. 7090]
27.6	Three (3) benchmark monitoring stations must be established. Table 2 in Appendix A must be used for the parameters, units of measure, and frequency of measurement for each station. [Minn. R. 7090]
27.7	Samples must be collected as grab samples or flow-weighted 24-hour composite samples. [Minn. R. 7090]
27.8	Each sample, excluding pH samples, must be analyzed by a laboratory certified by the Minnesota Department of Health and/or the Agency, and: a. sample preservation and test procedures for the analysis of pollutants must conform to 40 C.F.R. pt. 136 and Minn. R. 7041.3200; b. detection limits for dissolved phosphorus, dissolved aluminum, and dissolved iron must be a minimum of 6 micrograms per liter, 10 micrograms per liter, and 20 micrograms per liter, respectively; and c. pH must be measured within 15 minutes of sample collection using calibrated and maintained equipment. [Minn. R. 7090]
27.9	In the following situations, the permittee must perform corrective action(s) and immediately notify the Minnesota Department of Public Safety Duty Officer at 800-422-0798 (toll free) or 651-649-5451 (Metro area): a. the pH of the discharged water is not within the range of 6.0 and 9.0; b. any indications of toxicity or measurements exceeding water quality standards which could endanger human health, public drinking water supplies, or the environment; or c. a spill or discharge or alteration resulting in water pollution as defined in Minn. Stat. 115.01, subd. 13, of alum or ferric chloride. If item b is applicable, the permittee must also report the non-compliance to the Commissioner as required in item 32.12. [Minn. R. 7001.0150, subp. 3(K), Minn. R. 7090]
27.10	If the permittee discovers indications of toxicity or measurements exceeding water quality standards that the permittee determines does not endanger human health, public drinking water supplies, or the environment, the permittee must report the non-compliance to the Commissioner as required in item 32.13. [Minn. R. 7001.0150, subp. 3(L), Minn. R. 7090]

27.11	The permittee must submit the following information with the annual report. The annual report must include a month-by-month summary of:
	a. date(s) of operation;
	b. chemical(s) used for treatment;
	c. gallons of water treated;
	d. gallons of alum or ferric chloride treatment used;
	e. calculated pounds of phosphorus removed; and
	f. any performance issues and the corrective action(s), including the date(s) when corrective action(s) were taken. [Minn. R. 7090]

27.12	A record of the design parameters in items 27.13 through 27.15 must be kept on-site. [Minn. R. 7090]
27.13	Site-specific jar testing conducted using typical and representative water samples in accordance with the most current approved version of ASTM D2035. [Minn. R. 7090]
27.14	Baseline concentrations of the following parameters in the influent and receiving waters: a. aluminum or iron; and b. phosphorus. [Minn. R. 7090]

27.15	The following system parameters and how each was determined: a. flocculant settling velocity; b. minimum required retention time; c. rate of diversion of stormwater into the system; d. the flow rate from the discharge of the outlet structure; and e. range of expected dosing rates. [Minn. R. 7090]
27.16	The following site-specific procedures must be developed and a copy kept on-site: a. procedures for the installation, operation and maintenance of all pumps, generators, control systems, and other equipment; b. specific parameters for determining when the solids must be removed from the system and how the solids will be handled and disposed of; and c. procedures for cleaning up and/or containing a spill of each chemical stored on-site. [Minn. R. 7090]
28.1	**Stormwater Management Program (SWMP) Modification**. [Minn. R. 7090]
28.2	The Commissioner may require the permittee to modify the SWMP as needed, in accordance with the procedures of Minn. R. ch. 7001, and must consider the following factors: a. discharges from the MS4 are impacting the quality of receiving waters; b. more stringent requirements are necessary to comply with state or federal regulations; and c. additional conditions are deemed necessary to comply with the goals and applicable requirements of the Clean Water Act and protect water quality. [Minn. R. 7090]
28.3	Modifications required by the Commissioner for the SWMP must be requested in writing, setting forth schedules for compliance, and offering the permittee the opportunity to propose alternative SWMP modifications to meet the objectives of the requested modification. [Minn. R. 7090]
28.4	Modifications that the permittee chooses to make to the SWMP must be approved by the Commissioner in accordance with the procedures of Minn. R. ch. 7001. All requests must be in writing, setting forth schedules for compliance. The request must discuss alternative program modifications, ensure compliance with requirements of the permit, and meet other applicable laws. [Minn. R. 7090]
28.5	The SWMP may be modified by the permittee without prior approval of the Commissioner, provided the modification is in accordance with the following: a. the permittee adds one or more BMP(s) and none subtracted from the SWMP; b. a less effective BMP identified in the SWMP is replaced with a more effective BMP. The alternate BMP must address the same, or similar, concerns as the ineffective or failed BMP; or c. the Commissioner and public are notified of the modification in the annual report for the year the modification is made. If a less effective BMP is replaced with a more effective BMP, the permittee must include an explanation of circumstance(s) and reason(s) for the replacement of the BMP. [Minn. R. 7090]
28.6	The permittee must include proposed modifications in the annual report and notify the public (with an opportunity to provide comment) through the annual report public notice and meeting required in Section 17. Upon written approval of the Commissioner, the permittee may modify the SWMP to implement: a. BMPs needed to make reasonable progress toward meeting one or more applicable WLA(s); and b. modifications to the stormwater runoff monitoring and analysis program in accordance with Section 24. [Minn. R. 7090]
29.1	**SWMP Assessment, Updates, Reporting, and Other Submittals**. [Minn. R. 7090]
29.2	The permittee must complete an annual assessment of the SWMP based on information collected and analyzed during the reporting period, including activities implemented in Sections 16 through 24. The purpose of the annual SWMP assessment is to provide information for improving performance, including but not limited to reducing pollutant loading and runoff volumes, and to optimize associated planning and design, construction, operation, and maintenance of the MS4. The annual SWMP assessment must be submitted to the Agency with each annual report and must include the following:

	a. an analysis of the performance and effectiveness of BMPs in reducing stormwater runoff volumes and pollutant loading to receiving waters; b. an analysis of the effectiveness of the SWMP in achieving permit compliance, measurable goals, and other long-term goals; and c. a fiscal analysis of the budget utilized for implementing the SWMP including an evaluation of the resources used to implement the MCMs required by the permit. The analysis must include the capital, operation, maintenance, and staff resource costs for implementing the SWMP. [Minn. R. 7090]
29.3	The permittee must complete revisions to incorporate requirements of Sections 15 through 27 into the current SWMP within 12 months of the issuance date of this permit, unless other timelines have been specifically established in this permit. [Minn. R. 7090]
29.4	The permittee must keep records required by the NPDES/SDS MS4 permit for at least three (3) years beyond the term of this permit. The permittee must retain copies of the SWMP, all documentation necessary to comply with the permit, all data and information used by the permittee to develop the SWMP, and any information developed as a requirement of this permit or as requested by the Commissioner, for a period of at least three (3) years beyond the date of permit expiration. The permittee must extend these record retention periods upon request of the Commissioner and/or during the course of an unresolved enforcement action. [Minn. R. 7001.0150, subp. 2(C)]
29.5	The permittee must make its records, including the SWMP, available to the public at reasonable times during regular business hours (see 40 C.F.R. 122.7 for confidentiality provision). [Minn. R. 7090]
29.6	Except for data determined to be confidential according to Minn. Stat. 116.075, subd. 2, all documents, plans, and reports required by this permit must be available for inspection by the Agency upon request. Stormwater runoff monitoring or effluent data must not be considered confidential. Confidential material must be submitted according to Minn. R. 7000.1300. [Minn. R. 7000.1300, Minn. R. 7090]
30.1	**Annual Reporting**. [Minn. R. 7090]
30.2	The permittee must submit an annual report: Due annually, by the 30th of June. The annual report must cover the portion of the previous calendar year during which the permittee was authorized to discharge stormwater under this permit. The permittee's annual report must be submitted to the Agency, in a manner determined by the Agency, that includes but is not limited to: a. the status of compliance with permit terms and conditions, including an assessment of the appropriateness of BMPs identified by the permittee and progress towards achieving measurable requirements of each of the MCMs. The assessment must be based on results of information collected and analyzed, including monitoring, inspection findings, and public input received during the reporting period; b. the stormwater activities the permittee plans to undertake during the next reporting period; c. changes made to the SWMP during the reporting period; d. information required in items 30.3 through 30.29; and e. any partnerships or activities coordinated with other local governments or organizations to assist with implementing the SWMP and any agreements related to this effort. [Minn. R. 7090]
30.3	The permittee must provide the following as it pertains to the public education and outreach program required in Section 16: a. quantities and descriptions of educational materials distributed and the number of visits by the public to stormwater education websites; b. a summary of the education and outreach activities held including dates of events; c. any modifications made to the program as a result of the annual evaluation as described in item 16.7.e; and d. if the permittee relied upon other organizations for some, or all, of its education and outreach program, include a summary of activities conducted by those other organizations. [Minn. R. 7090]

