# Storm Water Pollution Prevention Plan for



February 2007



# **Storm Water Pollution Prevention Plan**

### For

# New Ulm, Minnesota

The City of New Ulm fully intends to incorporate the processes described herein as a means of meeting the requirements of the NPDES Phase II Municipally Separate Storm Sewer System permit. Should the City find itself unable to meet the goals set forth in this Storm Water Pollution Prevention Plan, the City intends to report the discrepancy and list the reasons why in its annual report to the Minnesota Pollution Control Agency.

By: John J. Human

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

Steven P. Koehler, P. E.

License No. 20693

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

Duane W. Hansel, P. E.

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Date: February 2007

BOLTON & MENK, INC.
CONSULTING ENGINEERS & SURVEYORS

Mankato ♦ Fairmont ♦ Sleepy Eye ♦ Burnsville ♦ Willmar ♦ Chaska ♦ Ramsey Ames, IA

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Glossary

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### I. Executive Summary

Under state and federal rules, the City of New Ulm has been classified as a designated Municipal Separate Storm Sewer System (MS4) community. As such, it must develop, implement and enforce a Stormwater Pollution Prevention Plan (SWPPP) that is designed to minimize the discharge of pollutants from its storm sewer system in order to protect the water quality of the receiving waters in accordance with the Federal Clean Water Act (CWA) and its recent amendments. Designated MS4 communities must obtain permit coverage not later than February 15, 2007.

This Storm Water Pollution Prevention Plan is a <u>local plan</u> that has been prepared with the purpose of meeting the requirements of the Federal National Pollutant Discharge Elimination System (NPDES) Phase II permit as outlined in the Minnesota Pollution Control Agency (MPCA) general permit and the most recent modifications to the Federal Clean Waters Act (CWA).

It is also intended to lay out the steps required to implement the assigned phosphorous TMDL (Total Maximum Daily Load) requirements for the Minnesota River.

The purpose of this SWPPP is two fold:

- Maintain water quality standards where compliance with standards currently exists, and
- Bring waters that do not meet water quality standards into compliance or containment by minimizing the discharge of pollutants to the Maximum Extent Practicable (MEP).

To meet this goal, the City's storm sewer system must be managed, operated and maintained in such a way that minimizes the discharge of pollutants.

### A. SWPPP Technique

Best Management Practices (BMPs); including education, maintenance, pollution control techniques, system designs and engineering methods as well as local provisions deemed appropriate; are to be used to meet the minimum requirements of the NPDES Phase II permit.

Best Management Practices fall into two categories:

- Structural, including water quality and detention ponds, infiltration designs, etc. and
- Non-structural, including operational practices like street sweeping, educational programs, etc.

When implementing the required BMPs, the City must consider the sources of the

targeted pollutants, the potential pollution creating activities in the various watersheds, and the sensitivity of the receiving waters.

### **B.** SWPPP Legal Significance

This SWPPP shall become an enforceable part of the NPDES Phase II permit upon submittal to the MPCA. Modifications as required by the agency and/or modification requests by the City and approved by the MPCA shall also become enforceable provisions.

The City must submit an annual report on the implementation of this SWPPP on or before June 30 of each year beginning in 2007.

### II. Methods

This document describes the City's 5-year Plan to meet each of the six Minimum Control Measures (MCM) described by the permit. The tasks described are not one-time efforts; they will continue throughout the permit period and beyond to maintain water quality. They are:

• No. 1 - Public Education And Outreach On Stormwater Impacts

Distribute educational materials and perform outreach activities to inform citizens about the ways stormwater may become polluted and and the effect polluted stormwater runoff discharges can have on water quality.

• No. 2 - Public Participation And Involvement

Provide opportunites for citizens to participate in program development and implementation, including publicizing public meetings and/or encouraging citizen representatives on a stormwater management panel or committee.

• No. 3 - Illicit Discharge Elimination

Develop and implement a plan to detect and eliminate illicit discharges to the storm sewer system including developing a system map and informing the community about the hazards associated with illegal discharges and improper disposal of waste.

• No. 4 - Construction Site Stormwater Runoff Control

Develop, implement and enforce an erosion and sediment control program including ordinances for construction activities that disturb 1 or more acres of land. The City will work to extend, advise and enforce this type of rule on smaller construction activity areas.

• No. 5 - Post-Construction Stormwater Management in New Development and Redevelopment

Develop, implement and enforce a program to address discharges of post-construction storm water run-off from new development and redevelopment areas.

• No. 6 - Pollution Control And Good Housekeeping For Municipal Operations

Develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations.

It is anticipated that this Plan will be updated on an annual basis. The proposed updates will be made public prior to the annual meeting, which is planned in January or early February. Updates or modifications to the 5-year Plan will be made on the following basis:

- 1. Modifications may be required by the Commissioner of the MPCA based on the following factors:
  - a. Discharges from the City are impacting the quality of the receiving water.
  - b. More stringent requirements are necessary to comply with State or Federal regulations.
  - c. Additional conditions are deemed necessary to comply with the goals and requirements of the Federal Clean Water Act.
- 2. Commissioner ordered modifications will be made in writing with a schedule of work set forth for compliance.
- 3. Reasonable modifications may be made as requested by the general public in the following formats:
  - a. Oral requests given at the annual meeting.
  - b. Written requests received within a reasonable time so that City staff can review the request and make the requested modification to the plan if deemed reasonable and appropriate.
- 4. Modifications may be made by the City without prior approval of the Commissioner, provided it is in accordance with the following:
  - a. New BMP's are added and none are subtracted from the SWPPP.
  - b. New BMP's that have failed or are ineffective are replaced with alternate BMP's that addresses the same or similar concerns.
  - c. The Commissioner is notified of the modification in the annual report for the year the modification was made, or in a technical report as needed.

Stormwater Pollution Prevention Program Monitoring, Record Keeping, and Reporting

- 1. The SWPPP should be evaluated annually for compliance and progress towards achieving the identified measurable goals.
- 2. Records required under the NPDES permit must be retained for a minimum of 3 years beyond the term of the permit and submitted to the Commissioner upon request. The SWPPP and required records should be available for public review.
- 3. An annual report must be submitted to the MPCA by June 30<sup>th</sup> each year of the term of the permit and shall include the following:
  - a. Evaluation of compliance with identified measurable goals.
  - b. Results of information collected and analyzed.
  - c. Upcoming years' planned stormwater activities.
  - d. Modifications to BMPs or measurable goals.
  - e. Notice that another entity will satisfy a portion of the permit obligations.

\*\*\*\* End of Executive Summary \*\*\*\*

# Storm Water Pollution Prevention Plan

### I. Introduction

### A. Storm Water Pollution Prevention Plan (SWPPP) Purpose

The City must develop, implement and enforce a plan that is designed to minimize the discharge of pollutants from its storm sewer system in order to protect the water quality of the receiving waters in accordance with the Federal Clean Water Act (CWA) and its recent amendments.

This Storm Water Pollution Prevention Plan is a <u>local plan</u> that has been prepared with the purpose of meeting the requirements of the federal NPDES Phase II permit as outlined in the Minnesota Pollution Control Agency (MPCA) general permit and the most recent modifications to the Federal Clean Waters Act (CWA).

It is also intended to identify the steps required to implement the assigned phosphorous TMDL (Total Maximum Daily Load) requirements for the Minnesota River.

The purpose of this SWPPP is to maintain water quality standards where we already have compliance with NPDES requirements, and to help bring waters that do not meet water quality standards into containment or compliance by minimizing the discharge of pollutants to the Maximum Extent Practicable (MEP). To meet this goal, the City's storm sewer system must be managed, operated and maintained in such a way that minimizes the discharge of pollutants.

### **B.** SWPPP Technique

Best Management Practices (BMPs); including education, maintenance, pollution control techniques, system designs and engineering methods as well as local provisions deemed appropriate; are to be used to meet the minimum requirements of the NPDES Phase II permit.

Best Management Practices fall into two categories:

- Structural, including water quality, detention ponds, infiltration designs, etc. and
- Non-structural, including operational practices like street sweeping, educational programs, etc.

When implementing the required BMPs, the City must consider the sources of the targeted pollutants, the potential pollution creating activities in the various watersheds, and the sensitivity of the receiving waters.

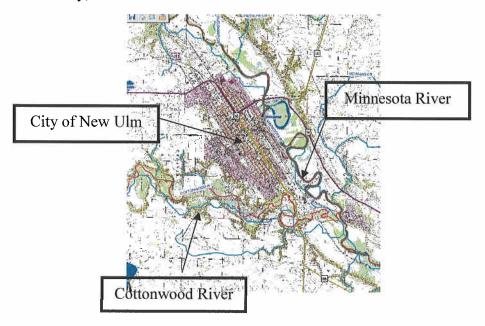
### C. SWPPP Legal Significance

This SWPPP shall become an enforceable part of the NPDES Phase II permit upon submittal to the Minnesota Pollution Control Agency (MPCA). Modifications as required by the agency and/or modifications requested by the City and approved by the MPCA shall also become enforceable provisions.

The City must submit an annual report on the implementation of this SWPPP on or before June 30 of each year beginning in 2007.

### II. Location

The City of New Ulm lies on the southwest bank of the Minnesota River in Brown County, as shown below.



The Cottonwood River also passes through the southerly portion of the city to its confluence with the Minnesota River.

### III. Methods

This document describes the City's 5-year Plan to meet each of the six Minimum Control Measures (MCM) described by the permit. The tasks described are not one-time efforts; they will continue throughout the permit period and beyond to maintain water quality. They are:

### No. 1 - Public Education And Outreach On Storm Water Impacts

Distribute educational materials and perform outreach acrivities to inform citizens about the impacts polluted stormwater runoff discharges can have on water quality.

The public education program will individually address each of the six minimum measures.

The City will hold at least one public meeting per year presenting the SWPPP annual report.

This SWPPP will describe how the education program may be coordinated with and makes use of other entities in the area including community groups, nonprofit organizations, lake conservation districts, watershed districts, various levels of other governmental bodies, etc.

In so doing, the City will identify:

- i. The audiences involved.
- ii. The educational goals for each audience in terms of increased awareness, understanding, acquired skills and/or changes in behavior.
- iii. Activities used to reach the educational goals for each audience.
- iv. Activity implementation plans, including responsible department in charge, entities responsible for given activities, and schedules.
- v. Available performance measures that can be used to determine success in reaching educational goals.

Additionally, this SWPPP describes how the education program may be coordinated with, and makes effective use of, other storm water education programs being conducted in the area by other community groups, nonprofit organizations, lake conservation districts, soil and water conservation districts, watershed districts, watershed management organizations, school districts, University of Minnesota Extension, and county, regional, state and federal governments.

Evaluation of the effectiveness of the various activities The City plans to document and maintain a running log of all email, web site responses and building inspector notes to measure the performance of the educational techniques.

The City has identified the following audiences, goals, activities, performance measures, and devised an implementation plan.

Audience	Goals  To increase public awareness on the following:	Activity	Implementation	Performance Measures
General Public	Fertilizer and lawn care techniques	Flier information / web site	Spring, summer mailers or PUC billing inserts	Advertisement to include comment opportunities at the City's Web site.
	Removal of snow debris	Flier information / web site	Winter, spring mailers or PUC billing inserts	
Waterfront Properties	Shore land protection techniques	Flier information / web site	Spring, summer mailers or PUC billing inserts	Flier to include comment opportunities at the City Web site. City maintenance personnel observations.
Building Contractors	Erosion and sediment control and waste management	Flier information / web site	Attach to Building Permits	Building inspector log of compliance.
General Site & Utility Contractors	Erosion and sediment control and waste management	Flier information / web site	Review franchise and permit agreements and revise as necessary	Establish inspection procedures by appropriate departments
Developers	Erosion control and sediment and waste management	Flier information / web site	Incorporate into development agreement	Engineering inspector log of compliance.
Businesses and individuals found to have illicit discharges	Assist them in mitigating their discharge, then Enlist their cooperation to 1) Identify illicit discharges and 2) mitigate.	Flier information / web site and enforcement	Incorporate into enforcement actions	Attendance at required classes Number of illicit discharges identified.

### • No. 2 - Public Participation And Involvement

Provide opportunites for citizens to participate in program development and implementation, including publicizing public meetings and/or encouraging citizen representatives on a stormwater management panel or committee.

The annual meeting shall afford interested persons a reasonable opportunity to make written or oral statements concerning the SWPPP.

The City will consider all timely, relevant written materials submitted by interested persons concerning the SWPPP.

The permit requires that the City hold at least one public meeting per year addressing the annual report on this Storm Water Pollution Prevention Program. The meeting must be held prior to submitting the annual report to the MPCA.

### • No. 3 - Illicit Discharge Elimination

Develop and implement a plan to detect and eliminate illicit discharges to the storm sewer system including developing a system map and informing the community about the hazards associated with illegal discharges and improper disposal of waste. The plan will attempt to define the difference between illegal and illicit discharges.

The City will develop, implement and enforce a program to detect and eliminate illicit discharges.

The City will select and implement a program of appropriate BMPs and measurable goals relative to the elimination of any identified illicit discharges.

The City will develop a storm sewer system map showing:

- i. Ponds, streams, lakes and wetlands within the City.
- ii. Structural pollution control devices (i.e., grit chambers, separators, etc.).
- iii. All pipes and conveyances that are 24 inches or greater.
- iv. Outfalls and/or discharges to Waters of the State or to other, adjacent jurisdictions that are 24 inches or greater.

The City will review its existing ordinances and, if necessary, adopt an ordinance prohibiting non-storm water discharges into the City storm sewer system and that provides for appropriate enforcement procedures and actions.

The City will review its franchise, license and permit agreements with private utilities and, if necessary, amend them to define the utilities' responsibilities to appropriately restore areas disturbed by its activities. The ultimate goal is to provide appropriate enforcement procedures and actions.

The City will inform and educate its employees, local businesses, and the general public of the hazards associated with illegal discharges and improper disposal of wastes.

The City will identify potential pollution sources.

The City will develop a program to detect and address non-storm water discharges, including illegal dumping into the storm sewer system.

The City will review the following list of potential illicit discharges, determine which ones are significant discharges and address BMPs to mitigate the pollutant source:

• Water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, de-chlorinated swimming pool discharges, and street wash water, discharges or flows from fire fighting activities.

### • No. 4 - Construction Site Stormwater Runoff Control

The City will adopt an erosion and sediment control ordinance that requires the implementation of erosion and sediment control measures. The ordinance shall include enforcement procedures to ensure compliance.

The City will institute a procedure for site plan review that incorporates procedures for evaluating water quality impacts.

The City will also institute site inspection and enforcement measures, including sanctions when necessary.

The City will require permittees to control waste, such as discarded building materials, concrete truck washout chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.

The City will establish procedures for receipt and consideration of reports of non-compliance or other information on construction related issues submitted by the public.

# • No. 5 - Post-Construction Stormwater Management in New Development and Redevelopment

The City will develop, implement and enforce an ordinance to address storm water runoff from new development and redevelopment projects that disturb more than one acre or the size the City establishes. This includes projects that are less than one acre in size but are part of a larger common plan of development

(i.e., individual house building permits in a new subdivision will also be required to ensure that controls are in place that would prevent or minimize water quality impacts).

The program will include a set of appropriate BMPs and measurable goals, including the following minimum items:

- i. Developing and implementing strategies that include structural and non-structural BMPs.
- ii. Ensure adequate long-term operation and maintenance of BMPs installed.

The City will initiate the writing of a new ordinance that meets the permit requirements. The City will begin with the model ordinance provided by MPCA and attempt to tailor the ordinance with BMPs that fit the needs of the City and protect its unique water resources.

The City will also provide educational material for the developers of subdivisions, planned unit developments, commercial sites, industrial sites, renovations, new buildings, etc. as well as any design consultants, using informational fliers describing the impact of new developments on the water quality of its runoff. These fliers will identify the BMPs that the City recommends for both structural and non-structural practices.

### No. 6 - Pollution Control And Good Housekeeping For Municipal Operations

Develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations.

The City will develop an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from its municipal operations. The program will include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet (vehicle) and building maintenance, new construction and land disturbances, and storm water system maintenance.

### The City will also:

- i. Operate and maintain its storm sewer system in a manner that minimizes the discharge of pollutants.
- ii. Annually inspect its pollution control devices and summarize the results in the annual report.

- iii. Annually inspect all of its basins and at least 20 percent of the system outfalls; then summarize the results in the annual report.
- iv. Maintain records of all annual reports.

The City will review its franchise, license and permit agreements with private utilities and, if necessary, amend them to define the utilities' responsibilities to appropriately restore areas disturbed by its activities. The ultimate goal is to provide appropriate enforcement procedures and actions.

