

State of Wisconsin  
Department of Natural Resources  
dnr.wi.gov

**Due by March 31, 2010**

This form is for the purpose of annual reporting on activities undertaken pursuant to the Municipal Separate Storm Sewer System (MS4) General Permit No. WI-S050075-1. An owner or operator of a municipal separate storm sewer system covered by the general permit under Chapter NR 216, Wis. Adm. Code, is required to submit an annual report to the Department of Natural Resources by March 31 of each year to report on activities for the previous calendar year. This form is for reporting on activities undertaken in calendar year 2009. In addition, this form serves as the owner or operator's reapplication for permit coverage as required under s. NR 216.09, Wis. Adm. Code.

Use of this specific form is optional. The Department of Natural Resources has created this form for the user's convenience and believes that the information requested on this form meets the reporting and reapplication requirements for an owner or operator of a municipal separate storm sewer system covered by the general permit.

**Instructions:** Complete each section of the form that follows. If additional space is needed to respond to a question, attach additional pages. Provide descriptions that explain the program actions taken to-date to comply with the general permit. Complete and submit the annual report by March 31, 2010, to the appropriate address indicated on the last page of this form.

**SECTION I. Municipal Information**

Name of Municipality City of Manitowoc		Facility ID No. (FIN) 31424	
Mailing Address 900 Quay Street	City Manitowoc	State WI	Postal Code 54220
County(s) in which Municipality is located Manitowoc	Type of Municipality: (check one) <input type="checkbox"/> County <input checked="" type="checkbox"/> City <input type="checkbox"/> Village <input type="checkbox"/> Town <input type="checkbox"/> Other (specify)		

**SECTION II. Municipal Contact Information**

Name of Municipal Contact Person Valerie Mellon, P.E.		Title Director of Public Works/City Engineer	
Mailing Address 900 Quay Street	City Manitowoc	State WI	Postal Code 54220
E-mail Address vmellon@manitowoc.org	Telephone No. (including area code) (920) 686-6910	Fax No. (including area code) (920) 686-6906	

**SECTION III. Certification**

*I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-1 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.*

Authorized Representative Printed Name Valerie Mellon, P.E.	Authorized Representative Title Director of Public Works and City Engineer		
Authorized Representative Signature	Date Signed		
E-mail Address vmellon@manitowoc.org	Telephone No. (including area code) (920) 686-6910	Fax No. (including area code) (920) 686-6906	

**SECTION IV. General Information**

a. Describe what efforts the municipality has undertaken to invite the municipal governing body, interest groups, and the general public to review and comment on the annual report.

The annual report was distributed to the Streets and Sanitation Committee at the March 22, 2010 meeting. The Committee discussed the report and comments were noted and incorporated as appropriate.

After approval of the report by the Streets and Sanitation Committee, the annual report was posted on the City's Stormwater Website at [http://www.manitowoc.org/dept\\_storm\\_permit.html](http://www.manitowoc.org/dept_storm_permit.html).

A press release was submitted to the local newspaper, Herald Times Reporter, on March 25, 2010 indicating that the annual report is available for review by the public on the City's Stormwater Website and at the City Engineering Office. The public was asked to contact the City Engineering Department with any comments about the report.

b. Describe how elected and municipal officials and appropriate staff have been kept apprised of the municipal storm water discharge permit and its requirements.

As indicated under "Public Involvement and Participation" information related to the MS4 permit is brought to the Streets and Sanitation Committee, which is the committee responsible for overseeing the implementation of the permit requirements, on a regular basis as available.

c. Has the municipality prepared its own municipal-wide storm water management plan?  Yes  No

If yes, title and date of storm water management plan:

The City of Manitowoc has completed 3 different Storm Water Management Plans. All of the Storm Water Management Plans are available on the City of Manitowoc Storm Water Webpage: [http://www.manitowoc.org/dept\\_storm\\_permit.html](http://www.manitowoc.org/dept_storm_permit.html)

- Storm Water Management Plan 2000 (Earth Tech)
- Storm Water Management Plan Update 2006 (Earth Tech)
- Storm Water Quality Plan 2007 (MSA)

d. Has the municipality entered into a written agreement with another municipality or a contract with another entity to perform one or more of the conditions of the general permit as provided under Section 2.10 of the general permit?  Yes  No

If yes, describe these cooperative efforts:

e. Does the municipality have an internet website?  Yes  No

If yes, provide web address:

[http://www.manitowoc.org/dept\\_storm.html](http://www.manitowoc.org/dept_storm.html)

If the municipality has an internet website, is there current information about or links provided to the MS4 general permit and/or the municipality's storm water management program?  Yes  No

If yes, provide web address:

[http://www.manitowoc.org/dept\\_storm\\_permit.html](http://www.manitowoc.org/dept_storm_permit.html)

## SECTION V. Permit Conditions

a. Minimum Control Measures: For each of the permit conditions listed below, provide a description of the status of implementation of program elements, the status of meeting measurable goals, and compliance with permit schedule in section 3 of the MS4 general permit. Be specific in describing the actions that have been taken during the reporting year to implement each permit condition and whether measurable goals have been met, including any data collected to document a measurable goal. Also, explain the reasons for any variations from the compliance schedule in the MS4 general permit.