30.4	The permittee must provide the following as it pertains to the public participation and involvement program required in Section 17: a. a summary of the written public input received on the SWMP and the permittee's response to the input as described in Section 17; b. any modifications made to the SWMP because of the input received during the public meeting; c. the date and location of the public meeting as described in item 17.3; and d. a formal resolution from the permittee's governing body adopting the annual report and the SWMP as required in item 17.10. [Minn. R. 7090]
30.5	The permittee must provide the following as it pertains to the IDDE program required in Section 18: a. the status of the regulatory mechanisms required in Section 18; b. a description and the date of the most recent update to the electronic storm sewer system inventory and map completed during the reporting year; c. the number of spills and illicit discharges that occurred and a description of the response, containment, and cleanup of the spills and illicit discharges; d. the number of illicit discharge inspections and/or screening activities completed during the reporting year and a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharges; e. reports of alleged illicit discharges received, including date(s) of the report(s), and a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharge(s); f. sources of illicit discharges, including a description and the responsible party if known; g. identification of outfalls or other areas where illicit discharges have been discovered and a description of the response, investigation, and enforcement response procedures utilized to eliminate the illicit discharge(s); and h. a description of the training activities, implemented during the reporting year, to train municipal staff about reporting, responding to, and eliminating illicit discharges. [Minn. R. 7090]
30.6	The permittee must provide the following as it pertains to the inspection and regulatory oversight program to monitor and control pollutants from industrial, commercial, and institutional facilities required in items 18.31 through 18.37: a. the status of the inventory required in item 18.33; and b. the number of facility inspections completed and a summary of inspection findings. [Minn. R. 7090]
30.7	The permittee must provide the following as it pertains to the construction site stormwater runoff control program required in Section 19: a. the status of the regulatory mechanism(s) required in item 19.3; b. the number of construction site plans reviewed and confirmed to meet regulatory mechanism(s) requirements; c. the number of construction stormwater complaints received and a summary of responses to those complaints; d. the number of site inspections completed and a summary of inspection findings; e. the number of violations of the permittee regulatory mechanism(s) for construction site stormwater runoff control and the types of enforcement response procedures utilized; and f. the title of the construction stormwater training attended by permittee staff. [Minn. R. 7090]
30.8	The permittee must provide the following as it pertains to the post-construction stormwater management program required in Section 20: a. the status of the regulatory mechanism(s) required in item 20.3; b. the number construction activity projects required to meet the terms of the permittee regulatory mechanism(s); c. the number and type of structural stormwater BMPs implemented to meet the terms of the permittee regulatory mechanism(s), including the number of structural stormwater BMP long-term maintenance agreements executed during the reporting year; and d. the number construction activity projects requiring mitigation (i.e., off-site stormwater treatment), including an explanation of why mitigation was required, the types of structural stormwater BMPs, and the expected dates of implementation. [Minn. R. 7090]

30.9	The permittee must provide information as it pertains to the operations and maintenance program required in Section 21. At a minimum, the permittee must include in the annual report the information described in items 30.10 through 30.14. [Minn. R. 7090]
30.10	The permittee must provide a description of permittee facilities and municipal operations that contribute pollutants to stormwater discharges and the BMPs implemented to prevent polluted runoff from discharging to the MS4. [Minn. R. 7090]
30.11	The permittee must provide a brief description of all outfall inspection findings including any improvement projects completed at the outfall locations. [Minn. R. 7090]
30.12	The permittee must provide a list of the MS4 components or facilities that need to be replaced, repaired, or maintained and a schedule for completing the replacement, repair, or maintenance activity. [Minn. R. 7090]
30.13	The permittee must provide the results of structural stormwater BMP inspections, assessments, maintenance, and repair activities including: a. date; b. estimation of sediment storage capacity and percent capacity remaining; c. the date of maintenance and/or repairs completed; d. the dates and quantity of removed substances from structural stormwater BMPs; e. the quantity of material removed by street sweeping (seasonal sweepings for spring sand and fall leaves must be itemized as part of the total quantity); f. the quantity of deicing materials, chemicals, and sand applied to roadways. The location and description of all storage facilities for sand, deicing materials, and anti-icing solution used during winter maintenance activities; and g. the number, type, and schedule of flood control improvement projects completed, including a description of the pollutant removal capabilities associated with each project. [Minn. R. 7090]
30.14	The permittee must provide information about stormwater management training events, including: a. title and topic of training; b. date of training; and c. names and departments of employees in attendance. [Minn. R. 7090]
30.15	The permittee must provide the information as it pertains to their integrated infrastructure management program required in Section 22. At a minimum, the permittee must include in the annual report the previous calendar year efforts to minimize inflow and infiltration, including but not limited to the information described in items 30.16 through 30.21. [Minn. R. 7090]
30.16	The permittee must provide a description of any release events from the sanitary or combined sewer system, including: a. outfall location; b. duration and volume; and c. a summary of any sampling activities and monitoring results associated with the release. [Minn. R. 7090]
30.17	The permittee must provide a summary of studies, investigations, and monitoring activities initiated to identify sources of inflow and infiltration. [Minn. R. 7090]
30.18	The permittee must provide an updated inventory of all identified areas of inflow to the sanitary sewer system, including: a. location and sewer shed of individually identified combined sewer areas; b. catch basins, roof leaders, and other storm water inlets connected to the combined sewer; c. sewer service area in acres for the locations identified in items a and b directly above; d. MCES Regulator identification number and geographic coordinates; e. MCES and Minneapolis outfall locations and geographic coordinates; and f. total area of each Minneapolis sewer shed tributary to an outfall and the percent of combined sewer area in that sewer shed. [Minn. R. 7090]
30.19	The permittee must provide a map and summary of projects completed in the past year to minimize inflow and infiltration, including but not limited to sewer separation projects, lined sewer pipes, manhole lining and repairs, and rainleader disconnections. [Minn. R. 7090]
30.20	The permittee must provide a description of collaborative arrangements with external partners to minimize releases and

