



# Storm Water Pollution Prevention Plan (SWPPP)



**Effective Date: June 1, 2006**  
**Expiration Date: May 31, 2011**

**Prepared May 2006**

## Table of Contents

Part I.	Permit Goals .....	3
Part II.	Coverage Under This Permit.....	3
Part III.	Application Requirements (Notice of Intent).....	4
Part IV.	Rights and Responsibilities .....	5
Part V.	Storm Water Pollution Prevention Program .....	5
Part VI.	Evaluating, Recordkeeping and Reporting .....	51
Part VII.	Appendix A: Standard Conditions .....	52
Part VIII.	Appendix B: Definitions .....	54
Part IX.	Appendix C: Limitations on Coverage .....	54
Part X.	Appendix D: Nondegradation for Selected MS4s.....	60
Part XI.	Appendix E: Selected MS4s.....	60

## **PART I. PERMIT GOALS**

The primary goal of the Minnesota Pollution Control Agency (MPCA) Municipal Separate Storm Sewer System (MS4) General Permit (MNR040000) is to restore and maintain the chemical, physical, and biological integrity of Waters of the State through management and treatment of storm water runoff. This is accomplished by management of MS4 systems with Storm Water Pollution Prevention Programs (SWPPPs) developed by individual system owners/operators. The purpose is to maintain water quality standards where there is compliance, and help bring waters that do not meet water quality standards into compliance. The format of this SWPPP follows the format of the MS4 Permit.

## **PART II. COVERAGE UNDER THIS PERMIT**

### **A. Eligibility**

The City of Moorhead is designated as a small MS4 and is therefore required to obtain coverage under the MS4 permit.

### **B. Limitations on Coverage**

1. The City of Moorhead obtains authorization from the MPCA to discharge storm water through the MS4 Permit. Once approved by the MPCA, this SWPPP is an enforceable part of the MS4 Permit for the City of Moorhead. Neither the MS4 Permit nor this SWPPP authorize discharges other than storm water.
2. The MS4 permit and this SWPPP do not authorize the discharge of storm water when a separate National Pollutant Discharge Elimination System (NPDES) permit is required.
3. The MS4 permit and this SWPPP do not authorize the discharge of storm water from any other entity located in the drainage area or outside the drainage area. Only the portions of the storm sewer system under the operational control of the City of Moorhead are authorized.
4. Part IX of this SWPPP addresses:
  - a. discharges to waters with Prohibited Discharge,
  - b. discharges to waters with Restricted Discharge,
  - c. discharges to Trout Waters,
  - d. discharges to Wetlands,
  - e. discharges requiring Environmental Review,
  - f. discharges Affecting Threatened or Endangered Species,
  - g. discharges Affecting Historic or Archeological Sites, and
  - h. discharges Affecting Source Water Protection Areas.

### **C. Obtaining Authorization**

1. The City of Moorhead submitted an application, including this SWPPP, in accordance with the requirements of Part III of the MS4 permit.
2. If ownership or significant operational control of the City of Moorhead storm sewer system changes, a new application will be submitted in accordance with Part III of the MS4 permit.
3. The MPCA will review the application and this SWPPP for completeness and compliance with the MS4 permit, determine whether to approve or deny coverage if the application is deemed complete, and provide public notice with the opportunity for hearing on the determination. Upon approval by the MPCA, the City of Moorhead is authorized to discharge storm water.

## **PART III. APPLICATION REQUIREMENTS (Notice of Intent)**

### **A. Deadline for Application**

The City of Moorhead submitted the application and all other required documents to the MPCA on the application deadline and effective date of the current MS4 Permit (June 1, 2006).

### **B. Signature**

1. As the person with operational control of the City of Moorhead, the City Manager signed the MS4 permit application.
2. The person responsible for overall compliance with the MS4 permit and SWPPP is the City Engineer.

### **C. Application Attachments: Storm Water Pollution Prevention Program**

1. The Best Management Practices (BMPs) that will be implemented in this SWPPP are listed on the BMP summary sheets located in Part V.G.
2. Measurable goals for each BMP are outlined in the BMP summary sheets located in Part V.G. Required actions for the measurable goals consist of milestones and the frequency of action, in narrative or numeric form.
3. Estimated timeline(s) of each measurable goal are outlined on the BMP summary sheets located in Part V.G.
4. The individuals responsible for implementing individual components of the SWPPP are Andrea J. Crabtree - Environmental & Regulatory Compliance Manager and Andrew Bradshaw - Civil Engineer I.

#### **D. Where to Submit**

The MS4 Permit application, this SWPPP, annual reports (Part VI.D), and other required submittals are sent to the Storm Water Management Unit of the MPCA.

#### **E. Record Retention**

A copy of the MS4 Permit application, this SWPPP, all data and information used by the City of Moorhead to complete the application, and any information developed as a requirement of the MS4 permit, or as requested by the Commissioner, will be retained for at least three (3) years beyond the date the current MS4 permit expires (May 31, 2006).

### **PART IV. RIGHTS AND RESPONSIBILITIES**

- A. The Commissioner may modify the MS4 permit or issue other permits, in accordance with Minn. R. ch. 7001. This may include more stringent effluent limitations or permit requirements that modify or are in addition to the minimum control measures in Part V.G. of the MS4 Permit and this SWPPP, or both.
- B. The City of Moorhead is designated for MS4 coverage. The City of Moorhead must comply with the MS4 permit requirement.
- C. If need be, the City of Moorhead may request individual permits based on Minn.R.ch.7000, 7001, and other applicable rules.
- D. There are currently several impairments on the Draft 2006 Section List of Impaired Waters under Section 303(d) of the Clean Water Act for the Red River of the North near Moorhead/Fargo, including listings for fecal coliform and turbidity. The City of Moorhead has not identified any warranted changes to this SWPPP that will reduce the impact of the MS4 discharge. No Waste Load Allocation (WLA) has been set for any Moorhead/Fargo stretches of the River. If a USEPA-approved Total Maximum Daily Load (TMDL) is developed with a WLA including storm water sources, this SWPPP will be reviewed and modified, as appropriate, within 18 months after the TMDL WLA is approved.

### **PART V. STORM WATER POLLUTION PREVENTION PROGRAM**

- A. This SWPPP was developed to reduce the discharge of pollutants to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.
- B. This SWPPP must be designed and managed to reduce pollutants from the storm sewer system to the Maximum Extent Practicable (MEP). The Moorhead MS4 must also be managed to comply with the Clean Water Act and the terms and conditions of the MS4 Permit. This SWPPP consists of BMPs the City of Moorhead has determined appropriate to meet the requirements of the MS4 Permit.

- C. An annual report on the implementation of this SWPPP must be submitted by June 30<sup>th</sup> of each year to the MPCA. The annual report covers the entire previous calendar year.
- D. This SWPPP includes BMP summary sheets to control or reduce pollutants within the City of Moorhead MS4 system.
- E. Each minimum control measure includes a description of the BMPs for the measure, responsible department in charge, an implementation schedule, and measurable goals used to determine the success or benefits of the BMPs. The Wastewater/Storm Water Section of the Engineering Department is responsible for each minimum control measure.
- F. Modifications to the SWPPP that are required or allowed by the MS4 permit shall become enforceable provisions.
- G. The following pages contain BMP summary sheets developed to meet the requirements of Part V.G of the MS4 permit. The MS4 Permit contains the specific requirements for the six minimum control measures:
  - 1. Public Education and Outreach,
  - 2. Public Participation,
  - 3. Illicit Discharge Detection and Elimination,
  - 4. Construction Site Storm Water Runoff Control,
  - 5. Post-construction Storm Water management in New Development and Redevelopment, and
  - 6. Pollution Prevention/Good housekeeping for Municipal Operations.