For each of the six minimum control measures, the City will list the applicable BMPs chosen, designate the department in charge of the responsibility, and implement a schedule of measurable goals determining the success or benefits of the BMPs. The City will list all discharges to the following as each applies:

- a. Waters with prohibited discharges.
- b. Wetlands.
- c. Areas requiring Environmental Review.
- d. Areas where endangered species or their habitat are affected.
- e. Historical or archeological sites.

The City will establish record keeping procedures that include:

- a. Inspections of stormwater outfalls, structural BMP's, and municipal stormwater handling shall be conducted and summarized in the annual report and shall include inspection dates and the completion of major additional protection measures.
- b. Records shall be kept of BMP and outfall inspection results, date, preceding weather conditions, sediment storage remaining in ponds and sediment devices, and any maintenance recommended and performed.
- c. Repair, replace or affect maintenance measures to ensure proper operation of the inspected items. These measures should be completed in the same year as the discovered need. If not, the reason for the delay must be submitted in the annual report.
- d. If maintenance or sediment removal is required as a result of each of the first two annual inspections, the inspection frequency shall be increased to at least two times per year

to ensure that the pollution removal properties of the inspected structure is maximized. If no maintenance is required after two years of inspections, the inspection frequency may be reduced to once every two years.

The City will provide materials and training courses designed to educate and train its maintenance personnel in the BMPs that will limit pollutants from entering the storm sewer system relative to mowing operations, park and open space management, roadway maintenance practices, street sweeping, etc. This education may include:

- a. Obtaining available tapes and brochures that are available from the MPCA, EPA, other jurisdictions and/or vendors regarding City maintenance practices and requiring mandatory review by all City maintenance personnel.
- b. Internal training of key City maintenance personnel in the inspection, maintenance and proper documentation of the City's outfalls and structural pollution control devices.

The City will review its mapped storm sewer system and:

- a. Coordinate a schedule to systematically review at least 20 percent of its outfalls greater than 24-inches in diameter annually.
- b. Coordinate and schedule the inspection of all of structural BMPs annually.
- c. Keep records of all inspections and maintenance efforts.
- d. Increase or decrease the inspections based on the frequency of needed maintenance.
- e. Submit inspection and maintenance records with the annual report.
- For each Minimum Control Measure (MCM), a list of appropriate Best Management Practices (BMP's) have been reviewed and chosen by City staff because they have been deemed the most appropriate and cost effective method for meeting the requirements outlined in the general permit. The list is attached in the Appendix.

### IV. Municipal Departments With Stormwater Responsibilities (2.1)

During the first year, it will be necessary for the City to identify each internal department with any responsibility related to stormwater. The following are departments with such potential:

### **A.** Administration & Finance

- Responsibilities include the collection of fees and disbursement of funds
- General facility maintenance coordination
- Human Resources supply adequately trained individuals to the various departments

### **B.** Engineering and Inspections

- Permits review and inspection responsibilities for both infrastructure improvements and building permits
- Zoning sets and enforces standards through the zoning laws
- Community development sets and enforces development standards for the community. Administers development agreements.
- Provide inspection and enforcement services over private utility operations within the city.

### C. Public Works

- Street maintenance
- Sewer maintenance

### **D.** Parks and Recreation

• Park maintenance

### **E.** Public Utilities Commission

• Comply with all permits, SWPPP, and ordinance requirements for their maintenance and construction operations.

### V. Outside Agencies With Stormwater Responsibilities (2.2)

The City proposes to contact and coordinate with several outside organizations in the implementation of the SWPPP, as necessary. Organizations to be contacted will include but will not be limited to the following:

A. Brown Soil and Water Conservation District (SWCD), Tom Maher, Brown SWCD Program Manager, 300 2nd Avenue SW, Sleepy Eye, MN 56085, 300 2nd Avenue SW, 507-794-2553, fax 507-794-5553 for current state set aside acres, active wells and precipitation monitoring in Brown County.

- **B.** The Board of Education for education opportunities and maintenance of school stormwater facilities.
- C. The watershed district organizations in the watershed for education and funding opportunities, including:
  - Minnesota River Basin Joint Powers Board (MRBJPB)
  - Prairie Country Resource Conservation and Development Council (RC&D), Willmar, Mn
  - Redwood, Cottonwood Rivers Control Area (RCRCA)
- **D.** Various community groups for education opportunities
- **E.** Brown County for coordinating maintenance and for implementation of the County Water Plan
- F. Area II Minnesota River Basin Projects, Inc., Coordinator Kerry Netzke phone: (507) 537-6369
- **G.** Brown-Nicollet-Cottonwood Water Quality Joint Powers Board (BNCJPB) BNCJPB Coordinator Bonnie Holz phone: (507) 931-4140
- **H.** Minnesota River Basin Joint Powers Board (MRBJPB) Executive Director phone: (952) 361-6590
- I. MPCA
- J. Minnesota Department of Transportation (Mn/DOT) for coordinating maintenance procedures and activity on State highways within the city limits.

### VI. Planning Tools & Resources (2.3)

The City has available a host of tools and resources with which to organize and implement this plan. During the first year individual resources will have to be evaluated for their contribution and potential for meeting the ultimate goal in a time effective manor. In subsequent years other resources may be added to the list as they become available. Some tools include:

- Minnesota River Basin Management Framework Watershed Organizations and Projects <a href="http://www.pca.state.mn.us/water/basins/mnriver/mnorgs.html">http://www.pca.state.mn.us/water/basins/mnriver/mnorgs.html</a>
- Minnesota River Basin Data Center Operated at Minnesota State University at Mankato - <a href="http://mrbdc.mnsu.edu/">http://mrbdc.mnsu.edu/</a>
- New Ulm Growth Plan. 1998
- New Ulm Source Water Protection Plan (Wellhead Protection),
- Brown County Comprehensive Water Plan 1997-2006 Currently being updated
- The City maintains a computerized mapping system of the municipal underground stormwater system.

### VII. Mapping per Appendix C of the General Permit (2.4)

The first major task will be the mapping of the municipal stormwater system including all discharges, conveyance structures, ponds, streams, lakes, rivers, wetlands, storm sewer outfalls greater than 24 inches in diameter, and structural pollution control devices that comprise the overall conveyance system for the City. The City is fortunate that it already has a computerized mapping system that can be expanded to meet all the requirements of the new stormwater permit.

This requirement also includes identifying certain waters of the state that demand special attention by either installing protections to prevent degradation of high quality waters, or to initiate more aggressive treatment to help remedy already impaired waters.

### These include:

Mapping of all impervious areas is required when any of the following conditions are met:

- Discharges to Waters With Prohibited Discharges
- Discharges to Waters With Restricted Discharges
- Discharges to Trout Waters
- Discharges to Wetlands
- Discharges Requiring Environmental Review
- Discharges Affecting Threatened or Endangered Species or Their Habitat
- Discharges Affecting Historic or Archeological Sites
- Discharges Affecting Source Water Protection Areas

### **A.** Waters With Prohibited Or Restricted Discharge (2.4)

As illustrated below, portions of the Minnesota River and the Cottonwood River within the City of New Ulm are impaired. The features listed in the table below represent the Special and Impaired Waters as defined by the MPCA and found to be within 2000 feet of your site boundaries.

### **Special Waters - Streams**

No Features found within 2000 feet of site boundary.

### **Special Waters - Lakes**

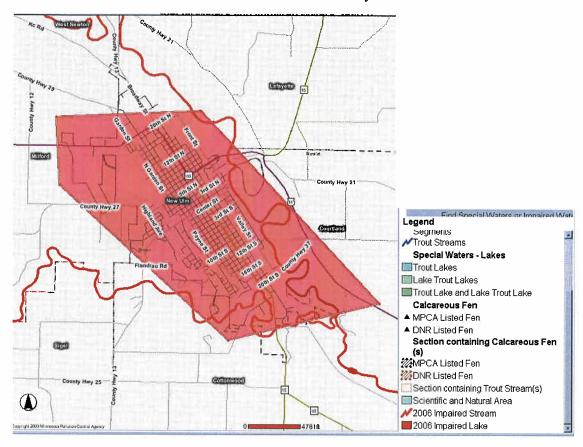
No Features found within 2000 feet of site boundary.

### Section containing calcareous fen(s)

No Features found within 2000 feet of site boundary.

### **Section containing Trout Stream(s)**

No Features found within 2000 feet of site boundary.



### Scientific and Natural Area

No Features found within 2000 feet of site boundary.

### **Impaired Lake**

No Features found within 2000 feet of site boundary.

### **Impaired Stream**

Rec	Assessment Unit ID	Stream Name	Pollutant(s) Need TMDL Plan	Pollutants with Approved TMDL Plan	No Plan Required	Meets WQ Standard(s)	BMP Link
1.0	07020008- 501	Cottonwood River; JD #30 to Minnesota R	M, FC, T		The state of the s	and control for transferior sequences and condition and transferior and distributed described and the condition of the condit	<u>tmdl</u>
<u>6</u>	07020007- 503	Minnesota River; Cottonwood R to Little Cottonwood R	M, P, T	Р	Silvinia kulturrijas i aksilvarguatųs.	inelity) be denived distribute in annes desiration in diame.	<u>tmdl</u>

### **B.** Impaired Waters Impact Evaluation

As shown above, several lakes and streams in the area are impaired. Using storm sewer and land use system mapping, field investigations and review of watershed

hydrology, the City will evaluate likely impacts of stormwater discharges from the City on the impaired waters and periodically revise the SWPPP as needed to address City actions relative to impaired waters and any USEPA approved TMDL. (See Section VIII).

This evaluation can be used for revisions to the SWPPP to prioritize and target implementation of BMP's to specifically address the City's contribution, if any, to the impairment.

### C. Threatened or Endangered Species or Their Habitat

Federal laws also prohibit encroachment on threatened and/or endangered apecies. The avoidance of impacts to these species can only be achieved through education of what species are present and the habitat necessary to sustain them.

Inquiry to the DNR Natural Heritage Database will provide the City with the latest information necessary to appropriately mitigate any effects. The DNR request site for this information is

http://files.dnr.state.mn.us/ecological services/nhnrp/nhis data request.pdf.

It is recommended that the City secure a 2006 list of species that includes the section, township and range. Some investigation may be necessary on the desirable habitat of some species. Areas that have special or unique habitat should be mapped to assure avoidance. Once in every permit cycle or following significant growth, the City should update the list and mapping.

### **D.** Historic Places Listings (2.4)

The early history of communities was often centered near streams and rivers and therefore, many historic structures and places are in the vicinity of these stormwater routes.

The federal government already has the National Historic Preservation Act that protects historic places; therefore the NPDES requirements discussed here cannot infringe on those requirements. The impacts of each individual project must be compared to the National Register of Historic Places and any conflicts mitigated. If it is absolutely necessary to impact a historic place or district, the State of Minnesota mandates the preparation of an Environmental Assessment Worksheet (EAW) describing the impacts and the mitigation efforts <u>before</u> any permitting.

A 2006 listing of the National Register of Historic Places in New Ulm is in the Appendix. Mapping will facilitate avoidance of these 'places'. The current listing is available online at <a href="http://www.nationalregisterofhistoricplaces.com/mn/Blue+Earth/state.html">http://www.nationalregisterofhistoricplaces.com/mn/Blue+Earth/state.html</a>.

### E. Source Water Protection Areas (Wellhead Protection) (2.4)

For purposes of security, the precise locations of these areas are not illustrated here but they must be considered in selecting points of discharge and sites for BMP installation.

### **F.** GIS Coverage

In conclusion, the entire city of New Ulm is within the coverage area designated by Appendix C of the General Permit and therefore will require the detailed mapping of impervious areas, etc.

### VIII. TMDL's (Total Maximum Daily Load) (2.5)

### **A.** Background Information

Specific water resources are especially sensitive to certain pollutants and the responsibility to protect, preserve and maintain these resources has been assigned, by law, statute and rule, to be borne by all or part of the upstream watersheds. Assignment of proportionate responsibility is accomplished by regulatory establishment of a <a href="Total Maximum Daily Load">Total Maximum Daily Load</a> (TMDL), a scientific study process that determines the capacity of the water resource to accommodate specific pollutants and/or water quality components.

The Lower Minnesota River encounters severe drops in dissolved oxygen during low flows in the late summer and early fall. These drops are largely caused by the nutrient phosphorous that stimulates algae growth. A TMDL has been established and approved by the MPCA and the Federal EPA that requires the City of New Ulm and other MS4's to reduce its contribution of **phosphorous by 30% based on the year 2000 levels.** This must be accomplished by 2015 (except for retrofits of structural urban BMP's).

Modeling performed as part of the TMDL determined that August through September 1988 was the Critical Low Flow Time Period and the TMDL requires the 30% reduction to be met during low flow periods. All stormwater discharges from the City are to the Minnesota River, either directly or by way of the Cottonwood River.

There are specific tasks in this plan or tasks that may be adopted in the future to accomplish the 30% reduction required by the Lower Minnesota River dissolved oxygen (LMRDO) TMDL for MS4's. Some of these requirements are already established by the MPCA and others will be required in the coming years.

In the future, it is expected that the City will be charged with other responsibilities to reduce its contribution to downstream pollution. TMDL research and approvals that could affect the City include:

- Minnesota River Basin: Turbidity Turbidity of water is caused by suspended and dissolved matter such as clay, silt, organic matter, algae and color. The target date for implementation of this TMDL is 2006-9.
- Cottonwood River Turbidity The target date for implementation of this TMDL is 2015.
- Cottonwood River Watershed Impaired Biota (plant and animal life) The target date for implementation of this TMDL is 2019.
- Minnesota River, Mainstem Fecal Coliform The target date for implementation of this TMDL is 2012.

- Minnesota River Basin, Mainstem and Mouth of Major Watersheds –
   Turbidity The target date for implementation of this TMDL is 2009.
- Minnesota River Basin Impaired Biota The target date for implementation of this TMDL is 2017.
- Lake Pepin Area Turbidity & Excessive Nutrients The target date for implementation of this TMDL is 2009.

The following sections (VIII.B through VIII.E) discuss the City's general implementation plan to meet its obligations relative to the Lower Minnesota River Dissolved Oxygen (LMRDO) TMDL by 2015. Upon notification of the approval of other TMDL's and applicability to the City of New Ulm, the City must assess, design and implement appropriate BMP's to achieve any reductions assigned by MPCA and achieve those reductions within the required TMDL timeline. This process will require revisions to the SWPPP over time. A separate BMP (6c-1) has been assigned to the task of accommodation for future TMDL's.

### **B.** TMDL Mapping and Load Calculations (2.7)

As an initial step in evaluating the impact of City's hydrology, land use and stormwater practices on the LMRDO TMDL together with efforts necessary to attain a 30% reduction in phosphorus contribution to the Lower Minnesota River watershed, the City must complete stormwater system mapping and load calculations. To complete necessary load calculations and design of appropriate BMP's to meet the TMDL requirements, the mapping database must include, at a minimum, information on watershed, conveyance system, land use, impervious surfaces, soil types and BMP's. The City will use information developed from TMDL mapping and load calculations as well as BMP effectiveness data to help the City determine its general strategies to meet current and future TMDL's; select/design pollutant tracking processes as they apply specifically to the City of New Ulm; and, periodically update this SWPPP with BMP's and other activities necessary to address TMDL (current and future) obligations.

The City currently maintains a portion of the required data as part of its storm sewer mapping, stormwater utility database, Surface Water Master Plan and zoning system. The City is also presently mapping outlets and in-place BMP's. It is the intent of the City to integrate this information system into a coordinated GIS. This SWPPP requires implementation of specific BMP's (3a-1 and 3a-2) to update the above information as well as other BMP's that, indirectly, will provide additional data for TMDL-related calculations. The implementation schedule dates for mapping-specific BMP's vary from 2007-2011.

To the extent that existing baseline mapping information is available or can expeditiously be developed with available City staff resources, the City is committed to completing TMDL load calculations relative to the LMRDO TMDL on or before June 30, 2008 and submitting them to MPCA by June 30, 2008. If necessary information cannot be readily compiled in advance of the SWPPP BMP timelines, the load calculations will be completed in accordance with the herein

SWPPP BMP completion timelines, but not later than June 30, 2009.

