

Stormwater Program for Municipal Separate Storm Sewer Systems (MS4)

Program Update - What's New

- [Annual Report forms due June 30, 2008](#)
- [Updated status of MS4 permit applications](#)

Overview

According to the 1996 National Water Quality Inventory, stormwater runoff is a leading source of water pollution. Stormwater runoff can harm surface waters such as rivers, lakes, and streams which in turn cause or contribute to water quality standards being exceeded.



Stormwater runoff can change natural hydrologic patterns, accelerate stream flows, destroy aquatic habitats, and elevate pollutant concentrations and loadings. Development substantially increases impervious surfaces thereby increasing runoff from city streets, driveways, parking lots, and sidewalks, on which pollutants from human activities settle.

Common pollutants in runoff include pesticides, fertilizers, oils, metals, pathogens, salt, sediment, litter and other debris are transported via stormwater and discharged – untreated – to water resources through storm sewer systems.

The Stormwater Program for MS4s is designed to reduce the amount of sediment and pollution that enters surface and ground water from storm sewer systems to the maximum extent practicable. Stormwater discharges associated with MS4s are regulated through the use of National Pollutant Discharge Elimination System (NPDES) permits. NPDES permits are legal documents. Through this permit, the owner or operator is required to develop a stormwater pollution prevention program (SWPPP) that incorporates best management practices (BMPs) applicable to their MS4. See the following fact sheet for additional information:

-  [MS4 Stormwater Program Overview](#)

What is a MS4

A municipal separate storm sewer system is a conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, storm drains):

- 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 districts, 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;
- Designed or used for collecting or conveying stormwater;
- Which is not a combined sewer; and
- Which is not part of a publicly owned treatment works.

Types of Small MS4s



There are three categories of regulated small MS4s: mandatory, designated and petition. Small MS4s include municipalities, townships, counties, military bases, hospitals, prison complexes, highway departments, and universities.

1. **Mandatory MS4s:** MS4s in urbanized areas as defined by the 2000 Census are required to obtain a NPDES/SDS stormwater permit. An "urbanized area" is defined as a land area comprising one or more places ("central places") and the adjacent densely settled surrounding area ("urban fringe") that together have a residential population of at least 50,000 and a density of at least 1,000 people per square mile. The definition also includes any other public storm sewer system located fully or partially within an urbanized area.

The following list identifies Minnesota's mandatory small MS4 cities, townships, and counties. The list also includes non-traditional mandatory MS4s identified by MPCA staff as requiring permit coverage. Non-traditional MS4s are publicly owned systems at military bases, hospitals, prisons, universities, highways and other thoroughfares.

-  [List of Minnesota's mandatory small MS4s](#)

Note: The cities of Minneapolis and St. Paul received individual stormwater permits in 2000.

2. **Designated MS4s:** MS4s outside of urbanized areas that have been designated by the MPCA for permit coverage under Minn. R. ch 7090 are required to obtain a NPDES/SDS stormwater permit. MS4s designated by rule are cities and townships with a population of at least 10,000; and cities and townships with a population of at least 5,000 and discharging or the potential to discharge to valuable or polluted waters. These designated MS4s are required to obtain permit coverage by February 15, 2007.
 -  [List of MS4s population 10,000 or more designated by rule](#)
 -  [List of MS4s population 5,000 to 10,000 designated by rule](#)

The rules also establish criteria that can be applied to designate future MS4s under a designation process identified in the rule. Visit the [Stormwater Program Rulemaking Web page](#) for details.

3. **Petition MS4s:** MS4s that are designated through the petition process under Minn. R. ch. 7090 are required to obtain a NPDES/SDS stormwater permit. The public can petition the Commissioner for the designation of an MS4 based on the designation criteria established in the rules. Visit the [Stormwater Program Rulemaking Web page](#) for details.

Maps of MS4s

MS4 Mapping Tool

- [MS4 mapping tool:](#) This is an electronic map tool using Geographic Information Systems (GIS) technology.

Note: This is best viewed using Internet Explorer 5.0 or higher or Netscape 6.0 or higher, with pop-up blockers disabled and screen resolution set to 1024x768 or higher.

Mandatory MS4s

- [Duluth Area](#)
- [Fargo/Moorhead Area](#)
- [Grand Forks Area](#)
- [LaCrosse/LaCrescent Area](#)
- [Minneapolis/St. Paul Area](#)
- [Rochester Area](#)
- [St. Cloud Area](#)

Note: The maps above for Duluth, Minneapolis/St. Paul and St. Cloud areas are interactive. Once you've opened one of those maps, click on a numbered area within the grid on the map to open a new map showing details of the grid area.



Designated MS4s


Maps of MS4s designated under the Minnesota Rules Chapter 7090 are available on the [Stormwater Program Rulemaking Web page](#).