- Public Education and Outreach

The City of Manitowoc continues to actively implement an effective public education and outreach program that meets and exceeds the expectations of the City's proposed program.

The City is an active member of the Northeast Wisconsin Stormwater Consortium (NEWSC). The City is aware that the NEWSC annual report has been submitted to the WDNR. Activities in the NEWSC report should be credited to the City of Manitowoc. City Storm Water Aide, Janet Sosnosky, served as Chair of the Tools and Resources Committee during the 2009 year. Janet was recently elected as NEWSC Vice-chair at the November 2009 Full Membership Meeting. Janet will serve as NEWSC Vice-chair for the 2010 year. During 2009, NEWSC launched and completed a very successful phosphorus campaign. As part of this campaign, the Tools and Resources Committee modified the NEWWaterWisconsin.org website in an effort to increase public awareness of stormwater issues. The NEWWaterWisconsin website will continue to be updated in 2010.

In an effort to enhance the phosphorus campaign on a local level in the City of Manitowoc, the City concurrently ran the campaign radio advertisements on our local radio station, WOMT. **\*\*MEASUREABLE GOAL\*\*** The Campaign radio ads were run on WOMT 30 times over a two week period from 4/20/09 thru 5/4/09.

The City also continues to use the public education materials published by NEWSC in local news articles, staff newsletters, and other means as deemed fit.

The City continues to maintain the partnership with the Wisconsin Maritime Museum to assist in implementing the City's public education program. The Maritime Museum has the resources available to draw in citizen groups for education and stormwater stenciling. Thanks to this partnership, **\*\*MEASUREABLE GOAL\*\***, the City stenciled 1,102 inlets in the past three years. This partnership has secured a River Planning Grant in 2009 that will be used for public education activities in 2010. We started planning those activities in 2009 but most events and activities will first take place in the 2010 year.

The City has now completed two full years of implementing their public education and outreach program. Some activities conducted over the past two year have been successful while others haven't been as successful. We continue to make modifications to our public education program in an effort to make this program as effective as possible.

ATTACHMENT A contains a list of activities conducted in 2009. The activities include presentations, stormwater website updates, press releases, new articles, etc.

The WDNR had previously asked that the City add information to the stormwater website about stream bank and shoreline management for riparian property owners. The City will add this information to the stormwater webpage in 2010 along with the complete redevelopment of the stormwater webpage. The City is in the process of completely redoing the entire website for the City creating a perfect opportunity to update and modify the existing stormwater webpage information.

- Public Involvement and Participation

The City of Manitowoc continues to educate and bring regular updates to the Streets and Sanitation Committee as this committee is responsible for making regular decisions regarding the implementation of the MS4 Permit. In 2009, the following stormwater related information was discussed at the Streets and Sanitation Committee Meetings indicated below:

2/23/09 - Grant submittal for Storm Water Pond located south of Custer Street

3/9/09 - DNR 2010-2011 Non-point grant submittal for stormwater pond construction

4/13/09 - Committee review of the 2008 MS4 Annual Report and the NEWSC Annual Report

5/11/09 - Illicit Discharge Detection and Elimination program scope of services with AECOM was discussed. The education and enforcement of the street sweeping parking ban was also discussed.

6/8/09 - Discussed signage for street sweeping parking ban, IDDE program development and N. 11<sup>th</sup> Street/Waldo/Wilson Bowl drainage study.

7/13/09 - Showed Streets Committee Sea Grant video, "All Washed Up - Lake Michigan's Algae Challenge".

9/14/09 - Discussed Street Sweeping Parking Ban warning tickets.

11/9/09 - Discussed detention pond fees.

The City sponsored two storm drain stenciling events in 2009. The first event was in July with the assistance of the Wisconsin Maritime Museum. The Maritime Museum summer group stenciled approximately 134 inlets. The second event was in October and approximately 40 inlets were stenciled. For a total of 174 inlets stenciled in 2009.

