State of Wisconsin
Department of Natural Resources

2009 - 2010 Biennial Report
Group Municipal Storm Water Discharge Permit
WPDES Permit No. WI-S058416-3 (Rev. 11/10)

2009-2010 (Due by March 31, 2011)

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 biennial reporting on activities undertaken pursuant to WPDES Permit No. WI-S058416-3 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 a biennial report to the Department of Natural Resources by March 31 of every odd numbered year to report on activities for the previous two (2) calendar years. Information in the biennial 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 covered by WPDES Permit No. WI-S058416-3. However, 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-S058416-3.

Complete and submit the biennial report by March 31, 2011, 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 City of Fitchburg	Contact person and title Rick Eilertson, Environmental Engineer
Mailing Address 5520 Lacy Road Fitchburg, WI 53711	Telephone no. (608) 270-4264
	Fax no. (608) 270-4275
	E-mail address rick.eilertson@city.fitchburg.wi.us

Does the municipality have an internet website? ☒ Yes ☐ 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 or links provided to the municipal storm water discharge permit and the municipality's storm water management program? ☒ Yes ☐ No
If yes, provide internet address:
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 biennial report.

Authorized representative printed name Paul Q. Woodard, P.E.	Authorized representative title Director of Public Works
Authorized representative signature Paul Q. Woodard	Date signed 3-29-11

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)? ☐ Yes ☒ 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 2009 ☐ May 2009* ☒ August 2009 ☒ November 2009
☒ February 2010 ☐ May 2010* ☒ August 2010 ☐ November 2010
*The May 2009 and May 2010 meetings were cancelled due to lack of critical agenda items.

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. Permit Conditions

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. Describe in **Appendix B** the Information and Education plan implementation and activities for the reporting year(s), 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:

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

4. 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 biennial report be an agenda item for discussion before the appropriate governing board(s) or council(s) contemporaneous with the submittal of the biennial report to the Department of Natural Resources. Accordingly, please provide the following information:

2. Name of board(s)/council(s):
Fitchburg's Resource Conservation Commission (RCC)

3. Date(s) of meeting(s) to discuss the biennial report:
RCC Meeting: March 21, 2011. Electronic copies of the report will also be submitted to Fitchburg's Common Council and Board of Public Works prior to this meeting

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? ☒ Yes ☐ No
If yes, please provide documentation in **Appendix B** the results of the field screening.

3. Has the municipality investigated any instances of spills, improper disposal of waste or dumping? ☐ Yes ☒ No
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? ☒ 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 incorporated into the Erosion Control & Stormwater Management Permit Application checklist and discussed with the applicant during the permit review process.

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, P.E. Environmental Engineer, 5520 Lacy Road, Fitchburg, WI 53711 608 270-4264

- Plan Review, Site Inspections

Felipe Avila, GIS Engineering Specialist, 5520 Lacy Road, Fitchburg, WI 53711 608 270-4277

- 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.

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.

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Felipe Avila, Engineering/GIS Specialist. 5520 Lacy Road, Fitchburg, WI 53711 608 270-4277

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? ☒ Yes ☐ No
If yes, approximate amount of solids collected (tons or cubic yards): **26 cy**. Describe in **Appendix B** the procedures used and schedules for catch basin cleaning. If no, explain:

3. Does the municipality perform street sweeping? ☒ Yes ☐ No
If yes, approximate number of street miles swept: **~7,500** ; approximate amount of solids collected (tons or cubic yards): **7,710 cy**. 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. Does the municipality haul snow to off-site disposal locations? ☐ Yes ☒ No
If yes, provide in **Appendix B** the location of all off-site snow disposal locations and describe what practices and procedures are used to protect water quality from snow and ice melt from the disposal site.

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

7. Does the municipality provide curbside pickup service for leaves, yard waste, and grass clippings? ☒ Yes ☐ No
If yes, approximate amount of material collected (tons or cubic yards): **170 tons in 2009, 80 tons in 2010.**

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** any local program the municipality employs to regulate the private use of lawn and garden fertilizers.

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

g. Developed Urban Area Standard
1. Has the municipality completed a pollutant-loading analysis to assess compliance with the 40% TSS reduction developed urban area performance standard? ☒ Yes ☐ No

Model used: **SLAMM** Version: **9.2.6** Reduction %: **41% as of Feb. 2011**

Describe in **Appendix B** past (2009-10) and proposed actions implemented to meet the 40% TSS reduction standard by March 10, 2013.

2. 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 in **Appendix B**.