	improve water quality. [Minn. R. 7090]
30.21	The permittee must provide a description of the annual expenditures on items 30.16 through 30.20. [Minn. R. 7090]
30.22	The permittee must provide a summary of the trash reduction program required in Section 23, including the information required to be documented in item 23.8. [Minn. R. 7090]
30.23	The permittee must provide information as it pertains to their stormwater runoff monitoring and analysis program required in Section 24. At a minimum, the permittee must include in the annual report the previous calendar year efforts to minimize inflow and infiltration, including but not limited to the information described in items 30.24 through 30.27. [Minn. R. 7090]
30.24	The permittee must provide any proposed SWMP modifications to substitute sources of monitoring and analysis data including a discussion of how the data will be utilized to demonstrate compliance with this permit and how it will characterize the nature of stormwater discharges. [Minn. R. 7090]
30.25	The permittee must provide any significant operational differences in monitoring and monitoring protocols as established in Section 24. [Minn. R. 7090]
30.26	The permittee must provide the results of the monitoring and sampling data analysis collected by the permittee, or any other entity on behalf of the permittee, including: a. estimated pollutant event mean concentrations; b. estimated total annual pollutant load to receiving water(s); c. estimated total annual volume to receiving water(s); d. estimated effectiveness (e.g., removal efficiency, load reduction, etc.) of structural stormwater BMPs; and e. calibration and verification of stormwater models. [Minn. R. 7090]
30.27	The permittee must provide a brief narrative description of the monitoring results collected by the permittee, or any other entity on behalf of the permittee, including data with tabulations, statistics, summary tables and graphics, by monitoring site with receiving water location description, including: a. continuous flow data; b. sample analytical data identified as storm composite or grab with corresponding flows and storm event periods; c. estimate of storm event rainfall which generated the sampled discharge including approximate duration between the storm event sampled and the end of the previous measurable storm event (greater than 0.10 inch rainfall); d. loading calculations: estimated annual and seasonal loads (total phosphorus, chloride, total suspended solids, volatile suspended solids, inorganic suspended solids by difference (TSS - VSS = ISS), and total nitrogen for the continuous monitoring stations; e. summary information for each site including drainage area and estimated annual total discharge volume, storm event discharge volume, storm event discharge values that were used to calculate event-scale pollutant loads, runoff yield (inches/year), analyte flow weighted mean concentrations and analyte annual mean concentrations; and f. a map showing receiving waters and representative land use management site locations as described in item 24.4. [Minn. R. 7090]
30.28	The permittee must provide an assessment of progress toward achieving applicable WLAs, including a summary of implementation activities and BMPs to meet the requirements in Section 26. [Minn. R. 7090]
30.29	If the permittee uses an alum or ferric chloride phosphorus treatment system that meets the conditions and design parameters described in Section 27, the permittee must submit the information required in item 27.11. [Minn. R. 7090]
31.1	**Where to Submit**. [Minn. R. 7090]
31.2	The permittee must use an electronic submittal process, when provided by the Agency, for submitting information required by this permit. When submitting information electronically is not possible, the permittee must use the following mailing address: Supervisor, Municipal Stormwater Unit Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, Minnesota 55155-4194. [Minn. R. 7090]
32.1	**General Conditions**. [Minn. R. 7090]
32.2	The Agency's issuance of a permit does not release the permittee from any liability, penalty, or duty imposed by

	Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit. [Minn. R. 7001.0150, subp. 3(A)]
32.3	The Agency's issuance of a permit does not prevent the future adoption by the Agency of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the permittee. [Minn. R. 7001.0150, subp. 3(B)]
32.4	The permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
32.5	The Agency's issuance of a permit does not obligate the Agency to enforce local laws, rules or plans beyond that authorized by Minnesota statutes. [Minn. R. 7001.0150, subp. 3(D)]
32.6	The permittee must perform the actions or conduct the activity authorized by the permit in accordance with the plans and specifications approved by the Agency and in compliance with the conditions of the permit. [Minn. R. 7001.0150, subp. 3(E)]
32.7	The permittee must at all times properly operate and maintain the facilities and systems of treatment and control and the appurtenances related to them which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The permittee must install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible. [Minn. R. 7001.0150, subp. 3(F)]
32.8	The permittee may not knowingly make a false or misleading statement, representation, or certification in a record, report, plan, or other document required to be submitted to the Agency or to the Commissioner by the permit. The permittee must immediately upon discovery report to the Commissioner an error or omission in these records, reports, plans, or other documents. [Minn. R. 7001.0150, subp. 3(G), Minn. R. 7001.1090, subp. 1(G), Minn. R. 7001.1090, subp. 1(H), Minn. Stat. 609.671]
32.9	The permittee must, when requested by the Commissioner, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit. [Minn. R. 7001.0150, subp. 3(H)]
32.10	When authorized by Minn. Stat. 115.04, 115B.17, subd. 4, and 116.091, and upon presentation of proper credentials, the Agency, or an authorized employee or agent of the Agency, must be allowed by the permittee to enter at reasonable times upon the property of the permittee to examine and copy books, papers, records, or memoranda pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit. [Minn. R. 7001.0150, subp. 3(I)]
32.11	If the permittee discovers, through any means, including notification by the Agency, that noncompliance with a condition of the permit has occurred, the permittee must take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance. [Minn. R. 7001.0150, subp. 3(J)]
32.12	If the permittee discovers that noncompliance with a condition of the permit has occurred which could endanger human health, public drinking water supplies, or the environment, the permittee must, within 24 hours of the discovery of the noncompliance, orally notify the Commissioner. Within five days of the discovery of the noncompliance, the permittee must submit to the Commissioner a written description of the noncompliance; the cause of the noncompliance; the exact dates of the period of the noncompliance; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [Minn. R. 7001.0150, subp. 3(K)]
32.13	The permittee must report noncompliance with the permit not reported under item 32.12 as a part of the next report which the permittee is required to submit under this permit. If no reports are required within 30 days of the discovery of the noncompliance, the permittee must submit the information listed in item 32.12 within 30 days of the discovery of the noncompliance. [Minn. R. 7001.0150, subp. 3(L)]

