#### Annual Report Group Municipal Storm Water Discharge Permit WPDES Permit No. WI-S058416-2 (Rev. 1/09)

# **2008** (Due by March 31, 2009)

For the Cities of Fitchburg, Madison, Middleton, Monona, Sun Prairie, and Verona; the Villages of DeForest, Maple Bluff, McFarland, Shorewood Hills, and Waunakee; the Towns of Blooming Grove, Burke, Madison, Middleton, Westport, and Windsor; Dane County; and the University of Wisconsin – Madison

This document is for the purpose of annual reporting on activities undertaken pursuant to WPDES Permit No. WI-S058416-2 for the above listed municipalities. An owner or operator of a municipal separate storm sewer system covered by a municipal storm water discharge 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. Information in the annual report will be used by the Department of Natural Resources to assist with assessing permit compliance. 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 requirements for an owner or operator of a municipal separate storm sewer system that uses and completes this form will not automatically be deemed to be in compliance with other requirements of WPDES Permit No. WI-S058416-2.

Complete and submit the annual report by March 31, 2009, to the following address: Storm Water Management Specialist, Wisconsin Dept. of Natural Resources, South Central Region, 3911 Fish Hatchery Rd., Fitchburg, WI 53711

I. MUNICIPAL INFORMATION		
Name of municipality	Contact person and title	
City of Fitchburg	Rick Eilertson, Environmental Engineer	
Mailing Address	Telephone no.	
5520 Lacy Road	(608) 270-4264	
Fitchburg, WI 53711	Fax no.	
	(608) 270-4275	
	E-mail address	
	rick.eilertson@city.fitchburg.wi.us	

Does the municipality have an internet website? Xes No If yes, provide internet address: http://www.city.fitchburg.wi.us

If the municipality has an internet website, is there current information posted about	t or links pro	ovided to the municipal storm
water discharge permit and the municipality's storm water management program?	🛛 Yes	🗌 No
If yes, provide internet address:		
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http://www.city.fitchburg.wi.us/public\_works/stormwater.php

#### II. CERTIFICATION

I certify 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 the annual report.

Authorized representative printed name	Authorized representative title
Paul Q. Woodard, P.E.	Director of Public Works
Authorized representative signature	Date signed March 31, 2009

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#### **III. GENERAL INFORMATION**

a. Has the municipality made any changes under its legal authority that affects implementation of the requirements of the municipal storm water discharge permit (e.g., changes to ordinances)?  $\Box$  Yes  $\boxtimes$  No If yes, describe the changes in **Appendix A**.

b. List the people who attended quarterly meetings on behalf of the municipality and indicate the quarterly meetings in which the municipality was represented for the reporting year.

Name	Title	Affiliation
Rick Eilertson	Environmental Engineer	City of Fitchburg
Felipe Avila	GIS Engr. Specialist	City of Fitchburg
c. Quarterly meetings represented:	🛛 February 🖾 May 🖾 August 🔲 No	ovember
d Describe in Annondix A how the	municipality internally acardinates implementatio	n of the requirements of the municipal

d. Describe in **Appendix A** how the municipality internally coordinates implementation of the requirements of the municipal storm water discharge permit between the municipality's agencies, departments, and programs. Provide any documentation on how this was accomplished, such as meeting agendas, minutes, memos, etc.

e. Describe in **Appendix A** how elected and municipal officials and appropriate staff are kept apprised of the municipal storm water discharge permit. Provide any documentation on how this was accomplished, such as meeting agendas, minutes, memos, etc.

f. Has the municipality prepared its own municipal-wide storm water management plan? 

Yes No

If yes, date of storm water management plan:

g. Describe in **Appendix A** how the requirements of the municipal storm water discharge permit are incorporated into master planning activities, neighborhood plans, development plans, or other comprehensive planning activities.

#### IV. STORM WATER MANAGEMENT PROGRAM

### a. Public Education and Outreach

Dane County only:

1. Has any municipality failed to submit its financial contribution in accordance with the Intergovernmental Agreement to Create and Fund a Position Responsible for Storm Water Management Education and Outreach? Yes No If yes, list municipalities:

2. Attach in Appendix B a copy of the 2009 Information and Education work plan

3. Describe in **Appendix B** the Information and Education plan implementation and activities for the reporting year, including any materials produced and their distribution. Provide examples. Include an assessment of the effectiveness of reaching targeted audiences and delivery of intended messages.

#### All municipalities:

4. Describe in **Appendix B** how any materials produced by Dane County on behalf of the municipality have been used and/or distributed. Provide examples.

5. Describe in **Appendix B** any individual information and education activities undertaken for the reporting year, including any materials produced and their distribution. Provide examples. Include an assessment of the effectiveness of reaching targeted audiences and delivery of intended messages.

#### b. Public Involvement and Participation

1. The group permit requires that the information in this annual report be an agenda item for discussion before the appropriate governing board(s) or council(s) contemporaneous with the submittal of the annual report to the Department of Natural Resources. Accordingly, please provide the following information:

 Name of board(s)/council(s): Board of Public Works Resource Conservation Commission
 Date(s) of meeting(s) to discuss the annual report: April 6, 2009 (BPW) May 18, 2009 (RCC)
 Describe in Appendix B the opportunities and type

4. Describe in **Appendix B** the opportunities and types of forums for public involvement and participation in permit related activities that occurred during the reporting year. Include an assessment of the effectiveness of efforts to involve the public and the level of participation.