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, 2011?
☐ 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?
☒ Yes ☐ No

VI. 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/orwers/) ☐ 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, 22 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, identify the following information in **Appendix D**:

- Impaired Waterbody to which the MS4 discharges.
- Description of actions municipality has taken to comply with section A(13) of the MS4 permit for discharges of pollutant(s) of concern to an impaired waterbody.

c. In **Appendix D**, identify any known water quality improvements in the receiving water to which the MS4 discharges during the reporting period.

d. In **Appendix 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:

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 period.

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.

d. Complete the fiscal analysis table provided below.

Program Element	2009 Annual Expenditure	2010 Annual Expenditure	2011 Budget	2012 Budget	Source of Funds
Public Education and Outreach	$3,500	$25,000	$40,000	$3,500	Stormwater Utility, DNR Planning Grant during 2010-2011
Public Involvement and Participation	$1,500	$7,500	$10,000	$1,500	Stormwater Utility, DNR Planning Grant during 2010-2011
Illicit Discharge Detection and Elimination	$3,000	$3,000	$3,000	$3,000	Stormwater Utility
Construction Site Pollution Control	$9,000	$9,000	$9,000	$9,000	Stormwater Utility
Post-Construction Site Storm Water Management	$2,000	$2,000	$2,000	$2,000	Stormwater Utility
Municipal Pollution Prevention	$127,000	$410,000	$290,000		Stormwater Utility, DNR Const. Grant during 2010-2011

e. What is the overall estimated annual cost to the municipality for compliance with the permit in 2009? **$146,000** 2010? **$456,500**

f. Has the municipality implemented a storm water utility? ☒ Yes ☐ No, but considering ☐ No, and not considering
If yes, provide a description of the storm water utility in **Appendix E** and any additional information that will assist the Department of Natural Resources in understanding how the utility works in your municipality.

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. Fitchburg's Chapter 27 can be viewed on Fitchburg's web site at: http://www.city.fitchburg.wi.us/departments/cityHall/cityClerk/documents/Chapter27ErosionControlandStormwaterManagement.pdf. Dane County has recently revised their Chapter 14 and Fitchburg will be looking to update our old Chapter 27 (new Fitchburg Chapter 30 after the 2011 Recodification) after the County updates are published.

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/departments/cityHall/publicWorks/stormwater/documents/ECSWMApplicabilityInfo1-16-08.pdf describes Fitchburg's erosion control and stormwater permit requirements and the 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. Key Fitchburg staff members (City Engineer, Environmental Engineer, and GIS Engineering Specialist) are all included in the e-mail correspondence related to the Madison Area Municipal Stormwater Partnership (MAMSWaP) quarterly meetings. Fitchburg's Environmental Engineer is the primary Fitchburg contact attending the quarterly meetings; however the GIS Engineering Specialist also attends occasionally depending on the meeting agenda topics. Copies of the past Annual Reports (2006 to 2008) have been submitted to Fitchburg's Resource Conservation Commission (RCC), Board of Public Works (BPW), and Common Council. The current Biennial Report (2009-2010) has been placed on RCC's March 21, 2011 meeting agenda for review and discussion, along with notifications to BPW and Common Council so they can attend this meeting as well. Copies of the 2006, 2007, and 2008 Annual Report are posted on the City of Fitchburg's web site at: http://www.city.fitchburg.wi.us/departments/cityHall/publicWorks/stormwater/DischargePermit.php.

III.g. Developers are notified of construction stormwater performance standards by Public Works in preliminary meetings and plan reviews. The Planning Department works closely with Public Works to incorporate storm water management plans in planning studies, plat development, and land use planning.

APPENDIX B
Storm Water Management Program

IV.a.1 (Dane County only)
IV.a.2 (Dane County only)

IV.a.3 & 4. The following articles provided by Dane County or created in house were incorporated into Fitchburg's quarterly newsletter, called the *Fitchburg Update:*