### C. General Strategies to Meet TMDL

The City of New Ulm currently consists primarily of previously developed areas and limited perimeter development. The population of the community has been fairly stable with limited new residential development. There is on-going new commercial and industrial development and the City is working on an updating its comprehensive plan to address developing areas. The City has generally been proactive in implementing stormwater management controls and BMP's to protect its water resources and has developed a Surface Water Master Plan to guide development. Based on conditions within the community, the most effective strategy for meeting current and future TMDL's is summarized and prioritized in following order:

- 1. City has and will continue to require the installation of appropriate structural BMP's in areas where the land use is changing and new development is occurring. Where possible, structural BMP's will be implemented in accordance with existing comprehensive and stormwater management plans, as updated from time to time in accordance with this SWPPP or as needed to address specific conditions in new developments.
- 2. To minimize practical/physical limitations and the very high cost of modifying existing or adding structural BMP's in fully developed areas of the community, the City will continue to implement non-structural BMP's, such as its existing street sweeping program, recycling yard waste and fertilizer controls, designed to capture and treat existing pollutant loads.
- 3. As part of the City's infrastructure reconstruction programs and to the extent physically feasible and fundable through local or external funding sources, the City will retrofit the existing stormwater system with appropriate BMP's, including addition of detention basins and other modifications.

### **D.** Pollutant Tracking Issues

Tracking efforts and outcomes for each TMDL are required. Tracking systems appropriate for the City of New Ulm will need to be evaluated for each TMDL and extent of City's contribution and allocation. For the LMRDO TMDL, it is anticipated that City will generally be using simple BMP tracking tools with field verification to determine and track progress toward meeting its watershed allocation and reductions. Modeling methods, based on data collection described in VIII.B, will also be utilized in load calculation and tracking processes. Specific tracking processes will be designed in accordance with findings of initial mapping and load calculations and revised from time to time as TMDL or MPCA regulations may require. It is expected that tracking processes will be incorporated into this SWPPP through future additions or revisions to BMP's.

### E. General Schedule for Meeting TMDL Requirements

It is the position of the City of New Ulm that this SWPPP and its associated BMP's provide a starting point and basic framework for meeting the reductions required by the LMRDO TMDL by the required compliance date. Implementation of BMP's to accomplish the required reductions will occur throughout the current and subsequent MS4 five year permit cycles and will require on-going updates and modifications to the SWPPP as modeling and tracking processes allow implementation to be targeted to effectively achieve required reductions or improve performance of in-place BMP's.

Based on information available to date, without completed stormwater GIS and load calculations, the City of New Ulm anticipates that it will be able to meet LMRDO TMDL requirements by 2015, with exception of any long-term retrofitting of storm sewer system and existing BMP's necessary to meet the TMDL. It is anticipated that 20 years will be required to complete retrofitting of storm sewer and existing BMP's.

General milestones for meeting TMDL are estimated as follows:

**2007-2011**: Completion of Initial Stormwater Mapping and Load Calculations; Creation of GIS for evaluation of Needs and BMP Planning; Implementation of BMP's for new and changed development; Implementation of non-structural BMP's in accordance with this SWPPP (such as continuation of street sweeping) and other methods as opportunities arise; Implementation of structural BMP retrofits in accordance with City's on-going infrastructure replacement program; On-going evaluation of funding resources and rates (such as new Storm Water Utility) for operation and maintenance of stormwater systems.

2011-2015: On-going BMP tracking, modeling and monitoring to determine effectiveness of implemented BMP's and needs for retrofitting of existing facilities; Continued implementation of BMP's for new and changed development; Refinement of non-structural BMP's for improved performance and/or implementation of additional non-structural BMP's; Implementation of structural BMP retrofits in accordance with City's on-going infrastructure replacement program, as needed.

**2015-2024**: Implementation of structural BMP retrofits in accordance with City's on-going infrastructure program, if needed.

As other TMDL's are approved, the City will need to modify this SWPPP and adopt additional procedures and schedules to meet new requirements.

### **IX.** BMP Evaluation Matrix (2.6)

Numerous methods can be utilized to improve the quality of stormwater leaving the urban drainage area and entering major and/or minor streams. The characteristics of each BMP define the:

- Effectiveness with the targeted pollutant,
- Area available and required for the volume to be treated,
- Hydraulic head available and required,
- Initial cost,
- Operating cost,
- Maintenance cost,
- Acceptance by the public of any hazards, and
- Sophistication of operation

The table below is <u>preliminary</u> and intended to assist in selecting appropriate BMP's to address both the immediate TMDL requirements for phosphorous and the future TMDL requirements listed above. During the first few years of the first permit cycle, it should be possible to add more detailed information.

The MPCA has adopted a stormwater manual that stipulates the percentage of phosphorous reductions that certain BMP's can achieve. In it, the MPCA acknowledges that the values listed are likely to be more conservative - predicting smaller reductions than some national databases. Currently, the MPCA manual does not list acceptable values for turbidity or nitrogen; therefore the values included here are from one of the national databases.

The evaluation must consider a series of issues that are not keyed to the functionality of the systems, i.e., maintenance, training required on the part of operators and developers, potential hazards / nuisances, life expectancy before replacement or major renovation, etc.

Two effective BMP's that will be encouraged but not generally the direct responsibility of the City to operate, are rain barrels or rain gardens. The use of these methods is generally limited to the local property owners, however the construction of rain gardens in public parks and schoolyards could be encouraged through community groups or classroom settings. It is suggested that credits could even be offered on any future stormwater utility bill for following these practices, however, that could place the burden on the City to inspect the installation and operation of these practices.

**BMP Evaluation Matrix** 

# Estimated Removal Rates for Various BMP's

	Water Quality Swale				%08 80%		(10)-
	Open Channel				(50)-	(25)-	(25)-
S	ED Shallow Wetland	40%	75%	30%		%09 -0	20-
Wetlands	Pond/Wetland	55%	75%	9/0/29	55- 85%	10-	(45)- 40%
	Shallow Wetland	45%	%59	20%	30- 80%	10- 55%	40- 80%
ds	Micropool ED Pond	40%	75%	30%			
Stormwater Ponds	Wet ED Pond	55%	209,8	70%	50- 75%	30- 45%	20- 65%
tormwa	Flow-Through (Wet)	20%	%02	%09	55- 90\$	20- 40%	10- 65%
S	Dry ED				25- 70%	25- 40%	(5)- 40%
Infiltration	nisad noitartifilal	65%	%06	80%			:
Infilt	Infiltration Trench	65%	006	80%			
ration	Vegetative Filters (dry)	9/359	75%	V 100			
Filtr	Media Filters	20%	%09	%0	%08 80%	35- 45%	(50)-
Bioretention	(OIA) noitstilfinl	%09	75%	20%			
Bioret	Underdrain (BIO)	20%	%59 	%09			
		Average TP Removal Rate	Maximum TP Removal Rate	Average Soluble P Removal Rated	Total Suspended Solids Removal	Total Nitrogen Removal	Nitrate Removal

<sup>\*</sup> Shaded values are from the Minnesota Stormwater Manual.

Un-shaded values are from the National Pollutant Removal Performance Database 1997 ed. The MPCA may not accept these values.

P = Phosphorous, TP = Total Phosphorous

# BMP Evaluation Matrix - Operational Issues

	Water Quality Swale										
	Open Channel										
	ED Shallow Wetland										×
Wetlands	Pond/Wetland										×
	Shallow Wetland										×
S	Micropool ED Pond										
ter Pond	Wet ED Pond									×	
Stormwater Ponds	Flow-Through (Wet)									X	
	Dry ED										
Infiltration	nisast noitaulithil										
Infilt	Infiltration Trench										
Filtration	Vegetative Filters (dry)										
Filtr	Redia Filters										
Bioretention	(OIA) noitertlital										
Bioret	(OIA) nisrbrəbnU										
		reach eness - orous	y rate	rd life ncy	ral nents	uctural ance	bn	ction	nance	Drowning hazard	ූ හ
		Time to reach effectiveness - phosphorous removal	Maturity rate	Expected life expectancy	Structural maintenance requirements	Non-structural maintenance	Training	Construction	Maintenance costs	Drowni	Mosquito breeding

### X. Storm Water Modeling (2.7)

The City is required to demonstrate that the efforts that it is pursuing by installing BMP's, changing operations, etc. are capable of attaining the required 30% reduction in phosphorous as well as the appropriate reductions associated with the other TMDL's. This task is accomplished by running a computer model of the system with the upstream and downstream watersheds included.

There are a number of sophisticated computer software programs that are capable of predicting the effectiveness of a specific stormwater / phosphorous removal strategy. The selection of a program is dependent on

- The volume of information already available on the individual watersheds,
- The percentage of impervious area,
- Soil types,
- General topography, and
- Knowledge of the specific routes stormwater collects in.

The City of New Ulm will evaluate software models to accomplish this task.

### **XI.** Low Impact Development (LID) (2.8)

Low impact development (LID) is a <u>significant reversal</u> from the development concepts that most communities have subscribed to. Rather than simply equating "low density" with "low impact", it directly examines the impacts on stormwater quantity and quality of stormwater runoff with the densities achieved in certain development patterns. In general, the conclusion is that the higher the density; the less the impact per unit. Therefore, movement toward this concept is encouraged with the MS4 requirements.

Low impact development is a relatively new concept to area and may require education of staff, developers and builders regarding application to development needs within the watershed. If this process is desired, the City may need to consider and implement changes in its zoning and development ordinances to encourage this practice.

### XII. Legal Tools (2.9)

Many of the recommendations of this plan will require either authority granted by City Council through ordinance, or changes in departmental rules and policies.

The following summary is a list of features for inclusion in city ordinances that should be adopted, reviewed and/or modified, as appropriate, to address and control stormwater in the community:

• Review and modify zoning rules, building codes, development standards, etc. to permit the introduction of low impact development (LID) if desired.

- The City will review its franchise, license and permit agreements with private utilities and, if necessary, amend them to define the utilities' responsibilities to appropriately restore areas disturbed by its activities. The ultimate goal is to provide appropriate enforcement procedures and actions.
- Create a stormwater utility capable of levying fees, performing inspections, initiating construction projects and assessing costs.
- Define discharges that are inappropriate and illegal for discharge to the stormwater system and establish fines for these discharges.
- Prohibit non-storm water discharges into the City storm sewer system and provide for appropriate enforcement procedures and actions.
- Re-assess existing ordinances for coordination with the SWPPP including lawn maintenance, development standards, etc.
- Require erosion and sediment controls as well as sanctions ensuring compliance for all construction projects one acre or larger.
- Review and require each construction project to follow its specific SWPPP.
- Develop an inspection program that outlines detection and analysis methods used to address non-storm water discharges, including illegal dumping into the storm sewer system.
- Require that all un-vegetated soil stockpiles be vegetated in a prompt and appropriate fashion.

### XIII. Plat Review Process (2.10)

Currently, the platting process defines nearly all land development

Although the City has chosen to become directly involved in developing some commercial, residential or industrial property either as a developer or providing design and financing for suitable improvements, private parties initiate most development.

The City has chosen to extend its planning authority beyond the existing city limits.

Confidential pre-planning meetings are encouraged between developers and City staff.

Land use and zoning are defined in the City Code

It may be necessary for the City to review the platting process as a result of this SWPPP.

The City has a great deal of latitude in its current platting and "Development Agreement" process. However, in order to assure that proper and sufficient BMP's are incorporated into future developments, a thorough review of the platting process would be appropriate. A review committee will review the development process and make recommendations to the City Council for appropriate ordinance revisions.

### XIV. Funding Mechanisms (2.11)

The funding of this process is expected to be established and implemented by the second year of this permit cycle. The funding may combine a separate stormwater utility fee for more routine costs and special assessments for major capital improvements. In addition, a general tax levy could be applied to many of these activities.

According to the Federal Environmental Protection Agency (EPA) there are approximately 125 different funding methods and variations for local governments (EPA Webcast, July 12, 2006). The keys to selecting the appropriate mechanism are developing a continuing cash flow stream that can fund the program into the future and creating one that can withstand court challenges. Currently, approximately 300-400 cities have chosen the stormwater utility method.

### XV. Schedule For Monitoring, Operating, And Maintaining BMP's (2.12)

The City will create a schedule for establishing, monitoring, operating, and maintaining BMPs.

The MPCA and University of Minnesota are currently developing guidance that establishes four levels of monitoring. This guidance will be useful to communities in deciding appropriate levels of monitoring for BMPs.

If BMPs are already in place, the monitoring, operation, and maintenance schedule will be established by the second year of the permit cycle.

### XVI. Inventory Current And Future Technical Tools And Expertise (2.13)

Individual departments in the City government that are in immediate contact with stormwater issues will be responsible to keep up with the technical tools that are available. This can be accomplished by attendance at industry seminars and workshops, and casual review of industry publications.

If changes in technical tools become available that the City chooses to employ, assignment of responsibility will be made to a qualified individual. This will include adequate training with an immediate on-the-job opportunity to implement and practice the tool.

### **XVII.BMP's That Can Be Implemented Immediately** (2.14)

- A. Structural (e.g. detention ponds, infiltration ponds, bio-filtration systems, etc.)
  - Identify and inspect all existing municipal stormwater detention facilities perform all necessary maintenance
  - Direct parks and recreation personnel in the construction <u>and operation</u> of rain gardens. Select some reasonably visible site(s) to construct an example.

### **B.** Non-structural (e.g. street sweeping)

- Adopt or formalize the City's street sweeping program
- Initiate the public information program.
- Introduce City personnel to the need for and requirements of this program with departmental training meetings. This should include the identification of illicit discharges.
- Train City personnel who issue building permits and conduct inspections in the requirements. This includes how to read, interpret and approve/deny SWPPP's submitted as part of a permit request.
- The City will review its franchise, license and permit agreements with private utilities and, if necessary, amend them to define the utilities' responsibilities to appropriately restore areas disturbed by its activities. The ultimate goal is to provide appropriate enforcement procedures and actions.

### **XVIII.** Goals For Next Five Years:

### **A.** 2007:

- One of the first tasks will be to assign the responsibility for creating a filing system and performing record keeping.
- Distribute information pamphlets in utility bills and/or post information on the City website.
- Contact local organizations to determine their educational roles with regard to the New Ulm area SWPPP and participate as needed.
- Initiate annual public meetings before submittal of annual report. This activity will continue into the future.
- Examine mechanisms to fund the stormwater program

### **B.** 2008:

- Work with local organizations to facilitate new educational opportunities.
- Develop ordinances by incorporating model ordinance information and drafting new language as required.
- Develop an illicit discharge inspection and assessment program.
- Adopt a stormwater funding method and execute all necessary ordinances.
- Distribute fliers for construction site erosion control with issuance of a building permit.
- Draft and adopt long-term operation and maintenance program for stormwater

facilities.

• Train City personnel for implementation of the long-term operation and maintenance program.

### **C.** 2009:

- Implement some of the new educational programs through cooperative efforts with local organizations
- Continue to promote and work with local organizations to develop new and existing educational programs.
- During adoption of the illicit discharge ordinance, hold public meeting(s) or hearings, as necessary.
- Adopt illicit discharge inspection and assessment program.
- Perform training sessions for City personnel and inspection staff.
- Post-educational information on web page.
- Ensure compliance with all construction permits.
- Complete inspections and maintenance as outlined in the long-term operations and maintenance program for stormwater facilities.

### **D.** 2010 - 2011:

• Conduct illicit discharge inspection and assessment as adopted.

### XIX. Plan Modifications

### A. General

It is anticipated that this Plan will be updated on an annual basis. The proposed updates will be made public prior to the annual meeting, which is planned in January or early February. Updates will be made on the following basis:

- 1. Modifications may be required by the Commissioner of the MPCA based on the following factors:
  - a. Discharges from the MS4 are impacting the quality of the receiving water.
  - b. More stringent requirements are necessary to comply with State or Federal regulations.
  - c. New BMP's may be adopted to replace ineffective or burdensome ones.
  - d. Additional conditions deemed necessary to comply with the goals and requirements of the Clean Water Act.
- 2. Written modifications shall set forth schedules for compliance, offer the City the

opportunity to propose alternative modifications, and explain how the modification will better meet the objectives of the program.

- 3. Reasonable modifications may be made as requested by the general public in the following formats:
  - a. Oral requests given at the annual meeting.
  - b. Written requests received within a reasonable time so that City staff can review the request and make the requested modification to the plan if deemed reasonable and appropriate.
- 4. Modifications may be made by the City without prior approval of the Commissioner, provided it is in accordance with the following:
  - a. A BMP is added and none are subtracted from the SWPPP.
  - b. A BMP that has failed or is ineffective is replaced with an alternate BMP that addresses the same or similar concerns.
  - c. The Commissioner is notified of the modification in the annual report for the year the modification was made, or in a technical report as needed.

### XX. Monitoring, Record Keeping And Reporting

### A. General

To meet the permit requirements, the City will evaluate program compliance, assess identified BMPs and identify progress towards achieving the measurable goals.

