



City of Robbinsdale

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**City of Robbinsdale, Minnesota  
Storm Water Pollution Prevention Plan  
(SWPPP)**

**2006-2010**

Adopted by City Council – April 15, 2003  
Amended for re-issuance of permit – May 2006

## **Introduction**

The City of Robbinsdale has an ongoing responsibility for the provision and management of a stormwater system, suitably designed to safely convey runoff to adjoining receiving waters. Coupled with this, the City in partnership with other agencies and the community, is committed to halt the degradation of our lakes and waterways as a result of our lifestyle and urban expansion. A range of programs are already in place and new programs are being developed to address the cumulative impact of the pressures placed on our lakes and waterways systems. The continuation and development of such programs will provide key decision and policy makers with a better understanding of the environmental, social and economic indicators that govern the state of our natural environment, and guide choices for a sustainable future.

## **Plan Purpose**

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared to detail the programs in place and being developed that address the issue of improving quality of stormwater. Under a mandate from the Federal Environment Protection Agency (EPA), cities such as Robbinsdale are required to prepare and submit to the State Pollution Control Agency (PCA), a permit under Phase II of the National Pollution Discharge Elimination System (NPDES) program. This SWPPP outlines actions proposed by the City and co-ordinated agencies for the 5 year period commencing June 1, 2006, that aim to improve the quality of stormwater runoff into receiving waters within our City and into downstream communities.

## **Watershed Context**

The City of Robbinsdale corporate limits cover a total area of approximately 2.7 square miles (1,780 acres). Stormwater generated within the City drains to one of two watersheds – approximately 1335 acres (75% of total City area) drain to the Shingle Creek Watershed to the northeast of the City, while the remaining 445 acres (25% of total City area) drain to the Bassett Creek Watershed to the south of the City. The sub-catchments within the City do not directly drain to the main lines of Shingle Creek or Bassett Creek, but rather into a system of Lakes and Creeks that ultimately connect to the main line creeks further downstream beyond the City corporate limits.

The prominent water feature in the City is Crystal Lake. This lake is centrally located, has an area of approximately 78 acres and a maximum depth of 39 feet. The volume of Crystal Lake is approximately 925 acre-feet. The catchment area of Crystal Lake is about 1,300 acres, most of which is located within the City limits although 360 acres of catchment are contributed by the City of Minneapolis. There is no natural gravity outflow from this lake. Discharge downstream is achieved by a pump and lift station within Sanborn Park to the immediate north of the lake. This lift system pumps water from the lake into the Minneapolis storm water system at the intersection of Xerxes Avenue and 42<sup>nd</sup> Avenue. The water then flows through a gravity system to Shingle Creek.

Also located in the Shingle Creek Watershed, the Twin Lake system is located at the northern boundary of the City. Twin Lakes consists of 3 basins. South Twin Lake is entirely located within the City, has an area of approximately 24 acres, and a volume of 246 acre-feet. Stormwater from upstream communities flows through the Twin Lake system on its way downstream to Shingle Creek. The outflow of this Lake is Ryan Creek which flows to the east into Ryan Lake.

Ryan Lake is located in the northeast corner of the City. The lake has an area of approximately 32 acres, 70% of which is located in the City of Robbinsdale. The outflow of this lake is a concrete stormwater drainage pipe to the northeast into Minneapolis and eventually into Shingle Creek thence the Mississippi River.

There are two lakes within the City boundary that lie within the Bassett Creek watershed. All of Grimes Pond and part of Rice Lake are located in the south western corner of the City. The catchment area upstream of these lakes is 460 acres, some of which is located in the adjoining communities of Minneapolis, Golden Valley and Crystal. Stormwater flows into Grimes Pond, under the BNSF railroad tracks, into Rice Lake and ultimately into Bassett Creek beyond the City boundary.

## **Landuse and Physical Attributes**

The predominant form of land usage within the City is residential (approximately 48%), with a central spine of commercial area, including a downtown. A number of parks are dispersed throughout the City and these occupy approximately 11% of the total City area.

The topography consists of generally mild slopes throughout the City, with an area of steeper grades in the southernmost section of the City.

Soil types range from yellowish or reddish brown sandy loam in the southwestern two thirds of the City, and sand, gravel sand and loamy sand covered by loam and organic sediment in the northeastern one third of the City.

The City has general records of the storm sewer conveyance system, including position of catch basins and discharge points into receiving waters. These plans will be verified for accuracy, and amended as further details become better known.

## **Self Assessment**

Before determining the appropriate programs to incorporate into the SWPPP, a process of self assessment was undertaken.

City Staff attended a workshop hosted by the League of Minnesota Cities (LMC) that detailed a process to follow to undertake self assessment and develop a SWPPP incorporating the selection of appropriate Best Management Practices (BMP's).

In order to evaluate relevant local information, an internal staff workshop was held, involving the City Manager and all Department Heads. This workshop briefed staff on the Phase II NPDES permit process, and sought a review of departmental operations in terms of the Minimum Control Measures (MCM's) and BMP's.

Each Department was required to review their current operations in detail, identify existing practices that contribute to good water quality, and how the introduction of new practices could be incorporated into these operations to make water quality even better.

Observations of potential threats and existing behaviors that may have impact on storm water quality were also sought. All these items were further discussed at a subsequent meeting, and responses were collected and compiled to help guide the formulation the individual BMP's within this SWPPP.

## **Municipal Facilities**

All operations of the City are covered under this SWPPP and the associated general storm water permit. Following review of City operation, none of the activities undertaken by the City have been considered as needing a separate industrial permit under the NPDES Phase II project. Each facility has been included in evaluation during the self-assessment phase of this plan formulation, with BMP's developed and included as appropriate.

