

# City of Minnetonka, Minnesota

## SWPPP (Storm Water Pollution Prevention Program)

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### Introduction

The City of Minnetonka is included in a group of communities that are federally required to obtain a Municipal Separate Storm Sewer System (MS4) permit for managing non-point source storm water. Non-point source storm water is generally the overland flow of storm water that does not originate from a single pipe, otherwise known as point-source storm water.

This permitting process requires cities such as Minnetonka to address how the city will regulate and improve storm water discharges. The permit must include a Storm Water Pollution Prevention Plan (SWPPP) addressing all the requirements of the permit.

The primary source for developing the city’s permit application and plan is the city’s existing Water Resources Management Plan (WRMP), adopted in 1999. The purpose of the Minnetonka WRMP is to provide a complete and intensive guide and reference for managing surface water resources within the city boundaries. The plan assists the city with policy decisions, water resource management, and implementation priorities.

The City of Minnetonka established a Stormwater Utility Fee in 2003. This fee helped to keep a continuous, dedicated funding source to meet growing stormwater management needs. The dedicated revenue source enables Minnetonka to provide improved flood protection, stormwater system maintenance, water quality protection, erosion and sediment control, improved lake water quality and wetland/resource protection. The following is a breakdown of the most current Stormwater Utility Fee revenue source:

<u>Classification</u>	<u>Description</u>	<u>Rate</u>
1	Open Space, Golf Course, Undeveloped	\$1.58/acre/month
2	Single Family and two/three-Family Residential	\$3.50/unit/month
3	Churches, Schools, & Government Buildings	\$9.45/acre/month
4	Apartments, Condos, and Railroad R/W	\$10.50/acre/month
5	Commercial & Industrial	\$26.46/acre/month

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Based on previous self-assessment processes, city staff has considered the following factors in order to meet the Maximum Extent Practicable standard set forth in the Permit:

- Sources of pollutants
- Potentially polluting activities being conducted in the watershed
- Sensitivity of receiving waters
- Uses of receiving waters
- Specific local concerns
- The size of our community
- Climate
- Implementation schedules
- Current ability to finance stormwater programs
- Hydrology
- Geology
- Capacity to perform operation and maintenance
- Local land uses
- Rate and type of development
- Characteristics of our watershed
- Organizational characteristics of our city

Minnetonka's plan addresses the six Minimum Control Measures (MCMs) outlined in the permit requirements. Many of the Best Management Practices (BMPs) required in the permit have already been developed in accordance with the City of Minnetonka's Water Resources Management Plan. The six Minimum control Measures of the permit are:

1. Public Outreach and Education
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention/Good Housekeeping

# **City of Minnetonka, Minnesota**

## **SWPPP (Storm Water Pollution Prevention Program)**

### **Minnetonka Watershed Perspective**

The City of Minnetonka is blessed with abundant physical and water resources which include wetlands, several large recreational lakes, and abundant wooded areas, parks, and recreational lands. Because of the early water management efforts of the city, these areas have been preserved from development and other pressures. Minnetonka has experienced considerable growth over the past 20 years. Currently approximately 97 percent of the city is developed.

The city has an existing Water Resources Management Plan that integrates flood control with wetland and water quality needs. Water resources are managed by balancing the conflicting needs so the whole system is optimized for public benefit. Priority water bodies are protected through classification and regional management whereby some water bodies are used to protect other higher quality ones.

#### **Primary Drainage System**

- 3 Creeks, 4 watersheds
- Approximately 381 Wetlands
- Over 600 Water Bodies
- 13 Lakes
- Ditches
- Lowland/Landlocked areas

#### **Secondary Drainage System**

- Conveyance System (MS4)
- Approximately 34 Known Outfalls
- Cross-connections

#### **Features**

- Steep Slopes
- Rolling Land
- Mostly Clayey Soils

#### **Receiving Waters**

- Generally good water quality
- Shady Oak Lake is swimmable
- Lake Rose chain of lakes are degraded

#### **Land Use**

- Category
  - Residential
  - Commercial
  - Some Industrial/Manufacturing

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- Intensity
  - Light commercial
  - Light Industrial/Manufacturing
  - Ridgedale Shopping Center
- Density
  - Moderate amounts of open space and greenways
  - ½ acre or larger residential lots
- Type and Rate
  - Established community
  - 97% Developed
  - Redevelopment and infill residential

### **Minnetonka City Perspective**

When the colonists on the Atlantic coast declared their independence from Great Britain, Minnetonka was still a part of the Spanish territory that in 1803 was included in the Louisiana Purchase.