The City also held a public informational meeting for all the property owners in the drainage basin for the newly constructed S. 30<sup>th</sup> Street pond on 7/21/09. This informational meeting was about the MS4 permit and why we are constructing these ponds, how the ponds work, and how they can help reduce stormwater pollution. **\*\*MEASUREABLE GOAL\*\*** Approximately 20 people attended this meeting.

- Illicit Discharge Detection and Elimination

The City completed the initial dry weather field screening at each of the fifty-five (55) major outfalls. The field screening was conducted on July 16 and July 17. The 2009 report was submitted to the WDNR on 12/17/09. The following is a summary of the 2009 outfall screening results (**\*\*MEASUREABLE GOALS\*\***):

- 55 outfalls were screened
- 38 outfalls were dry or did not have enough flow to sample
- 17 outfalls were active (wet with enough flow to sample)
  - 8 outfalls returned no detectable chemical results
  - 6 outfalls returned detectable detergent levels (all at < 0.5 mg/l)
  - 3 outfalls returned detectable chlorine levels (all at 0.3 mg/l or less)
  - 2 outfalls had noticeable color (one blue and one brown)
  - 1 outfall had floatables (leaves/branches)
- No outfalls exhibited noticeable or unusual turbidity, odor, surface sheen, staining, or vegetation.

The City also completed an On-going Field Screening Program. This program was submitted to the WDNR on 12/17/09 and will be used as a guide for future outfall screening. For future Permit cycles, the City has established an initial approach of screening all of the MS4 outfalls (210 total) during the 5-year Permit cycle. However, over the remaining two years of the current/initial permit cycle, the City will screen the remaining 155 outfalls.

The City has an illicit discharge ordinance and an illicit discharge response procedures plan that was fully implemented in 2009. The City has been active in responding, reducing and eliminating illicit discharges. The City has documented 12 illicit discharge related activities in 2009 that were reported and/or responded to. See ATTACHMENT B for details on the Illicit Discharge Events.

- Construction Site Pollutant Control

Chapter 29 - Soil Erosion Control Ordinance can be found at [http://www.manitowoc.org/PDF\\_ORDINANCES/ch29.pdf](http://www.manitowoc.org/PDF_ORDINANCES/ch29.pdf)

The City continues to actively regulate and enforce the requirements of Chapter 29. A total of 17 erosion control permits meeting the requirements of Chapter 29 were issued in 2009. Sites are to be inspected on a regular basis by the permittee and the City also conducts regular inspections of the sites. At total of 90 erosion control inspections were conducted in 2009. Of those, 51 were inspections on City projects and 39 were inspections by the City on permitted projects under Chapter 29.

Staff has received credential as a soil erosion control inspector per the Department of Commerce requirement. Authority from the Department of Commerce was received by the City to regulate erosion control at public buildings in 2009.

- Post-Construction Storm Water Management

Chapter 28 - Stormwater Management Ordinance can be found at [http://www.manitowoc.org/PDF\\_ORDINANCES/ch28.pdf](http://www.manitowoc.org/PDF_ORDINANCES/ch28.pdf)

In 2009, 4 new construction sites required a stormwater management permit per Chapter 28. Of those sites, 2 of them required a Stormwater Management Maintenance Facility Agreements with the City. Both of these sites have a signed and recorded stormwater maintenance agreement for their stormwater BMPs.

The City intends to inspect all private and city-owned Stormwater Management Facilities on a regular basis.

- Pollution Prevention

The City completed their Pollution Prevention Program and individual Storm Water Pollution Prevention Plans for the Department of Public Works Service Building and Parks Maintenance Facility in October of 2008 (plans can be found at [http://www.manitowoc.org/dept\\_storm\\_permit.html](http://www.manitowoc.org/dept_storm_permit.html)). The City was required to implement these programs by April 11, 2009. Therefore, the following is a summary of the recommendations and measureable goals for these programs in 2009.

POLLUTION PREVENTION PROGRAM (AECOM, October 2008):

Section 1.0 - Municipal Storm Water Facilities Inspection and Maintenance Measureable Goals

1. Inspect all city owned wet detention facilities 2 times per year.

The City had a total of 3 wet detention ponds in 2009. Two additional ponds were also constructed in 2009.

**\*\*MEASUREABLE GOAL\*\*:** Each City-owned detention pond was inspected twice in 2009 for a total of 6 inspections.

The City will inspect all private BMPs with maintenance agreements along with the city-owned BMPs in 2010. Part of these inspections will include documenting current sediment depths.

2. Implement catch basin inspection and cleaning program by 2009. Quantify number of catch basins cleaned and amount of debris removed.