#### c. Illicit Discharge Detection and Elimination

1. Describe in **Appendix B** the illicit discharge detection and elimination program developed to comply with the permit. Include information on the municipality's strategy to prevent, detect, and eliminate all types of illicit discharges; how priorities are established for field screening and the methodologies to be used for field screening; and procedures for responding to and rectifying illicit discharges to the MS4, including spills, improper disposal of waste or dumping. Also include and assessment of the effectiveness of detection and elimination of illicit discharges, prevention of improper disposal of waste and dumping, the handling of spills, and any enforcement efforts involving these activities.

2. Has the municipality performed any field screening for the reporting year?  $\square$  Yes  $\square$  No If yes, please provide documentation in **Appendix B** the results of the field screening.

s of the field screening.

3. Has the municipality investigated any instances of spills, improper disposal of waste or dumping? Xes I ves If yes, please provide documentation in **Appendix B** the results of the investigations.

4. Describe in **Appendix B** how the municipality facilitates public reporting of illicit discharges.

#### d. Construction Site Pollution Control

1. Does the municipality notify landowners who apply for local construction or land disturbing permits of the possible applicability of Subchapter III of Chapter NR 216, Wis. Adm. Code, *Construction Site Storm Water Discharge Permits*, to the landowners' construction projects? X Yes No

If yes, please explain the process for providing this notification. If no, please explain why this notification is not provided.

This notification is addressed in the Erosion Control & Stormwater Management Permit Application paperwork as well in

discussions with the developer, developer's engineer, and developer's contractor before, during, and following construction.

2. Describe in **Appendix B** the procedures the municipality employs to incorporate timely consideration of potential water quality impacts from construction sites and that ensure implementation of the standards of ss. NR 151.11 and 151.23, Wis. Adm. Code, or equivalent local standards. Be specific of when in the review and approval process this is done, and how the municipality ensures compliance with the standards.

3. Describe in **Appendix B** the procedures the municipality employs for the inspection of construction sites and enforcing erosion control standards. Provided documentation of any enforcement actions taken that resulted in the issuance of a stop work order, citation, or summons for a construction site where one or more acre of land is disturbed. Include the name and address of the landowner, the site name and location, date(s) of violation(s), type of violation(s), and the status of resolution of the enforcement action.

4. List the name, title, address, telephone number, e-mail address, and duties of all persons designated with the responsibility to ensure implementation of the standards of ss. NR 151.11 and 151.23, Wis. Adm. Code, or equivalent local standards, and the requirements of Subchapter III of Chapter NR 216, Wis. Adm. Code, *Construction Site Storm Water Discharge Permits*, where applicable.

Rick Eilertson, Environmental Enginner. 5520 Lacy Rd. Fitchburg, WI 53711. 608 270-4264 rick.eilertson@city.fitchburg.wi.us

- Plan review, Site Inspections

Felipe Avila, GIS Engineering Specialist. 5520 Lacy Rd. Fitchburg, WI 53711. 608 270-4277 felipe.avila@city.fitchburg.wi.us

- Plan review, Site Inspections

5. Include in **Appendix B** an assessment of the municipality's construction site pollution control program effectiveness in meeting the standards of ss. NR 151.11 and 151.23, Wis. Adm. Code, including enforcement efforts.

#### e. Post-Construction Site Storm Water Management

1. Describe in **Appendix B** the procedures the municipality employs to incorporate timely consideration of potential water quality impacts from construction sites and that ensure implementation of the standards of ss. NR 151.12 and 151.24, Wis. Adm. Code, or equivalent local standards. Be specific of when in the review and approval process this is done, and how the municipality ensures compliance with the standards.

2. Describe in **Appendix B** the procedures the municipality employs for inspecting the construction and installation of storm water best management practices and enforcement actions to ensure compliance with post-construction storm water management standards. Provided documentation of any enforcement actions taken that resulted in the issuance of a stop work order, citation, or summons for non-compliance with post-construction storm water management standards for sites where one or more acre of land is disturbed. Include the name and address of the landowner, the site name and location, date(s) of violation(s), type of violation(s), and the status of resolution of the enforcement action.

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3. List the name, title, address, telephone number, e-mail address, and duties of all persons designated with the responsibility to ensure implementation of the standards of ss. NR 151.12 and 151.24, Wis. Adm. Code, or equivalent local standards, and the requirements of Subchapter III of Chapter NR 216, Wis. Adm. Code, *Construction Site Storm Water Discharge Permits*, where applicable.

Rick Eilertson, Environmental Enginner. 5520 Lacy Rd. Fitchburg, WI 53711. 608 270-4264 rick.eilertson@city.fitchburg.wi.us

- Plan review, Site Inspections

Felipe Avila, GIS Engineering Specialist. 5520 Lacy Rd. Fitchburg, WI 53711. 608 270-4277 felipe.avila@city.fitchburg.wi.us

- Plan review, Site Inspections

4. Include in **Appendix B** an assessment of the municipality's post-construction site storm water management program effectiveness in meeting the standards of ss. NR 151.12 and 151.24, Wis. Adm. Code, including enforcement efforts.

#### f. Municipal Pollution Prevention

1. List in **Appendix B** an inventory of long-term storm water best management practices owned, operated, managed, or maintained by the municipality. Include storm water basins, infiltration practices, treatment structures, and other practices for long-term water quality treatment. For each best management practice, provided the name, location, type of practice, and any maintenance activities undertaken for the practice during the reporting year. Also in **Appendix B**, provide a description of the maintenance procedures used and schedules for each long-term storm water best management practice and the approximate amount of solids collected (tons or cubic yards) from any structural control receiving maintenance.