In 1852 a claim was staked on Minnehaha Creek near McGinty Road, resulting in several firsts. The sawmill that was constructed in the thick woods of maple, oak, elm, red cedar and basswood was the first privately-operated mill in Minnesota west of the Mississippi River. The settlement of Minnetonka Mills that grew up around the mill, later to include a furniture factory and varnish/paint shop, was the first permanent European-American settlement west of Minneapolis in Hennepin County. Oak timbers from this mill were used to build the first suspension bridge across the Mississippi River at St. Anthony/Minneapolis in 1853.

Between 1883 and 1956 the area within the original 36 square mile township grew smaller as Wayzata, Hopkins, Deephaven, Woodland and St. Louis Park incorporated or annexed portions of Minnetonka. In 1956 the remaining 28 square miles were incorporated as Minnetonka Village. In 1969, Minnetonka became a city by charter.

Since the mid-1800's Minnetonka has evolved from heavily wooded wilderness through extensive farming and thriving industrialization to its present primarily residential suburban character.

Now the City of Minnetonka is a suburban community located eight miles west of Minneapolis in Hennepin County. The city has a land area of 28 square miles, and its 2000 population of 51,301 makes it the thirteenth largest city in Minnesota.

#### **Emotional Environment**

- Culture is positive
- Willing to spend funds as appropriate
- City Council and City Administration very supportive
- City Departments work and communicate well with each other

## **City of Minnetonka, Minnesota SWPPP (Storm Water Pollution Prevention Program)**

### City Government

- Council/City manager/Full Service community (see organizational charts)
- 216 Full-Time Staff plus part-time and seasonal
- In general, staff has a moderate level of understanding of stormwater issues
- Adequate technology and resources exist or are planned to be implemented

### Stakeholders

- Multiple City Departments are impacted
- Individual Citizens, Civic Groups and Business Alliances
- Condominium and Homeowner Associations
- Neighboring Phase II Communities include Deephaven, Plymouth, St Louis Park, Hopkins, Wayzata, Shorewood, Woodland, and Eden Prairie.

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**Best Management Practices (BMP) Summary**

This document summarizes the BMPs chosen by the City of Minnetonka.

**Miscellaneous BMPs**

Nondegradation for Selected MS4s
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**MCM-1: Public Education and Outreach**

1a-1	Distribute Educational Materials
1b-1	Implement an Education Program
1c-1a	Education Program: Public Education and Outreach: General Public and K-12 Students
1c-1b	Educational Program: Public Education and Outreach: Property managers
1c-1c	Education Program: Public Education and Outreach: Government Officials and Boards
1c-1d	Education Program: Public Education and Outreach: Media
1c-2a	Education Program: Public Participation: General Public
1c-2b	Education Program: Public Participation: Government Officials and Boards
1c-2c	Education Program: Public Participation: City Staff
1c-2d	Education Program: Business and Industry
1c-2e	Education Program: Media
1c-3a	Education Program: Illicit Discharge Detection and Elimination: General public
1c-2b	Education Program: Illicit Discharge Detection and Elimination: Homeowners
1c-3c	Education Program: Illicit Discharge Detection and Elimination: City Staff
1c-3d	Education Program: Illicit Discharge Detection and Elimination: Household and Industrial Cleaning Companies
1c-3e	Education Program: Illicit Discharge Detection and Elimination: Restaurants and Other Commercial Businesses
1c-3f	Education Program: Illicit Discharge Detection and Elimination: Industrial Operations
1c-3g	Education Program: Illicit Discharge Detection and Elimination: Property Managers
1c-4a	Education Program: Construction Site Run-off Control: General Public
1c-4b	Education Program: Construction Site Run-off Control: Property Managers
1c-4c	Education Program: Construction Site Run-off Control: City Staff