The City will keep records required by the NPDES permit for at least 3 years beyond the term of the permit and make the SWPPP and records available to the public during regular business hours.

### B. Approach

The status of program compliance, assessment of identified BMPs and progress of achieving the measurable goals will be documented in an annual report that is submitted to the MPCA by June 30 of each year covered under the term of the permit. The report will include the following:

- 1. Evaluation and assessment of the compliance with measurable goals in the SWPPP.
- 2. Results of information collected and analyzed regarding the effectiveness of the SWPPP.
- 3. A summary of next year's storm water activities planned.
- 4. Any proposed changes to BMPs or measurable goals.
- 5. A notice that another entity will satisfy some of the permit obligations.

The City will retain a copy of the SWPPP, which includes a copy of the permit application

and all supporting information at City Hall that can be viewed by interested persons during business hours. A copy of the SWPPP may be acquired from the City for a fee equal to the cost of plan reproduction. In addition, all data and information used to complete the application, annual reports, records and additional information requested by the Commissioner will be retained at City Hall for a period of at least 3 years beyond the date of permit expiration.

# XXI. Summary

A principal feature of this SWPPP will the encouragement of public participation and involvement. This can be accomplished by:

- All meetings will be held locally.
- Notice must be published at least 30 days before the meeting in the official City newspaper and provide a copy of the notice to the MPCA, county officials and all other persons who have indicated an interest in the SWPPP.
- The Notice will contain reference to this SWPPP, the date, time and location of the public informational meeting.
- The Notice will contain a concise description of the manner in which the meeting will be conducted.
- The Notice will indicate where a copy of this SWPPP is available for public review.
- The meeting will solicit public opinion on the adequacy of the SWPPP.
- Interested persons will be given a reasonable opportunity to make oral statements concerning the SWPPP.
- Timely, relevant written material, submitted concerning the SWPPP, will be considered.
- The City will consider the public input, oral or written, and make adjustments as deemed appropriate to the SWPPP.
- Complete minutes of the meeting will be taken to document the meeting and any submitted written statements regarding the SWPPP.
- The comments may be answered immediately if deemed appropriate. If more review is necessary, the staff may note the oral and/or written comments to be addressed at the next regularly scheduled administrative meeting. All submitted comments will be addressed. A file of all comments and their conditions of acceptance and/or rejection will be kept on file and open for public review. Accepted amendments will be made part of the annual revision to the SWPPP.

This Plan is merely the starting point of this 5-year endeavor and will be modified throughout the period of the permit. The general public is welcome to review this Plan and

to submit recommendations for revision during the annual SWPPP meeting that is anticipated to be held in either January or February. The Minnesota Pollution Control Agency is also anticipated to submit comments and recommendations for both mandatory and suggested plan revisions. These requested revisions will be made available to the general public for review and comment.

The City will document the relevant actions and efforts taken to comply with the conditions of the permit. The City intends to keep all documented actions, the most current rendition of this SWPPP and any requested revisions on file with the permit.

Approach toward pollution prevention:

The City's general approach is to map the location and size of all of its significant storm sewer outfalls into its rivers, lakes and wetlands and to utilize the Best Management Practice approach to limit pollutants and illicit discharges through its outfalls by both structural and non-structural methods. Engineered installations such as retention ponds, sedimentation basins and in-line sediment removal devices are generally considered to be structural methods. Educating the general public as well as the City's maintenance and construction personnel in more pollution conscious methods of mowing, fertilizing and proper waste disposal are generally considered non-structural methods.

# Table of Best Management Practices (BMP's) Identified 1-PUBLIC EDUCATION AND OUTREACH

1a-1 - Distribute Educational Materials	2
1b-1 - Implement an Education Program	3
1c-1 – Education Program: Public Education and Outreach	5
1c-3 - Education Program - Illicit Discharge Detection and Elimination	6
1c-4 - Education Program - Construction Site Run-off Control	8
1c-5 - Education Program - Post-Construction Stormwater Management in New Development and Redevelopment	9
1c-6 - Education Program - Pollution Prevention/Good Housekeeping for Municipal Operations	10
1d-1 - Coordination of Education Program	11
1e-1 - Annual Public Meeting	12

MS4 Name:

New Ulm

1a-1

**Minimum Control Measure:** 

1-PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 

\*BMP Title:

1a-1 - Distribute Educational Materials

# \*BMP Description:

- Create and/or select written educational materials that introduce storm water management issues to residential and nonresidential system users.
- Utility bill stuffers
- Local press releases

- City's web site
- Approach school district on including stormwater issues in course material

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Number of months and pieces of information included with utility bills
- Number or press releases

• Number of hits on City web site

# \*Timeline/Implementation Schedule:

• 2007-8 Commit people and money

• 2008-9 Begin with materials in utility bills

2009-10 Post materials and create links on City web site

• 2010-11 Approach school district on including stormwater issues in course material

# **Specific Components and Notes:**

EPA web site

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

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

1b-1

MS4 Name:

New Ulm

**Minimum Control Measure:** 

PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 

\*BMP Title:

1b-1 - Implement an Education Program

# \*BMP Description:

 Annually, select a theme and sequence of educational materials to be included with utility bills, web site, etc. over the succeeding year. Materials should change seasonally to reflect what the near future holds.

- It is anticipated that various entities (such as, business groups, service clubs, youth groups, teachers, environmental organizations, and others) will request presentations about storm water issues.
- Work with watershed SWCD's and others to prepare and distribute or post on City's website educational brochures or articles, and other materials such as:

Minnesota River Watershed Map & Statistics

Various other brochures and educational materials

3M River Rats

Minnesota River Association

Cure, Putting Green

- Maintain a continual awareness to find new sources of information and document all new worthwhile finds.
- Annually, review the new soruces of information against the current materials used and adjust accordingly.

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

# \*Measurable Goals:

- Number of months information included with utility bills
- Number of press releases
- Number of hits on City web site
- Number of new sources of information found

#### \*Timeline/Implementation Schedule:

• 2007 Establish ongoing annual review

• 2008-9 Begin with materials in utility bills

• 2009-10 Web accesses active

• 2010-11 Approach school district on including stormwater issues in course material

Specific Components and Notes:			
*Responsible	Party for this BMP:		
Name:	Steve Koehler		
Department:	Engineering		
Phone:	507.359.8245		
E-mail:	steve.koehler@ci.new-ulm.mn.us		

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

MS4 Name:

New Ulm

1c-1

**Minimum Control Measure:** 

PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 

\***BMP Title:** 1c-1 – Edu

1c-1 - Education Program: Public Education and Outreach

# \*Audience(s) Involved:

- Adults
- Children

#### \*Educational Goals for Each Audience:

- Adult –Capable of describing the relationship between good or bad stormwater management and the clean waters
- Children Recognize examples of poor stormwater management and list corrective options

# \*Activities Used to Reach Educational Goals:

- Adult –Watershed clean up projects
- Children School curriculum targeting stormwater issues, scouting programs

# \*Activity Implementation Plan:

• 2010-11

Approach school system scouts for inclusion in curiculum

• 2007- ongoing

Conduct Annual Review and request public input

# \*Performance Measures:

- Adults Number of held clean up projects
- Children Number of held clean up projects

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

MS4 Name: New Ulm

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

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

\*BMP Title: 1c-3 - Education Program - Illicit Discharge Detection and Elimination

#### \*Audience(s) Involved:

- City storm sewer utility staff
- Supervisory staff
- Other City/PUC staff
- New Ulm Residents
- Local Business Interests e.g. Chamber of Commerce
- Conservation Groups e.g. Brown County Conservation Club, 4H, Scouting

#### \*Educational Goals for Each Audience:

- City storm sewer utility staff Recognize types of illicit discharge potentially present in this area, ability to properly document any observations, understand their reporting responsibilities, able to describe punitive measures taken previously
- Supervisory staff Capable of evaluating documentation of illicit discharges and assessing the situation and determining an appropriate response. Capable to verbally, with follow-up written instruction, to the offender solicit cooperation to rectify the situation. Able to describe punitive measures taken previously.
- Other City/PUC staff Recognize types of illicit discharge potentially present in this area and report it to City staff
- Public groups Recognize and be able to describe the types of illicit discharge; and the difference between illegal and illicit discharges

#### \*Activities Used to Reach Educational Goals:

- Provide training to City staff so that they can learn their various roles in stormwater management, including:
- Implementers of SWPPP & BMPs,
- Observers and reporters of illicit discharges, illegal dumping, erosion control problems,
- Brief other staff on what an Illicit Discharge looks like and who to report it to
- Presentations at community groups and on the city's web site

#### \*Activity Implementation Plan:

- 2007-8 Initiate seasonal required training on potential illicit discharges during the upcoming season All City staff
- 2007-8 Annual formal training session for key staff members
- 2007-11 Attend local and regional training when presented

#### \*Performance Measures:

- Record number, types and locations of illicit discharges
- Keep records of training sessions attended by staff

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

MS4 Name: New Ulm

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

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

\*BMP Title: 1c-4 - Education Program - Construction Site Run-off Control

#### \*Audience(s) Involved:

- Local building construction companies –
- Local developers –
- Building inspectors –
- Realtors –
- Private utilities –

# \*Educational Goals for Each Audience:

- Local building construction companies Describe the effectiveness of the various BMP's required, recognize damaged BMP's, capable of effectively reading the site SWPPP, understanding the reporting requirements of individual SWPPP's, describe the potential penalties
- Local developers Capable of describing to homebuyers the responsibilities of compliance with requirements of the Storm Water Pollution Prevention Plan, including limitations on future grading.
- Building inspectors ability to read and enforce the rules of the individual SWPPP

#### \*Activities Used to Reach Educational Goals:

- Hold annual meetings/forums to discuss new erosion and sediment control requirements.
- Provide materials with each ground disturbing building permit request
- Annually prepare a packet of information including the MPCA permit transfer form and fact sheet and mail it to area realtors and developers

#### \*Activity Implementation Plan:

- 2008 Provide materials with building permits
- 2009+ Hold annual meetings/forums for building contractors and developers to explain expectations
- 2008 Educate building and utility inspectors on evaluating the operation of structural BMP's reminder training to be held each spring

#### \*Performance Measures:

- Number of attendees at annual training meetings/forums
- Number of building permits with materials attached issued to contractors

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

MS4 Name:

New Ulm

**Minimum Control Measure:** 

PUBLIC EDUCATION AND OUTREACH

**Unique BMP Identification Number:** 

1c-5

\*BMP Title:

1c-5 - Education Program - Post-Construction Stormwater Management in New Development and

Redevelopment

# \*Audience(s) Involved:

- Realtors -
- Landscape firms –

#### \*Educational Goals for Each Audience:

- Realtors Capablility to describe to homebuyers the responsibilities of compliance with requirements of the Storm Water Pollution Prevention Plan including limitations on future grading.
- Landscape firms Ability to find, read and describe to customers the limitations on grading in developments as described in the Storm Water Pollution Prevention Plan

## \*Activities Used to Reach Educational Goals:

Present meetings/forums at the beginning of each construction season to the targeted audiences

#### \*Activity Implementation Plan:

2009 +Hold annual meetings/forums for realtors and landscaping firms

#### \*Performance Measures:

Number of attendees at annual meetings/forums

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department:

Engineering

Phone:

507.359.8245

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

MS4 Name: New Ulm

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

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

\*BMP Title: 1c-6 - Education Program - Pollution Prevention/Good Housekeeping for Municipal Operations

#### \*Audience(s) Involved:

- City Park Deptartment, Street Department, PUC Field Operational staff
- City/PUC supervisory staff
- General Public through civic groups, athletic leagues & gardening clubs

#### \*Educational Goals for Each Audience:

- City Park Deptartment, Street Department, PUC Field Operational staff Capable of recognizing improperly operating BMP's, ability to describe corrective measures, capable of implementing the corrective measures
- City Park Deptartment, Street Department, PUC Field Operational staff Capable of recognizing improperly operating BMP's, ability to describe corrective measures, identify all materials necessary to correct the situation; knowledge of where those materials are available, capable of communicating with field staff the required corrective plan
- General Public Capable of recognizing poor housekeeping practices in municipal operations and comfortable to report them to the MS4

#### \*Activities Used to Reach Educational Goals:

- With City Park Deptartment, Street Department, PUC Field Operational staff, develop a list of activities commonly seen locally that could contribute to pollution and methods used to control them
- At beginning of each season hold training meeting to educate all City personnel in the proper use and functioning of the various BMP's
- Add comments to other public presentations that request public involvement in assisting the MS4 to scrutinize its own operations

# \*Activity Implementation Plan:

- 2009+ Prepare training materials
- 2009+ Begin seasonal training on activities inclined to release pollution during the coming season

#### \*Performance Measures:

• Attendance list at all training sessions

# \*Responsible Party for this BMP:

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

MS4 Name: New Ulm

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

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

\*BMP Title: 1d-1 - Coordination of Education Program

## \*BMP Descriptions:

- Identify other MS4 communities in the area and identify resources to publicize information in each one's area. Contact them in an effort to eliminate any duplication that could confuse the public.
- If agreement can be reached, rotate seminars among the communities and cross publicize the availability.

# Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or reference on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

# Engineering

507.359.8245

# steve.koehler@ci.new-ulm.mn.us

- Number of meeting invitations; attendance; program inventory; priority list
- Number of agreements

# \*Timeline/Implementation Schedule:

- 2007 Identify other MS4 communities in the vicinity
- 2007-8 Inquire of other MS4's which media outlets they may use in their implementation
- 2011 Select best presenters from each City for each audience coordinate appearances

#### **Specific Components and Notes:**

• Attempt to focus on sharing the responsibilities to staff community events to reduce total cost. Also, the internal staff communication could be helpful

## \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

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

MS4 Name: New Ulm

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1e-1

\*BMP Title: 1e-1 - Annual Public Meeting

## \*BMP Description:

• Prepare and issue meeting notice to public, MPCA, city/county officials and all other persons who have indicated interest in the SWPPP.

- Issue press release of upcoming meeting with an agenda
- Document attendance at public meeting
- Document public input with regard to the adequacy of the SWPPP, whether written or oral opinion.
- Adjust SWPPP according to comments when appropriate

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Number of attendees
- Promptness of start and end (minutes)
- Number of comments from the public

# \*Timeline/Implementation Schedule:

• 2008+ Begin annual meetings - Meeting scheduled annually sometime in January or February throughout the term of the permit.

#### **Specific Components and Notes:**

- The public notice will be completed a minimum of 30 days prior to the public meeting
- Ask, but do not require people to contact the City to be placed on the agenda
- Adjust SWPPP according to comments when appropriate
- The notice will contain the following information: reference to the SWPPP, date, time and location of the public meeting, concise description of the manner in which the public meeting is to be conducted and where a copy of the SWPPP is available for the public to review.
- The meeting will solicit public opinion with regard to the adequacy of the SWPPP.
- Interested persons will be given a reasonable opportunity to make oral statements regarding the SWPPP.
- All timely and relevant comments will be considered in adjusting the SWPPP.
- Adjustments will be made to the SWPPP according to the public comment and as directed by the Council.