2. Does the municipality perform catch basin cleaning? Xes No If yes, approximate amount of solids collected (tons or cubic yards): <u>18 cy</u>. Describe in **Appendix B** the procedures used and schedules for catch basin cleaning. If no, explain:

3. Does the municipality perform street sweeping?  $\square$  Yes  $\square$  No If yes, approximate number of street miles swept: <u>3,750</u>; approximate amount of solids collected (tons or cubic yards): <u>750 cy</u>. Describe in **Appendix B** the procedures used and schedules for street sweeping. If no street sweeping is performed, explain:

4. Describe in **Appendix B** the municipality's procedures for roadway snow removal and de-icing. Provide information on what practice and procedures the municipality has implemented in consideration of water quality impacts from snow removal and de-icing. Include an estimate of the annual amount of salt and/or sand used for roadway de-icing.

5. E	Does the municipality haul snow to off-site disposal locations? 🗌 Ye	es 🛛	🛾 No		
If ye	es, provide in Appendix B the location of all off-site snow disposal lo	cations	and describe	what practices and	procedures are
use	ed to protect water quality from snow and ice melt from the disposal si	ite.			

6. Does the municipality own or operate salt storage facilities? 🛛 Yes 🗌 No If yes, provide in **Appendix B** the locations of all salt storage facilities. Are all salt storage facilities managed in accordance with Chapter TRANS 277, Wis. Adm. Code? 🖾 Yes 🗌 No

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7. Does the municipality provide curbside pickup service for leaves, yard waste, and grass clippings? Xes IN No If yes, approximate amount of material collected (tons or cubic yards): <u>~300 Tons curbside</u>

8. Describe in **Appendix B** the municipality's procedures for the collection of leaves, yard waste, and grass clippings, and/or instruction to citizens for on-site management of these items. Provide the location of sites used by the municipality or citizens for the disposal of leaves, yard waste, and grass clippings.

9. Describe in **Appendix B** the municipality's policies and procedures for the use and application of lawn and garden fertilizers on municipally controlled properties. Include information on how these policies and procedures address pollution prevention efforts.

10. Describe in **Appendix B** the municipality's policies and procedures for the use and application pesticides and herbicides on municipally controlled properties. Include information on how these policies and procedures address pollution prevention efforts.

11. Describe in **Appendix B** any local program the municipality employs to regulate the private use of lawn and garden fertilizers, and pesticides and herbicides.

12. Include in **Appendix B** an assessment of the effectiveness of the municipality's pollution prevention efforts through the municipal pollution prevention program.

### V. STORM SEWER SYSTEM MAP

#### City of Madison only:

a. Has any municipality failed to submit its hard copy changes for the storm sewer system map by January 31, 2009? Yes No If yes, list municipalities:

#### b. Attach in Appendix C a copy of the updated storm sewer system map.

#### All municipalities:

c. Has the municipality updated and maintained documentation of all storm sewer outfalls from its MS4 to waters of the state?

#### **VI. MONITORING PROGRAM**

#### City of Madison only:

a. Has any municipality failed to submit its financial contribution in accordance with the Intergovernmental Agreement to Fund a Joint Storm Water Monitoring Program through the Scientific Evaluation of rain Gardens? Yes No If yes, list municipalities:

b. Provide in Appendix D information on implementation and any results of the group-sponsored rain garden study.

#### All municipalities:

c. Provide in **Appendix D** information on any monitoring of storm water or storm water treatment methods that the municipality is involved in outside of the group rain garden study.

#### **VII. ADDITIONAL INFORMATION**

a. Provide in **Appendix E** a description of any revisions or proposed revisions to any element of the municipality's storm water management program.

b. Provide in **Appendix E** an updated listing and contact information for any new industrial facilities that may be regulated under Subchapter II of NR 216, Wis. Adm. Code, and that have commenced operation during the reporting year.

c. Provide in **Appendix E** a summary of any other activities undertaken to comply with the conditions of this permit or other information you feel the Department of Natural Resources should be aware of.

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d. Complete the fiscal analysis table provided below.

Program Element	2008 Annual Expenditure	2009 Budget	Source of Funds
Public Education and Outreach	\$1,500	\$3,500	
Public Involvement and Participation	\$500	\$1,500	
Illicit Discharge Detection and Elimination	\$3,000	\$3,000	
Construction Site Pollution Control	\$9,000	\$9,000	
Post-Construction Site Storm Water Management	\$2,000	\$2,000	
Municipal Pollution Prevention	\$127,000	\$127,000	

e. What is the overall estimated annual cost to the municipality for compliance with the permit in 2008? \$143,000

f. Ha	as the municipality impleme	ented a storm water utility? 🛛 Yes	No, but considering	No, and not considering		
If yes	s, provide a description of t	the storm water utility in Appendix E a	and any additional informa	tion that will assist the Departme	ent of Natural Resources in	understanding how the
utility	v works in your municipality	у.				

# APPENDIX A General Information

**III.a.** Fitchburg's most recent revision to Chapter 27 Erosion Control and Stormwater Management Ordinance was adopted by the Common Council at their January 23, 2007 meeting and went into effect on February 2, 2007. Draft copies of this ordinance were sent to Eric Rortvedt (WisDNR) and Jeremy Balousek (Dane County Land & Water Resources Department) for review prior to adoption. WisDNR and Dane County have agreed that Chapter 27 of the Fitchburg Municipal Code meets the requirements of NR 151, NR 216, and Dane County Chapter 14. Chapter 27 can be viewed on Fitchburg's web site at:

http://www.city.fitchburg.wi.us/public\_works/documents/Chap27ECSWM2-2-07.pdf

**III.d.** The "Information on Applicability and Filing" flyer for the Erosion Control and Stormwater Management Permit Process available at:

http://www.city.fitchburg.wi.us/public\_works/documents/ECSWMApplicabilityInfo1-16-08.pdf describes the Chapter 27 permit requirements and process followed for obtaining the applicable permits. The Public Works Department coordinates permit reviews and construction inspections for these permits. Erosion control inspections for single family residential dwellings are handled by the Building Inspection Department via Uniform Dwelling Code (UDC) guidelines.