32.14	The permittee must give advance notice to the Commissioner as soon as possible of planned physical alterations or additions to the permitted facility (MS4) or activity that may result in noncompliance with a Minnesota or federal pollution control statute or rule or a condition of the permit. [Minn. R. 7001.0150, subp. 3(M)]
32.15	The permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred must comply with the conditions of the permit. [Minn. R. 7001.0150, subp. 3(N)]
32.16	The permit authorizes the permittee to perform the activities described in the permit under the conditions of the permit. In issuing the permit, the state and Agency assume no responsibility for damage to persons, property, or the environment caused by the activities of the permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under the permit. To the extent the state and Agency may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act, Minn. Stat. 3.736. [Minn. R. 7001.0150, subp. 3(O)]
32.17	This permit incorporates by reference the applicable portions of 40 C.F.R. 122.41 and 40 C.F.R. 122.42(c) and (d), and Minn. R. 7001.1090, which are enforceable parts of this permit. [Minn. R. 7090]
32.18	The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. [Minn. R. 7090]
33.1	**Definitions**. [Minn. R. 7090]
33.2	"Active karst" means geographic areas underlain by carbonate bedrock (or other forms of bedrock that can erode or dissolve) with less than 50 feet of sediment cover. [Minn. R. 7090]
33.3	"Agency" means Minnesota Pollution Control Agency. [Minn. Stat. 116.36, subd. 2]
33.4	"Alum or Ferric Chloride Phosphorus Treatment System" means the diversion of flowing stormwater from a MS4, removal of phosphorus through the use a continuous feed of alum or ferric chloride additive, flocculation, and the return of the treated stormwater back into a MS4 or receiving water. [Minn. R. 7090]
33.5	"Applicable WLA" means a Waste Load Allocation assigned to the permittee and approved by the EPA prior to the issuance date of the permit. [Minn. R. 7090]
33.6	"Best Management Practice" or "BMP" means practices to prevent or reduce the pollution of the waters of the state, including schedules of activities, prohibitions of practices, and other management practices, and also includes treatment requirements, operating procedures and practices to control plan site runoff, spillage or leaks, sludge, or waste disposal or drainage from raw material storage. [Minn. R. 7001.1020, subp. 5]
33.7	"Commissioner" means the Commissioner of the Minnesota Pollution Control Agency or the Commissioner's designee. [Minn. Stat. 116.36, subd. 3]
33.8	"Common plan of development or sale" means one proposed plan for 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. [Minn. R. 7090]
33.9	"Construction Activity" means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity. [Minn. R. 7090]
33.10	"DNR catchment area" means the Hydrologic Unit 08 areas delineated and digitized by the Minnesota DNR. The catchment areas are available for download at the Minnesota DNR Geospatial Commons website. DNR catchment areas may be locally corrected, in which case the local corrections may be used. [Minn. R. 7090]
33.11	"Fully reconstructed" means areas where impervious surfaces have been removed down to the underlying soils. Activities

	such as structure renovation, mill and overlay projects, and other pavement rehabilitation projects that do not expose the underlying soils beneath the structure, pavement, or activity are not considered fully reconstructed. Maintenance activities such as catch basin repair/replacement, utility repair/replacement, pipe repair/replacement, lighting, and pedestrian ramp improvements are not considered fully reconstructed. [Minn. R. 7090]
33.12	"Geographic coordinates" means the point location of a stormwater feature expressed by X, Y coordinates of a standard Cartesian coordinate system (i.e. latitude/longitude) that can be readily converted to Universal Transverse Mercator (UTM), Zone 15N in the NAD83 datum. For polygon features, the geographic coordinates will typically define the approximate center of a stormwater feature. [Minn. R. 7090]
33.13	"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from firefighting activities. [40 CFR 122.26(b)(2)]
33.14	"Impaired water" means waters identified as impaired by the Agency, and approved by the EPA, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. 1313(d)). [Minn. R. 7090]
33.15	"Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are impervious surfaces. Recreational trails that are distinctly set apart from a roadway (i.e., not parallel) and intended for non-motorized recreational uses, are not considered impervious surfaces. Sidewalks that are parallel to a roadway (or generally following alongside a roadway) must still be included as impervious surfaces. [Minn. R. 7090]
33.16	"Large municipal separate storm sewer system" or "Large MS4" means all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management Agency under section 208 of the Clean Water Act that discharges to waters of the United States. [Minn. R. 7090]
33.17	"Linear project" means construction of new or fully reconstructed roads, trails, sidewalks, or rail lines that are not part of a common plan of development or sale. For example, roads being constructed concurrently with a new residential development are not considered linear projects because they are part of a common plan of development or sale. [Minn. R. 7090]
33.18	"Long-term goals" means those goals established in the permittee's SWMP to be accomplished by implementing the NPDES Phase I MS4 Permit. These goals may have various timeframes and durations including durations longer than one NPDES Phase I MS4 permit cycle. [Minn. R. 7090]
33.19	"Maximum Extent Practicable" or "MEP" means the statutory standard (33 U.S.C. 1342(p)(3)(B)(iii)) that establishes the level of pollutant reductions that an owner or operator of a regulated MS4s must achieve. The EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting. The pollutant reductions that represent MEP may be different for each MS4, given the unique local hydrologic and geologic concerns that may exist and the differing pollutant control strategies. Therefore, the permittee will determine appropriate BMPs to satisfy each of the MCMs through an evaluative process. The EPA envisions application of the MEP standard as an iterative process. [Minn. R. 7090]
33.20	"Municipal separate storm sewer system" or "MS4" means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains: a. owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management Agency under section 208 of the federal Clean Water Act, United States Code, Title 33, section 1288, that discharges into waters of the state; b. designed or used for collecting or conveying stormwater; c. that is not a combined sewer; and d. that is not part of a publicly owned treatment works as defined at 40 C.F.R. 122.2.