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

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

# Table of Best Management Practices (BMP's) Identified 2-PUBLIC PARTICIPATION/INVOLVEMENT

2a-1 - Comply with Public Notice Requirements	2
2b-1 - Solicit Public Input and Opinion on the Adequacy of the SWPPP	3
1 · · · · · · · · · · · · · · · · · · ·	
2c-1 - Consider Public Input	⊿

MS4 Name:

New Ulm

**Minimum Control Measure:** 

2-PUBLIC PARTICIPATION/INVOLVEMENT

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

\*BMP Title: 2a-1 - Comply with Public Notice Requirements

# \*BMP Description:

- A 30 day public notice will be issued for the annual meeting
- Document with proof of publication from the newspaper of record, New Ulm Journal
- In addition to the legal notice, document issuance of all press releases associated with stormwaterissues

Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Proof of publication available for public review
- Number of times per year formal Notices are published on any City stormwater issue

# \*Timeline/Implementation Schedule:

2008-11 Continuing throughout permit period

# **Specific Components and Notes:**

# \*Responsible Party for this BMP:

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

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

2b-1 - Solicit Public Input and Opinion on the Adequacy of the SWPPP

MS4 Name: New Ulm

Minimum Control Measure: 2-PUBLIC PARTICIPATION/INVOLVEMENT

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

\*BMP Title:

*BMP Description:			
Include in the annual meeting notice, language that invites public participation and input on the adequacy of the SWPPP			
All external communication and publicity should include contact name of the City staff person responsible, City mailing address			
Request all materials be submitted in writting			
Location(s) in SWPPP of detailed information relating to this BMP:			
The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.			
*Measurable Goals:	_		
• Count of each type of communication received.			
• Number of responses to inquiries	i		
*Timeline/Implementation Schedule:	_		
• 2008-11 Ongoing			
Specific Components and Notes:	-		
Specific Components and Process			
*Responsible Party for this BMP:	_		
Name: Steve Koehler			
Department: Engineering			
Phone: 507.359.8245			
E-mail: steve.koehler@ci.new-ulm.mn.us			

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

2-PUBLIC PARTICIPATION/INVOLVEMENT

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

\*BMP Title: 2c-1 - Consider Public Input

# \*BMP Description:

- Maintain a file of all comments received throughout the year with documentation to indicate final resolution.
- Prepare a summary of input received throughout the year
- Document all conversation during the annual meeting
- Assign a specific individual to follow-up on specific issues.
- One month after the annual meeting, require reports from the assigned individuals

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

Number of comments received

# \*Timeline/Implementation Schedule:

2008-11 and continuing for permit period

# **Specific Components and Notes:**

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

# Table of Best Management Practices (BMP's) Identified 3-ILLICIT DISCHARGE DETECTION AND ELIMINATION

3a-1 - Storm Sewer System Map	2
3a-2 - Define Drainage Areas	
3b-1 - Regulatory Control Program	
3c-1 - Illicit Discharge Detection and Elimination Plan	6
3d-1 - Public and Employee Illicit Discharge Information Program	7
3e-1 - Identification of Non Stormwater Discharges and Flows	8
3f-1 - Year 2000 Land Use – MN River D. O. TMDL	9
3f-3 - Prioritize Drainage Areas for Installation of BMP's	10

MS4 Name:

New Ulm

Minimum Control Measure:

3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

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

\*BMP Title:

3a-1 - Storm Sewer System Map

# \*BMP Description:

- Develop map of the municipal storm sewer system
- All utility maps will be on a computerized system
- Maintenance staff should mark changes necessary on the maps
- Existing illicit discharges should be highlighted with description on the map
- Use the map as a tool for eliminating illicit discharges
- Update maps annually, removing those illicit discharges from the map as they are corrected

# Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

# \*Measurable Goals:

Map updates shall be recorded on the map

# \*Timeline/Implementation Schedule:

2007-8 Begin mapping the system or begin capturing the missing information

2009 +Continue maintaining the system map

# **Specific Components and Notes:**

- Illicit discharges does not necessarily mean illegal
- Listing of illicit dischages

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone:

507.359.8245

E-mail:

MS4 Name: New Ulm

Minimum Control Measure: 3-Illicit Discharge Detection And Elimination

Unique BMP Identification Number: 3a-

\*BMP Title:

3a-2 - Define Drainage Areas

# \*BMP Description:

- Define all points of discharge (24" and larger) on the city utility map
- Outline the watersheds for each outlet.
- Identify sub watersheds with their development pattern as of 2000. Identify area of impervious surface in each sub watershed
- Illustrate all existing BMP's and types along the routes within the drainage area. Determine the area served by each individual BMP
- Place all information gathered in a database

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- % of city identified with sub watersheds
- % of city included in the database

#### \*Timeline/Implementation Schedule:

- 2008 Begin calculating sub areas and determining the amount of impervious surface area
- 2011 Entry into database
- 2011 Implementation plan for additional BMP's

#### **Specific Components and Notes:**

- As development /re-development occurs, approved maps and sub watershed may need updating
- Acquire and retain stormwater design BMP performance calculations for all developments

# \*Responsible Party for this BMP:

Name: Steve Koehler Department: Engineering

Phone: 507.359.8245

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

MS4 Name: New Ulm

Minimum Control Measure: 3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

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

\*BMP Title: 3b-1 - Regulatory Control Program

# \*BMP Description:

• An Illicit Discharge Ordinance will be drafted, adopted and implemented

- Review current ordinance language; acquire model ordinances
- Draft and adopt City ordinance
- Policies for enforcement and penalities will be included in the ordinance
- Educate the staff and public on the requirements of the ordinance
- Conduct inspections, enforce the ordinance, including penaltities

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Draft City ordinance and complete public hearing notice.
- Document attendance at public hearing.
- Document public input with regard to the ordinance
- Adjust the ordinance as directed by the Council
- Adopt illicit discharge ordinance.
- Track fines levied by implementation of ordinance.

# \*Timeline/Implementation Schedule:

•	2007-8	Information	gathering on	model and	existing ord	linances.

- 2008-9 Drafting of illicit discharge ordinance.
- 2008-9 Public hearing for public input on illicit discharge ordinance.
- 2009 The adoption of the illicit discharge ordinance.
- 2010-11 Monitoring of fines levied by implementation of illicit discharge ordinance.

#### **Specific Components and Notes:**

• In the first two years of permit coverage, an illicit discharge ordinance will be drafted. A public notice will be completed a minimum of 30 days prior to the scheduled public hearing. The public hearing will solicit public opinion with regard to the ordinance. Interested persons will be given a reasonable opportunity to make oral statements regarding the ordinance. All timely and relevant comments will be considered in adjusting the ordinance. Adjustments will be made to the ordinance as directed by the Council.

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

Unique BMP Identification Number: 3c-1

\*BMP Title: 3c-1 - Illicit Discharge Detection and Elimination Plan

# \*BMP Description:

- The audience for this is the MS4 staff for implementation of field and administrative procedures.
- Identify policies (City, State and regional) that already exist in the surrounding area
- Identify criminal code (State of Minnesota) that exists
- Adopt necessary rules to fill-in any gaps that exist in existing codes and rules
- Develop field procedures for identifying and eliminating illegal connections
- Develop administrative procedures for notifying violators and enforcing compliance

Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

# \*Measurable Goals:

- Identify illicit discharge issues and concerns.
- Quantify illicit discharge types, locations, etc.
- Develop and implement an illicit discharge inspection and assessment program.
- Incorporate the illicit discharge inspection program into the SWPPP.
- Perform inspections as outlined in illicit discharge inspection program.

# \*Timeline/Implementation Schedule:

• 2007-09

Draft inspection plan

• 2010-11

The monitoring and elimination of illegal connections

#### **Specific Components and Notes:**

- In the first two years of permit coverage, an illicit discharge inspection and assessment program will be drafted.
- Adjustments will be made to the inspection program according to the public comment and as directed by the Council.

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

**Unique BMP Identification Number:** 

\*BMP Title: 3d-1 - Public an

3d-1 - Public and Employee Illicit Discharge Information Program

# \*BMP Description:

• Training will be held for City/PUC personnel and inspection staff for implementation of the illicit discharge inspection and assessment program.

3d-1

• Brochures specifically describing illicit discharges will be added to other materials for distribution to the general public

# Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

# \*Measurable Goals:

- Maintain a list of individuals attending training.
- Document any responses to the inspection and assessment program.
- Modify illicit discharge inspection program accordingly to comments received.

# \*Timeline/Implementation Schedule:

- 2008-11 Ongoing training will be conducted with the appropriate staff.
- 2008-11 Set up refresher training and new employee training
- 2008-11 Distribute brochures to the general public

# **Specific Components and Notes:**

• The City will work with adjoining communities to the fullest extent to try to utilize a single training effort for multiple communities.

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

F-mail

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

Unique BMP Identification Number: 3e-1

\*BMP Title:

3e-1 - Identification of Non Stormwater Discharges and Flows

#### \*BMP Description:

- Using the Permit application, prepare and publicize a list of typical "non-stormwater discharges" from local experience and the experience of other communities
- Examine the topographic maps of the city and identify stormwater routes of the collection system
- Identify likely sources associated with typical non-stormwater discharge

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

Track number of illicit discharges identified as well as the actions taken and final resolution

#### \*Timeline/Implementation Schedule:

- 2008-9 Prepare a list of typical "non-stormwater discharges" from local experience and the experience of other communities
- 2010-11 Identify likely sources

# **Specific Components and Notes:**

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

3-ILLICIT DISCHARGE DETECTION AND

**ELIMINATION** 

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

\*BMP Title:

3f-1 - Year 2000 Land Use - MN River D. O. TMDL

#### \*BMP Description:

- Obtain the pixel and percentage GIS information on impervious area from the U of M for 2000
- Using similar methods as used to determine the current amount of impervious area, determine the amount of impervious area in the year 2000.
- Identify all existing structural BMP's that reduce phosphorus

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Completed impervious area of New Ulm for the year 2000
- List of BMP's reducing phosphorus

# \*Timeline/Implementation Schedule:

• 2008

Determine the area of impervious in 2000

# **Specific Components and Notes:**

• The TMDL for 30% phosphorous reduction in the Minnesota River is measured against the year 2000. This reduction is not measured directly by pound of phosphorous removed but by a function of the amount of impervious area and the BMP's in place to treat it.

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name: New Ulm

Minimum Control Measure: 3-ILLICIT DISCHARGE DETECTION AND

ELIMINATION

**Unique BMP Identification Number:** 3f-3

\*BMP Title:

3f-3 - Prioritize Drainage Areas for Installation of BMP's

# \*BMP Description:

- Develop boundaries and areas for each major water drainage area.
- Determine percentage of impervious in each area.
- Evaluate BMP's to serve each area.
- Develop a city wide matrix of recommended BMP's/cost/maximize phosphorus reduction.

# Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- The coverage of the city where drainage boundaries are determined.
- The number of drainage areas reviewed for BMP implementation.
- The entry of the data into a database.

#### \*Timeline/Implementation Schedule:

- 2007-8 Draw boundaries of drainage areas.
- 2008 Subjective evaluation performed
- 2009-11 Begin using the matrix tool to closely examine various areas for BMP installation.

#### **Specific Components and Notes:**

• The most highly rated areas should be based on high potential contribution, space available, near outlet, and low cost.

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

Name: Steve Koehler Department: Engineering

Phone: 507.359.8245

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

# Table of Best Management Practices (BMP's) Identified 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

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

MS4 Name: New Ulm

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF

CONTROL

Unique BMP Identification Number: 4a-1

\*BMP Title: 4a-1 - Ordinance or other Regulatory Mechanism

# \*BMP Description:

- Identify policies (City, state and regional) that already exist
- Review current ordinance language; acquire model ordinances and surrounding community ordinances.
- Draft City ordinance.
- Complete public hearing notice.
- Document attendance at public hearing.
- Document public input with regard to the perceived adequacy of the ordinance.
- Adjust the ordinance and as directed by the City Counil.
- Adopt construction site storm water runoff control ordinance.

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Conformance with the timetable for this BMP
- Enactment of policies at the department level

### \*Timeline/Implementation Schedule:

• 2007 Information gathering on model and existing ordinances.

• 2007 Drafting of construction site storm water runoff control ordinance.

• 2007 Public hearing for public input on construction site storm water runoff control ordinance.

• 2007-8 Adoption of the construction site storm water runoff control ordinance

• 2009+ Enforcement of ordinance

# **Specific Components and Notes:**

- In the first six months of permit coverage, a construction site storm water runoff control ordinance will be drafted and adopted.
- A public notice will be completed a minimum of 30 days prior to the scheduled public hearing.
- The public hearing will solicit public opinion with regard to the adequacy of the ordinance.
- Interested persons will be given an opportunity to make oral statements regarding the rdinance.
- All timely and relevant comments will be considered in adjusting the ordinance.
- Adjustments will be made to the ordinance according to the public comment and as directed by the Council.

# \*Responsible Party for this BMP:

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

4-CONSTRUCTION SITE STORMWATER RUNOFF

CONTROL

**Unique BMP Identification Number:** 

\*BMP Title: 4b-1 - Construction Site Implementation of Erosion and Sediment Control BMPs

# \*BMP Description:

• Identify the five (5) BMP's found to be the most effective in keeping erosion under control and containing sediment on the construction site and off the streets in similar communities.

4b-1

- The City will host an annual BMP Workshop for all local builders, contractors, and developers. The five (5) BMPs will be explained in detail with data from the literature denoting the efficacy of each BMP.
- Proper maintenance of the BMPs will also be discussed at this event.
- Conduct construction site inspections to assure that proper BMP's are being used

# Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Review the BMP Workshop evaluation comments submitted by the attendees.
- Developed list of five (5) BMP's.

# \*Timeline/Implementation Schedule:

During the year following the completion of the stormwater ordinance and the selection of the five (5) BMPs, start the implementation of these BMPs.

• 2009

Identify five (5) BMPs

• 2009+

Construction site inspections

2010+

Annual BMP Workshop

2011+

Plan review must include evaluating BMP 's specified in SWPPP for the project

#### **Specific Components and Notes:**

- Make certain that the selected BMPs are consistent with the requirements of the Phase II General Stormwater Permit for Construction Activity.
- Attendance at the BMP Workshops.

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

0 0

- 1101101

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

4-CONSTRUCTION SITE STORMWATER RUNOFF

**CONTROL** 

4c-1

**Unique BMP Identification Number:** 

\*BMP Title: 4c-1 - Waste Controls for Construction Site Operators

# \*BMP Description:

- Verify that existing regulations appropriately address construction site operators
- Carefully examine site specific BMP's for adequate waste control management
- Assess construction site material storage and waste management problems and identify definitions and criteria needed to promote proper construction site materials storage and compliance
- Provide training to contractors and suppliers in the proper use and storage of potentially hazardous and non-hazardous regulated materials at annual contractor workshop

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- List all key construction site material storage and waste management issues encountered
- Number of contractors & developers who attend the annual workshops

# \*Timeline/Implementation Schedule:

• 2009-11

Identify hazardous materials and storage issues

• 2009-11

Present information annually to contractors and suppliers

# **Specific Components and Notes:**

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E mail

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

4-CONSTRUCTION SITE STORMWATER RUNOFF

**CONTROL** 

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

\*BMP Title:

4d-1 - Procedure for Site Plan Review

# \*BMP Description:

- Procedures will be developed for three types of site plan review:
  - 1. New subdivision or commercial development
  - 2. Construction / Reconstruction of municipal infrastructure
  - 3. Construction initiated through a local building permit for exterior construction

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

Number of each type of plan reviewed annually

# \*Timeline/Implementation Schedule:

• 2008-9

Develop criteria and educate staff for site plan reviews

• 2009+

Review plans for new development and municipal infrastructure

2009+

For building permit site plan review

# **Specific Components and Notes:**

• Procedures need to describe the MPCA stormwater rules and site plan review criteria

# \*Responsible Party for this BMP:

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

4-CONSTRUCTION SITE STORMWATER RUNOFF

CONTROL

**Unique BMP Identification Number:** 

\*BMP Title:

4e-1 - Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater

Noncompliance

# \*BMP Description:

Establish a policy on the procedure to receive and process noncompliance reports. Procedure may include:

4e-1

- Publication of a contact address, phone number and email address on all publicly distributed materials, including the City web site, posters, newspaper articles, etc. This contact is available for all stormwater related issues.
  - Prompt response to the source of the report
  - Maintain a log of all reports, the assignment, estimated completion date, the current status
  - Keep an original copy of complete correspondence in file
  - Response of findings and resolution to the source of the report

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

Number of non-compliance reports received

# \*Timeline/Implementation Schedule:

- 2008-9 Draft procedure for non-compliance issue resolution
- 2009+Initiate non-compliance procedures and enforcement

# **Specific Components and Notes:**

# \*Responsible Party for this BMP:

Name: Steve Koehler Department: Engineering Phone: 507.359.8245

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

MS4 Name: New Ulm

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF

CONTROL

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

\*BMP Title: 4f-1 - Establishment of Procedures for Site Inspections and Enforcement

#### \*BMP Description:

- Construction sites disturbing 1 acre or larger, or part of a larger common plan for development, will be required to have stormwater pollution prevention plans in place prior to commencement of earth-disturbing activities.
- Establish procedures for conducting site inspections, including guildlines regarding non-compliance and assessing penalties
- Initiate site inspection and enforcement programs
- Provide training for building code enforcement officials

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- All distributed sites 1 acre or larger will have issued permits and SWPP Plans in place; smaller sites
  will be evaluated by the responsible party to determine if a SWPPP and state permit will be required
- All permitted sites will:

Be inspected at least once by City personnel near the beginning of work and once as the work is closing.