- "Annual Waterway Cleanup" – Spring 2009
- "Springtime Brings More than Flowers with those Showers" – Spring 2009
- "Plant Dane! Cost-Share Program for Rain Garden Projects in Dane County" – Spring 2009
- "You Can Help Fitchburg's Creeks during Winter/Spring Runoff" – Spring 2009
- "Thank You Fitchburg Waterway Cleanup Volunteers!" – Summer 2010
- "Make a Difference—Plant a Rain Garden" – Summer 2010
- "Native plants for your rain garden at a great price!" – Summer 2010
- "15th Annual Take a Stake in the Lakes Days June 6-21" – Summer 2010
- "Fitchburg's Community Rain Garden" – Fall 2009
- "Fitchburg's Storm Drain Marking" – Fall 2009
- "Storm Sewers: Highways to Our Lakes and Streams" – Fall 2009
- "Put Your Sidewalk and Driveway on a Low-Salt Diet" – Winter 2009
- "2010 Stormwater Utility Projects" – Spring 2010
- "Springtime Brings More than Flowers with those Showers" – Spring 2010
- "You Can Help Fitchburg's Creeks during Winter/Spring Runoff" – Spring 2010
- "Thank You Fitchburg Waterway Cleanup Volunteers!" – Summer 2010
- "Fitchburg Wins Water Star Gold Award" – Summer 2010
- "Fitchburg Environmental Project Staff Wins Water Champions Award" – Summer 2010
- "Storm Sewers: Highways to Our Lakes and Streams" – Fall 2010
- "Nine Springs E-Way Watershed Bicycle Tour" – Fall 2010
- "Dane County Water Balancing Act" – Winter 2010
- "Put Your Sidewalk and Driveway on a Low-Salt Diet" – Winter 2010
- "Fitchburg Road Salt Reduction" – Winter 2010

These articles are attached at end of Appendix B.

A total of 23 Fitchburg newsletter articles related to water quality were published in the 2009 and 2010 *Fitchburg Updates*. The *Fitchburg Update* newsletters are distributed to all Fitchburg residents and are also placed on Fitchburg's web site. The Fitchburg web site averages 300,000 hits per month, and the news letter is mailed to all homes, apartments and businesses in Fitchburg approximately 11,000 addresses.

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.

Spring waterway clean ups were held on April 18, 2009 and April 24, and May 1, 2010. In 2009 17 volunteers participates in helping to collect 40 bags of trash, 3 car and marine batteries, 5 tires and 5 tire rims along waterways, parks, and natural areas. In

2010 44 volunteers collected 34 bags of trash 2 sofas, a table, and 3 tires. As a part of the day's activities an explanation of the storm sewer system is given. After the clean ups a biking tour of the Nine Springs E-way was held to show residents more of the natural water features in Fitchburg.

On June 6, 2009 a community rain garden planting was held. Volunteers from AmeriCorps and a Girl Scout troop helped plant native rain garden plants in a demonstration rain garden if front of the Fitchburg City Hall.

On September 19, 2010 a bike tour of the Nine Springs E-way was held to show residents Fitchburg's water features, natural areas and demonstrate how the storm sewer system keep the waterways clean.

IV.c.1. In 2009, 375 stormwater outfalls and 84 pond release structures were inspected during dry weather periods, May to August. Of these 90 stormwater outfalls and 15 pond release structures were greater than 24-inch diameter. The inspections involved commercial, industrial, and environmentally sensitive areas. Throughout the year the outfall and basin inspections involved a thorough look for evidence of illicit discharge. A computer database holds inspection forms for all outfalls and pond release structures inspected by the City. The form evaluates any discharge observations, outlet conditions, outlet area, and a picture of the structure.

In May through August 2010, 70 stormwater outfalls and 43 pond release structures were inspected were inspected. Inspectors looked for flow from outfalls and release structures, and compared flow to recent precipitation events. Flow was observed in 3 outfalls and 10 release structures, but was attributable to recent precipitation events. Oil sheen was noted in 3 outfalls and 1 release structure, but was minimal in all cases and likely the result of street runoff.

IV.c.2. In May through August 2009, a total of 90 stormwater outfalls and 15 pond release structures were inspected for flow and maintenance problems. Of these 4 outfalls and 3 pond release structures had oil sheen while 16 outfalls and 3 pond release structures had a bacterial slime. The quantities of oil or bacterial slime were so small that there was no evidence to suggest whether they were caused by anything other than normal rainwater flowing off the street.

In May through August 2010, a total of 70 stormwater outfalls and 43 pond release structures were inspected for flow and maintenance problems. All outfalls were screened for flow, odor, turbidity, oil sheen, bacterial slime, foam, and numerous structural and drainage parameters. Most problems were associated with proper drainage, and city crews cleared flow impediments or repaired damaged structures.

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 2009 and 2010, the city did not receive any complaints on illicit discharges.

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 construction sites 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 a Notice of Non-compliance of the Erosion Control Permit via e-mail or direct phone call to the contractor on site. The contractor is notified that, if the non-compliance is not corrected within three days, a stop work notice will be issued.

IV.d.5. In 2009 and 2010, the City issued approximately 65 notices of non-compliance for insufficient erosion control practices and/or incomplete weekly construction inspection forms. No Stop work orders were issued during 2009 and 2010.