**\*\*MEASUREABLE GOAL\*\*:** 57 Catch Basins and Catch Basin Manholes Cleaned

**\*\*MEASUREABLE GOAL\*\*:** 32.9 Cubic Yards of Material Removed from Catch Basins

Inlets were also cleaned in 2009; however, the number of inlets and yards of material removed from the inlets was not documented. The City intends to document this information in 2010. Note: as part of new and reconstruction projects, the City is replacing existing inlets with catch basins.

3. Document the linear footage of ditches maintained and linear footage of storm sewers cleaned based on data collected.

The City maintains and cleans ditches and storm sewer on an as needed bases, mostly due to obstructions. The City also televises storm sewer on regular basis.

**\*\*MEASURABLE GOAL\*\*:** 48,412 Feet of Storm Sewer was Televised

Section 2.0 - Street Sweeping and Catch Basin Cleaning Measurable Goals

Street Sweeping:

1. Purchase two (2) high efficiency street sweepers

**\*\*MEASUREABLE GOAL\*\*:** The City purchased two high-efficiency vacuum sweepers (Elgin Whirlwind) in late fall of 2008

2. Implement parking controls to be effective in April 2009

**\*\*MEASUREABLE GOAL\*\*:** The City implemented a street sweeping parking ban effective April 21, 2009.  
See ATTACHMENT C

The City did a great deal of public education with regard to the implementation of the parking ban. See the list of public education activities in ATTACHMENT A.

3. Implement new street sweeper routes based on parking control plan

**\*\*MEASUREABLE GOAL\*\*:** The City developed street sweeper districts in coordination with the implementation of the parking ban, five (5) districts on the north side and five (5) on the south side. See ATTACHMENT D.

4. Continue current street sweeping frequency and document miles swept and amount of debris removed.

**\*\*MEASUREABLE GOAL\*\*:** The entire City is swept on a weekly bases from April 1 to September 30, conditions permitting.

**\*\*MEASUREABLE GOAL\*\*:** 6,387 miles of street was swept by the sweepers

**\*\*MEASUREABLE GOAL\*\*:** 3,232 yards of material was removed by the sweepers

Catch Basin Cleaning:

1. Add future catch basins to mapping

**\*\*MEASUREABLE GOAL\*\*:** 19 catch basins and 3 catch basin manholes were added to our mapping.

2. Implement catch basin cleaning program - document number of catch basins cleaned and amount of material removed.

Repeated from above:

**\*\*MEASUREABLE GOAL\*\*:** 57 Catch Basins and Catch Basin Manholes Cleaned

**\*\*MEASUREABLE GOAL\*\*:** 32.9 Cubic Yards of Material Removed from Catch Basins

Inlets were also cleaned in 2009; however, the number of inlets and yards of material removed from the inlets was not documented. The City intends to document this information in 2010. NOTE: as part of new and reconstruction projects, the City is replacing existing inlets with catch basins.

Section 3.0 - Street Sweeping and Catch Basin Cleaning Disposal

1. Initiate disposal of street sweeping and catch basin cleanings in a licensed landfill in 2009 unless alternative methods are

allowable.

**\*\*MEASUREABLE GOAL\*\*:** All material removed by the street sweepers in 2009 was hauled to Ridgeview Landfill in Whitelaw, WI

2. Document amount of material removed.

**\*\*MEASUREABLE GOAL\*\*:** 1,961.40 tons of street sweeping material was landfilled

Section 4.0 - Road Salt Application and Snow Disposal

1. Document the amount of salt and other de-icing agents used.

**\*\*MEASUREABLE GOAL\*\*:** 1,834 tons of salt was used in 2009

Section 5.0 - Collection and Disposal of Leaves and Grass Clippings

1. Document the amount of leaves and other materials collected/recycled.

**\*\*MEASUREABLE GOAL\*\*:** 13,824 yards of material was collected (8,935 to Manitowoc County Compost Site; 4,889 to Private Sites)

Section 6.0 - Municipal Storm Water Pollution Prevention Planning

DPW SERVICE BUILDING STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (AECOM, October 2008):

Existing and Recommended Control Measures:

1. Fuels Islands - The City intends to retrofit the two (2) existing inlets into catch basins in 2010 as indicated in the plan.
2. Outdoor Vehicle Washing Area - This has turned out to be a bigger issue than originally thought. The City has been unable to eliminate this outdoor wash area due to the extra effort needed to washout the new high-efficiency sweepers. The City is going to focus on addressing this issue in 2010. We are currently working with a consultant to come up with ideas to address and fix this issue. Funding of this may be an issue and might delay this project until 2011. This project takes priority over the runoff erosion issue and outdoor storage piles.
3. Runoff Erosion - The work to address this issue is planned for 2010, but may be delayed pending the outdoor wash area.
4. Outdoor Storage Piles - The work to address this issue is planned for 2010, but may be delayed pending outdoor wash area.
5. Quarterly Inspections - Will be completed in January, April, July and October of every year starting in 2010.