#### \*Timeline/Implementation Schedule:

	2007-8	Review and adjust the current inspection procedures and responsibility
•	2008-9	Provide training for building code officials
•	2009+	Begin implementing the SWPPP requirement for all sites over 1 acre
•	2009+	Inspection and enforcement program

#### **Specific Components and Notes:**

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

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

# Table of Best Management Practices (BMP's) Identified

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

5a-1 - Development and Implementation of Structural and/or Non-structural BMPs	2
5a-4 - Review and Adjust Existing Ordinances and Development Standards	3
5a-5 - Examine mechanisms to fund the stormwater program.	,
54-5 - Examine incentations to fund the storin water program.	
5b-1 - Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment	5
5c-1 - Long-term Operation and Maintenance of BMPs	-

MS4 Name: New Ulm

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT

IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5a-1

\*BMP Title: 5a-1 - Development and Implementation of Structural and/or Non-structural BMPs

#### \*BMP Description:

- Assign the responsibility for stormwater management to a specific position in the City
- Review development standards as necessary to include provision for low impact development (LID), if desired.
- Enact ordinance prohibiting the modification, removal or disabling any permanent BMP without formal written authority from the City
- Review stormwater utility fee to insure that sufficient funds are being collected to fund the City requirements, if desired

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Establish ordinance adopted
- Establish stormwater utility fund

#### \*Timeline/Implementation Schedule:

- 2007-8 Assign the responsibility
- 2009 Enact ordinance prohibiting the modification
- 2009 Review and amend development standards
- 2009-11 Implement stormwater utility fees

#### **Specific Components and Notes:**

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

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name: New Ulm

Minimum Control Measure: No. 5 - Post-Construction Storm Water Management In New

Development And Redevelopment

**Unique BMP Identification Number:** 5a-4

\*BMP Title:

5a-4 - Review and Adjust Existing Ordinances and Development Standards

#### \*BMP Description:

- Examine existing ordinances and policies for conflicts with the standards and recommendations included in this SWPPP and the State Stormwater Manual:
  - Requirements that would prohibit infiltration areas with taller foliage (Require mowing unmowed lawns, etc.)
  - Prohibit changes to the runoff characteristics of the area (i.e., paving over pervious concrete or asphalt pavements, etc.)

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

The number of ordinances and policies reviewed

#### \*Timeline/Implementation Schedule:

• 2008

Identify all ordinances and policy manuals that require change

• 2009+

Draft, pass and implement the changes necessary

#### **Specific Components and Notes:**

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name: New Ulm

Minimum Control Measure: No. 5 - Post-Construction Storm Water Management In New

Development And Redevelopment

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

*BMP Title:	5a-5 - Examine mechanisms to fund the stormwater program.
*BMP Description:	
	methods of funding these City requirements and make recommendations for method
to pursue the preferre	d method.
Location(s) in SWPPP	of detailed information relating to this BMP:
	ncluded or referenced on this Summary Sheet is intended to meet all SWPPP
requirements for t	
*Measurable Goals:	
• Recommendation	s received by mid year 2008
• Implementation o	f recommendations in 2009
*Timeline/Implemen	tation Schedule:
<del>-</del>	nmendations received by mid year
	mentation of recommendations
•	
<b>Specific Components</b>	and Notes:
*Responsible Party fo	
Name:	Steve Koehler
Department:	Engineering
Phone:	507.359.8245
E-mail:	steve.koehler@ci.new-ulm.mn.us

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

MS4 Name: New Ulm

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT

IN NEW DEVELOPMENT AND REDEVELOPMENT

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

\*BMP Title: 5b-1 - Regulatory Mechanism to Address Post Construction Runoff from New Development and

Redevelopment

#### \*BMP Description:

 By June 30, 2008, adopt an ordinance with provisions to regulate runoff from development and redevelopment

- Review existing BMP's and evaluate their effectiveness
- Develop a regulatory program to penalize those who remove, alter or modify permanent BMP's in such a way to diminish their effectiveness (Post construction stormwater management ordinance.)

#### Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Draft City ordinance.
- Complete public hearing notice.
- Document attendance at public hearing.
- Document public input with regard to the adequacy of the ordinance.
- Adjust the ordinance according to comments and as directed by the Council.
- Adopt post construction storm water management ordinance.

#### \*Timeline/Implementation Schedule:

- 2007 Draft of post construction storm water management ordinance.
- 2007-8 Public hearing for public input on post construction storm water management ordinance.
- By Jume 30, 2008 Adoption of the post construction storm water management ordinance.
- 2008+ Implement ordinance

#### **Specific Components and Notes:**

- A public notice will be completed a minimum of 30 days prior to the scheduled public hearing.
- The public hearing will solicit public opinion with regard to the adequacy of the ordinance.
- Interested persons will be given an opportunity to make oral statements regarding the ordinance.
- All timely and relevant comments will be considered in adjusting the ordinance.
- Adjustments will be made to the ordinance as directed by the Council.

# \*Responsible Party for this BMP:

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name: New Ulm

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT

IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5c-1

\*BMP Title: 5c-1 - Long-term Operation and Maintenance of BMPs

#### \*BMP Description:

- Create a database with sites of all BMP's listed with dates of inspections and evaluations
- Assign responsibility to maintain the database to specific position in the organization
- Identify needed maintenance for BMP's
- Assign the responsibility for operation and maintenance for BMP's
- Conduct inspections and perform needed maintenance

#### Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Inventory of structural runoff controls
- Establish and implement a preventive maintenance schedule for all structures
- Inspect structural storm water BMP's annually

#### \*Timeline/Implementation Schedule:

• 2008 Assign responsibilities

• 2008-11 Inventory existing structural BMP's

• 2008-11 Create BMP database

• 2007-11 Continuous operation of BMP's with appropriate maintenance

#### **Specific Components and Notes:**

Develop a program for inspection and maintenance of storm water control structures

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

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

# Table of Best Management Practices (BMP's) Identified 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

6a-1 - Municipal Operations and Maintenance Program	2
6a-2 - Street Sweeping**	3
6a-3 - Examine mechanisms to fund the stormwater program.	4
6b-2 - Annual Inspection of All Structural Pollution Control Devices.	5
6b-3 - Inspection of a Minimum of 20 percent of the City Outfalls and all of the Sediment Basins and Ponds Each Year	6
6b-4 - Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas	7
6b-5 - Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are	
Necessary and the Implementation of the Corrective Measures	8
6b-6 - Record Reporting and Retention of All Inspections and Responses to the Inspections	9
6b-7 - Evaluation of Inspection Frequency	10
6c-1 - Compliance with Approved Current and Future TMDL's	11
6c-2 - Minimize or Avoid Impacts on Current and Future Source Water Protection Zones	12

MS4 Name: New Ulm

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

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

\*BMP Title: 6a-1 - Municipal Operations and Maintenance Program

#### \*BMP Description:

- A long-term operation and maintenance program will be developed and implemented to minimize the discharge of pollutants from the City outfalls
- Establish a line of authority and responsibility for compliance with this SWPPP
- Train maintenance personnel on importance of performing good housekeeping

#### Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Keep records of all inspections and maintenance measures.
- Submit inspection and maintenance records with the annual report.

#### \*Timeline/Implementation Schedule:

- 2008-9 Draft long-term operation and maintenance program
- 2008-9 Adopt long-term operation and maintenance program
- 2009-11 Perform inspections and maintenance as outlined.

#### **Specific Components and Notes:**

- Develop a consistent inspection, maintenance and documentation program through training.
- Maintain a log of all training received by City personnel
- Include a discussion of training needs and accomplishments in annual reviews
- Submit inspection maintenance documentation annually with SWPPP annual report

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

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name: New Ulm

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

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

\*BMP Title: 6a-2 - Street Sweeping\*\*

#### \*BMP Description:

• Minimum twice per year sweep all streets

- Target specific areas for more frequent street sweeping, if applicable. Also indicate the reason for selecting the specific target area and how the frequency differs.
- Overview of street sweeping waste management plan

#### Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Total hours of operation and average speed
- Measure of material removed each sweeping scheduled (could be kept for specific areas of the City)

#### \*Timeline/Implementation Schedule:

2007-8

Develop a street sweeping plan and schedule

• 2008-9

Implement the plan for city streets

#### **Specific Components and Notes:**

- Frequency of street sweeping events, including the time(s) of year that it will be conducted
- Type of street sweeping equipment used (brush or vacuum)
- Target areas for more frequent street sweeping, if applicable. Also indicate the reason for selecting the specific target area and how the frequency differs.
- Overview of street sweeping waste management plan

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name: New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

6a-3

#### \*BMP Title:

6a-3 - Examine mechanisms to fund the stormwater program.

#### \*BMP Description:

Examine the various methods of funding these City requirements and make recommendations to pursue the preferred method.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

#### \*Measurable Goals:

- Recommendations received by mid year 2008
- Implementation of recommendations in 2009

#### \*Timeline/Implementation Schedule:

2008

Recommendations received by mid year

2009

Implementation of recommendations

#### **Specific Components and Notes:**

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

\*BMP Title: 6b-2 - Annual Inspection of All Structural Pollution Control Devices

6b-2

#### \*BMP Description:

- Annually inspect all structural BMPs, including, as appropriate:
  - wet ponds and extended-detention outlet structures
  - grassed swales, bioretention cells, sand filters, and filter strips
  - infiltration basins and trenches
- Initiate appropriate maintenance efforts to restore the effectiveness of the structures
- Once every ten years measure and document the volume of sediment build up in detention and retention ponds
- Inspection will include photographs to illustrate the condition of the device

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Report and photograph inspection each structural BMP
- Place photographs in database
- Record number of BMP's requiring maintenance
- Cost of maintenance for each type of BMP

#### \*Timeline/Implementation Schedule:

- 2007-8 Inventory BMP's
- 2009-11 Conduct inspections

#### **Specific Components and Notes:**

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

MS4 Name:

New Ulm

6b-3

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

\*BMP Title:

6b-3 - Inspection of a Minimum of 20 percent of the City Outfalls and all of the Sediment Basins

and Ponds Each Year

#### \*BMP Description:

- Inspect 20% of all outfalls
- Initiate appropriate maintenance
- All inspections include documentation for a database

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Number of outfalls inspected each year
- Completion of updating the database

#### \*Timeline/Implementation Schedule:

- 2007 Identify locations of all outfalls requiring inspection & develop a schedule
- 2008-11 Conduct the inspections

#### **Specific Components and Notes:**

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

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

6b-4

# \*BMP Description:

\*BMP Title:

Create an inventory to register and track City/PUC stockpile sites (material, temp or perm, location, BMPs used), inspection results

6b-4 - Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas

- Develop procedures for inspection of stockpiles and BMP's required
- Inspect all City/PUC stockpiles

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Number of City/PUC permanent and temporary stockpiles of record
- Actions recommended for non-compliance

#### \*Timeline/Implementation Schedule:

2008 +Conduct routine annual inspections

#### **Specific Components and Notes:**

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

Name: Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

6b-5

\*BMP Title:

6b-5 - Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures

#### \*BMP Description:

- Maintain a log of all non-compliance occurrences, together with the final resolution of the situation, cost, time of year, contractor, and engineer if necessary.
- When the inspection reveals that an issue is resolved, mark it in the database and report to the reporting source, as appropriate

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Number of unresolved situations
- Number of items resolved

#### \*Timeline/Implementation Schedule:

• 2009

Establish the database to log events.

2010+

Implement inspection and resolution process

#### **Specific Components and Notes:**

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

Name:

Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

MS4 Name:

New Ulm

6b-6

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

\*BMP Title: 6b-6 - Record Reporting and Retention of All Inspections and Responses to the Inspections

#### \*BMP Description:

- Train Inspectors.
- Develop standardized forms for the inspectors to use
- Log all reports and communication (incoming and outgoing)

#### Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Number of training opportunities utilized
- Number of reports filed

#### \*Timeline/Implementation Schedule:

• 2007 Develop standardized forms

• 2008-9 Train inspectors

• 2010 Initiate and maintain recordkeeping program

#### **Specific Components and Notes:**

Evaluation adjectives like "excellent, good, poor" should be avoided.

Quantitative evaluations based on some measurable feature of the BMP or the breech should be employed (cy of material that escaped from the site, etc.)

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

Name: Steve Koehler
Department: Engineering

Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

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

\*BMP Title: 6b-7 - Evaluation of Inspection Frequency

#### \*BMP Description:

- The frequency of conducting inspections is somewhat dependent on the diligence of the various members of the community in practicing and maintaining the BMP's.
- At the time of a new inspection, the site should be scored for compliance with the BMP. If found to be non-compliant, the extent of work required to bring it into compliance should be logged as a separate running total for each BMP. Evaluation of the BMP's may warrant a more or less frequent inspection cycle
- In 2009, after the first two annual inspections, the City staff will review the inspection timing and recommend necessary adjustments.

Location(s) in SWPPP of detailed information relating to this BMP:

• The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Total number of sites inspected on an annual basis
- Inspection frequency evaluations for each BMP

#### \*Timeline/Implementation Schedule:

- 2007-8 Develop inspection frequency evaluation criteria for BMP's
- 2008+ Ongoing evaluation to continue. Make adjustments as necessary

#### **Specific Components and Notes:**

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

Name: Steve Koehler

Department: Engineering

Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name:

New Ulm

6c-1

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

\*BMP Title: 6c-1

6c-1 - Compliance with Approved Current and Future TMDL's

#### \*BMP Description:

- In the future Total Maximum Daily Loads (TMDL) will be mandated by EPA that corresponds to that specific pollutants in the rivers at New Ulm. These studies will establish the TMDL for the stream and allocate the load among the various sources within the watershed. The TMDL research will also specify tasks required for each City community.
- Currenty, a Dissolved Oxygen TMDL Implementation Plan has been adopted fo the Minnesota River which states that "By May 2006, the MPCA will provide guidance to communities on the additional measures that need to be added to the SWPPP in order to achieve the necessary phosphorous reductions."
- Upon receipt of new TMDL requirements, the SWPPP will be modified accordingly.

Location(s) in SWPPP of detailed information relating to this BMP:

 The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

Keep records of all guidance materials received and adjustments made.

#### \*Timeline/Implementation Schedule:

• Receipt of Mandated TMDL's will occur throughout the permit period and changes will be necessary

#### **Specific Components and Notes:**

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

Name: Steve Koehler
Department: Engineering
Phone: 507.359.8245

E-mail: steve.koehler@ci.new-ulm.mn.us

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

MS4 Name:

New Ulm

**Minimum Control Measure:** 

6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

**Unique BMP Identification Number:** 

6c-2

\*BMP Title:

6c-2 - Minimize or Avoid Impacts on Current and Future Source Water Protection Zones

#### \*BMP Description:

- The City/PUC must maintain due vigilance over any public water supply in the vicinity with regard to the assignment or extension of any Source Water Protection Area.
- If a protection area is established; the City will consider its discharges in the area, including the downstream flow direction, and take the necessary actions to secure the water supply, when necessary.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP

#### \*Measurable Goals:

- Keep records of all protection areas defined and adjustments made.
- Maintain a record of all changes made in the SWPPP.