	Municipal separate storm sewer systems do not include separate storm sewers in very discrete areas, such as individual buildings. [Minn. R. 7090.0080, subp. 8]
33.21	"New applicable WLA" means a Waste Load Allocation assigned to the permittee and approved by the EPA after the final application for permit reissuance submittal and prior to the issuance date of this permit. [Minn. R. 7090]
33.22	"Non-stormwater discharge" means any discharge not composed entirely of stormwater. [Minn. R. 7090]
33.23	"Operator" means the person with primary operational control and legal responsibility for the municipal separate storm sewer system. [Minn. R. 7090.0080, subp. 10]
33.24	"Outfall" means the point source where a municipal separate storm sewer system discharges to a receiving water, or the stormwater discharge permanently leaves the permittee's MS4. It does not include diffuse runoff or conveyances which connect segments of the same stream or water systems (e.g., when a conveyance temporarily leaves a MS4 at a road crossing). [Minn. R. 7090]
33.25	"Owner" means the person that owns the municipal separate storm sewer system. [Minn. R. 7090.0080, subp. 11]
33.26	"Permittee" means a person or persons, that signs the permit application submitted to the Agency and is responsible for compliance with the terms and conditions of this permit. [Minn. R. 7090]
33.27	"Person" means the state or any Agency or institution thereof, any municipality, governmental subdivision, public or private corporation, individual, partnership, or other entity, including, but not limited to, association, commission, or any interstate body, and includes any officer or governing or managing body of any municipality, governmental subdivision, or public or private corporation, or other entity. [Minn. Stat. 115.01, subd. 10]
33.28	"Pipe" means a closed human-made conveyance device used to transport stormwater from location to location. The definition of pipe does not include foundation drain pipes, irrigation pipes, land drain tile pipes, culverts, and road sub-grade drain pipes. [Minn. R. 7090]
33.29	"Receiving water" means any lake, river, stream, or wetland that receives stormwater discharges from a MS4. [Minn. R. 7090]
33.30	"Reduce" means reduce to the Maximum Extent Practicable (MEP) unless otherwise defined in the context in which it is used. [Minn. R. 7090]
33.31	"Regulatory mechanism" means contract language, an ordinance, permits, standards, or any other mechanism, that will be enforced by the permittee. [Minn. R. 7090]
33.32	"Seasonally saturated soil" means the highest seasonal elevation in the soil that is in a reduced chemical state because of soil voids being filled with water causing anaerobic conditions. Seasonally saturated soil is evident by the presence of redoximorphic features or other information determined by scientifically established methods or empirical field measurements. [Minn. R. 7090]
33.33	"Section" includes all item numbers of the same whole number. For example, "Section 5" of the permit refers to items 5.1 through 5.2. As a second example, when "this Section" is used in item 16.2, it refers to all item numbers in Section 16 (i.e., items 16.1 through 16.8). [Minn. R. 7090]
33.34	"Significant materials" includes, but is not limited to: raw materials, fuels, materials such as solvents, detergents, and plastic pellets: finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers, pesticides, and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g., the material's solubility, transportability, and toxicity characteristics) to determine the material's pollution potential. [40 CFR 122.26(b)(12)]
33.35	"Stormwater" means stormwater runoff, snowmelt runoff, surface runoff, and drainage. [Minn. R. 7090.0080, subp. 12]
33.36	"Stormwater hotspot" means any land use or activity that may generate a higher concentration of hydrocarbons, trace metals, or toxic pollutants than are found in typical stormwater runoff. [Minn. R. 7090]
33.37	"Stormwater Management Program" or "SWMP" means a comprehensive program developed by the permittee to manage and reduce the discharge of pollutants in stormwater to and from the medium or large MS4. [Minn. R. 7090]
33.38	"Structural stormwater BMP" means a stationary and permanent BMP that is designed, constructed and operated to prevent or reduce the discharge of pollutants in stormwater. [Minn. R. 7090]