IV.e.1. For all construction projects adding over 20,000 sf of new impervious area, the City requires a stormwater management plan submittal, review, and approval before construction may commence. The review process includes a check for compliance with NR 151 standards.

IV.e.2. Stormwater maintenance agreements are prepared and reviewed prior to construction. The agreements are recorded with the Dane County Register of Deeds and copies are maintained by the Public Works Department. In the event that maintenance or repair complaints are raised or if staff notices that stormwater facilities aren't being maintained properly, the PW Department has the authority to order the property owner to maintain or repair the facility(ies).

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. In 2009, 375 stormwater outfalls and 84 pond release structures were inspected during dry weather periods, May to August. Of these 90 stormwater outfalls and 15 pond release structures were greater than 24-inch diameter. The inspections involved commercial, industrial, and environmentally sensitive areas. Throughout the year the outfall and basin inspections involved a thorough look for evidence of illicit discharge. A computer database holds inspection forms for all outfalls and pond release structures inspected by the City. The form evaluates any discharge observations, outlet conditions, outlet area, and a picture of the structure. The Streets 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 Streets Division will schedule and perform the repair work for the Stormwater Utility. Approximately 26 cubic yards of solids were collected from basin outlet structures cleaned out in 2009 and 2010

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 Streets Division will collect the material with the sweeper vacuum or schedule and perform the maintenance work. The Streets Division also responds to resident calls on inlet maintenance problems. Approximately 26 cubic yard of solids were collected from approximately 20 inlets cleaned in 2009 and 2010.

IV.f.3. The City swept approximately 7,500 street miles during 2009 and 2010 with a Regenerative Air Street Sweeper (Schwarze A7000). Approximately 7710 cubic yards of solids were collected (4150 cy sand/dirt, 2820 cy leaves and grass, 740 cy stone from chip sealing work) from streets in 2009 and 2010. The Streets Division operates the

sweeper from approximately March through December. All urban streets (~80 miles of 2-lane streets and ~10 miles of 4-lane roadways) 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 urban and rural streets with debris problems as notices by staff or called in by residents.

IV.f.4. The snow removal plan consists of pretreatment with a brine solution, and plowing with minimal use of salt. Sand for traction is only used on hills and intersections on an as needed basis. Approximately 1208.04 tons of salt and 13 tons of sand were used in 2009. Approximately 1178.72 tons of salt and 12 tons of sand were used in 2010.

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

IV.f.8. In 2009 and 2010, the City collected leaves, yard waste, brush and grass clippings curbside under contract with Pellitteri Waste Systems. Four yard waste collection weeks, two each in the Spring and FalI of 2009 and 2010. 16 brush collection weeks from April through November were provided in 2009. 12 brush collection weeks from April through November were provided in 2010. 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 and the City website. Fitchburg collected 593 tons of yard waste and brush curbside and 875 tons of yard waste from the Recycling Drop Off Site for a total of 1,468 tons of yard waste collected in 2009. For 2010, 621 tons of yard waste and brush curbside and 527 tons of yard waste from the Recycling Drop Off Site were collected, for a total of 1,148 tons of yard waste.

IV.f.9. Fitchburg staff crews only use fertilizer on newly restored areas. The crews minimize the use of fertilizer at medians, athletic fields, and municipal building grounds. Fertilizer is not used on general park land. The crews do not use pesticides. Occasionally, the crews use herbicide to treat buckthorn, honeysuckle, black locust, and/or box elder stumps following removal of these species in order to reduce the likelihood of regeneration of these invasive woody species. The crews minimize 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 to treat invasive plants and/or undesirable aggressive weeds.

IV.f.10. The City does not have local ordinances to regulate the private use of fertilizer, pesticides, and herbicides. Fitchburg's website and Fitchburg Update newsletter articles and both contain information for the responsible use of these items if necessary. The Public Works Department promotes the use of a soil test before applying fertilizer during the Erosion Control & Stormwater Management Permit review process. The City also provides a credit on stormwater utility fees for property owners who voluntarily limit or eliminate the use of lawn and garden fertilizers through the Fitchburg Creek Supporter Pledge Program.

IV.f.11. Fitchburg's website and Fitchburg Update newsletters appear to be doing a good job of keeping residents, businesses, and contractors informed of Fitchburg's pollution prevention program. Participation in education and outreach activities is very good. Residents with questions are generally complimentary on staff's response to their questions and concerns.