PARKS MAINTENANCE FACILITY STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (AECOM, October 2008):

1. Fuel Island - Will be done by October 2010.
2. Outdoor Wash Area - Will be done by October 2010.
3. Police Impoundment Area - Will be done in 2010.
4. Snow Disposal Area - Will be done in 2010.
5. Quarterly Inspections - Will be completed in January, April, July and October of every year starting in 2010.

Section 7.0 - Municipal Application of Lawn and Garden Fertilizers

Currently the City does not apply fertilizers to areas greater than five acres.

Section 8.0 - Education of Municipal Staff

1. Include an educational component for appropriate staff relative to their area of work.

City staff attended multiple erosion control and stormwater management training workshops and conferences (FWWA Conference, NASECA Conference and other teleconferences). These are listed with the public education activities on ATTACHMENT A. The City intends to provide some pollution prevention, illicit discharge and erosion control training to the Department of Public Works staff in 2010.

Section 9.0 - Measures to reduce storm water contamination within source water protection areas.

The City has not yet addressed the recommendations and measurable goals of this section. We will work toward addressing this section in 2010.

b. Storm Water Quality Management: Has the municipality completed a pollutant-loading analysis to assess compliance with the 20% TSS reduction developed urban area performance standard?  Yes  No

If yes, provide the following: Model used WinSLAMM Version 9.2.2 Reduction (%) 23.1

Has the municipality completed a pollutant-loading analysis to assess compliance with the 40% TSS reduction developed urban area performance standard?  Yes  No

If yes, provide the following: Model used WinSLAMM Version 9.2.2 Reduction (%) as of 12/31/09 = 25.5

If no, include a description of any actions the municipality has undertaken during 2009 to help achieve the 40% standard by March 10, 2013.

See "STORM WATER QUALITY MANAGEMENT PROJECT UPDATE" below.

Has the municipality completed an evaluation of all municipal owned or operated structural flood control facilities to determine the feasibility of retrofitting to increase TSS removal?  Yes  No If yes, describe:

The City owns one Stormwater Dry Detention Pond located in Dewey Street Park. In an effort to utilize this pond for water quality treatment, the City's Water Quality Plan proposes to convert this Dry Detention Basin to a Wet Detention Basin in 2011.

#### STORM WATER QUALITY MANAGEMENT PROJECT UPDATE:

The City Stormwater Quality Plan was completed by MSA in October 2007 and was submitted to the WDNR as part of the 2006-2007 Annual Report. The Stormwater Quality Plan is also available on the City of Manitowoc Webpage: [http://www.manitowoc.org/dept\\_storm\\_permit.html](http://www.manitowoc.org/dept_storm_permit.html). The Stormwater Quality plan recommends implementing a high efficiency street sweeping program and parking ban to meet the 20% TSS reduction and the construction of approximately 21 storm water detention basins to meet the 40% TSS reduction goal.

Completed projects to meet the 40% goal are as follows:

The City purchased two high efficiency vacuum sweepers in late fall of 2008 to meet the 20% TSS reduction goal. Both vacuum sweepers were up and running in the spring of 2009. The entire City is swept on a weekly basis, dependent on weather. The City also implemented a street sweeping parking ban for the entire City from Monday thru Friday from 3:00 a.m. to 7:00 a.m., See ATTACHMENT C. Based on these two goals, the City believes that they have met the 20% TSS reduction requirement. Cost of the High Efficiency Sweepers \$203,392 each = Total \$406,784

The City has also been moving forward in the design and construction of some storm water detention basins. The City constructed 3 stormwater detention basins in 2009:

1) Rapids Road Stormwater Detention Basin. This pond was constructed north of Waldo Blvd and west of Rapids Road. This pond replaced recommend proposed structural BMP #9 as described in the 2007 Storm Water Quality Plan. The Storm Water Quality Plan proposed the pond on the east side on Rapids Road, however, the City constructed the pond at the storm sewer outfall located on the west side of Rapids Road. Stand alone efficiency for this pond = 45.8%. City-wide TSS reduction achieved for this pond = 0.32%. See ATTACHMENT E. Pond Cost: Land Acquisition \$13,315.31 + Design/Construction \$253,257.83 = Total \$266,573.14