## Minimum Control Measure 1

### PUBLIC EDUCATION AND OUTREACH

Key to Unique BMP ID Numbers	BMP Summary Sheet Title	Permit Reference
1a-1	Distribute Educational Materials	<b>V.G.1.a</b>
1b-1	Implement an Education Program	<b>V.G.1.b</b>
1c-1	Education Program: Public Education and Outreach	<b>V.G.1.c</b>
1c-2	Education Program: Public Participation	<b>V.G.1.c</b>
1c-3	Education Program: Illicit Discharge Detection and Elimination	<b>V.G.1.c</b>
1c-4	Education Program: Construction Site Run-off Control	<b>V.G.1.c</b>
1c-5	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment	<b>V.G.1.c</b>
1c-6	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations	<b>V.G.1.c</b>
1d-1	Coordination of Education Program	<b>V.G.1.d</b>
*1d-2	Red River Water Festival	<b>V.G.1.d</b>
*1d-3	S.S. Ruby Pontoon Tours	<b>V.G.1.d</b>
1e-1	Annual Public Meeting	<b>V.G.1.e</b>

\* EXCEEDS MINIMUM CONTROL MEASURES

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 1-PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1a-1

**\*BMP Title:** Distribute Educational Materials

**\*BMP Description:**

The City will publish storm water article(s) in the City Insights newsletter to update and educate residents and City staff. The newsletter is sent to all residents and city departments three times per year.

**\*Measurable Goals:**

- Annual article published in City Insights newsletter
- Number of City Insights distributed with storm water related information

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Continue to prepare and submit at least one article per year, adjust goal and frequency as necessary

**Specific Components and Notes:**

- Volunteer opportunities
- Storm water pollution prevention practices for citizens and households
- Educational items directed towards the community

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree  
Department: Engineering/Wastewater  
Phone: 218-299-5386  
E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1b-1

<b>*BMP Title:</b> Implement an Education Program
<b>*BMP Description:</b> The City has an Education Program which includes City staff training, City Council presentations, storm water articles, a City website, and the efforts of a local non-profit group named River Keepers.
<b>*Measurable Goals:</b> <ul style="list-style-type: none"><li>• Annual article(s) published in the City Insights newsletter (1a-1)</li><li>• Annual article(s) published in the CoMmunicator newsletter</li><li>• Annual presentation to City Council completed</li><li>• Record of updates on the City Website</li><li>• Number of citizens and students attending River Keeper events</li></ul>
<b>*Timeline/Implementation Schedule:</b> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Each measurable goal is assessed annually except the website which is updated more frequently.</li></ul>
<b>Specific Components and Notes:</b> <ul style="list-style-type: none"><li>• Newsletter article(s)</li><li>• Presentation to City Council – SWPPP overview and annual report</li><li>• Update information on City website</li><li>• Continue governmental/contributor sponsorship of River Keepers</li><li>• Provide staff assistance as needed for River Keepers’ educational activities and event preparation</li></ul>
<b>*Responsible Party for this BMP:</b> Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-1

<p><b>*BMP Title:</b> Education Program: Public Education and Outreach</p>
<p><b>*Audience(s) Involved:</b></p> <ul style="list-style-type: none"> <li style="display: inline-block; width: 30%;">• City Staff (1b-1)</li> <li style="display: inline-block; width: 30%;">• Resident/Homeowner (1a-1)</li> <li style="display: inline-block; width: 30%;">• Commercial Businesses (3d-1)</li> <li style="display: inline-block; width: 30%;">• City Council (1b-1)</li> <li style="display: inline-block; width: 30%;">• Students (1d-2 &amp; 2d-1)</li> <li style="display: inline-block; width: 30%;">• Building Contractors (1c-4)</li> </ul>
<p><b>*Educational Goals for Each Audience:</b></p> <ul style="list-style-type: none"> <li>• City Staff – Awareness and understanding of the Phase II program and storm water pollution</li> <li>• City Council – Present program goals and accomplishments at the annual meeting</li> <li>• Resident/Homeowner – Increase awareness of what can be done to help protect water quality</li> <li>• Students – Increase awareness of what can be done to help protect water quality</li> <li>• Commercial Businesses – Distribute business practice specific literature that targets storm water</li> <li>• Building Contractors – Awareness and understanding of Erosion and Sediment Control Standards</li> </ul>
<p><b>*Activities Used to Reach Educational Goals:</b></p> <ul style="list-style-type: none"> <li>• City Staff - City of Moorhead CoMmunicator newsletters</li> <li>• City Council – Presentation once a year</li> <li>• Resident/Homeowner – Insights newsletter, S.S. Ruby tours (1d-3) and River Keepers events</li> <li>• Students –Presentation about the Red River, watersheds, pollution sources and prevention, conservation, and basic hydrology</li> <li>• Commercial Businesses – Educational literature</li> <li>• Building Contractors – Presentation(s), City website and newsletter article(s)</li> </ul>
<p><b>*Activity Implementation Plan:</b></p> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"> <li>• Year 2006 through 2010             <ol style="list-style-type: none"> <li>1. City Staff – Publish at least one article per year in the CoMmunicator</li> <li>2. City Council – Presentation on a yearly basis to explain specific components</li> <li>3. Resident/Homeowner – Publish at least one article per year in City Insights</li> <li>4. Students – Red River Water Festival (1d-2) and Storm Drain marking program (2d-1)</li> <li>5. Commercial Businesses – Literature distribution as needed</li> <li>6. Building Contractors – Presentation(s) and update City website as needed</li> </ol> </li> </ul>
<p><b>*Performance Measures:</b></p> <ul style="list-style-type: none"> <li>• City Staff – Annual article printed in the CoMmunicator</li> <li>• City Council – Completed presentation</li> <li>• Resident/Homeowner – Annual article published in Insights</li> <li>• Students – Number of students attending</li> <li>• Commercial Businesses – Number of businesses mailed literature</li> <li>• Building Contractors – Completed presentation(s) as needed</li> </ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree</p> <p>Department: Engineering/Wastewater</p> <p>Phone: 218-299-5386</p> <p>E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-2

<p><b>*BMP Title:</b> Education Program: Public Participation</p>
<p><b>*Audience(s) Involved:</b></p> <ul style="list-style-type: none"> <li>• Public – residents, homeowners, and business owners</li> </ul>
<p><b>*Educational Goals for Each Audience:</b></p> <ul style="list-style-type: none"> <li>• Increase public awareness and understanding of storm water issues</li> <li>• Inform and educate the public about the SWPPP, 24 hour community hotline and e-mail address (3c-1), and City website (1b-1)</li> <li>• Educate the public about volunteer opportunities like the Storm Drain marking program (2d-1)</li> </ul>
<p><b>*Activities Used to Reach Educational Goals:</b></p> <ul style="list-style-type: none"> <li>• City Insights newsletter – Publish at least one article each year (1a-1)</li> <li>• Public Information Meeting Notice – Notice in the Fargo Forum newspaper</li> <li>• Community Hotline and e-mail address - Information on City website and distributed in educational materials</li> <li>• Storm Drain Marking Program (2d-1) – Promote through River Keepers</li> </ul>
<p><b>*Activity Implementation Plan:</b></p> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"> <li>• Year 2006 through 2010               <ol style="list-style-type: none"> <li>1. The City will Publish at least one article per calendar year</li> <li>2. The City will provide a 30 day notice for the annual storm water meeting</li> <li>3. Information on the 24 hour community hotline and e-mail address is promoted through newsletters, the City website and presentations</li> <li>4. Provide volunteers with supplies for the Storm Drain Marking Program (2d-1) and coordinate with River Keepers</li> </ol> </li> </ul>
<p><b>*Performance Measures:</b></p> <ul style="list-style-type: none"> <li>• Published storm water article annually</li> <li>• Completed Public Notice</li> <li>• Number of calls and e-mails to the community hotline</li> <li>• Number of volunteers participating in the Storm Drain Marking Program (2d-1)</li> </ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree</p> <p>Department: Engineering/Wastewater</p> <p>Phone: 218-299-5386</p> <p>E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-3