IV.g.1. Fitchburg paid ~$260,000 in 2010 towards reconstruction of Pond 4 in the UW Arboretum, which changed the corresponding TSS Reduction from ~4% to ~62% for that

subwatershed. In 2010, Fitchburg designed the Apache Drive Wet Pond as a retrofit facility to improve TSS Reduction for that subwatershed from ~1% to ~75%. Apache Drive Wet Pond will be constructed in 2011. The combination of these 2 pond projects along with the Seminole Highway Pond constructed by Madison in 2008 brought the citywide TSS Removal up from ~37% in 2008 to ~41% projected by the end of 2011.

IV.g.2. The Stormwater Detention Basin Inventory and Analysis, dated December 1997, provided recommendations on various retrofits to existing facilities. Recommendations from this report (Longford Terrace pond enlargement, Seminole Hills Estates dry pond conversion to wet pond, Bosshard Drive dry pond conversion to wet pond, WIBA dry pond conversion to wet pond, and McKee Farms pond enlargement) have all been completed. The only remaining dry ponds are: Aleo Court dry pond on private property, Persimmon Drive dry pond, Pine Ridge dry pond, and Byrne Park dry pond. The city will continue evaluating these and other public properties for conversion or enlargement as it creates the Fitchburg Stormwater Master Plan during the upcoming years.

Stormwater Articles appearing in the Spring 2009 *Fitchburg Update*

YOU CAN HELP FITCHBURG'S CREEKS DURING WINTER/SPRING RUNOFF

It's very important to continue to pick up after your pet all year long, especially during winter. If you don't pick up pet waste right away, it can soon be encased in snow and ice, ready to be carried away with melt water when it warms up. Grassy areas that would normally allow water to soak in are frozen during winter, so they're more like a parking lot greatly increasing the surface area from which runoff flows. So, the bacteria and nutrients found in pet waste are much more likely to make their way to the nearest storm drain. And contrary to common belief, rain and melting snow that goes into storm drains does not go to the wastewater treatment plant. Rather, it goes to the nearest Fitchburg creek. Fitchburg is the headwaters of each of the following creeks which drain to downstream lakes and rivers (Nine Springs Creek, Swan Creek, Murphy's Creek, Badfish Creek, Story Creek/Allen Creek, and Badger Mill Creek) So, be sure to continue to scoop the poop this winter and do your part to help keep Fitchburg's creeks free of pet waste. For more ideas on how you can help improve water quality near you, visit www.myfairlakes.com.

Plant Dane! Cost-Share Program for Rain Garden Projects in Dane County

Thinking about installing a rain garden? Consider taking advantage of the Plant Dane! Cost-Share Program, open to schools, non-profit organizations (homeowner, lake or neighborhood associations, faith centers, garden clubs, etc.), municipalities and individual residents in Dane County, Wisconsin.

The Plant Dane! Cost-Share Program provides native plants at the greatly reduced price of $1.80 each—about half the normal retail price. For choice of plants, order forms with payment are due at the February workshop. Orders/payments received after the workshop

will be filled on a first-come, first-served, as available basis. Orders received after the last working day in May cannot be filled. Plants are delivered in June. Preference will be given to orders/payments received at the workshop in February.

Not sure if you can do a rain garden? Come to the workshop and make your decision then and there! Visit http://www.myfairlakes.com/applicationForm.aspx to apply.

2009 Plant Dane! Schedule

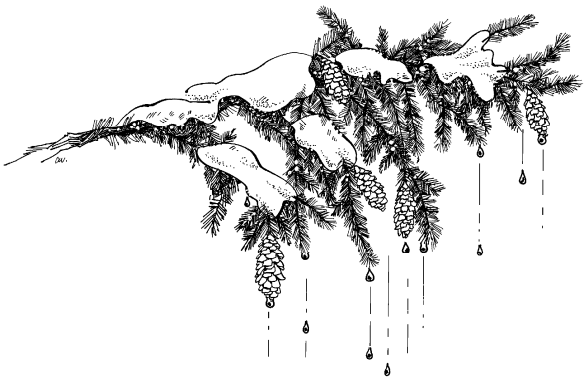
February 28	Rain Garden Workshop. Applicants that submit their applications prior to February 27 will be sent confirmation and an order form that is due at the February workshop. Order form with payment due to GMF at or before the workshop for choice of plants.
May 31	Last day applications and orders with payment will be accepted. Orders received after the February workshop are subject to availability. Applications/orders received after May 31 will be considered for the following year.
June 27	Plants are delivered to Dane County Land & Water Resources Department, One Fen Oak Court, for pick-up between 8a–10a.