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1c-4d	Education Program: Construction Site Run-off Control: Architects, Engineers, and Developers
1c-4e	Education Program: Construction Site Run-off Control: Construction Industry
1c-5a	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment: General public and homeowners
1c-5b	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment: City Staff
1c-5c	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment: Architects, Engineers, and Developers
1c-5d	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment: Construction Industry
1c-5e	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment: Business and Industry
1c-6a	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations: City Grounds Maintenance Staff
1c-6b	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations: City Vehicle and Equipment Maintenance Staff
1c-6c	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations: City Building Design and Maintenance Staff
1c-6d	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations: City Street, Storm Sewer, and Water Supply Staff
1c-6e	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations: City Fire Protection and Emergency Response Staff
1d-1	Coordination of Education Program
1d-2	Volunteer Lake Monitoring (CAMP)
1d-3	Volunteer Wetland Monitoring (WHEP)
1d-4	Volunteer Stream Monitoring (VSMP)
1d-5	Conduct Informational Workshops
1d-6	Develop Watershed Organizations
1e-1	Annual Public Meeting

**MCM-2: Public Participation and Involvement**

2a-1	Comply with Public Notice Requirements
2b-1	Solicit Public Input and opinion on the Adequacy of the SWPPP
2b-2	Stormwater Community Hotline/Website
2b-3	Public Opinion and Recommendation Surveys
2c-1	Consider Public Input

**MCM-3: Illicit Discharge, Detection and Elimination**

3a-1	Storm Sewer System Map
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3b-1	Regulatory Control Program
3c-1	Illicit Discharge Detection and Elimination Plan
3d-1	Public and Employee Illicit Discharge Information Program
3e-1	Identification of Non Stormwater Discharges and Flows

**MCM-4: Construction Site Stormwater Runoff Control Measures**

4a-1	Ordinance or other Regulatory Mechanism
4b-1	Construction Site Implementation of Erosion and Sediment Control BMPs
4c-1	Waste Controls for Construction Site Operators
4d-1	Procedure for Site Plan Review
4e-1	Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance
4f-1	Establishment of Procedures for Site Inspections and Enforcement
4f-2	Road and Bridge Maintenance

**MCM-5: Post-Construction Stormwater management Measures**

5a-1	Development and Implementation of Structural and/or Non-structural BMPs
5a-2	Electronic Version of Construction Site BMPs and Installation Criteria
5a-3	Community Resource Guide for BMP Availability
5a-4	Education Classes and Workshops on Proper Erosion Control Installation Techniques
5a-5	Wet Ponds, Dry Ponds
5a-6	Underground Storage Pipe
5a-7	Infiltration Basin, Infiltration Trench, Rain Garden
5a-8	Filter/Buffer Strips
5a-9	Stabilization Seeding
5a-10	Bio-Engineering
5a-11	Structural or Hard Engineering Techniques
5a-12	Manufactured BMPs
5b-1	Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment
5b-2	Water Resources Management Plan (WRMP)
5c-1	Long-term Operation and Maintenance of BMPs

**MCM-6: Pollution Prevention/Good Housekeeping**

6a-1	Municipal Operations and Maintenance Program
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6a-2	Street Sweeping
6a-3	Storm Sewer Cleaning
6a-4	Landscaping and Lawn Care
6a-5	Park and Open Space Training
6a-6	Fleet and Building Maintenance Training Program
6a-7	Storm Sewer Maintenance Training Program
6a-8	Road Salt Materials Management Program
6a-9	Used Oil Recycling and Spill Prevention/Response Programs
6b-1	Annual Inspection of All Structural Pollution Control Devices
6b-2	Inspection of a Minimum of 20 percent of the MS4 Outfalls Sediment Basins and Ponds Each Year on a Rotating Basis
6b-3	Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas
6b-4	Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures
6b-5	Record Reporting and Retention of All Inspections and Responses to the Inspections
6b-6	Evaluation of Inspection Frequency