**III.e.** Information on the NR216 permit and process was presented in the 2008 Group Municipal Storm Water Discharge Annual Report, posted on the City of Fitchburg's web site at: <a href="http://www.city.fitchburg.wi.us/public\_works">http://www.city.fitchburg.wi.us/public\_works</a> Links to this report were distributed to all elected municipal officials and appropriate city staff. The Annual Report will be reviewed at the April 6, 2009 Board of Public Works and the April 20, 2009 Resource Conservation Commission meetings.

**III.g.** Developers are notified of construction stormwater performance standards by Public Works in preliminary meetings and plan reviews.

## APPENDIX B Storm Water Management Program

## IV.a.2 (Dane County only) IV.a.3 (Dane County only)

**IV.a.4.** The following articles provided by Dane County were incorporated into Fitchburg's quarterly newsletter, called the *Fitchburg Update:* 

- "Springtime brings more than flowers with those showers" Summer 2008
- "Storm Sewers: Highways to our Lakes and Streams" Fall 2008
- "Put your Sidewalk and Driveway on a Low-Salt Diet" Winter 2008 These articles are attached at end of Appendix B.

**IV.a.5.** A total of 9 Fitchburg newsletter articles related to water quality were published in the Spring 2008, Summer 2008, Fall 2008, and Winter 2008 *Fitchburg Updates* (see articles attached at end of Appendix B). The *Fitchburg Update* newsletters are distributed to all Fitchburg residents and are also placed on Fitchburg's web site. Grade school visits were held during fall 2008 at City Hall where information on water pollution prevention was discussed and distributed.

**IV.b.4.** The Fitchburg Resource Conservation Commission (RCC) meets monthly and the meeting agenda includes public appearances which are open to discussion on stormwater or water quality issues. There are occasional public appearances on water quality issues. On February 21, 2008 a public forum called "The Rain in Dane... a Forum for discussing Water Management Policies and Programs in and around Dane County" was held to discuss stormwater runoff and groundwater management in Fitchburg and surrounding Dane County. Approximately 50 people attended. The presentation materials can be viewed at:

http://www.city.fitchburg.wi.us/public\_works/StormwaterEvents.php

**IV.c.1.** In 2008, 30 stormwater outfalls greater that 24-inch diameter were inspected during dry weather periods, May through July. Commercial, industrial, and environmentally sensitive areas were inspected first. Spring and Fall outfall and basin inspections were also conducted with the inspectors looking for evidence of illicit discharge as well.

**IV.c.2.** In May through July 2008, A total of 25 outfalls were inspected for flow and maintenance problems. A few outfalls had an oil sheen or bacterial slime but the quantities were so small that there was no evidence to suggest that they were caused by anything other than normal rainwater flowing off the street. In August 2008, four follow-up inspections were made, with no changes to the earlier observations.

**IV.c.3.** In the event of general public calls or e-mails reporting improper disposal of waste or dumping, City staff makes follow-up inspections and/or makes contact with the property owner to verify the issue and identify the appropriate action to be taken. In 2008, the following illicit discharges were called in that staff followed up on:

 July 9, 2008 – Calls from neighbors of 5794 Verde View Road of an illicit discharge (excessive oil leaking from a car parked on street). Rick Eilertson contacted the property owner to ensure car leak gets fixed or removed from the street to a location that won't leak oil into the street or storm system and to have the owner coordinate cleanup of the oil released on the street. The property owner agreed to comply so

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# Appendix B – Stormwater Management Program

no citations were sent. Rick inspected the site 3 times after the incident and it appeared the owner was complying with the City's requirements.

- July 23, 2008 Call from John Schoenfeld (Placon) of an illicit discharge (hydraulic oil spill) into Placon's private storm sewer. Rick Eilertson followed up with obtaining asbuilt drawings of Placon's site and printing a GIS map of the site and met with John and Howard Luedtke (Placon) to coordinate cleanup activities with Pellitteri Waste Systems and their subcontractors. DNR's Spill Hotline was contacted and Rick gave update on cleanup activities to Dino Tsoris, DNR. Rick followed up with all parties the following week and verified that everything was cleaned up properly.
- August 4, 2008 Anonymous call was made of complaint of illicit discharge at 2043
   S. Fish Hatchery Road. Rick Eilertson followed up with a site visit ~15 minutes after the call came in. No evidence of an illicit discharge was discovered.

There were also ~15 contacts dealing with improper disposal of brush and yard waste within the City. All issues were resolved without citations being issued.

**IV.c.4.** The city website, newsletter, and cable access channels all have contact information for residents to report spills or illicit discharges.

**IV.d.2.** For all developments, the City requires an erosion control plan submittal, review, and approval before a Building Permit or Erosion Control & Stormwater Management (ECSWM) Permit is issued. The review process includes a check for compliance with NR 151 standards.

**IV.d.3.** The City inspects projects weekly to monthly depending on scope and disturbance schedule of each project. Developments not in compliance with erosion control measures are contacted by the City with an Erosion Control Corrective Action Notice or a direct phone call to the contractor on site. If problems are not corrected within three days, a stop work notice is issued.