33.39	"Total Maximum Daily Load" or "TMDL" means the sum of the individual Waste Load Allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined in 40 C.F.R. 130.2(i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water of the state and still assure attainment and maintenance of water quality standards. [Minn. R. 7052.0010, subp. 42]
33.40	"Waste Load Allocation" or "WLA" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined in 40 C.F.R. 130.2(h). In the absence of a TMDL approved by EPA under 40 C.F.R. 130.7, or an assessment and remediation plan developed and approved according to Minn. R. 7052.0200, subp. 1(C), a WLA is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards and criteria. [Minn. R. 7052.0010, subp. 45]
33.41	"Water pollution" means: a. the discharge of any pollutants into any waters of the state or the contamination of any waters of the state so as to create a nuisance or renders such waters unclean, or noxious, or impure so as to be actually or potentially harmful or detrimental or injurious to public health, safety or welfare, to domestic, agricultural, commercial, industrial, recreational or other legitimate uses, or to livestock, animals, birds, fish, or other aquatic life; or b. the alteration made or induced by human activity of the chemical, physical, biological, or radiological integrity of waters of the state. [Minn. Stat. 115.01, subd. 13(b)]
33.42	"Water quality standards" mean those provisions contained in Minn. R. chs. 7050 and 7052. [Minn. R. 7090]
33.43	"Water Quality Volume" means either: a. for construction activity (excluding linear projects), one (1) inch of runoff from the sum of the new and fully reconstructed impervious surfaces created by the project (calculated as an instantaneous volume); or b. for linear projects, the greater of one (1) inch of runoff from the new impervious surface or one-half (0.5) inch of runoff from the sum of the new and fully reconstructed impervious surfaces created by the project (calculated as an instantaneous volume). [Minn. R. 7090]
33.44	"Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. [Minn. Stat. 115.01, subd. 22]
33.45	"Wetlands" are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes: a. a predominance of hydric soils; b. inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and c. under normal circumstances, support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1a(B)]

2. Appendix A.

Table 1: Monitoring and analysis

Analytical data for samples			Sites 1-6 Monitored by the permittee (Types 1, 2, 3)					
Parameter	**Sample Type**	**Frequency** (Note 2)	**Site 1**	**Site 2**	**Site 3**	**Site 4**	**Site 5**	**Site 6**
Chloride, Total	Flow-paced composite samples over non-ice time period (approx. March through November)	10 samples/year, select from events 0.10 inch or greater over range of seasons and events	X	X	X	X	X	X
Copper, Total (as Cu)			X	X	X	X	X	X
Lead, Total (as Pb)			X	X	X	X	X	X
Zinc, Total (as Zn)			X	X	X	X	X	X
Hardness, Carbonate (as CaCo3)			X	X	X	X	X	X
Nitrate + Nitrite, Total (as N)			X	X	X	X	X	X
Nitrogen, Total			X	X	X	X	X	X
Phosphorus, Total (as P)			X	X	X	X	X	X
Solids, Total Suspended (TSS)			X	X	X	X	X	X
Solids, Volatile Suspended (VSS)			X	X	X	X	X	X
Solids, Inorganic Suspended by difference (TSS-VSS=ISS)			X	X	X	X	X	X
Carbon, Organic Dissolved	Grab samples at least two times during typical winter thaw (approx. December to March)		X	X	X	X	X	X
Chemical Oxygen Demand (COD)			X	X	X	X	X	X
Phosphorus, Total Dissolved or Ortho			X	X	X	X	X	X
Solids, Total Dissolved (TDS)			X	X	X	X	X	X
Flow	Measurement	Continuous during period when flow-paced composite samples are collected as required for other parameters in this table Point-estimated when grab samples are collected as required for other parameters in this table	X	X	X	X	X	X
Precipitation	Measurement, at 3800 Bryant Avenue South location	Daily	N/A	N/A	N/A	N/A	N/A	N/A
Oil and grease	Grab	Quarterly (spring, summer, fall, winter)	X	X	X	X	X	X
Escherichia coli (E. coli)			X	X	X	X	X	X
pH (Note 1)	Grab, measured by multi-parameter probe	Quarterly (spring, summer, fall, winter)	X	X	X	X	X	X

Note 1: Field analysis.

Note 2: Taking into consideration weather and safety.

X: Monitoring of parameter is applicable

N/A: Not applicable

Type 1. To determine and improve system/BMP effectiveness through adaptive management (highest priority).

Type 2. Representative land use management sites selected by the permittee (second priority).
Type 3. To determine contributions from upstream jurisdictions (third priority).

Table 2: Monitoring parameters during operation

Station	Alum parameters	Ferric parameters	Units	Frequency
Upstream-background	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily
Alum or Ferric Chloride Feed	Alum	Ferric	Gallons	Daily total dosed in gallons
Discharge from treatment	Total Phosphorus	Total Phosphorus	mg/L	1 x week
	Dissolved Phosphorus	Dissolved Phosphorus	mg/L	1 x week
	Total Aluminum	Total Iron	mg/L	1 x month
	Dissolved Aluminum	Dissolved Iron	mg/L	1 x week
	pH	pH	SU	1 x week
	Flow	Flow	Mgd	Daily