<b>*BMP Title:</b> Education Program: Illicit Discharge Detection and Elimination
<b>*Audience(s) Involved:</b> <ul style="list-style-type: none"><li>• City Staff</li><li>• Residents/Homeowners</li><li>• Business Owners</li></ul>
<b>*Educational Goals for Each Audience:</b> <ul style="list-style-type: none"><li>• City Staff – Educate City staff on acceptable and prohibited discharges (3c-1)</li><li>• Residents/Homeowners – Educate the public about the Household Hazardous Waste Program (3d-1)</li><li>• Business Owners – Educate owners/managers about acceptable and prohibited discharges (3c-1)</li></ul>
<b>*Activities Used to Reach Educational Goals:</b> <ul style="list-style-type: none"><li>• City Staff – Annual Article published in the CoMmunicator</li><li>• Residents/Homeowners – Information on website and through article(s) in City Insights</li><li>• Business Owners – Targeted mailing to building owners and article(s) in City Insights</li></ul>
<b>*Activity Implementation Plan:</b> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"><li>• Year 2006 through 2010<ol style="list-style-type: none"><li>1. City Staff – Published Annual article in CoMmunicator</li><li>2. Residents/Homeowners – Promotion through information on the City website, and published article(s) in City Insights</li><li>3. Business Owners – Distribute information to target businesses</li></ol></li></ul>
<b>*Performance Measures:</b> <ul style="list-style-type: none"><li>• City Staff – Training as needed</li><li>• Residents/Homeowners – Amount of hazardous waste and products collected</li><li>• Business Owners – Information mailed to targeted businesses</li></ul>
<b>*Responsible Party for this BMP:</b> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-4

<b>*BMP Title:</b> Education Program: Construction Site Run-off Control
<b>*Audience(s) Involved:</b> <ul style="list-style-type: none"><li>• Residential Construction</li><li>• Commercial Construction</li><li>• Utility Construction</li><li>• City Staff</li></ul>
<b>*Educational Goals for Each Audience:</b> <ul style="list-style-type: none"><li>• Residential Construction – Educate Home Builders on Single Family Residential Erosion/Sediment Control Standards</li><li>• Commercial Construction – Educate contractors on Commercial Erosion/Sediment Control Standards</li><li>• Utility Construction – Educate Utility companies on Utility Erosion/Sediment Control Standards</li><li>• City Staff – Educate City Staff on Erosion/Sediment Control Standards</li></ul>
<b>*Activities Used to Reach Educational Goals:</b> <ul style="list-style-type: none"><li>• Presentation(s)</li><li>• Website (1b-1)</li><li>• Correspondence</li><li>• Awareness of established City erosion/sediment control standards and permits</li></ul>
<b>*Activity Implementation Plan:</b> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Inform and educate City staff, builders, contractors, and developers of erosion and sediment control standards through correspondence, presentations, and meetings.</li></ul>
<b>*Performance Measures:</b> <ul style="list-style-type: none"><li>• Completed presentation(s) as needed</li><li>• Keep website up to date and make any necessary changes</li><li>• Correspondence distributed as needed</li></ul>
<b>*Responsible Party for this BMP:</b> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-5

<b>*BMP Title:</b> Education Program: Post-Construction Stormwater Management in New Development and Redevelopment
<b>*Audience(s) Involved:</b> <ul style="list-style-type: none"><li>• City Staff</li></ul>
<b>*Educational Goals for Each Audience:</b> <ul style="list-style-type: none"><li>• Educate staff with responsibilities related to the Post-Construction Storm Water Management in New Development and Redevelopment</li></ul>
<b>*Activities Used to Reach Educational Goals:</b> <ul style="list-style-type: none"><li>• Training, certification courses, and workshops</li></ul>
<b>*Activity Implementation Plan:</b> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Continue with training components as appropriate</li></ul>
<b>*Performance Measures:</b> <ul style="list-style-type: none"><li>• Number of employee's trained</li></ul>
<b>*Responsible Party for this BMP:</b> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1c-6

<b>*BMP Title:</b> Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations
<b>*Audience(s) Involved:</b> <ul style="list-style-type: none"><li>• City Staff</li></ul>
<b>*Educational Goals for Each Audience:</b> <ul style="list-style-type: none"><li>• Park and Open Space Maintenance Program (6a-1)</li><li>• Building Maintenance Program (6a-1)</li><li>• Fleet Maintenance Program (6a-1)</li></ul>
<b>*Activities Used to Reach Educational Goals:</b> <ul style="list-style-type: none"><li>• Training for employees</li></ul>
<b>*Activity Implementation Plan:</b> <p>The responsible party for this program is the Environmental &amp; Regulatory Compliance Staff</p> <ul style="list-style-type: none"><li>• Year 2006 – Develop a training program</li><li>• Year 2007 – Implement a training program</li><li>• Year 2008 through 2010 – Assess and make changes to the training program as necessary</li></ul>
<b>*Performance Measures:</b> <ul style="list-style-type: none"><li>• Number of employees trained per year</li></ul>
<b>*Responsible Party for this BMP:</b> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1d-1

<p><b>*BMP Title:</b> Coordination of Education Program</p>
<p><b>*BMP Description:</b></p> <p>The City utilizes a local non-profit group called River Keepers. The City is involved with many activities through this program, the Red River Water Festival (1d-2), S.S. Ruby pontoon tours (1d-3), and the Storm Drain marking program (2d-1).</p> <p>The City will continue to support and assist River Keepers and other various River Keeper's educational activities and programs. Additional items include a semi-annual "Mouth of the River" newsletter, community presentations, and a website. The City will also meet and work with River Keepers to revive, renew, develop, and/or identify other programs or activities that increase the public's understanding of storm water pollution.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of articles with storm water pollution related information and distribution of newsletter</li><li>• Number of citizens receiving information relating to storm water pollution</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Assess activities and modify as necessary</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Continue governmental/contributor sponsorship of River Keepers</li><li>• Continue to provide support from various City staff</li><li>• Provide letters of support for River Keepers' grant funding applications</li><li>• Contribute to and/or document storm water related newsletter articles</li><li>• Assist with and/or document any additional storm water education performed by River Keepers</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



## Additional BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 1-PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1d-2

<p><b>*BMP Title:</b> Red River Water Festival</p>
<p><b>*BMP Description:</b></p> <p>A local non-profit group called River Keepers conducts an annual Red River Water Festival for 4<sup>th</sup> grade students. Informational booths, activities, and presentations are used to educate the students about the Red River, watersheds, pollution sources and prevention, conservation, and basic hydrology.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of students attending</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Continue to assist with the Red River Water Festival through in-kind contributions.</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Provide staff assistance, as needed, for education activities and event preparation</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Additional BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 1-PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1d-3

<p><b>*BMP Title:</b> S.S. Ruby Pontoon Tours</p>
<p><b>*BMP Description:</b></p> <p>River Keepers owns a custom designed, Coast Guard inspected pontoon boat used for tours on the Red River. In addition to history, geography, and wildlife, tours include an explanation of the connection between the public and the storm sewer outlets seen along the river tour. The City of Moorhead covered a significant portion of the pontoon purchase price, built a landing, and performs corrective maintenance on the landing.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of passengers boarding</li><li>• Corrective maintenance performed on landing</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Continue corrective maintenance on landing as needed</li><li>• Year 2006 through 2010 – Provide input, as needed, to the storm water information presented on the tour</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Maintenance of landing area, as needed</li><li>• Log maintenance activities</li><li>• Public information provided for tours</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 1e-1

<p><b>*BMP Title:</b> Annual Public Meeting</p>
<p><b>*BMP Description:</b></p> <p>The City will hold a public hearing for the Storm Water Pollution Prevention Program each year to discuss the provisions of the SWPPP, its effectiveness, and amendments thereto.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Conducted Public Meeting</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – A 30-day notice will be given for the annual public meeting addressing the SWPPP annual report (2a-1). If periodic meetings become necessary additional 30-day notices will be given.</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Date, time, location, and description of how the meeting will be conducted</li><li>• Location of the SWPPP for review prior to the meeting</li><li>• A public notice will be placed in the Fargo Forum newspaper</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Minimum Control Measure 2

### PUBLIC PARTICIPATION/INVOLVEMENT

<b>Key to Unique BMP ID Numbers</b>	<b>BMP Summary Sheet Title</b>	<b>Permit Reference</b>
2a-1	Comply with Public Notice Requirements	<b>V.G.2.a</b>
2b-1	Solicit Public Input and opinion on the Adequacy of the SWPPP	<b>V.G.2.b</b>
2c-1	Consider Public Input	<b>V.G.2.c</b>
*2d-1	Storm Drain Marking Program	

\* EXCEEDS MINIMUM CONTROL MEASURES

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 2-PUBLIC PARTICIPATION/INVOLVEMENT