#### \*Timeline/Implementation Schedule:

2007-12

Ongoing

#### **Specific Components and Notes:**

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

Name: Steve Koehler

Department:

Engineering

Phone:

507.359.8245

E-mail:

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

# SWPPP IMPLEMENTATION SCHEDULE

## CITY OF NEW ULM

BMP	2007	2008	2009	2010	2011
	· · · · · · · · · · · · · · · · · · ·	=1-PUBLIC EDUCATI			
1a-1 Distribute Educational Materials	2007-8 Commit people and money	2008-11 Begin with materials in utility bills			
			2009-11 Post materials and create links on City web site		
				2010-11 Approach school district on including stormwater issues in course material	
1b-1 Implement an Education Program	2007 Establish ongoing annual review				
		2008-11 Begin with materials in utility bills			
			2009-11 Web accesses active		
				20010-11 Approach school district on including stormwater issues in course material	
1c-1 Education Program: Public Education and Outreach		2007-11 Ongoing Conduct annual review and request public input			
				20010-11 Approach school scouts system for inclusion in curriculum	
1c-3 Education Program: Illicit Discharge Detection and Elimination	2007-11 Initiate seasonal required training on potential illicit discharges during the upcoming season – All MS4 staff				
	2007-11 Annual formal training session for key staff members				
	2007-11 Attend local and regional training when presented				
		,			

#### SWPPP IMPLEMENTATION SCHEDULE CITY OF NEW ULM **BMP** 2007 2008 2009 2010 2011 2008-11 Provide materials with 1c-4 Education Program: Construction Site Run-off Control building permits 2009+ Hold annual meetings and forums for building contractors and developers to explain expectations 2008-11 Educate building and utility inspectors on evaluating the operation of structural BMP's – reminder training to be held each spring 2009+ Hold annual meetings 1c-5 Education Program: Postand forums for realtors and Construction Stormwater landscaping firms Management in New Development and Redevelopment 1c-6 Education Program: Pollution 2008 Prepare training materials Prevention/Good Housekeeping for **Municipal Operations** 2009-11 Begin seasonal training on activities inclined to release pollution during the coming season Identify other MS4 1d-1 Coordination of Education communities in the vicinity Program 2007-11 Inquire of other MS4's which media outlets they may use in their implementation 2010-11 Select best presenters from each MS4 for each audience coordinate appearances 2008-11 Begin annual meetings -1e-1 Annual Public Meeting Meeting scheduled annually sometime in January or February throughout the term of the permit 2-PUBLIC PARTICIPATION/INVOLVEMENT 2008-11 2a-1 Comply with Public Notice Continuing throughout permit period Requirements 2008-11 On Going 2b-1 Solicit Public Input and Opinion on the Adequacy of the SWPPP 2008-11 Continuing for permit 2c-1 Consider Public Input period

# SWPPP IMPLEMENTATION SCHEDULE

# CITY OF NEW ULM

		CITYOF			
ВМР	2007	2008	2009	2010	2011
		3-ILLICH DISCHARGE DET	ECTION AND FLIMINATION		
3a-1 Storm Sewer System Map	2007-11 Begin mapping the system or begin capturing the missing information				
3a-2 Define Drainage Areas		2008-11 Begin calculating sub areas and determining the amount of impervious cover			
					2011 Entry into database
					2012 Implementation plan for additional BMP's
3b-1 Regulatory Control Program	2007-11 Information gathering on model and existing ordinances				
	,	2008-11 Drafting of illicit discharge ordinance			
		2008-11 Public hearing for public input on illicit discharge ordinance			
		2008-9 Adoption of the illicit discharge ordinance			
			2009-11 Monitoring of fines levied by implementation of illicit discharge ordinance		
3c-1 Illicit Discharge Detection and Elimination Plan	2007-8 Draft inspection plan				
			2009-11 Monitoring of fines levied by implementation of illicit discharge ordinance and elimination		
3d-1 Public and Employee Illicit Discharge Information Program		2008-11 Ongoing training will be conducted with the appropriate staff			
		2008-2011 Distribute educational brochures to general public			
3e-1 Identification of Non Stormwater Discharges and Flows	·	2008-11 Using permit definitions, prepare a list of typical "non-stormwater discharges" from local experience and the experience of other communities			
				2010-11 Identify likely sources	

SWPPP IMPLEMENTATION SCHEDULE					
ВМР	2007	2008	NEW ULM 2009	2010	2011
3f-1 Year 2000 Land Use – MN River D.O. TMDL	2007	2008 Determine the area of impervious in 2000	2007	2010	2011
3f-2 Prioritize Drainage Areas for Installation of BMP's	2007-8 Draw boundaries of drainage areas				
		2008-11 Subjective evaluation performed			
			2009-11 Begin using the matrix tool to closely examine various areas for BMP installation		
3f-3 Prioritize Drainage Areas for Installation of BMP's	2007-8 Draw boundaries of drainage areas				
		2008-11 Subjective evaluation performed			
			2009-11 Begin using the matrix tool to closely examine various areas for BMP installation		
		4-CONSTRUCTION SITE STOR	MWATER RUNOFF CONTROL		
4a-1 Ordinance or other Regulatory Mechanism	2007-8 Information gathering on model and existing ordinances				
		2008 Drafting of construction site storm water runoff control ordinance			
		2008 Public hearing for public input on construction site storm water runoff control ordinance			
		2008 Adoption of the construction site storm water runoff control ordinance			
			2008-11 Implementation of penalties		
4b-1 Construction Site Implementation of Erosion and Sediment Control BMPs		2009 Identify five (5) BMPs		·	
				2010+ Annual BMP Workshop	
					2011+ Plan review must include evaluating BMP 's specified in SWPPP for the project

# SWPPP IMPLEMENTATION SCHEDULE CITY OF NEW ULM

	CITY OF NEW ULM				
ВМР	2007	2008	2009	2010	2011
4c-1 Waste Controls for Construction Site Operators			2009-11 Identify hazardous materials and storage issues		
			2009-11 Present information annually to contractors and suppliers		
4d-1 Procedure for Site Plan Review		2008-11 Develop criteria and educate staff for site plan reviews			
			2009+ For new development and municipal infrastructure		
			2009+ For building permit site plan review		
4e-1 Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance		2008-9 Draft procedure for non-compliance issue resolution			
Tvoicompitance			2009+ Initiate non-compliance procedures and enforcement		
4f-1 Establishment of Procedures for Site Inspections and Enforcement		2008-9 Provide training for building code officials			
	·	2008+ Begin implementing the SWPPP requirement for all sites over 1 acre			
		2008+ Initiate inspection and enforcement program			
		TION STORMWATER MANAGEM	ENT IN NEW DENELOPMENT AND I	REDEVELOPMENT	
5a-1 Development and Implementation of Structural and/or Non-structural BMPs	2007-8 Assign the responsibility				
1100 5000000000000000000000000000000000			2009 Enact ordinance prohibiting the modification		
			2009 Review and amend development standards	·	
			2009-11 Implement stormwater utility fees		
5a-4 Review and adjust Existing Ordinances and Development Standards		2008- Identify all ordinances and policy manuals that require change			

#### SWPPP IMPLEMENTATION SCHEDULE CITY OF NEW ULM 2008 2009 **BMP** 2007 2010 2011 2009+ Draft, pass and implement the changes necessary 2008- Recommendations received 5a-5 Examine Mechanisms to Fund by mid year the Stormwater program 2009 Implementation of recommendations 2007 Draft of post construction 5b-1 Regulatory Mechanism to storm water management ordinance Address Post Construction Runoff from New Development and Redevelopment 2007 Public hearing for public input on post construction storm water management ordinance BY 6/30/08 Adoption of the post construction storm water management ordinance 200+ Implement ordinance 5c-1 Long-term Operation and 2008 Assign responsibility Maintenance of BMPs 2008-11 Inventory existing structural BMP's 2008-11 Create BMP database 2007 Assign the responsibility for operation and maintenance for BMP's 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING 2008-9 Draft long-term operation 6a-1 Municipal Operations and and maintenance program Maintenance Program 2008-9 Adopt long-term operation and maintenance program 2009-11 Perform inspections and maintenance as outlined 2007-8 Develop a street sweeping 6a-2 Street Sweeping\*\* plan and schedule 2008-11 Implement the plan for City Streets

# SWPPP IMPLEMENTATION SCHEDULE

## CITY OF NEW ULM

CITY OF NEW ULM					
ВМР	2007	2008	2009	2010	2011
6a-3 Examine Mechanisms to Fund the Stormwater Program		2008 Recommendations received by mid-year			
			2009 Implementation of recommendations		
6b-2 Annual Inspection of All Structural Pollution Control Devices	2007-8 Inventory BMP's				
			2009-12 Conduct Inspections		
6b-3 Inspection of a Minimum of 20 percent of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis	2007 Identify locations of all outfalls requiring inspection & develop a schedule				
		2008-11 Conduct the inspections			
6b-4 Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas`		2008+11 Conduct routine annual inspections			
*					
6b-5 Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures			2009-11 Establish the database to log events		
of the corrective ividustres				2010+ Implement inspection and resolution process	
6b-6 Record Reporting and Retention of All Inspections and Responses to the Inspections	2007 Develop standardized forms				
		2008-11 Train inspectors			
				2010 Initiate and maintain record keeping program	
6b-7 Evaluation of Inspection Frequency	2007-8 Develop inspection frequency evaluation criteria for BMP's				

SWPPP IMPLEMENTATION SCHEDULE CITY OF NEW ULM					
ВМР	2007	2008	2009	2010	2011
		2008+ Ongoing evaluation to continue. Make adjustments as necessary			
6c-1 Compliance with Approved Current and Future TMDL's	Receipt of mandated TMDL's will occur throughout the permit period and changes will be necessary				
6c-2 Minimize or Avoid Impacts on Current and Future Source Water Protection Zones	2007-11 Ongoing				

# **APPENDICES**

ACRONYMS
GLOSSARY
EDUCATIONAL PROGRAM TERMS
DRINKING WATER SUPPLY MANAGEMENT AREA MAP
HISTORIC PLACES LIST

#### **ACRONYMS**

As the regulatory world develops, it becomes increasingly difficult to remember acronyms. The following list has been prepared as part of the League of Minnesota Cities (LMC) NPDES Guide Plan and contains acronyms used within the NPDES permit document, the LMC Guide Plan Material and this Storm Water Pollution Prevention Plan.

<ul> <li>BATBest Available Technology Economically Achievable (applies to non-conventional and toxic pollutants)</li> <li>BCTBest Conventional Pollutant Control Technology (applies to conventional pollutants)</li> <li>BMPBest Management Practice</li> <li>BPJBest Professional Judgment</li> <li>BPTBest Practicable Control Technology Currently Available (generally applies to conventional pollutants and some metals)</li> </ul>
<ul> <li>CFRCode of Federal Regulations</li> <li>CODChemical Oxygen Demand</li> <li>CSOCombined Sewer Overflow</li> <li>CWAClean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972)</li> <li>CZARACoastal Zone Act Reauthorization Amendments</li> </ul>
D.ODissolved Oxygen DMRDischarge Monitoring Report
ELGEffluent Limitations Guidelines EPAEnvironmental Protection Agency
FRFederal Register
GISGeographic Information Systems
HAZMAT Hazardous Material
LIDLow Impact Development LMCThe League of Minnesota Cities
MCDMinor Civil Division MCMMinimum Control Measure MEPMaximum Extent Practicable MEPAMinnesota Environmental Policy Act Mn/DOTMinnesota-Department of Transportation MPCAMinnesota Pollution Control Agency MS4Municipal Separate Storm Sewer System

MSGP ......Multi Sector General Permit

**NEPA** ......National Environmental Policy Act

NOI ......Notice of Intent

**NOT** ......Notice of Termination

NPDES .... National Pollutant Discharge Elimination System

**NPS** ......Non-point Source

O&M ......Operation and Maintenance

OW .....Office of Water

**OWM** ...... Office of Wastewater Management

**ORVW** .....Outstanding Resource Value Waters

P .....Phosphorous

PA .....Permitting Authority

**POTW** .....Publicly Owned Treatment Works

SIC ......Standard Industrial Classification

SWPPP .... Storm Water Pollution Prevention Program

TMDL ..... Total Maximum Daily Load

**TP** ......Total Phosphorous

TSS .....Total Suspended Solids

UA .....Urbanized Area

USEPA .... United States Environmental Protection Agency

**USGS** ......United States Geological Survey

#### **GLOSSARY**

The following glossary has been prepared as part of the League of Minnesota Cities (LMC) NPDES Guide Plan and contains terms used within the NPDES permit document, the LMC Guide Plan Material, and this Storm Water Pollution Prevention Plan. Although some specific terms have been added from the Minnesota Pollution Control Agency (MPCA) pertaining to the general permit requirements, most came directly from the Environmental Pollution Control Agency (EPA) Compliance Assistance Guide.

- **Best Available Treatment (BAT)/Best Control Technology (BCT):** A level of technology based on the very best (state of the art) control and treatment measures that have been developed or are capable of being developed and that are economically achievable within the appropriate industrial category.
- **Best Management Practices (BMPs):** Activities or structural improvements that help reduce the quantity and improve the quality of storm water runoff. BMPs include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- Clean Water Act (Water Quality Act): (formerly the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972). Public law 92-500; 33 U.S.C. 1251 et seq.; legislation which provides statutory authority for the NPDES program. Also known as the Federal Water Pollution Control Act.
- Common Plan of Development or Sale: Means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of five ¼ acre lots (40 CFR Sec. 122.26 (b)(15)(i)).
- **Conveyance:** The process of water moving from one place to another.
- **Discharge:** The volume of water (and suspended sediment if surface water) that passes a given location within a given period of time.
- **Discharge Monitoring Report:** The required annual report to be submitted by an MS4.
- **Discretionary MS4:** A small MS4 who is required to comply with the NPDES Phase II permit due to the permitting agency's (MPCA's) designated criteria.
- **Dry Weather Flow:** Continued flow through the storm sewer system drains during dry weather conditions that usually indicate illicit connections into the storm sewer system.
- **Erosion:** When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.
- **Excavation:** The process of removing earth, stone, or other materials from land.
- **General Permit:** A permit issued under the NPDES program to cover a certain class or category of storm water discharges whose operations, emissions, discharges, or facilities are the same or substantially similar. These permits reduce the administrative burden of permitting storm water discharges.
- **Grading:** The cutting and/or filling of the land surface to a desired slope or elevation.

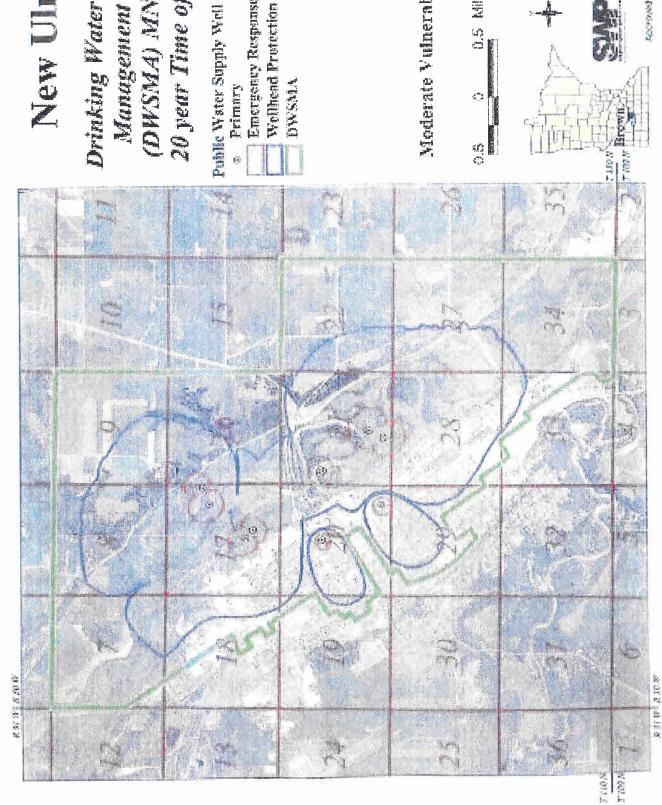
- **Illicit Connection:** Any discharge to a municipal separate storm sewer that is not composed entirely of storm water and is not authorized by a separate NPDES permit or included in an approved SWPPP, with some exceptions (e.g., discharges due to fire fighting activities).
- **Industrial Activity:** Any activity that is directly related to manufacturing, processing, or raw materials storage at an industrial plant.
- Large Municipal Separate Storm Sewer System (MS4): An MS4 located in an incorporated place or county with a population of 250,000 or more, as determined by Appendix A Page A-3 Storm Water Phase II Compliance Assistance Guide the latest U.S. Census.
- **Light Manufacturing Facilities:** Described under Category (xi) of the definition of "storm water discharges associated with industrial activity." [40 CFR 122.26(b)(14)(xi)] Under the Phase I NPDES Storm water Program, these facilities were eligible for exemption from storm water permitting requirements if certain areas and activities were not exposed to storm water. As a result of the Phase II Final Rule, these facilities must now certify to a condition of no exposure.
- MS4: Municipal Small Storm Sewer System.
- **Mandatory MS4:** A small MS4 who is required to comply with the NPDES Phase II permit due to the criteria set by the USEPA. Any publicly owned MS4 with a population greater than 10,000 located in an UA (Urbanized Area).
- **Maximum Extent Practicable (MEP):** A standard for water quality protection that applies to all MS4 operators regulated under the NPDES Storm water Program. Since no precise definition of MEP exists, it allows for flexibility on the part of MS4 operators as they develop and implement their programs.
- **Measurable Goals:** Goals required for the NPDES Phase II permit under each Minimum Control Measure and intended to gauge permit compliance and program effectiveness.
- Medium Municipal Separate Storm Sewer System (MS4): MS4 located in an incorporated place or county with a population of 100,000 or more but less than 250,000, as determined by the latest U.S. Census.
- **Minimum Control Measure:** If coverage is obtained under a general permit or an individual permit under the Phase II regulations, the operator of a regulated small MS4 is required to implement a storm water management program that includes, at a minimum, the six minimum control measures.
- Municipal Separate Storm Sewer System (MS4): A publicly-owned conveyance or system of conveyances that discharges to waters of the U.S. or waters of the State, and is designed or used for collecting or conveying storm water, is not a combined sewer, and is not part of a publicly-owned treatment works (POTW).
- No exposure: All industrial materials or activities that are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

- **Non-authorized States:** Any State that does not have the authority to regulate the NPDES Storm water Program.
- **Non-point Source (NPS) Pollutants:** Pollutants from many diffuse sources. NPS pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water.
- **Notice of Intent (NOI):** An application to notify the permitting authority of a facility's intention to be covered by a general permit; exempts a facility from having to submit an individual or group application.
- NPDES (National Pollutant Discharge Elimination System): The name of the surface water quality program authorized by Congress as part of the 1987 Clean Water Act. This is EPA's program to control the discharge of pollutants to waters of the United States (see 40 CFR 122.2). In Minnesota, the MPCA is the permitting authority and also controls the discharge of pollutants to the waters of the State.
- **O&M Expenditures**: The operating and maintenance costs associated with the continual workings of a project.
- **Outfall:** The point where storm water discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water.
- **Permitting Authority (PA):** The NPDES-authorized state agency or EPA regional office that administers the NPDES Storm water Program. PAs issue permits, provide compliance assistance, and inspect and enforce the program.
- **Physically interconnected MS4:** This refers to an MS4 that is connected to a second MS4 in such a way that it allows for direct discharges into the second system.
- Point Source Pollutant: Pollutants from a single, identifiable source such as a factory or refinery.
- **Pollutant Loading:** The total quantity of pollutants in storm water runoff discharged to receiving waters.
- **Regulated MS4:** Any MS4 covered by the NPDES Storm water Program (regulated small, medium, or large MS4s).
- **Retrofit:** The modification of storm water management systems through the construction and/or enhancement of wet ponds, wetland plantings, or other BMPs designed to improve water quality.
- **Runoff:** Surface water drainage or flood discharge that leaves an area as surface flow or as pipeline flow and can reach a channel or pipeline by either surface or sub-surface routes.
- **Sanitary Sewer:** A system of underground pipes that carries sanitary waste or process wastewater to a treatment plant.
- **Sediment:** Soil, sand, and minerals washed from land into water, usually after rain and snowmelt. Sediment can destroy fish-nesting areas and clog animal habitats. It can also cloud waters so that sunlight does not reach aquatic plants, predators cannot find prey, and water temperatures increase.
- **Sheet flow:** The portion of precipitation that moves initially as diffuse overland flow in very shallow depths before eventually reaching a stream channel.
- Site Plan: A graphical representation of a layout of buildings and facilities on a parcel of land.