Learn about rain gardens and other ways you can help protect and improve our lakes and streams at www.myfairlakes.com. For more information, contact Marcia Hartwig, Madison Area Municipal Storm Water Partnership Education Coordinator at (608) 224-3746 or email hartwig@co.dane.wi.us.
The Plant Dane! Cost-Share Program is possible through a gift from the Graham-Martin Foundation, Inc., a registered 501(c)(3) organization, dedicated to the preservation and restoration of natural ecosystems and the promotion of environmental education.

SPRINGTIME BRINGS MORE THAN FLOWERS WITH THOSE SHOWERS

Whether March comes in like a lion or a lamb, it also brings spring showers and melting snow. When snow melts and rain falls, it flows across streets, driveways, parking lots and rooftops and transports sand, salt, leaves, oil, trash and many other pollutants directly to storm drains, which eventually ends up in our lakes and streams.

Some folks mistakenly think that water running off streets goes into a sewage treatment plant. But the truth is that it goes right to our lakes and streams.



You Can Help

There are many things each of us can do to prevent storm water pollution.

- Use salt sparingly during the winter.
- Sweep up any excess sand left over from the snow shoveling season.
- Clean up pet waste year round–flush it down the toilet or collect it in a bucket until you can bury it properly.
- Keep cars well maintained repairing leaks; but consider walking, public transportation or riding a bike whenever you can.
- Direct rainwater away from paved areas to lawns or gardens where it can soak in.
- Keep leaves and grass clippings out of the street. Compost yard waste, debris and leaves.
- Get a soil test before applying fertilizer to your lawn. Don't pay for something you don't need. If a test shows that your lawn does need fertilizer, apply it according to directions and carefully clean up any spills on paved surfaces.
- 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 into the ditch.

Go to www.myfairlakes.com for more ideas on how you can help our lakes and streams.

Annual Waterway Cleanup

Fitchburg's Annual Waterway Cleanup for 2009 is tentatively planned for Saturday, April 18th or 25th from 8:30am until noon, rain or shine.*

This year's plan calls for up to three groups of volunteers strategically located on the Nine Springs Creek waterway from Dunn's Marsh to Fish Hatchery Road. In addition, there may be a cleanup group in your area, coordinated by your neighborhood association. Anyone interested in being a group leader may contact Rick Eilertson, Fitchburg Environmental Engineer, at (608) 270-4264 or rick.eilertson@city.fitchburg.wi.us to coordinate a cleanup in your neighborhood.

Fitchburg will provide refreshments and a tote bag or T-shirt to participants. Volunteers are encouraged to wear boots and bring work gloves. Be forewarned: Restroom facilities are not convenient to the planned locations.

*Further details on the Cleanup date and locations will be posted at www.city.fitchburg.wi.us closer to the event.

Stormwater Articles appearing in the Summer 2009 *Fitchburg Update*

15th Annual Take a Stake in the Lakes Days June 6-21

Take a Stake in the Lakes Days, sponsored by the Dane County Lakes and Watershed Commission, is a great way to kick off the summer by learning how our daily lives impact Dane County's lakes, rivers, streams and wetlands and how their wellbeing impacts us.

Sue Jones, Dane County Watershed Management Coordinator, said "If you swim, fish, paddle, water-ski, or just enjoy a picnic by the water, check out the many activities included in this 16-day celebration."

Visit www.takeastakeinthelakes.com for details of these events listed below and a complete listing of the many events during the week.

Saturday, June 6

Clean Lakes Festival, sponsored by the Mad-City Ski Team, kicks off the 16-day celebration with food, music, races, and more at Olin Park.

Thursday, June 11

Paddle to Work Day Although this event takes place countywide, one flotilla paddles on Lake Monona departing from Olbrich Park at 6:30 a.m. arriving at Law Park at 7:30 a.m.

Saturday, June 13

9:00 a.m. – noon. 22nd Annual Take a Stake in the Lakes Clean-Up. Volunteer shoreline clean-up of lakes Mendota and Kegonsa.

Sunday, June 14

9 a.m.–4 p.m. In celebration of the Lower Wisconsin Riverway's 20th Anniversary, the Dane County Office of Lakes & Watersheds is coordinating a guided paddle down the 14 miles of Wisconsin River that borders the northwest corner of Dane County. Watch www.danewaters.com for registration information.

Thursday, June 18

Dane County Waters Champions Award Ceremony 5:30 p.m. at the Madison Club, Terrace Room. The Dane County Waters Champions will also be announced and will be recognized at the County Board meeting immediately after the awards ceremony.

Sue Jones will give the State of the Waters address to the County Board after presenting the 2008 Waters Champion awards.