**Unique BMP Identification Number:** 2a-1

<p><b>*BMP Title:</b> Comply with Public Notice Requirements</p>
<p><b>*BMP Description:</b></p> <p>The City will provide a Public Notice for the annual storm water meeting (1e-1) or any subsequent meeting to discuss the provisions of the SWPPP, its effectiveness, or amendments thereto.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Completed required Public Notices</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Publish a notice for the Annual Public Meeting (1e-1) in each year of the permit cycle. If additional meetings become necessary, additional 30-day notices will be implemented.</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• 30-day notice of public informational meetings</li><li>• Date, time, and location of meetings</li><li>• Description of how the meetings will be conducted</li><li>• Location of where a copy of the SWPPP is available for public review.</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 2-PUBLIC PARTICIPATION/INVOLVEMENT

**Unique BMP Identification Number:** 2b-1

<p><b>*BMP Title:</b> Solicit Public Input and Opinion on the Adequacy of the SWPPP</p>
<p><b>*BMP Description:</b></p> <p>An annual public meeting will be conducted prior to the submittal of the annual report to receive public input and opinion on the adequacy of the SWPPP (1e-1). At the meeting, the City will afford an opportunity for interested citizens to be heard with respect to the SWPPP. Written comments on the SWPPP may be submitted in advance of the public hearing.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Record of Comments</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• April/May 2007 through 2011 – Conduct Annual Meeting for previous calendar year.</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Afford interested persons a reasonable opportunity to make oral statements concerning the SWPPP</li><li>• Consider timely, relevant written materials that interested persons submit concerning the SWPPP</li><li>• Establish procedures and processes for speakers and written material</li><li>• Consider public input from the meeting to the SWPPP and make adjustments deemed appropriate</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 2-PUBLIC PARTICIPATION/INVOLVEMENT

**Unique BMP Identification Number:** 2c-1

<p><b>*BMP Title:</b> Consider Public Input</p>
<p><b>*BMP Description:</b></p> <p>Along with the annual meeting, the City has developed a community hotline and e-mail address for residents to report illicit discharges, provide comments on the SWPPP, report construction site sedimentation and erosion control violations, and voice any other storm water related questions or concerns.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of phone calls and e-mails</li><li>• Record of decisions</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Assess procedures and modify as necessary</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Complaint receipt program</li><li>• Citizen reports on illicit discharges and activities</li><li>• Citizen reports on storm water related questions and concerns</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Additional BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 2-PUBLIC PARTICIPATION/INVOLVEMENT

**Unique BMP Identification Number:** 2d-1

<p><b>*BMP Title:</b> Storm Drain Marking Program</p>
<p><b>*BMP Description:</b></p> <p>The City will work with and provide resources to River Keepers existing storm drain marking program. Volunteers are provided with marking supplies and door hangers to distribute in the area being marked. Assistance, as needed, may include storm sewer maps for areas to be marked, purchase of marking supplies, and assistance in promotion of the program.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of storm drains marked</li><li>• Number of volunteers participating in the program</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Continue to promote the program, provide supplies, and in-kind contributions</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Selection and purchase supplies</li><li>• Program reference in City publications</li><li>• In-kind staff contributions</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



## Minimum Control Measure 3

### ILLICIT DISCHARGE DETECTION AND ELIMINATION

<b>Key to Unique BMP ID Numbers</b>	<b>BMP Summary Sheet Title</b>	<b>Permit Reference</b>
3a-1	Storm Sewer System Map	<b>V.G.3.a</b>
3b-1	Regulatory Control Program	<b>V.G.3.b</b>
3c-1	Illicit Discharge Detection and Elimination Plan	<b>V.G.3.c</b>
3d-1	Public and Employee Illicit Discharge Information Program	<b>V.G.3.d</b>
3e-1	Identification of Non Stormwater Discharges and Flows	<b>V.G.3.e</b>

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 3-ILLCIT DISCHARGE DETECTION AND  
ELIMINATION

**Unique BMP Identification Number:** 3a-1

<p><b>*BMP Title:</b> Storm Sewer System Map</p>
<p><b>*BMP Description:</b></p> <p>The City has completed a storm sewer map in ArcGIS format. The City will continue to update the system map as needed.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Update storm sewer system map</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Review the storm sewer system map by the end of each reporting year to ensure that all updates from the previous construction season are included or scheduled for inclusion.</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Ponds, streams, wetlands, structural pollution control devices, all pipes 24 inch in diameter or greater and all outfalls within the storm sewer system.</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

**Unique BMP Identification Number:** 3b-1

<p><b>*BMP Title:</b> Regulatory Control Program</p>
<p><b>*BMP Description:</b></p> <p>The City approved a comprehensive storm water ordinance in April 2005. The ordinance includes prohibition of non-storm water discharge into the storm sewer system. As the program continues, the City will review the current ordinance and revise it accordingly to meet regulatory requirements.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Annual review of storm water ordinance and compilation of identified changes for future revisions</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Review and compile ordinance changes</li><li>• Year 2006 through 2010 – Revise ordinance as deemed necessary</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Meetings with the City Attorney, Building Codes, Planning and Zoning, and other City staff as appropriate</li><li>• Coordinate with neighboring MS4 communities</li><li>• Septic system control, illicit connection control, illegal dumping, and recreational vehicle sewage</li><li>• Right of entry provision</li><li>• Enforcement procedures</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 3-ILLICIT DISCHARGE DETECTION AND ELIMINATION

**Unique BMP Identification Number:** 3c-1

<p><b>*BMP Title:</b> Illicit Discharge Detection and Elimination Plan</p>
<p><b>*BMP Description:</b></p> <p>A program will be designed to detect and eliminate illegal and/or improper connections to the storm water conveyance system and receiving waters. The City will determine proper actions and enforce applicable provisions of the City ordinance pertaining to illicit/illegal discharges to the storm sewer system.</p> <p>A community hotline and e-mail address (2c-1) has been developed for residents to report illicit discharge, illegal dumping and erosion/sediment control issues.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Documentation of the Illicit Discharge Detection and Elimination Plan</li><li>• Annual review of the Illicit Discharge Detection Elimination Plan</li><li>• Prioritized a list of sites for conducting assessments</li><li>• Completed employee training as needed</li><li>• Televising of the storm and sanitary sewer system (6b-3)</li><li>• Number of outfalls inspected (6b-3)</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 – Development of the Illicit Discharge Detection and Elimination plan</li><li>• Year 2007 – Implementation of the Illicit Discharge Detection and Elimination plan</li><li>• Year 2008 – Identify and prioritize sites for future assessments</li><li>• Year 2008 through 2010 – Assess the Illicit Discharge Detection and Elimination plan, make any necessary changes, and conduct employee training as needed</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Community hotline and documentation procedures (2c-1)</li><li>• Storm sewer televising (6b-3)</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree</p> <p>Department: Engineering/Wastewater</p> <p>Phone: 218-299-5386</p> <p>E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

**Unique BMP Identification Number:** 3d-1

<p><b>*BMP Title:</b> Public and Employee Illicit Discharge Information Program</p>
<p><b>*BMP Description:</b></p> <p>City employees, business owners, and the public are informed about illegal discharges and improper disposal through newsletter articles. The City has a 24 hour community hotline and e-mail address to report storm water issues (2c-1).</p> <p>A Household Hazardous Waste program was created to help Clay County residents with the disposal of toxic household products and provides an exchange program for usable leftover products. The facility is located in Moorhead and is open from April 1 through November 16. Promotion is provided by the City website, newsletters, and other means.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Annual article published in the CoMmunicator and City Insights (1c-3)</li><li>• Amount of hazardous waste and products collected</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Continue to promote program</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Promotion through information outlets such as the City website, CoMmunicator and City Insights newsletters</li><li>• Obtain data from hazardous waste facility reports</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

**Unique BMP Identification Number:** 3e-1

<p><b>*BMP Title:</b> Identification of Non Stormwater Discharges and Flows</p>
<p><b>*BMP Description:</b></p> <p>The City storm water ordinance and the MS4 permit list a number of non-storm water discharges which are not expressly prohibited. If information becomes available identifying any of these discharges as significant contributors of pollutants to the storm water system, the City will address the discharge through ordinance and/or other regulatory mechanisms.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of non-storm water discharges determined to be significant contributors of pollutants.</li><li>• Documentation of regulatory action performed</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Address any new non-storm water discharges identified</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Enforcement and regulatory actions</li><li>• City storm water ordinance</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Minimum Control Measure 4

### CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

<b>Key to Unique BMP ID Numbers</b>	<b>BMP Summary Sheet Title</b>	<b>Permit Reference</b>
4a-1	Ordinance or other Regulatory Mechanism	<b>V.G.4.a</b>
4b-1	Construction Site Implementation of Erosion and Sediment Control BMPs	<b>V.G.4.b</b>
4c-1	Waste Controls for Construction Site Operators	<b>V.G.4.c</b>
4d-1	Procedure for Site Plan Review	<b>V.G.4.d</b>
4e-1	Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance	<b>V.G.4.e</b>
4f-1	Establishment of Procedures for Site Inspections and Enforcement	<b>V.G.4.f</b>

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4a-1

<b>*BMP Title:</b> Ordinance or other Regulatory Mechanism
<b>*BMP Description:</b> The City expanded its existing storm water ordinance, including requirements to meet the MPCA general permit for construction activity. The City also implemented a permit and site inspection program, including standards for construction sites (4f-1).
<b>*Measurable Goals:</b> <ul style="list-style-type: none"><li>• Implemented ordinance, City permits, City standards and “Notice of Violation/Order to Comply” procedures</li><li>• Conduct a annual meeting to compile a list of future actions with a timeline</li></ul>
<b>*Timeline/Implementation Schedule:</b> <ul style="list-style-type: none"><li>• Year 2006 – Inspection paperwork and enforcement procedures</li><li>• Year 2007 through 2010 – Conduct annual assessment meeting with affected staff and inspectors, make necessary changes</li></ul>
<b>Specific Components and Notes:</b> <ul style="list-style-type: none"><li>• Site erosion and sediment control requirements</li><li>• Runoff pollution prevention provisions</li><li>• Construction site waste control</li><li>• Enforcement procedures, penalties for non-compliance</li><li>• Required site plan review provisions</li><li>• Notify affected builders and contractors</li></ul>
<b>*Responsible Party for this BMP:</b> Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4b-1

<p><b>*BMP Title:</b> Construction Site Implementation of Erosion and Sediment Control BMPs</p>
<p><b>*BMP Description:</b></p> <p>Sediment Control BMPs are outlined in the Erosion and Sediment Control Standards on our website at <a href="http://www.cityofmoorhead.mn.us/city_services/storm_water.asp">www.cityofmoorhead.mn.us/city_services/storm_water.asp</a> (1b-1) for Single Family Residential, Commercial and Utility construction projects. For City let projects, standard plates and specifications are included in the construction plans.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Review Standard Plates</li><li>• Review Single Family Residential Construction Erosion/Sediment Control Standards</li><li>• Review Commercial Construction Erosion/Sediment Control Standards</li><li>• Review Utility Construction Erosion/Sediment Control Standards</li><li>• Assess program annually</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Assess and make any necessary changes to Standard Plates, Single Family Residential, Commercial and Utility erosion and sediment control standards</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Enforcement of standards</li><li>• Educate contractors and City staff on standards</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: <a href="mailto:andrea.crabtree@ci.moorhead.mn.us">andrea.crabtree@ci.moorhead.mn.us</a></p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4c-1

<p><b>*BMP Title:</b> Waste Controls for Construction Site Operators</p>
<p><b>*BMP Description:</b></p> <p>Waste control for construction site operators are incorporated into the Storm Water Pollution Prevention Plan (SWPPP) for City let projects. The waste control requirements are revised for each SWPPP. Other projects such as residential, commercial, and utility construction are listed in the erosion and sediment control standards located on the City website at <a href="http://www.cityofmoorhead.mn.us/city_services/storm_water.asp">www.cityofmoorhead.mn.us/city_services/storm_water.asp</a>.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of SWPPP which include waste control</li><li>• Review of waste control requirements in the Single Family Residential standards (4b-1)</li><li>• Review of waste control requirements in the Commercial standards (4b-1)</li><li>• Review of waste control requirements in the Utility standards (4b-1)</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Assess program and make any necessary changes</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Field manuals, handbooks, guidance materials, standards, and other resources</li><li>• City storm water ordinance and enforcement procedures</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: <a href="mailto:andrea.crabtree@ci.moorhead.mn.us">andrea.crabtree@ci.moorhead.mn.us</a></p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4d-1

<p><b>*BMP Title:</b> Procedure for Site Plan Review</p>
<p><b>*BMP Description:</b></p> <p>The City has developed procedures and documentation for review of construction site temporary erosion and sediment control plans and specifications. Plans are received by building code staff and a notice is sent out to the Engineering and Storm Water staff for review.</p> <p>All City let projects include erosion and sediment control standard plates and specifications (4b-1).</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Completed plan review process and documentation procedures</li><li>• Number of plan reviews performed</li><li>• Annual program assessment</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Conduct and annual program assessment and make any necessary changes</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Coordinate communication between Planning &amp; Zoning, Engineering, and Building Codes</li><li>• Site plan review process</li><li>• Storm water ordinance (4a-1)</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4e-1

<p><b>*BMP Title:</b> Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance</p>
<p><b>*BMP Description:</b></p> <p>The City has a community hotline and e-mail address to report storm water violations (2c-1). Once a call or an e-mail has been received the City will perform a field inspection. If a violation has or is occurring a written notification "Notice of Violation/Order to Comply" or a letter will be given to the property owner or the person(s) committing the violation. A record of storm water calls and e-mails is maintained.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Number of phone calls and e-mails to the community hotline</li><li>• Number of City staff actions initiated based on calls received</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 through 2010 – Compile data for annual report</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Citizen or City staff reports on storm water violations</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

**Unique BMP Identification Number:** 4f-1

<p><b>*BMP Title:</b> Establishment of Procedures for Site Inspections and Enforcement</p>
<p><b>*BMP Description:</b></p> <p>The City has put in place procedures and documentation for site inspections and enforcement. For City let projects, the inspections are done by Engineering Department staff or a consultant. Residential, commercial and utility projects are initially inspected by building code staff. If a storm water violation occurs, a "Notice of Violation/Order to Comply" form is given to the property owner. A reinspection is then conducted by the Environmental and Regulatory Compliance staff. If the violation(s) have not been corrected, enforcement procedures will be implemented.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"><li>• Trained Engineering and Building Codes staff on site requirements and inspection procedures</li><li>• Guidance material distributed</li><li>• Number of "Notice of Violation/Order to Comply" forms issued</li></ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"><li>• Year 2006 – Implement inspection procedures</li><li>• Year 2007 through 2010 – Compile data for annual report</li></ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"><li>• Coordinate communication between Building Codes and Engineering</li><li>• Enforcement procedures</li><li>• Inspection forms</li></ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Minimum Control Measure 5

### POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

<b>Key to Unique BMP ID Numbers</b>	<b>BMP Summary Sheet Title</b>	<b>Permit Reference</b>
5a-1	Development and Implementation of Structural and/or Non-structural BMPs	<b>V.G.5.a</b>
5b-1	Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment	<b>V.G.5.b</b>
5c-1	Long-term Operation and Maintenance of BMPs	<b>V.G.5.c</b>

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

**Unique BMP Identification Number:** 5a-1

<p><b>*BMP Title:</b> Development and Implementation of Structural and/or Non-structural BMPs</p>
<p><b>*BMP Description:</b></p> <p>The City developed procedures for development and redevelopment site plan review within the Engineering Department (4d-1). The review procedures will ensure proper site design for minimizing post-construction storm water runoff pollution and flooding. A combination of structural (detention ponds) and non-structural (swales) BMPs are in place to manage post-construction storm water.</p> <p>City let construction project plans, specifications, and documents address required post-construction measures. Residential, commercial, and utility BMPs are incorporated into the City construction site erosion and sediment control standards (1c-4).</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• Number of site plan reviews performed</li> <li>• Number of City let projects</li> <li>• Number of new structural or non-structural storm water treatment BMPs created</li> </ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"> <li>• Year 2006 through 2010 – Compile data for annual report</li> </ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"> <li>• Ensure construction projects are in compliance with Part III.C of the MN MS4 Storm Water Permit for Construction Activity</li> <li>• City storm water ordinance (5b-1)</li> <li>• Permanent BMP Maintenance program (5c-1)</li> <li>• Review process and documentation procedures</li> </ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree</p> <p>Department: Engineering/Wastewater</p> <p>Phone: 218-299-5386</p> <p>E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

**Unique BMP Identification Number:** 5b-1

**\*BMP Title:** Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment

**\*BMP Description:**

The City expanded its existing storm water ordinance, including requirements relating to new development and redevelopment based on the requirements of the MPCA general permit for construction activity and available guidance. The ordinance was adopted in April of 2005. The ordinance is implemented through site plan reviews (4d-1).