2) S. 30<sup>th</sup> Street Stormwater Detention Basin. The City purchased 3.88 acres of property located on S. 30<sup>th</sup> Street for the construction of a Storm Water Detention Basin. This pond was recommended proposed structural improvement #6 as described in the 2007 Storm Water Quality Plan. The City constructed this pond in the late summer of 2009. The S. 30<sup>th</sup> Street Pond will be landscaped with native prairie and wetland plants in 2010. Stand alone efficiency for this pond = 78.3%. City-wide TSS reduction achieved for this pond = 1.46%. See ATTACHMENT F. Pond Cost: Land Acquisition \$126,135.22 + Design/Construction \$441,441.09 = Total \$537,576.31

3) Clay Pit Road Stormwater Detention Basin. The City constructed a stormwater detention basin off of Clay Pit Road in the summer of 2009. This pond is located on City property. This pond is recommended proposed structural improvement #2 as described in the 2007 Storm Water Quality Plan. This pond is located on City property and was constructed in late summer 2009. Stand alone efficiency for this pond = 66.8%. City-wide TSS reduction achieved for this pond = 0.58%. See ATTACHMENT G. Pond Cost: Design/Construction \$203,677.56 = Total \$203,677.56

With the construction of the above three (3) ponds and the implementation of a high-efficiency street sweeping program with a parking ban, the city's current City-wide TSS reduction status (as of December 31, 2009) is 25.46%.

The City also constructed 2 bioinfiltration devices at the Senior Center as part of the reconstruction of the parking lot area. The City intends to put up signage at these two devices in 2010 as a public education effort.

Upcoming projects:

1) S. 41<sup>st</sup> and Custer Street Stormwater Detention Basin. The City is working on a Stormwater Detention Basin located at S. 41<sup>st</sup> and Custer Street. This pond was recommended proposed structural improvement #4 as described in the 2007 Storm Water Quality Plan. The City will be purchasing additional abutting property from Dowco in this area to expand the size of the pond. This will increase the efficiency of the proposed pond and reduce pollutants currently being discharged from this industrial into the Manitowoc River. The City is working with MSA on the design for this pond; however, due to wetlands on the property, design and construction of this pond have been delayed. The City intends to construct this pond in 2010. Expected city-wide

TSS reduction for this pond = 0.93%.

2) S. 10<sup>th</sup> Street Stormwater Detention Basin. The City recently purchased 4.21 acres of property located on S. 10<sup>th</sup> Street for the construction of a stormwater pond. This pond was recommended structural improvement #1 as described in the 2007 Storm Water Management Plan. This pond was originally proposed to be constructed in Red Arrow Park; however, this is not feasible. This vacant property is located just upstream of this location. The City intends to construct this pond in 2010. Expected city-wide TSS reduction for this pond = 3.18%.

3) Dewey Street Pond Retrofit. The City will begin working on the design for the retrofit of the Dewey Street Pond later this year. The retrofit construction of the Dewey Street pond from a Dry Detention Basin to a Wet Detention Basin is planned for 2011. This pond was recommended proposed structural improvement #5 as described in the 2007 Storm Water Quality Plan.

It is anticipated that with the construction of the S. 41<sup>st</sup> and Custer Street Pond and the S. 10<sup>th</sup> Street Pond in 2010, the City-wide TSS reduction will be 29.57%.

In summary, the City continues to actively work toward meeting the required TSS reduction. However, due to debt service constraints and other issues relating to property acquisition for constructing the ponds, the City is only likely to continue constructing one or possibly two ponds a year.

c. Storm Sewer System Map: Describe any changes or updates to the storm sewer system map made in the reporting year. Provide an updated map.

The City submitted the storm sewer maps in October 2008. Only minor changes have been made to the maps in 2009; these changes include modifications to the storm sewer system (on reconstruction projects) and new stormwater management BMPs (4 city-owned and 2 privately owned).

#### ADDITIONAL INFORMATION:

Late in 2008, the City purchased ASIST (Advanced Stormwater Information Systems) Enterprise software. This software is a database that will allow the City to track many of MS4 permit activities such as public education, employee training, outfalls, stormwater facilities, construction projects, citizen calls, etc. The City did not utilize this software to a great extent in 2009 but hopes to use it much more in 2010.



**SECTION VI. Fiscal Analysis**

a. Provide a fiscal analysis that includes the annual expenditures for 2009, and the budget for 2009 and 2010. A table to document fiscal information is provided on page 6.

b. What financing/fiscal strategy has the municipality implemented to finance the requirements of the general permit?