Saturday, June 21

9:00 a.m. – noon. 20th Annual Take a Stake in the Lakes Clean-Up, Information Center at Law Park. Volunteer shoreline clean-up of lakes Monona and Waubesa.

WANT TO DO SOMETHING ABOUT THE ALGAE ON AREA PONDS?
HEALTHY YARDS . . . HEALTHY PONDS AND STREAMS

What we do in our yards can directly affect our lakes and streams. DNR studies have shown that ~45% of phosphorus in our urban stormwater ponds comes from lawns and another ~35% comes from our streets!

Before using fertilizer on your lawn or gardens, test your soil. A $15 soil test will show if your soil is lacking anything. Instructions and forms from the UW Soil and Plant Analysis Lab are online at http://uwlab.soils.wisc.edu/madison/http://uwlab.soils.wisc.edu/madison/. Most soils in Dane County have excess phosphorus, so be sure that if you do apply fertilizer, you apply only what you need. Read the label on the fertilizer bag before buying (N = Nitrogen, P = Phosphorus, and K = Potassium).

Lake studies performed by the Center for Watershed Protection and US Environmental Protection Agency have demonstrated that 1 pound of phosphorus can yield up to 500 pounds of algae. This helps show how important source reduction of phosphorus can be.

If you do need to spread fertilizer, be sure to clean up any that falls on your sidewalk, driveway or other hard surfaces. If left on paved areas, fertilizer can easily make its way to the nearest pond, marsh or stream with the next rainfall. When these nutrients wash into stormwater ponds, lakes and streams they can promote nasty algae blooms and excessive weed growth (which can lower oxygen levels in the water) and may release ammonia (toxic to fish).

Keeping leaves, grass clippings and other yard waste, which contain nitrogen and phosphorus, out of the street also helps prevent lakes and streams from becoming green and scummy.

Healthy lawns add to the beauty and value of your home. They can also help our lakes and streams by allowing rainwater to soak into the soil rather than running off to the nearest storm drain. However, it is not necessary to use large amounts or frequent applications of fertilizer to have a healthy lawn. Do your part and keep your lakes and streams healthy by using fertilizers only if and where they are needed and raking up leaves and grass clippings out of the street and composting them.

Native plants for your rain garden at a great price!

Thinking about installing a rain garden? Consider taking advantage of the Plant Dane! Cost-Share Program, open to schools, non-profit organizations (homeowner, lake or neighborhood associations, faith centers, garden clubs, etc.), municipalities and individual residents in Dane County.

The Plant Dane! Cost-Share Program provides native plants at the greatly reduced price of $1.80 each—about half the normal retail price. Apply online at www.myfairlakes.com. After you apply, an order form will be sent to you. Then mail your order form with payment before May 29. Plants will be delivered on Saturday, June 27, 8:30-10a.m.

Learn about rain gardens and other ways you can help protect and improve our lakes and streams at www.myfairlakes.com. For more information, contact Marcia Hartwig, Madison Area Municipal Storm Water Partnership Education Coordinator at (608) 224-3746 or hartwig@co.dane.wi.us.
The Plant Dane! Cost-Share Program is possible through a gift from the Graham-Martin Foundation, Inc., a registered 501(c)(3) organization, dedicated to the preservation and restoration of natural ecosystems and the promotion of environmental education.

Make a Difference—Plant a Rain Garden

Rain gardens (shallow depressions planted with native wildflowers) soak up rainwater or melted snow from your rooftop, driveway and lawn. They are positioned to collect water from downspouts or at a low-point in the yard where drainage naturally occurs. The gardens allow water to soak into the soil rather than running off to the nearest lake or stream.

A rain garden can soak up to 30% more water than a traditional lawn. Why is that important? Because the water from rain and snow that runs off our roofs and driveways to the streets and through the storm drain system to our lakes carries with it all sorts of pollutants like fertilizers, oil, pet waste and more. Whatever is in the street—garbage, pet waste, oil, etc.—gets washed to the nearest lake or stream.

Mature rain gardens are delightfully easy to maintain. Once plants get established, very little weeding is needed—far less time consuming than mowing the lawn. Just think—no noise, no gas, and all that free time!

Besides helping our lakes and streams, rain gardens are aesthetically pleasing and provide habitat for birds, butterflies and beneficial insects—including dragonflies that eat mosquitoes. You can make a big difference by devoting a small amount of space, time and money to the creation of a rain garden.

To see rain gardens first hand, watch www.danewaters.com for the Better Lawns & Gutters Tour coming this August. Visit www.myfairlakes.com to learn more about rain gardens and the Plant Dane! Cost-Share Program that provides plants at a very affordable price.