**\*Measurable Goals:**

- Compile a list of changes for future ordinance
- Site plan review(s)

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Conduct assessment of ordinance

**Specific Components and Notes:**

- Make necessary changes to address storm water runoff and pollution
- Incorporated ordinance provisions into Development and Redevelopment Site Plan Review Program (4d-1)

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree  
Department: Engineering/Wastewater  
Phone: 218-299-5386  
E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

**Unique BMP Identification Number:** 5c-1

**\*BMP Title:** Long-term Operation and Maintenance of BMPs

**\*BMP Description:**

The City currently inspects and maintains installed storm water BMPs located throughout Moorhead. A maintenance program, including preventive and corrective maintenance, for existing and future installed BMPs has been implemented. The Storm System Inspection Program (6b-3) will be used to identify maintenance needs.

**\*Measurable Goals:**

- Completion of inspection
- Completion of scheduled preventive maintenance tasks
- Completion of identified corrective maintenance requirements

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Perform maintenance according to program requirements

**Specific Components and Notes:**

- List of BMPs
- Preventive maintenance schedule, procedures, and documentation
- Documentation of all preventive maintenance and corrective maintenance performed
- Add installed storm water BMPs to computerized preventive maintenance program

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## Minimum Control Measure 6

### POLLUTION PREVENTION/GOOD HOUSEKEEPING

Key to Unique BMP ID Numbers	BMP Summary Sheet Title	Permit Reference
6a-1	Municipal Operations and Maintenance Program	V.G.6.a
6a-2	Street Sweeping**	
6b-2	Annual Inspection of All Structural Pollution Control Devices	V.G.6.b.2
6b-3	Inspection of a Minimum of 20 percent of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis	V.G.6.b.3
6b-4	Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas	V.G.6.b.4
6b-5	Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures	V.G.6.b.5
6b-6	Record Reporting and Retention of all Inspections and Responses to the Inspections	V.G.6.b.6
6b-7	Evaluation of Inspection Frequency	V.G.6.b.7

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6a-1

<b>*BMP Title:</b> Municipal Operations and Maintenance Program
<b>*BMP Description:</b> The City will develop a program that includes training, standard operating procedures, and practices for City park and open space maintenance, fleet maintenance, and building maintenance.
<b>*Measurable Goals:</b> <ul style="list-style-type: none"><li>• Completed maintenance and training programs (1c-6)</li><li>• Number of employees trained per year</li></ul>
<b>*Timeline/Implementation Schedule:</b> <ul style="list-style-type: none"><li>• Year 2006 – Develop a program for park and open space maintenance</li><li>• Year 2007 – Implement park and open space maintenance program, develop a program for fleet maintenance</li><li>• Year 2008 – Implement fleet maintenance program, develop a program for building maintenance</li><li>• Year 2009 – Implement building maintenance program</li><li>• Year 2010 – Review programs and make any necessary changes</li></ul>
<b>Specific Components and Notes:</b> <ul style="list-style-type: none"><li>• Park and open space maintenance<ol style="list-style-type: none"><li>1. Fertilizer application training</li><li>2. Pesticide, herbicide, and other chemical application training</li><li>3. Mower training</li></ol></li><li>• Fleet maintenance<ol style="list-style-type: none"><li>1. Vehicle washing procedures</li><li>2. Vehicle storage</li><li>3. Inspection requirements and checklist</li></ol></li><li>• Building maintenance<ol style="list-style-type: none"><li>1. Material storage and spill clean-up training</li><li>2. Hazardous material training</li></ol></li></ul>
<b>*Responsible Party for this BMP:</b> Name: Andrea J. Crabtree Department: Engineering/Wastewater Phone: 218-299-5386 E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6a-2

**\*BMP Title:** Street Sweeping\*\*

**\*BMP Description:**

The Operations Department uses mechanical street sweepers to remove sediment and debris from all City streets. Street sweeping begins early in the spring and finishes in the late fall. The City's goal is to sweep all the streets at least twice per year.

**\*Measurable Goals:**

- Completed tracking method
- Record of amount/frequency of street cleaning performed
- Quantity of debris removed each year

**\*Timeline/Implementation Schedule:**

- Year 2006 – Develop a tracking method
- Year 2007 through 2010 – Assess program and make any necessary changes. Implement training as needed

**Specific Components and Notes:**

- Sweeping schedule
- Location of sediment and debris disposal

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

# BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-2

**\*BMP Title:** Annual Inspection of All Structural Pollution Control Devices

**\*BMP Description:**

The City is on a five year cycle to inspect and clean all catch basins in the storm sewer system. An outside contractor is hired to perform catch basin cleaning. Catch basins with sump pits are identified as part of the inspection/cleaning cycle. A program has been developed to retrofit catch basins to eliminate sump pits. The City does not have any other structural pollution control devices.

**\*Measurable Goals:**

- Number of catch basin cleaned/inspected each year

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Conduct the cleaning schedule accordingly, and compile data annually

**Specific Components and Notes:**

- Catch basin cleaning schedule
- Storm sewer map (3a-1)
- Storm Sewer Inspection Program (6b-3)

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-3

**\*BMP Title:** Inspection of a Minimum of 20 percent of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis

**\*BMP Description:**

The City inspects 20% of the catch basins, 20% of the permanent ponds, and 20% of the outfalls annually. The City televises portions of the storm sewer annually.

**\*Measurable Goals:**

- Number/percentage of outfalls inspected
- Number/percentage of sediment basins inspected
- Televises at least 2,000 feet of storm sewer annually

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Conduct inspections and compile data annually

**Specific Components and Notes:**

- Inspection forms
- Documentation of inspections
- Storm Sewer System Map (3a-1)
- Storm sewer televising

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-4

**\*BMP Title:** Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas

**\*BMP Description:**

The City will inspect exposed stockpiles, storage and material handling areas at least once annually.

**\*Measurable Goals:**

- Develop inspection forms
- Number of exposed stockpiles inspected

**\*Timeline/Implementation Schedule:**

- Year 2006 – Create an inspection form and identify stockpile storage areas
- Year 2007 through 2010 – Implement inspections and take necessary corrective action

**Specific Components and Notes:**

- Inspection forms – date, time, weather, and condition of site

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-5

**\*BMP Title:** Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures

**\*BMP Description:**

A corrective maintenance program for existing and future installed BMPs has been developed and implemented. Based on responses from inspections (6b-2, 6b-3 and 6b-4) a work order will be generated. The work order will include a schedule for completion. Depending on the scope of the work the task maybe completed by City staff or will be contracted out. If possible, costly repairs may be incorporated into the following year's budget.

**\*Measurable Goals:**

- Corrective maintenance activities completed or scheduled

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Perform maintenance according to program requirements

**Specific Components and Notes:**

- List of BMPs
- Documentation of corrective maintenance performed

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*



## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-6

**\*BMP Title:** Record Reporting and Retention of All Inspections and Responses to the Inspections

**\*BMP Description:**

The City will record and retain all inspections and summarize the actions taken in the annual report.

**\*Measurable Goals:**

- Compile inspection reports (6b-2, 6b-3, and 6b-4)
- Compile maintenance and repair records

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2010 – Compile appropriate records

**Specific Components and Notes:**

- Date of inspections
- Actions taken due to inspections
- Maintenance and repairs
- Inspection records

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 6b-7

**\*BMP Title:** Evaluation of Inspection Frequency

**\*BMP Description:**

The City will evaluate inspection frequency after the first two reporting years and assess the need for more or less frequent inspections (6b-2, 6b-3, and 6b-4).