**IV.d.5.** In 2008, the City issued approximately 30 corrective action notices or calls to various developments for noncompliance for the city's erosion control and stormwater management ordinance. Stop work orders were issued and posted at 2 job sites in 2008 (One at Lot 9 of Orchard Pointe Preliminary Plat on April 1, 2008 (this lot was later separated into Lots 3, 4, and 5 of Orchard Pointe Final Plat – Peterson Properties of Chicago/Jim Spahr, Owner) and the other at Lots 3, 4, 6, 7, 8, and Outlot 7 of Orchard Pointe Final Plat on September 29, 2008 – Tim Nietzel, Owner.

**IV.e.1.** For all developments, the City requires a stormwater management plan submittal, review, and approval before a Building Permit or ECSWM Permit is issued. The review process includes a check for compliance with NR 151 standards.

**IV.e.2.** For commercial projects, Building Inspection notifies Public Works for a site inspection before issuing an occupancy permit. A condition of the permit is to correct site deficiencies per the approved stormwater management plan. For subdivisions, Public Works conducts a site inspection. Site deficiencies per the approved stormwater management plan must be corrected before building permits are issued.

**IV.e.4.** If developments do meet post-construction stormwater management standards per the approved plans, a work list with due date is issued to the developer.

**IV.f.1.** As of the end of 2008, A total of 59 stormwater basins were owned and maintained by the City. The Highway Division generally maintains all basins by mowing at least once a year. If erosion control or maintenance problems are found at the basins

during mowing operations, the Highway Division will schedule and perform the repair work for the Stormwater Utility. Approximately 12 cubic yards of solids were collected from each of 13 basin outlet structures cleaned out in 2008.

**IV.f.2.** The City standard stormwater collection structures are inlets and are not built with a sump. If plugging or debris problems are found during sweeping operations, the Highway Division will collect the material with the sweeper vacuum or schedule and perform the maintenance work. The Highway Division also responds to resident calls on inlet maintenance problems. Approximately ¼ to 1 cubic yard of solids were collected from each of 20 inlets cleaned in 2008.

**IV.f.3.** The City maintains and sweeps approximately 115 inventory miles of streets with a Regenerative Air Street Sweeper (2001 Johnston 770 Cyclone in early 2008 and 2008 Schwarze A7000 in late 2008). Approximately 1434 cubic yards of solids were collected (276 cy sand/dirt, 798 cy leaves and grass, 360 cy stone from chip sealing work) from streets in 2008. The Highway Division operates the sweeper from approximately March through December. All streets are swept a minimum of 2 times each in the Spring, and as needed through the Summer and Fall. The sweeper is also sent to street with debris problems as called in by residents.

**IV.f.4.** The City procedure for snow and ice removal includes the use of plow trucks loaded with a deicing mix. The deicing mix includes an approximate 60-40 mix of salt to sand; however this blend varies with anticipated temperatures following deicing application. Approximately 1293 tons of salt and 1415 tons of sand were used in 2008.

## IV.f.5. N/A

IV.f.6. The City salt storage facility is located at 2373 S. Fish Hatchery Road.

**IV.f.8.** In 2008, the City collected leaves, yard waste, and grass clippings curbside under contract with Green Valley Disposal. Four yard waste collection weeks, two each in the Spring and Fall, were provided in 2008. Residents may also dispose of yard waste at the Fitchburg Recycling Drop-Off Site at 2373 S. Fish Hatchery Road. Residents are instructed on disposal, composting, or grass cycling methods annually by the City newsletters. Fitchburg collected ~300 tons of yard waste curbside and ~750 tons of yard waste from the Recycling Drop Off Site for a total of ~1,050 tons of yardwaste collected.

**IV.f.9.** The Public Works (PW) crew only uses fertilizer on newly restored areas. The Public Works Department promotes the use of a soil test before applying fertilizer for projects in the City. The Parks Department minimizes the use of fertilizer at medians, athletic fields, and municipal building grounds. Fertilizer is not used on general park land.

**IV.f.10.** The PW crew does not use pesticides for highway or stormwater utility projects. Occassionally, the PW crew uses herbicide to treat buckthorn and honeysuckle stumps following removal of these species in order to reduce the likelihood of regeneration of these invasive woody species. The Parks Department minimizes the use of herbicides at medians, athletic fields, and municipal building grounds. Herbicide is not used on general park land, but may occasionally be used at wet park areas to control invasive species such as purple loosestrife.

Appendix B – Stormwater Management Program

**IV.f.11.** The City does not have local ordinances to regulate the private use of fertilizer, pesticides, and herbicides. The City quarterly newsletters and website contains information for the smart use of these items if necessary.

**IV.f.12.** Fitchburg's website and the quarterly newsletters appear to be doing a good job of keeping residents, businesses, and contractors informed of Fitchburg's pollution prevention program. Very few residents have expressed frustration at knowing who to get in touch with when they have guestions or see stormwater concerns.

## Stormwater Articles appearing in the Spring 2008 Fitchburg Update

## The Rain in Dane...

A Forum for discussing Stormwater & Groundwater Management Policies in and around Dane County will be held in the Fitchburg Room of the Community Center at 5510 Lacy Road. Date & Time: Thursday, February 21, 2008 from 6:30pm to 8:30pm

The event is being sponsored by the Fitchburg Stormwater Utility along with the Fitchburg Resource Conservation Committee.