Special Waters and Impaired Waters

The MS4 General Permit for MS4s near specially-protected waters require additional controls, conditions or an individual permit:

- MS4s that discharge near waters with qualities that warrant extra protection (special waters) must use additional best management practices and enhanced runoff controls (see permit Part IX).
- MS4s that discharge near an “impaired water” for which there is a total maximum daily load (TMDL) allocation for stormwater sources must meet special conditions (see permit Part IV.D).

The MPCA has several documents and an interactive map called Special Waters Search to help owners and operators of MS4s identify those waters near their MS4 that may require extra protections or an individual permit. The specific requirements are outlined in the MS4 General Permit.

- [Special Waters List](#)
- [Stormwater and Impaired Waters](#)
-  [Known Calcareous Fens List](#)
- [Final TMDLs and Implementation Plans](#)
- [Special and Impaired Waters Search](#): This is an electronic map tool using Geographic Information Systems (GIS) technology. Find the city boundary or site location of specific interest, draw the site boundaries and create a list of special waters.

MS4 Permit Requirements

















MS4s are required to develop and implement a stormwater pollution prevention program (SWPPP) to reduce the discharge of pollutants from their storm sewer system to the maximum extent practicable. The SWPPP must cover six minimum control measures.

The MS4 must identify best management practices (BMPs) and measurable goals associated with each minimum control measure. An annual report on the implementation of the SWPPP must be submitted each year.

Public Process for SWPPPs








The MPCA will provide public notice and opportunity for public comment and hearing on each MS4s proposed SWPPP. Information on the public notice process is available at the MPCA Web page [Public Notice Process for MS4 General Permit Applications](#).

Revised Permit and Program Forms

Permit/Application	Summary	Fact Sheets and Instructions
 General NPDES/SDS Permit MNR040000 for Municipal Separate Storm Sewer Systems (MS4s)	The new permit (MNR040000) becomes effective on June 1, 2006. Regulated municipalities should continue operating under the terms of the old permit until the new permit becomes effective.	 New MS4 General Permit: Overview of Changes  Nondegradation Reporting for Non-ORVW Waters
Action Items	Identifies dates for MPCA and MS4 action items.	 Milestones under 2006 MS4 Permit
  Application Instructions and Application for General Stormwater Permit MNR040000 for Small Municipal Separate Storm Sewer Systems (MS4s)	Applications for mandatory small MS4s in urbanized areas are due by June 1, 2006. Applications for the 43 MS4s designated under Minn. R. ch. 7090 are due by February 15, 2007.	
  BMP Summary Sheet Instructions and BMP Summary Sheets for General Stormwater Permit MNR040000 for Small MS4s   Additional BMP Summary Sheets	The BMP Summary Sheets are a required attachment to your permit application.	 BMP Summary Sheets: Clarifications and Supplemental Guidance   Example BMP Summary Sheets   Impaired Waters BMP Summary Sheet
2007 MS4 Annual Reports	Annual Reports are due June 30 of each year.	 MS4 Inspection and Recordkeeping






Guidance and Fact Sheets

Staff continues to draft revisions to the Guidance Manual for Small Municipal Separate Storm Sewer Systems. An updated copy of this “work in progress” is provided here. Please send any suggestions to [Lou Flynn](#).

-  [Draft Guidance Manual for Small Municipal Separate Storm Sewer Systems \(MS4\)](#)
- [Minnesota Rules Chapter 7090](#) 
- [Minnesota Rules Chapter 7050](#) 
-  [MS4 Stormwater Program Overview](#)
-  [MS4 Inspection and Recordkeeping](#)
-  [Nondegradation Reporting for Non-ORVW Waters](#)
-  [Stormwater and Wetlands: Planning and Evaluation Guidelines](#)

Best Management Practices

General


- [Minnesota Stormwater Manual](#)
- [National Stormwater Best Management Practices \(BMP\) Database](#) 
- [EPA National Menu of Best Management Practices for Stormwater Phase II](#) 
- [Protecting Water Quality in Urban Areas - MPCA Stormwater Best Management Practices Manual](#)
- [Plants for Stormwater Design](#)
- [Metropolitan Council Environmental Services - "Urban Small Sites Best Management Practices Manual"](#) 
- [Center for Watershed Protection - "Stormwater Practices For Cold Climates"](#) 
- [Water Resources Center - Assessment of Stormwater Best Management Practices Manual](#) 
- Public education and outreach
- Public participation/involvement
- Construction site runoff control
- Post-construction site runoff control
- Pollution prevention/good housekeeping

Illicit discharge, detection and elimination

-  [U.S. EPA Guidance](#)
- [Center for Watershed Protection IDDE Manual \(2004\)](#)

Stormwater Financial Assistance

The MPCA has various opportunities for receiving grants or loans for stormwater projects in Minnesota. Visit the following MPCA Web pages for information on water-related financial assistance:

- [Funding for Wastewater and Stormwater](#)
- [Other Financial Assistance Opportunities — Grants and Loans](#)
- [Minnesota Stormwater Utility Survey](#) 
- [New MS4 General Permit: Overview of Changes](#)
- [Guidance for Municipal Stormwater Funding](#) 