**\*Measurable Goals:**

- Conduct annual evaluation and document recommendations for changes in the inspection frequency

**\*Timeline/Implementation Schedule:**

- Year 2006 through 2007 – Conduct inspections, evaluate inspection program and adjust inspection rate based on previous years data
- Year 2008 through 2010 – Conduct inspections according to the adjusted inspection rate, if applicable

**Specific Components and Notes:**

- Maintenance performed or recommended
- Sediment storage and capacity remaining

**\*Responsible Party for this BMP:**

Name: Andrea J. Crabtree

Department: Engineering/Wastewater

Phone: 218-299-5386

E-mail: andrea.crabtree@ci.moorhead.mn.us

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

## **H. Modifications to the Storm Water Pollution Prevention Program**

1. The MPCA may require this SWPPP to be modified, as needed, in accordance with Minn. R. ch. 7001, and may consider the following factors:
  - a. Discharges are impacting the quality of receiving waters;
  - b. More stringent requirements to comply with state or federal regulations;
  - c. Measures are necessary to meet the applicable requirements of Appendices C and D of the MS4 permit, or
  - d. Additional conditions deemed necessary to comply with the goals and requirements of the Clean Water Act or water quality standards.
2. All modifications made to the City of Moorhead SWPPP, other than what is allowed in Part H.3 below, will be submitted to the MPCA for approval. The modification will be submitted in writing and set forth schedules for compliance.
3. This SWPPP may only be modified by the City of Moorhead, without prior approval from the Commissioner, provided it is in accordance with the following:
  - a. A BMP is added, and none subtracted from the SWPPP; or
  - b. A less effective BMP is replaced with a more effective BMP. The alternative BMP must address the same, or similar, concerns as the ineffective BMP; and
  - c. The MPCA is notified of the modification in the annual report for the year the modification is made.

## **PART VI. EVALUATING, RECORDKEEPING AND REPORTING**

### **A. Evaluation and Assessment**

For each annual report, the City of Moorhead will evaluate the program compliance, the appropriateness of the BMPs, and the progress towards achieving identified measurable goals.

### **B. Recordkeeping**

Records of the SWPPP are kept at the office of the Environmental and Regulatory Compliance Manager. The records will be kept at least three (3) years beyond the expiration of the current MS4 Permit May 31, 2011).

### **C. Public Availability**

A member of the public can request a copy of the records by contacting the Wastewater Treatment Facility at (218) 299-5386. A copy of the SWPPP is also located on the City of Moorhead website at [www.cityofmoorhead.mn.us/city\\_services/storm\\_water.asp](http://www.cityofmoorhead.mn.us/city_services/storm_water.asp).

### **D. Annual Reporting**

An annual report will be submitted to the MPCA by June 30 of each permit year. The report will cover the entire previous calendar year. The annual report will summarize:

1. The status of compliance with MS4 Permit conditions, an assessment of the appropriateness of identified BMPs, and progress towards achieving measurable goals;
2. The storm water activities that the City of Moorhead plans to undertake during the next reporting cycle;
3. Any changes to identified BMPs or measurable goals; and
4. If applicable, a statement that the City of Moorhead relies on another entity to satisfy some MS4 Permit obligations, and what agreements the City of Moorhead entered into in support of the effort. Currently, the activities and efforts of a local non-profit group called River Keepers help to satisfy several MS4 Permit requirements, but no formal agreements exist related to the MS4 Permit. For more information, see BMP sheets 1d-1, 1d-2, 1d-3 and 2d-1.

### **E. Reporting Submittals**

The application, annual reports, SWPPP, and other submittals required by the MS4 Permit are submitted to the Storm Water Management Unit of the MPCA.

## **PART VII. APPENDIX A: STANDARD CONDITIONS**

The following are standard conditions from the MS4 Permit and apply to all MS4s. The terms Agency, permit, and permittee refer to the MPCA, MS4 Permit, and permitted MS4s, respectfully. Where used, Commissioner is the Commissioner of the MPCA.

- A. 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.
- B. 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.
- C. The permit does not convey a property right or an exclusive privilege.

- D. 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.
- E. The permittee shall 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.
- F. The permittee shall 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 included effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The permittee shall install and maintain appropriate back up 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.
- G. 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 shall immediately upon discovery report to the Commissioner an error or omission in these records, reports, plans, or other documents.
- H. The permittee shall, 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.
- I. 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, shall 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 construction, modification, or operation of the facility covered by the permit or 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.
- J. If the permittee discovers, through any means, including notification by the Agency, the noncompliance with a condition of the permit has occurred, the permittee shall take all reasonable steps to minimize the adverse impacts on human health, public drinking water supplies, or the environment resulting from the noncompliance.
- K. 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 shall, within 24 hours of the discovery of the noncompliance, orally notify the Commissioner. Within five days of the discovery of the noncompliance, the permittee shall 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.

- L. The permittee shall report noncompliance with the permit not reported under item K as 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 shall submit the information listed in item K within 30 days of the discovery of the noncompliance.
- M. The permittee shall 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.
- N. 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 shall comply with the conditions of the permit.
- O. 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.
- P. This permit incorporates by reference the applicable portions of 40 CFR §§ 122.41 and 122.42 parts (c) and (d) and Minn. R. 7001.1090, which are enforceable parts of this permit.

## **PART VIII. APPENDIX B: DEFINITIONS**

Please see the MS4 Permit for definitions.

## **PART IX. APPENDIX C: LIMITATIONS ON COVERAGE**

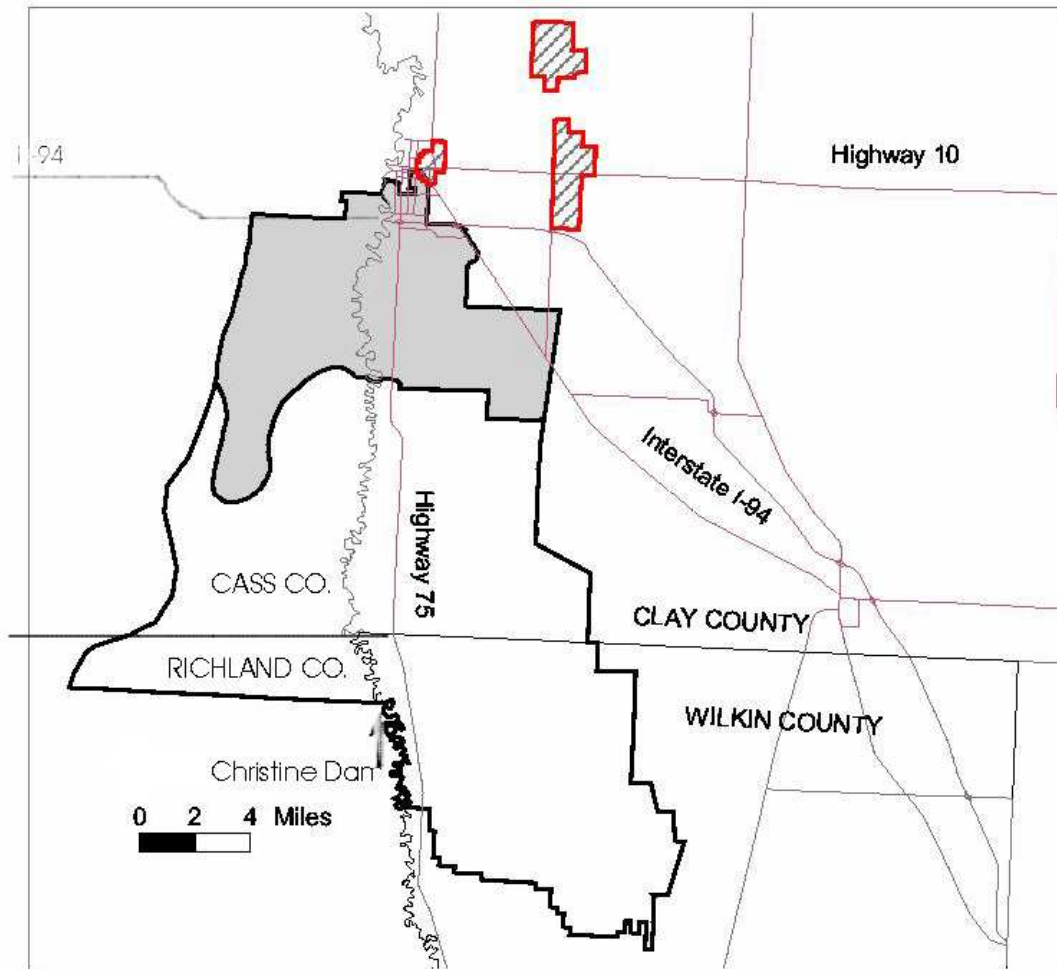
- A. Discharges to Waters with Prohibited Discharges.** The City of Moorhead does not discharge to waters with prohibited discharges, DNR designated scientific and natural areas, or a state designated wild river segment. Therefore, Part IX.A of the MS4 Permit is not applicable.