Highlights include the following presentations:

- 1. Stormwater Basics & Fitchburg Credit Policy by Rick Eilertson, Environmental Engineer
- 2. Stormwater Quality Modeling & Rain Garden Basics by Roger Bannerman (WisDNR)
- Groundwater Modeling (GFLOW, MODFLOW, etc.) by Chuck Dunning (USGS)

4. Integrating Stormwater & Groundwater, Understanding Springs by Ken Johnson (WisDNR)

The Forum will end with a Stormwater and Groundwater Panel Discussion with the following experts in attendance: Roger Bannerman (WisDNR), Chuck Dunning (USGS), Ken Johnson (WisDNR), Nancy Zolidis (MARS), Rob Montgomery (MARS), Jon Schellpfeffer (MMSD), Dave Liebl (UW-Madison Arboretum/UW-Extension)

**RSVP's** are requested so that we can plan on amounts of groundwater and other refreshments. Please contact Rick Eilertson at rick.eilertson@city.fitchburg.wi.us or 270-4264 to register or to discuss any questions, comments, or suggestions.

Please check www.city.fitchburg.wi.us for further details as the event approaches.

## Yard Waste Collection Begins April 21<sup>st</sup>

Residents of single family homes and apartments with up to four-units who receive City refuse & recycling collection from Green Valley Disposal will receive four curbside collections for yard waste in 2008. Spring yard waste collection will take place the weeks of April 21st and May 19th. Fall yard waste collection will take place the weeks of October 20<sup>th</sup> and November 17<sup>th</sup>.

Yard waste includes leaves and grass clippings, twigs less than 1/4-inch diameter, as well as non-woody garden material, such as flowers, weeds, and garden waste. All yard waste set out for collection must be at the curb in plastic bags or in garbage cans labeled yard waste. Yard waste should be placed on your driveway or terrace, but cannot be placed in the street. No loose material or material in cardboard boxes will be collected!

Please have yard waste at the curb by 6:30 a.m. Monday on the week of collection, regardless of which day your refuse and recyclables are collected.

Please keep other materials, such as, brush, rocks and dirt, separate. Brush and other woody materials will be collected in a separate vehicle and are processed differently than the vard waste.

All residents may also take yard waste to the City's Recycling Drop-Off Site, located at 2373 S. Fish Hatchery Road. The site is open every day from 6:30 a.m. to 7:00 p.m. In addition, residents may take vard waste to one of the Dane County compost sites (on Hwy, 18 & 151 near Badger Prairie Park or at the Dane County Landfill on Hwy. 12 & 18). Call 266-4139 for more information on the Dane County compost sites.

Please contact Public Works at 270-4260 or by e-mail at publicworks@city.fitchburg.wi.us if you have any questions on yard waste collection procedures.

## Stormwater Articles appearing in the Summer 2008 Fitchburg Update

### Fitchburg Creek Supporter Program

The City of Fitchburg recently started up a new program to reward property owners for good housekeeping and lawn care practices right at their own house or business. The program includes a list of 50 different practices that property owners can do to help minimize the adverse effects of human impact on stormwater and the environment. The Fitchburg Creek Supporter Pledge form is available at:

http://www.city.fitchburg.wi.us/public\_works/documents/SWUCreekSupporter01-29-08.pdf Residents who pledge to do at least 30 of these 50 practices and turn in their pledge form along with the Stormwater Utility Credit and Rebate Application Form:

<u>http://www.city.fitchburg.wi.us/public\_works/documents/SWUcreditapp01-29-08.pdf</u> are eligible for a discount on their stormwater utility bill.

Fitchburg's first official "Fitchburg Creek Supporter" is Michelle Bright, a three-year new resident in the Teaberry Lane area of the Swan Creek of Nine Springs Development. Michelle has also won grants through the "Plant Dane!" program

(http://www.danewaters.com/business/PlantDane.aspx) for purchasing and installing native plants. With this year's Plant Dane! grant, Michelle is planning to expand her rain garden size so that she is eligible for an additional reduction on her stormwater utility bill. "Living in the cottage section of Swan Creek, with smaller homes and smaller lots, with porches in the front and garages in back, was exactly where I wanted to put my own roots. Putting in a rain garden was just \*green\* icing on the cake!", says Bright. With the combination of the Fitchburg Creek Supporter and Rain Garden Credit, Ms. Bright's stormwater utility bill can be reduced by over 30%, a savings of \$20/year.

The Fitchburg Creek Supporter Pledge Program and the Stormwater Utility Credit and Rebate Program are both based on the fundamental concept that it's best and easiest to address stormwater quality improvements and infiltration/recharge as close to the source as possible. They also follow the mantra of the Dane County Land & Water Resources Department, "Keep water where it lands, and soil in its place."

Please feel free to contact Rick Eilertson, Fitchburg's Environmental Engineer, at <u>rick.eilertson@city.fitchburg.wi.us</u> or 270-4264 to discuss any questions, comments, or further suggestions on how we can work together to improve stormwater in our community.

#### Thank You Fitchburg Waterway Cleanup Volunteers!

The City of Fitchburg and the Fitchburg Resource Conservation Committee (RCC) would like to thank all the volunteers who helped with Fitchburg's Annual Waterway Cleanup this year. It was a perfect day for the Annual Waterway Cleanup. Twenty-seven volunteers pitched in on April 19 to remove debris from the waterways in 3 separate areas:

- WIBA Wet Pond to McKee Farms Park,
- Waterways at the northern portion of the Swan Creek of Nine Springs Development and
- Fitchburg's waterways draining to Dunn's Marsh.

Volunteers removed 30 30-gallon bags of refuse and 10 30-gallon bags of recyclables. They also removed a television, computer, microwave, trampoline, two shopping carts, several tires, construction tarps and a large wooden palette from these 3 area waterways.

Unfortunately, we've been finding that many of our waterways end up as dumping grounds from construction sites, upstream residents, and litterbugs. Thanks to the effort of these volunteers, these waterways are once again clean. Great job Volunteers!