Storm water utility  General fund  Other Bonded Capital

c. Are adequate revenues being generated to implement your storm water management program to meet the permit requirements?  Yes  No

Please provide a brief summary of your financing/fiscal strategy and any additional information that will assist the Department in understanding how storm water management funds are being generated to implement and administer your storm water management program.

The City does not have a Storm Water Utility or other special revenue source. However, we have currently reached 25% through the use of General Obligation Bonds to finance necessary pond projects. This has required us to severely limit road reconstruction. We intend to continue to apply for any/all available transportation funding to supplement street construction in order to comply with the 40% TSS reduction requirement.

**SECTION VII. Inspections and Enforcement Actions**

**Note: If an ordinance listed below has previously been submitted and has not been amended since that time, a copy does not need to be submitted again. If the ordinance was previously submitted, indicate such in the space provided.**

a. As of the date of this annual report, has the municipality adopted a construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit?  Yes  No If yes, attach copy or provide web link to ordinance:

Ordinance was already submitted and is on the City website at [http://www.manitowoc.org/PDF\\_ORDINANCES/ch29.pdf](http://www.manitowoc.org/PDF_ORDINANCES/ch29.pdf)

b. As of the date of this annual report, has the municipality adopted a post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit?  Yes  No If yes, attach copy or provide web link to ordinance:

Ordinance was already submitted and is on the City website at [http://www.manitowoc.org/PDF\\_ORDINANCES/ch28.pdf](http://www.manitowoc.org/PDF_ORDINANCES/ch28.pdf)

c. As of the date of this annual report, has the municipality adopted an illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit?  Yes  No If yes, attach copy or provide web link to ordinance:

Ordinance was already submitted and is on the City website at [http://www.manitowoc.org/PDF\\_ORDINANCES/ch30.pdf](http://www.manitowoc.org/PDF_ORDINANCES/ch30.pdf)

d. As of the date of this annual report, has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.)?  Yes  No If yes, attach copy or provide web link to ordinance:

The City implemented a parking restriction ordinance for street cleaning. This ordinance was adopted by Common Council on April 6, 2009 and became effective on April 21, 2009 (the day after publication). ATTACHMENT C is a copy of the adopted street sweeping ordinance. The City conducted many public education activities in an effort to educate the public about the street sweeping parking ban.

e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above.

The City continues to actively inspect and enforce Chapter 28, 29, and 30.

Chapter 29. Construction site inspections are tracked in a database. In 2009, a total of 90 inspections were conducted for construction site erosion control. Of those, 51 were inspections on City projects and 39 were inspections by the City on

permitted projects. Additional inspections may have taken place but were not entered into the database. There were no enforcement actions taken in 2009.

Chapter 28. Inspections are regularly conducted while new post-construction BMPs are being constructed. No enforcement actions were taken in 2009 in relation to Ch. 28.

Chapter 30. Inspections pertaining to the Illicit Discharge Ordinance can be found in ATTACHMENT B. In 2009, a total of 12 illicit discharge related activities were responded to. No Notice of Violations were issued in 2009, however, there were some warning letters sent out.

**SECTION VIII. Water Quality Concerns**

a. Does any part of the MS4 discharge to an outstanding resource water (ORW) or exceptional resource water (ERW) listed under s. NR 102.10 or 102.11, Wis. Adm. Code? (A list of ORWs and ERWs may be found on the Department's Internet site at: <http://dnr.wi.gov/org/water/wm/wqs/orwerw/>)  Yes  No If yes, list:

b. Does any part of the MS4 discharge to an impaired waterbody listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaired waterbodies may be found on the Department's Internet site at: <http://dnr.wi.gov/org/water/wm/wqs/303d/303d.html>)  Yes  No If yes, complete the following:

- Impaired waterbody to which the MS4 discharges:

Manitowoc River

Red Arrow Beach - Lake Michigan

YMCA Beach - Lake Michigan

- Description of actions municipality has taken to comply with section 1.5.2 of the MS4 general permit for discharges of pollutant(s) of concern to an impaired waterbody:

None at this time. Focus has been placed on meeting the 40% TSS reduction requirement. Any BMPs constructed in an drainage basin that discharges to any of the above impaired waters would help to reduce the pollutants entering that waterbody whether it's the pollutant of concern or not. There currently is no TMDL for the Manitowoc River.

c. Identify any known water quality improvements in the receiving water to which the MS4 discharges during the reporting period.

None known at this time.

d. Identify any known water quality degradation in the receiving water to which the MS4 discharges during the reporting period and what actions are being taken to improve the water quality in the receiving water.