### **City Hall**

City Hall is located at 4100 Lakeview Avenue North. The general administrative functions of the City are operated out of this building.

### **Public Works Facility**

This facility is located at 4601 Toledo Avenue North. This site undertakes the general storage and maintenance of the City owned street and parks maintenance fleet. The seasonal road salt storage facilities are located at this site.

### **Public Safety Building**

Located at 4101 Hubbard Avenue North, this building houses the operations of the City Police service and Fire Department.

### **Water Treatment Plants**

The City operates three water filter plants that treat and distribute water for use throughout the City. The plants are located at –

- 4127 Hubbard Avenue North
- 3507 Oakdale Avenue North
- 5115 38<sup>th</sup> Avenue North

### **Miscellaneous Operations**

The following list identifies miscellaneous operations of the City and their location –

- Historic Library Building – 4915 42<sup>nd</sup> Avenue North
- Municipal Liquor Store – 4150 Lakeland Avenue North

## **Minimum Control Measures (MCM's)**

To achieve compliance with the Phase II NPDES permit requirements, this SWPPP contains actions to address the six MCM's –

1. Public Outreach and Education
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Controls
5. Post Construction Stormwater Management in New Development and Redevelopment
6. Pollution Prevention and Good Housekeeping

The development of actions in this plan have been guided by the need to meet these six MCM's.

## **Partnering Agencies**

The City of Robbinsdale has entered into water resource related agreements that assist in the governing of how the City manages the water resources within its corporate limits. This consists of joint powers agreements between the City and the following organizations –

- Shingle Creek Watershed Commission
- Bassett Creek Watershed Commission

Consequently, the Shingle Creek Watershed Commission and Bassett Creek Watershed Commission are key resources for member Cities in terms of general water management issues.

Programs that involve the public education, participation and involvement aspects of stormwater management are often best undertaken at a watershed level in order to achieve consistency of message and economies of scale. With this in mind, the City itself will not be developing the BMP's required for compliance with the Public Outreach and Education and Public Participation and Involvement components of the permit, but will be partnering with the watershed commissions as they develop these programs on behalf of all member cities.

## **Amendment Procedure**

This SWPPP covers the period June 1, 2006 to June 1, 2010. In the interest of flexibility as more efficient technologies and new methods become available, the document must have an ability to be amended on an annual basis in order to continuously achieve City Council and regulatory goals.

Throughout the duration of this plan, any resident, business owner within the City, or staff member may seek amendment to the plan as part of the annual review process. The proper procedure to initiate a review shall involve the submission of a written request, addressed to the City Manager, detailing the elements of amendment sought.

All written amendment requests received will be reviewed by staff, who will determine whether the amendment as sought has merit. The following process will then be applied by the review staff –

- Reject the amendment as unnecessary.
- Accept the change and amend the SWPPP as part of the annual review and reporting process.
- In cases where the amendment may have a significant impact on City financial or other resources, the request will be considered by City Council in the form of a memo and / or public hearing. Based on the details provided and the merits of the individual case, the City Council will either accept or reject the amendment. The amendment if approved and if necessary, will then be referred to the appropriate agency for comment and /or approval.

All amendments will be forwarded to the Minnesota Pollution Control Agency for their information and review with the Annual Report.

## BMP Summary

The following list is a summary of actions to be undertaken by the City and its agencies to achieve compliance with the requirements of the NPDES Phase II permit.

### Minimum Control Measure – Public Education and Outreach

1a-1	Distribute Educational Materials
1b-1	Implement and Educational Program
1c-1	Education Program: Public Education and Outreach
1c-2	Education Program: Public Participation
1c-3	Education Program: Illicit Discharge Detection and Elimination
1c-4	Education Program: Construction Site Run-off Control
1c-5	Education Program: Post Construction Stormwater Management in New Development and Redevelopment
1c-6	Education Program: Pollution Prevention/ Good Housekeeping for Municipal Operations
1d-1	Co-ordination of Education Program
1e-1	Annual Public Meeting

### Minimum Control Measure – Public Participation and Involvement

2a-1	Comply with Public Notice Requirements
2b-1	Solicit Public Input and Opinion on the Adequacy of the SWPPP
2c-1	Consider Public Input

### Minimum Control Measure – Illicit Discharge Detection and Elimination

3a-1	Storm Sewer System Map
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

**Minimum Control Measure – Construction Site Stormwater Runoff Controls**

4a-1	Ordinance or Other Regulatory Mechanism
4b-1	Construction Site Implementation of Erosion and Sediment Control BMP's
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 Non Compliance
4f-1	Establishment of Procedures for Site Inspections and Enforcement

**Minimum Control Measure – Post Construction Stormwater Management in New Development and Redevelopment**

5a-1	Development and Implementation of Structural and / or Non Structural BMP's
5b-1	Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment
5c-1	Long Term Operation and Maintenance of BMP's

**Minimum Control Measure – Pollution Prevention / Good Housekeeping**

6a-1	Municipal Operations and Maintenance Program
6a-2	Street Sweeping
6a-3	Yard Waste Collection
6a-4	Spill Response Plan
6b-2	Annual Inspection of All Structural Pollution Control Devices

6b-3	Inspection of a Minimum of 20 % of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis
6b-4	Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas
6b-5	Inspection Follow up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures
6b-6	Record Reporting and Retention of all Inspections and Responses to the Inspections
6b-7	Evaluation of Inspection Frequency