We welcome any other volunteers interested in helping to keep these and other waterways clean throughout the year to contact Rick Eilertson, Fitchburg's Environmental Engineer, at <u>rick.eilertson@city.fitchburg.wi.us</u> or 270-4264 for more information. Volunteers who complete and submit a Fitchburg Creek Supporter Pledge Form may be eligible for a reduction in their stormwater utility bill for pledging to help clean up Fitchburg's waterways.

## 2008 Annual Report

### Group Municipal Storm Water Discharge Permit WPDES Permit No. WI S058416-2

# Appendix B – Stormwater Management Program

#### SPRINGTIME BRINGS MORE THAN FLOWERS WITH THOSE SHOWERS

With warm weather comes southern breezes, spring showers, and water is everywhere. There are buds on the trees and spring flowers begin to make an appearance. But there are also oily sheens in parking lots, which wash into the storm drains, and muddy water flows into ditches and gutters. Spring is a good time to stop and ask, "What happens to all that rainwater?" Most of it ends up in our lakes and streams, but along the way it goes through a few changes.

#### Storm Water is more than Just Water

Storm water begins its journey to our lakes and rivers when it washes across the surface of the land. When rain falls, water flows across streets, rooftops, lawns and farmland. The water carries sand, salt, fertilizer, leaves, grass clippings, pesticides, oil, trash and many other pollutants. In developed areas, storm drains and ditches carry large amounts of runoff water to lakes and streams.

Storm sewer inlets located in curbs and parking lots collect the runoff, which flows untreated to nearby streams and lakes. A common misconception is that street runoff goes to a sewage treatment plant. It does not! The polluted water flows directly into our lakes.

### "What Can I Do?"

The first step toward keeping our lakes and streams clean is to think about what we do at home. Each of us contributes to storm water pollution and each of us can help stop it. Here are some ways you can help:

- Keep leaves and grass clippings out of the street.
- Direct rainwater away from paved areas to lawns or gardens where it can infiltrate.
- Get a soil test before applying fertilizer to your lawn. Don't pay for something you don't need. If you do use fertilizer, apply it according to directions and clean up any spills on paved surfaces.
- Clean up pet waste bury it or flush it down the toilet.
- Compost your leaves and yard debris.
- Keep cars tuned up and repair leaks, and walk or ride a bike whenever you can.
- Wash your car on the lawn or at a car wash that sends its used water to the sewage treatment plant.
- Prevent soil erosion.
- Don't let anything but rain go down the storm drain or ditch.

Go to <u>www.myfairlakes.com</u> for more ideas on how you can help our lakes and streams. Adapted from Wisconsin Department of Natural Resources, University of Wisconsin Cooperative Extension, Dane County Lakes and Watershed Commission and other publications.

## Stormwater Articles appearing in the Fall 2008 Fitchburg Update

## Fall Leaf Collection Begins October 20<sup>th</sup>

Fall leaf and yard waste collection will take place the weeks of October 20<sup>th</sup> and November 17<sup>th</sup>, 2008 (weather permitting) for residents of single family homes and apartments with up to fourunits who receive City refuse & recycling collection. Green Valley Disposal will begin collection on Monday of each week, and may continue through Saturday. Your yard waste will not necessarily be collected on the same day as your pickup for refuse and recycling. Please have leaves at the curb by 6:30 a.m. on the Monday that collection begins, regardless of which day your garbage is collected.

Any leaves not ready for collection at the curb by November 17<sup>th</sup> will not be collected, and should be brought to the City Recycling Drop-off Site (2373 S. Fish Hatchery Road). By planning ahead and raking your yard early, you can ensure that your leaves will be collected. Condominium owners and apartment managers who do not receive City leaf pickup may also use the City Recycling Drop-Off Site.

Place leaves and yard waste at the curb in plastic bags that are tied shut to prevent leaves from spilling out before collection. You may also use containers clearly marked "leaves" or "yard

waste". Do not place leaves in cardboard boxes. Loose leaves will not be collected. Although the fall cleanup is intended primarily for leaves, other non-woody yard waste will be collected, including grass clippings, weeds, flowers, garden debris, etc.

Please do not rake your leaves into the street! Although some other municipalities may collect leaves this way, Fitchburg prohibits raking leaves into the street. Raking leaves into the street can clog storm sewers, contribute to water pollution in local lakes and streams, and necessitate more frequent street cleaning.

#### Storm Sewers: Highways to Our Lakes and Streams

Storm sewers are designed to safely transport stormwater away from city streets. Storm sewers and inlets should not be used as a place to dump yard waste and refuse.

Leaves, grass clippings, and trash in streets can clog storm sewer pipes, resulting in street flooding that can damage property and make street driving hazardous. Debris and contaminants in the sewers also harm downstream environments. Most city storm sewers discharge to ponds and tributaries of the Yahara River basin, which ultimately go to Lake Waubesa. Nutrients found in yard waste make aquatic plants and algae grow, contributing to the unappealing smell and color of local lakes and streams.

The City cleans streets on a regular basis with a high-powered street sweeper in the urban service area during warm weather months. An important way everyone can help to prevent water pollution is by keeping yard waste and other contaminants out of the City streets. If you live near a storm sewer inlet and see something there that shouldn't be, lend a hand and pick it up. Let's keep our City streets clean and the downstream ponds and tributaries both pleasing to the eye and environmentally healthy.

www.city.fitchburg.wi.us/public\_works/stormwater.php and www.myfairlakes.com both have additional information on stormwater efforts in Fitchburg and throughout Dane County.