- B. Discharges to Waters with Restricted Discharges.** The City of Moorhead does not discharge to waters with restricted discharges, federal or state designated scenic or recreational river segments, or calcareous fens. Therefore, Part IX. B of the MS4 Permit is not applicable.
- C. Discharges Adversely Impacting Trout Waters.** The City of Moorhead does not discharge to any designated trout lakes or streams. Therefore, Part IX.C of the MS4 Permit is not applicable.
- D. Discharges to Wetlands.** The City of Moorhead does not discharge to wetlands. Therefore, Part IX.D of the MS4 Permit is not applicable.
- E. Discharges Requiring Environmental Review.** If a project meets the state or federal requirements for environmental review, an environmental assessment worksheet, environmental assessment or environmental impact statement is completed.
- F. Discharges Affecting Threatened or Endangered Species.** If a project meets the state or federal requirements for environmental review, the environmental assessment worksheet, environmental assessment or environmental impact statement addresses threatened or endangered species.
- G. Discharges Affecting Historic or Archeological Sites.** If a project meets the state or federal requirements for environmental review, the environmental assessment worksheet, environmental assessment or environmental impact statement addresses historic or archeological sites.
- H. Discharges Affecting Source Water Protection Areas**
- 1. Groundwater.** Two groundwater wells in the Moorhead Aquifer and five in the Buffalo Aquifer supply approximately 15 percent of Moorhead's drinking water. The City is currently participating in the wellhead protection program under Minn. R. 4720. Only the Drinking Water Supply Management Area of the Moorhead Aquifer exists within the city limits of Moorhead. There is no hydraulic connection between surface water and the Moorhead Aquifer. As a result, water in the aquifer is considered not vulnerable to contamination.
  - 2. Surface-Water.** A surface water intake on the Red River of the North supplies most of the drinking water in Moorhead. A Source Water Assessment (SWA) was completed for the Minnesota Department of Health in 2003 to comply with the 1996 Amendments to the Safe Drinking Water Act (SDWA). Urban storm water runoff is one of many potential sources of contamination noted in the SWA. For the City of Moorhead, the most important contaminants of concern include organics, turbidity/sediment, chemicals spills, and pathogens. River monitoring upstream of the Moorhead drinking water intake shows turbidity and fecal coliform (an indicator of potential pathogen presence) levels are of the most impact to the water treatment systems.



The SWA states that the vulnerability of any surface-water is high because no practical means of preventing all potential contaminant releases into surface waters exists. The SDWA recognizes the vulnerability of surface waters and requires filtration to remove pathogens and particulate contaminants. Although it has been determined that the Moorhead source water is highly susceptible to contaminants found in the river, the SWA notes the treatment system effectively treats the source water to continually meet safe drinking water standards. Figure 1 is a map of the Source Water Assessment areas for the City of Moorhead.



**SOURCE WATER ASSESSMENT AREAS  
FOR THE CITY OF MOORHEAD**



**Source Water Assessment Areas**

-  Inner Emergency Response Area
-  Outer Source Water Management Area

**Wellhead Protection Areas**

-  Drinking Water Supply Management Area

Prepared by  
Minnesota Department of Health  
July, 2002

**FIGURE 1  
SOURCE WATER ASSESSMENT AREA FOR THE CITY OF MOORHEAD**

This SWPPP is required to incorporate BMPs to protect drinking water sources. Many storm water outfalls discharge upstream of the Moorhead drinking water intake on the Red River of the North. The intent of every BMP in this SWPPP is to improve water quality in the Red River, which helps to protect drinking water. Drinking water is also protected through in place emergency response procedures in Moorhead. The Moorhead Fire Department has been named the Northwestern MN Regional Hazardous Material Team. If a chemical spill occurs, the 911 call will alert the Team to respond. The Team follows State and MPCA protocols which include protection of storm sewers and surface waters. Depending upon the location and type of spill, the Water Treatment Facility is notified by the State Duty Officer, MPCA, Moorhead Fire, City personnel, emergency dispatch, or others involved.

A Drinking Water Source Protection BMP Summary Sheet (C.H.2) was created on the following page to serve as a check to ensure this SWPPP address specific drinking water protection concerns. Instead of listing how all the BMPs in this SWPPP protect drinking water, Table 1 highlights how several BMPs protect drinking water.

Table 1. How Select BMPs Help Protect Drinking Water.

BMP ID	Organics	Sediment	Chemical Spills	Pathogens
1c-1	Education includes engine oil and other organic fluid leaks and spills		Education includes not dumping waste down storm drains	Education includes proper disposal of pet waste
2d-1	Marking drains helps to prevent dumping of oil and other organic wastes			Marking drains helps to prevent dumping of pet waste
4b-1		Requires erosion and sediment control for construction sites		
4c-1	Waste controls are included in construction site requirements		Waste controls are included in construction site requirements	
5a-1		Storm water pond installation in new development and redevelopment helps remove sediment from storm water	Storm water pond installation in new development and redevelopment helps to provide containment of spills	Many pathogens are destroyed by sunlight during detention in storm water ponds
C.H.2			A local hazardous material team provides quick response to spills	

## BMP Summary Sheet

**MS4 Name:** City of Moorhead

**Minimum Control Measure:** NOT APPLICABLE  
SEE APPENDIX C, PART H OF THE MS4 PERMIT - DISCHARGES  
AFFECTING SOURCE WATER PROTECTION AREAS

**Unique BMP Identification Number:** Appendix C.H.2

<p><b>*BMP Title:</b> Drinking Water Source Protection</p>
<p><b>*BMP Description:</b> The City of Moorhead SWPPP helps to protect drinking water from organics, sediment, chemical spills, and pathogens. This BMP Summary Sheet serve as a check to ensure this SWPPP continues to address these specific drinking water protection concerns.</p>
<p><b>*Measurable Goals:</b></p> <ul style="list-style-type: none"> <li>• Include proper disposal of organics, chemicals, and pet wastes in BMP 1c-1 education</li> <li>• Achieve measurable goals for BMP 2d-1</li> <li>• Achieve measurable goals for BMP 4b-1</li> <li>• Achieve measurable goals for BMP 4c-1</li> <li>• Achieve measurable goals for BMP 5a-1</li> <li>• Maintain the Hazardous Material Team</li> <li>• Water Treatment Facility notified in the event a chemical spill occurs</li> </ul>
<p><b>*Timeline/Implementation Schedule:</b></p> <ul style="list-style-type: none"> <li>• Year 2006 – Perform audit of measurable goals, determine shortcomings</li> <li>• Year 2007 through 2010 – BMP fully implemented each year</li> </ul>
<p><b>Specific Components and Notes:</b></p> <ul style="list-style-type: none"> <li>• Chemical spills – Hazmat team, Water Treatment Facility notification</li> <li>• Turbidity/sediment – Comply with permit requirements for new development and redevelopment</li> <li>• Pathogens – Pet waste education, existing sewage and septage dumping ordinance</li> <li>• Organics – Storm water ponds, education in BMP 1C-1</li> </ul>
<p><b>*Responsible Party for this BMP:</b></p> <p>Name: Andrea J. Crabtree          Department: Engineering/Wastewater          Phone: 218-299-5386          E-mail: andrea.crabtree@ci.moorhead.mn.us</p>

*\*Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

**PART X. APPENDIX D: NONDEGRADATION FOR SELECTED MS4s**

The City of Moorhead is not a Selected MS4. Therefore, Part X of the MS4 permit is not applicable.

**PART XI. APPENDIX E: SELECTED MS4s**

The City of Moorhead is not a Selected MS4. Therefore, it does not appear on this list.