None known at this time.

**SECTION IX. Department of Commerce Authority**

Section 2.4.1.1.3 of the MS4 general permit requires a permittee that does not already have authority from the Wisconsin Department of Commerce (Commerce) to regulate erosion control at public buildings and places of employment to request such authority from Commerce within 18 months after the start date of permit coverage. However, as of January 1, 2010, responsibility for erosion control administration and enforcement for commercial building sites was transferred from Commerce to the Department of Natural Resources. This transfer took place due to 2009 Wisconsin Act 28, the 2009 state budget legislation, which moved s. 101.1205, Wis. Stats., commercial building construction site soil erosion and sediment control statutory language, to s. 281.33, Wis. Stats. As of January 1, 2010, the State's requirements for erosion control at commercial building construction sites will be administered by the Department of Natural Resources. Accordingly, a permitted municipality that was delegated to serve as an agent for Commerce will continue to serve as an agent for the Department of Natural Resources in accordance with the original agreement with Commerce unless this delegation is revoked by the Department of Natural Resources.

As of January 1, 2010, was the municipality granted authority from the Wisconsin Department of Commerce to regulate erosion control at public buildings and places of employment?  Yes  No

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**SECTION X. Reapplication for Permit Coverage**

Provide a description of any proposed changes to the municipality's storm water management program and any other relevant change that the municipality plans or anticipates.

Fiscal Analysis Table. Complete the fiscal analysis table provided below.

Program Element	Annual Expenditure		Budget		Source of Funds
	2009	2009	2009	2010	
Public Education and Outreach	\$4,009.60	\$625 - GF	\$3,960 - GF		- General Fund
Public Involvement and Participation	N/A	N/A	N/A		NOTE: Funding for this program is grouped with the Public Education and Outreach Program.
Illicit Discharge Detection and Elimination	\$22,118.83	\$20,000 - GF	\$50,000 - GF		- General Fund
Construction Site Pollutant Control	\$3,946.78	\$800 - CAP	\$500 - CAP		- Capital
Post-Construction Storm Water Management	\$1,859.95		\$1,000 - GF		- General Fund
Pollution Prevention	\$779,798.97	\$40,000 - CAP \$1,079,176 - GF	\$50,000 - CAP \$854,200 - GF		- Capital - General Fund
Storm Water Quality Management (including pollutant-loading analysis)	\$1,034,546.62		\$560,000 - CAP		- Capital
Storm Sewer System Map	\$0				NOTE: Funding needed for this program can be taken from the "other category" if needed.
Other	52,995.15	\$20,000 - CAP \$119,397 - GF	\$50,000 - CAP \$115,601 - GF		- Capital - General Fund

<b>NORTHERN REGION COUNTIES</b>			<b>WEST CENTRAL REGION COUNTIES</b>		
Ashland	Langlade	DNR Service Center	Adams	Marathon	DNR Service Center
Barron	Lincoln	1401 Tower Ave.	Buffalo	Monroe	5301 Rib Mountain Rd.
Bayfield	Oneida	Superior, WI 54880	Clark	Portage	Wausau, WI 54401
Burnett	Polk	Phone: (715) 392-7988	Crawford	Trempealeau	Phone: (715) 359-4522
Douglas	Price		Jackson	Vernon	
Florence	Rusk		Juneau	Wood	
Forest	Sawyer		La Crosse		
Iron	Taylor				
	Vilas				
	Washburn				
			Chippewa	Pepin	DNR Service Center
			Dunn	Pierce	890 Spruce St.
			Eau Claire	St. Croix	Baldwin, WI 54002
					Phone: (715) 684-2914

<b>NORTHEAST REGION COUNTIES</b>			<b>SOUTH CENTRAL REGION COUNTIES</b>		
Brown	Marquette	DNR Northeast Region	Columbia	Jefferson	DNR South Central Region
Calumet	Menominee	2984 Shawano Ave.	Dane	LaFayette	3911 Fish Hatchery Rd.
Door	Oconto	Green Bay, WI 54313	Dodge	Richland	Fitchburg, WI 53711
Fond du Lac	Outagamie	Phone: (920) 662-5100	Grant	Rock	Phone: (608) 275-3266
Green Lake	Shawano		Green	Sauk	
Kewaunee	Waupaca		Iowa		
Manitowoc	Waushara				
Marinette	Winnebago				

<b>SOUTHEAST REGION COUNTIES</b>		
Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	141 NW Barstow Street,
Ozaukee	Washington	Room 180
Racine	Waukesha	Waukesha, WI 53188
		Phone: (262) 884-2300