- Site Runoff: Any surface drainage or flood discharge that is released from a specified area.
- **Small Municipal Separate Storm Sewer System (MS4):** Any MS4 that is not regulated under Phase I of the NPDES Storm water Program and Federally-owned MS4s.
- **Stakeholder:** An entity that holds a special interest in an issue or program -- such as the storm water program -- since it is or may be affected by it.
- **Standard Industrial Classification (SIC) Code:** A four-digit number, which is used to identify various types of industries.
- **Storm Drain:** A slotted opening leading to an underground pipe or an open ditch intended to carry surface water runoff, such as a catch basin.
- **Storm water Management:** Functions associated with planning, designing, constructing, maintaining, financing, and regulating the facilities (both constructed and natural) that collect, store, control, and/or convey storm water.
- **Storm water Pollution Prevention Program (SWPPP):** A program to describe a process whereby an MS4 thoroughly evaluates potential pollutant sources and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff.
- **Surface Water:** Water that remains on the surface of the ground, including rivers, lakes, reservoirs, streams, wetlands, impoundments, seas, estuaries, etc.
- **Total Maximum Daily Load (TMDL):** The maximum amount of pollutants that can be released into a water body without adversely affecting the water quality.
- **Tool Box:** A term to describe the activities and materials that EPA plans to perform/produce to facilitate implementation of the storm water program in an effective and cost-efficient manner. The eight components include: 1) fact sheets; 2) guidance documents; 3) menu of BMPs; 4) compliance assistance; 5) information clearing house; 6) training and outreach efforts; 7) technical research; and 8) support for demonstration projects.
- **Urbanized Area (UA):** A Census Bureau determination of a central place (or places) and the adjacent densely settled surrounding territory that together have a minimum residential population of 50,000 people and a minimum average density of 1,000 people/square mile. This is a simplified definition of a UA, the full definition is very complex.
- **Urban Runoff:** Storm water from urban areas, which tends to contain heavy concentrations of pollutants from urban activities.
- **Watershed:** That geographical area which drains to a specified point on a watercourse, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).
- Waters of the State: All streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.
- Waters of the US: All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide and all interstate waters including interstate wetlands. For a full description, visit the US Army Corps of Engineering website (40 CFR 122.2) at www.usace.army.mil
- Wet Weather Flows: Flow that enters storm drains during rainstorms or wet weather events.

## EDUCATIONAL PROGRAM TERMS

- **Activity/Educational Activity**: Method used to produce changes in awareness, understanding, skills, and behavior in an audience.
- **Activity Implementation Plan**: Provides details (e.g.: who, what, when) on how activities will be carried out.
- **Audience/Target Audience**: Individuals or groups to whom education is directed. Audiences can often be divided into those who need to take action and those who can support action.
- Awareness: Know that an issue or concern exists.
- Changes in Behavior: Regular adoption of a preventive or corrective action.
- **Educational Goal**: Information or an informed action that is desired for a given audience to know, be able to do, or actually be doing.
- **Educational Program**: For this document, an overall educational effort which is made up of individual educational strategies.
- **Educational Strategy**: For this document, an educational effort directed at a specific Minimum Control Measure.
- **Measurable Goal**: Measuring educational goals can be difficult. How do you measure changes in knowledge of the public? A measurable goal is an educational goal that is practical for a Phase II program to measure.
- Skills/Abilities: Using one's knowledge to effectively implement preventive or corrective actions.
- **Understanding/Knowledge**: Understand the cause and effect of an issue or concern. Understand sufficiently to explain the issue or concern to others.



# New Ulm

Management Area (DWSMA) MN-00377 20 year Time of Travel Drinking Water Supply

Wellhead Protection Area (WHPA) Emergency Regrense dres

Moderate Vulnerability

D.S. Miles

Approved fraction in 2000

#### HISTORIC PLACES

## Boesch, Hummel, and Maltzahn Block (added 1979 - Building - #79001201)

6-12 N. Minnesota St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: No Style Listed

Area of Significance: Architecture, Commerce

Period of Significance: 1875-1899 Owner: **Private** 

Historic Function: Commerce/Trade, Domestic Historic Sub-function: Multiple Dwelling, Specialty Store Current Function: Commerce/Trade, Domestic Current Sub-function: Multiple Dwelling, Specialty Store

# Chicago and North Western Railroad Depot (added 1979 - Building - #79001202)

S. Valley St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: Other

Area of Significance: Architecture, Transportation

Period of Significance: 1875-1899

Owner: Private

Historic Function: Transportation Historic Sub-function: Rail-Related

Current Function: Commerce/Trade, Vacant/Not In Use Historic Significance: Event, Architecture/Engineering

# Fesenmaier, Bernard, House (added 1979 - Building - #79001203)

426 N. State St., New Ulm

Historic Significance: Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: No Style Listed
Area of Significance: Architecture
Period of Significance: 1875-1899

Owner: **Private**Historic Function: Domestic
Historic Sub-function: Single Dwelling
Current Function: Domestic

Current Sub-function: Single Dwelling

# Flandrau State Park CCC/WPA/Rustic Style Historic Resources \*\* (added 1989 - District -

#89001658)

#### Also known as Flandrau (Cottonwood River) State Park

Off Co. Hwy. 13 SE of New Ulm, New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Multiple Architectural Style: Other

Area of Significance: Architecture, Entertainment/Recreation, Politics/Government, Landscape

Architecture

Period of Significance: 1925-1949

Owner: State

Historic Function: Landscape, Recreation And Culture

Historic Sub-function: Outdoor Recreation, Park

Current Function: Landscape, Recreation And Culture

Current Sub-function: Outdoor Recreation, Park

# Gag, Wanda, Childhood Home \*\* (added 1979 - Building - #79001204)

226 N. Washington St., New Ulm

Historic Significance: Person, Event Historic Person: Gag, Wanda, et al.

Significant Year: 1898

Area of Significance: Art, Literature Period of Significance: 1875-1899

Owner: Private Historic Function: Domestic Historic Sub-function: Single Dwelling **Current Function: Domestic** Current Sub-function: Single Dwelling Historic Person: Gag, Wanda, et al.

# Grand Hotel (added 1990 - Building - #90000986)

210 N. Minnesota St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown Architectural Style: Italianate

Area of Significance: Architecture, Commerce

Period of Significance: 1875-1899, 1900-1924, 1925-1949

Owner: Private Historic Function: Domestic Historic Sub-function: Hotel

Current Function: Commerce/Trade

Current Sub-function: Specialty

Historic Function: Recreation And Culture

Historic Sub-function: Work Of Art (Sculpture, Carving, Rock Art)

Current Function: Recreation And Culture

Current Sub-function: Work Of Art (Sculpture, Carving, Rock Art)

# Kiesling, Frederick W., House \*\* (added 1972 - Building - #72000674)

220 N. Minnesota St., New Ulm

Historic Significance: Event Area of Significance: Military Period of Significance: 1850-1874

Owner: Local Gov't

Historic Function: Domestic

Historic Sub-function: Single Dwelling Current Function: Vacant/Not In Use

Historic Significance: Event Area of Significance: Military Period of Significance: 1850-1874

# Lampert Lumber Company Line Yard (added 1979 - Building - #79001196)

Center St., New Ulm

Historic Significance: Event Area of Significance: Commerce Period of Significance: 1900-1924 Owner: **Private** 

Historic Function: Commerce/Trade Historic Sub-function: Warehouse

Current Function: Vacant/Not In Use

Historic Significance: Event
Area of Significance: Commerce

Period of Significance: 1900-1924

# Lind, Gov. John, House \*\* (added 1974 - Building - #74001005) 622 Center St., New Ulm

Historic Significance: Person, Architecture/Engineering

Architect, builder, or engineer: Thayer,Frank Architectural Style: Queen Anne Historic Person: Lind,John

Significant Year: 1887

Area of Significance: Architecture, Politics/Government

Period of Significance: 1875-1899

Owner: **Private**Historic Function: Domestic

# Lind, Gov. John, House \*\* (added 1974 - Building - #74001005) 622 Center St., New Ulm

Historic Significance: Person, Architecture/Engineering

Architect, builder, or engineer: Thayer,Frank Architectural Style: Queen Anne Historic Person: Lind,John

Significant Year: 1887

Area of Significance: Architecture, Politics/Government

Period of Significance: 1875-1899

Owner: **Private**Historic Function: Domestic

Historic Sub-function: Single Dwelling

**Current Function: Domestic** 

Current Sub-function: Single Dwelling

# Melges Bakery (added 1974 - Building - #74001006)

213 S. Minnesota St., New Ulm

Historic Significance: Event
Area of Significance: Commerce
Period of Significance: 1850-1874
Owner: Local Gov't

Historic Function: Industry/Processing/Extraction

Historic Sub-function: Manufacturing Facility
Current Function: Vacant/Not In Use

# New Ulm Armory \*\* (added 1979 - Building - #79001205)

205 N. Broadway St., New Ulm

Historic Significance: Event Area of Significance: Military Period of Significance: 1900-1924

Owner: State

Historic Function: Social, Transportation

Historic Sub-function: Civic

Current Function: Social, Transportation

Current Sub-function: Civic

#### New Ulm Oil Company Service Station (added 1979 - Building - #79001206)

Broadway and 5th Sts., New Ulm

Historic Significance: Event Area of Significance: Commerce Period of Significance: 1900-1924 Owner: **Private** 

Historic Function: Transportation
Historic Sub-function: Road-Related
Current Function: Vacant/Not In Use

# New Ulm Post Office \*\* (added 1970 - Building - #70000287)

Also known as Federal Post Office Building

Center St. and Broadway, New Ulm

Historic Significance: Event, Architecture/Engineering Architect, builder, or engineer: Stewart & Hager, Taylor, James Knox

Architectural Style: Other

Area of Significance: Architecture, European

Period of Significance: 1900-1924

Owner: Federal

Historic Function: Government Historic Sub-function: Post Office Current Function: Government Current Sub-function: Post Office

# New Ulm Roller Mill Complex \*\* (added 1986 - Building - #79001207)

222 First So. St., New Ulm

Historic Significance: Event

Area of Significance: Industry, Commerce

Period of Significance: 1900-1924

Owner: Private

Historic Function: Commerce/Trade, Industry/Processing/Extraction

Historic Sub-function: Manufacturing Facility

Current Function: Unknown

# Old Main, Dr. Martin Luther College \*\* (added 1979 - Building - #79001208)

College Hts., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: Gothic

Area of Significance: Architecture, Education

Period of Significance: 1875-1899

Owner: **Private**Historic Function: Education
Historic Sub-function: College
Current Function: Education
Current Sub-function: College

# Ruemke Mercantile Store (added 1984 - Building - #79001209)

Also known as Roeders Hatchery

226 N. Minnesota St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown

Architectural Style: No Style Listed

Area of Significance: Architecture, Commerce

Period of Significance: 1875-1899

Owner: Private

Historic Function: Commerce/Trade, Domestic Historic Sub-function: Department Store, Hotel Current Function: Commerce/Trade, Domestic

Current Sub-function: Business, Hotel

# Schell, August, Brewing Company \*\* (added 1974 - District - #74001007)

20th South St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: No Style Listed

Area of Significance: Architecture, Industry, Commerce, Landscape Architecture

Period of Significance: 1850-1874, 1875-1899

Owner: Private

Historic Function: Domestic, Industry/Processing/Extraction, Landscape
Historic Sub-function: Forest, Manufacturing Facility, Single Dwelling
Current Function: Domestic, Industry/Processing/Extraction, Landscape
Current Sub-function: Forest, Manufacturing Facility, Single Dwelling

#### Schell, Otto, House (added 1979 - Building - #79001210)

Point Lookout, New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Unknown
Architectural Style: Queen Anne

Area of Significance: Architecture, Industry

Period of Significance: 1875-1899

Owner: **Private**Historic Function: Domestic
Historic Sub-function: Single Dwelling
Current Function: Domestic

Current Sub-function: Single Dwelling

# South Broadway Historic District (added 1979 - District - #79001212)

200--308 S. Broadway, New Ulm

Historic Significance: Architecture/Engineering, Person

Architect, builder, or engineer: Heers, Carl

Architectural Style: Second Empire, Queen Anne Historic Person: Silverson, Charles, et al.

Significant Year: 1906, 1895

Area of Significance: Commerce, Industry, Architecture

Period of Significance: 1875-1899, 1900-1924

Owner: **Private** Historic Function: Domestic

Historic Sub-function: Secondary Structure, Single Dwelling

**Current Function: Domestic** 

Current Sub-function: Secondary Structure, Single Dwelling

#### South German Street Historic District (added 1979 - District - #79001217)

110-312 S. German St., New Ulm

Historic Significance: Person, Architecture/Engineering

Architect, builder, or engineer: Unknown

Architectural Style: Queen Anne, Italianate, Other

Historic Person: Pfenninger, Jacob, et al.

Significant Year: 1899, 1884

Area of Significance: Architecture, Industry, Commerce

Period of Significance: 1875-1899

Owner: Private, Local Gov't

Historic Function: Domestic

Historic Sub-function: Multiple Dwelling, Single Dwelling

Current Function: Domestic
Current Sub-function: Single Dwelling

#### St. Michael's School and Convent (added 1979 - Building - #79001213)

Also known as Holy Trinity Convent

500 N. State St., New Ulm

Historic Significance: Event, Architecture/Engineering

Architect, builder, or engineer: Klinghammer, Paul Architectural Style: Italianate, Gothic Area of Significance: Architecture, Religion

Period of Significance: 1850-1874

Owner: Private Historic Function: Religion

Historic Sub-function: Church Related Residence, Church School, Religious Structure

**Current Function: Religion** 

Current Sub-function: Church Related Residence, Religious Structure

## Tivoli Gardens Building (added 1987 - Building - #79001214) 313 1<sup>st</sup> No. St., New Ulm

Historic Significance: Event

Area of Significance: Industry, Commerce

Period of Significance: 1875-1899

Owner: Private

Historic Function: Commerce/Trade, Social

Historic Sub-function: Restaurant

Current Function: Commerce/Trade, Domestic Current Sub-function: Multiple Dwelling, Specialty Store

# **Turner Hall** (added 1979 - **Building** - #79001215)

State and 1st South Sts., New Ulm

Historic Significance: Event

Area of Significance: Social History, Exploration/Settlement

Period of Significance: 1850-1874

Owner: Private

Historic Function: Recreation And Culture, Social Historic Sub-function: Clubhouse, Sport Facility, Theater Current Function: Recreation And Culture, Social Current Sub-function: Meeting Hall, Sport Facility