## Stormwater Articles appearing in the Winter 2008 Fitchburg Update

#### Put Your Sidewalk and Driveway on a Low-Salt Diet

For safety reasons, we need to keep driveways and sidewalks clear of ice and snow. However, choosing the right product and using it correctly is important to help protect our water resources.

1. Shovel early, shovel often. There is no substitute for muscle and elbow grease for snow and ice removal. Deicers work best when there is only a thin layer of snow or ice that must be melted. Remove as much snow as you can during the storm if possible. Use a hoe, ice breaker, or other tools to chip or scrape ice off the surface before any deicers are applied. If you have a problem with ice forming, determine the source and divert the melting snow away from your sidewalks and driveway to an area where ice won't be a problem.

2. Buy early. Make sure to buy your deicing product well before the big storm hits, otherwise you will be looking at empty shelves, and have few, if any, environmental choices to make at the store.

3. Check the label. The table below shows how the main ingredients of common de-icing products compare. Check the package closely to see what you're buying—often a product may contain several of the ingredients listed below, but the first one listed is usually the main ingredient.

On the label:	Works Down to:	Cost	Environmental Concerns
Calcium Chloride	-25° F	~\$15 / 50 lb.	Uses lower doses; No Cyanide
			Chloride impact
Magnesium Chloride	5° F		less toxic and safer for environment
			than calcium chloride
NaCI: Sodium Chloride or "rock salt"	15° F	~\$5 / 50 lb.	Contains cyanide; Chloride impacts

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Urea	20 - 25° F	~\$25 / 50 lb.	Needless nutrients
			Less Corrosion
Calcium Magnesium Acetate (CMA)	22 - 25° F	~\$100 / 50 lb.	Less toxic
Sand	No melting effect	~\$3 / 50 lb.	Accumulates in streets and streams; needs to be swept up

4. Apply salt early, but sparingly. Whether you choose calcium chloride, magnesium chloride or sodium chloride, a little goes a long way. Applying additional salt won't speed up the melting process, so follow directions for application carefully and remember to first remove as much snow and ice as you can. The recommended application rate for sodium chloride is about a handful per square yard. Calcium chloride works at much colder temperatures and you need a lot less (about a handful per three square yards—about the area of a single bed). Choose calcium chloride over sodium chloride when you can.

5. Avoid kitty litter and ashes. Although these products may seem environmentally friendlier, they don't work to melt snow and ice—they merely provide some traction. Also, they often result in a mess on your floors. If you're looking for traction, stick with sand, which is cheaper and easier to sweep up.

6. Avoid Products that Contain Urea. Urea has been recommended as a safer alternative, reasoning that it does not contain chlorides and, as a form of nitrogen, will help fertilize your yard when it washes off. However, urea-based deicing products are a poor choice as it is fairly expensive and performs poorly when temperatures drop below 20 degrees F. The application rate for urea during a *single* deicing is ten times greater than that needed to fertilize the same area of your yard, and ultimately, very little of the urea will actually get onto your lawn, but will end up washing into the street and storm drain and eventually to the nearest lake or stream. Given that nitrogen is a problem for surface water resources, it doesn't make sense to use nitrogen-based products for de-icing.

7. Consider nearby vegetation. Look at the plants growing within five or ten feet of your driveway, sidewalk and road. Salt-sensitive plants are listed in the table below. If you have salt-sensitive tree, shrub or grass close to these paved surfaces, you should avoid any de-icing product that contains chlorides (magnesium chloride, rock salt or calcium chloride), or use very small amounts. You may want to use CMA as a safer alternative, or use sand for traction.

Landscaping Areas	Species at Risk from Salting
Deciduous Trees	Tulip polar, Green ash, Hickory, Red maple, Sugar Maple
Conifers	Balsam fir, White pine, Hemlock, Norway Spruce
Shrubs	Dogwood, redbud, hawthorn, rose, spirea
Grasses	Kentucky bluegrass, Red fescue

This article has been adapted from *Snow, Road Salt and the Chesapeake Bay* by Tom Schueler, Center for Watershed Protection

## Appendix B – Stormwater Management Program

**DNR Grant Awarded for Stormwater Master Plan for the Nine Springs Creek Watershed** The Wisconsin Department of Natural Resources recently announced that the City of Fitchburg will be awarded a \$42,850 grant for preparing a Stormwater Master Plan for the Nine Springs Creek Watershed.

Highlights of the Stormwater Master Plan include:

- 1. Compilation of historical information on stormwater facilities in the Nine Springs Creek Watershed
- 2. Three Public Involvement Meetings during the 2009 2010 grant period
- Identification of necessary stormwater management or maintenance projects within the watershed, including a review and update of current ordinances and nutrient management plans
- 4. Update of Fitchburg's Stormwater System Maps
- 5. Financial Recommendations, and
- 6. A specific stormwater management plan for the Dunn's Marsh Watershed

Further information on this project can be viewed at:

<u>http://www.city.fitchburg.wi.us/public\_works/Grants.php</u> If you would like to help out on this project and/or be notified of special meetings or tours, please feel free to contact Rick Eilertson, Environmental Engineer at 270-4264 or <u>rick.eilertson@city.fitchburg.wi.us</u>

# APPENDIX E Additional Information

VII.a. N/A

VII.b. N/A

VIII.c. N/A

**VII.f.** The City created a Stormwater Utility in 2002 to fund stormwater activities. The Stormwater Utility is responsible for maintaining and upgrading the City stormwater management facilities. Services include street sweeping, basin and streambank improvements, stormwater system pollution prevention and planning, repair, and installation, and public education.

Property owners within the Fitchburg urban service area are charged a quarterly fee, based on the impervious area of the property. Property owners within the rural service area are charged an annual fee, based on the impervious area of the property.