The Fitchburg Stormwater Utility also offers a credit for property owners who install and maintain rain gardens on their property to control stormwater quantity and quality. This credit can reduce your stormwater utility fee by 20% or more, depending on the design

and sizing of your rain garden. Credit Application Forms can be found at: http://www.city.fitchburg.wi.us/public_works/CreditRebateOpportunities.php

Thank You Fitchburg Waterway Cleanup Volunteers!

The City of Fitchburg and the Fitchburg Resource Conservation Commission (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. 17 volunteers and 3 Fitchburg staff members pitched in on April 18th to remove debris from the waterways in 4 separate areas:

- Fitchburg waterways draining to Dunn's Marsh,
- Arrowhead Park and its 2 wet ponds, and
- Waterways and wet ponds including Dawley Conservancy, Seminole Village, Seminole Hills, and Harlan Hills
- Waterways and wet ponds within Highlands of Seminole and Hatchery Hill

Volunteers removed 42 30-gallon bags of refuse and 11 30-gallon bags of recyclables. They also removed a washing machine tub, 2 car batteries, 1 marine battery, 5 tires, 5 tire rims, 8 metal fence posts, dimensional lumber scraps, and miscellaneous electronics items from these 4 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 rick.eilertson@city.fitchburg.wi.us or 270-4264 for more information. Volunteers who complete and submit a Fitchburg Creek Supporter Pledge Form (available at: http://www.city.fitchburg.wi.us/public_works/CreditRebateOpportunities.php) may be eligible for a reduction in their stormwater utility bill for pledging to help clean up Fitchburg's waterways.

Stormwater Articles appearing in the Fall 2009 *Fitchburg Update*

Fitchburg's Community Rain Garden

Five AmeriCorps volunteers (Dan Driscoll, Katherine Usher, Adrian Camacho, Greg Louden, and Kristy Rogers) working for Habitat for Humanity recently worked with Fitchburg staff to design and construct a Community Rain Garden in front of the Fitchburg Community Center at 5510 Lacy Road. Soil borings, design calculations, and map layout occurred throughout May and rough grading was performed by the Fitchburg Public Works Crew in early June.

On June 6, 2009, a group of 16 volunteers helped plant various native rain garden plants and seeds that were donated for the Community Rain Garden. Planting Volunteers included Troop 2967 of the Girl Scouts of Wisconsin - Badgerland Council - formerly Troop 967 of the Blackhawk Council (Ashley Payne, Natalie Schad, Amy Witthuhn, Celia Kiela, Carissa Witthuhn, Kelsey Pacetti, Claire Evensen, and Cassidy Wastlick), Dan Driscoll, Adrian Camacho, Kristy Rogers, Felipe Avila, Rick Eilertson, Diane Streck, Steve Arnold, and Kara Naramore (EC3 Environmental Consulting Group).

This Community Rain Garden is currently planned to be the Tour Information Center for the 2009 Dane County Better Lawns and Gutters Tour scheduled for Saturday, August 15, 2009 from 9am to 1pm. Please feel free to register or obtain further information on this tour at:
http://www.danewaters.com/events/YLW2009Gutters.aspx

A special thank you goes out to all the donors who helped make this project possible: 2nd Season Recycling (~100 cubic yards of rain garden soil compost mix), AmeriCorps volunteers (~$150 in native seed, 10 bales of straw mulch, temporary seed, hand tools, and over 100 hours of labor), Peter Tonn/Silt Sock of Southern Wisconsin (~64 linear feet of 8" diameter silt sock), Roger Bannerman (~100 native plants), Anne Hecht (~30 native plants), Rebecca Fox (~30 native plants), Steve Arnold (~20 native plants), EC3 Environmental Group, Inc. (~$200 of native seed), Steve Banovetz (bluebird house and bat house - yet to be installed), Tom Hovel (~4 native plants), Kelsey Pacetti (3 native plants), and Natalie Schad and Celia Kiela (~3 native plants).

If you have a rain garden or rain barrel on your property or are interested in putting one in, you could be eligible for a reduction on your stormwater utility bill. Please visit
http://www.city.fitchburg.wi.us/public_works/CreditRebateOpportunities.php for application forms or contact Rick Eilertson, Environmental Engineer at rick.eilertson@city.fitchburg.wi.us or 270-4264 for more information.

Fitchburg's Storm Drain Marking

Troop 2967 of the Girl Scouts of Wisconsin - Badgerland Council (formerly Troop 967 of the Blackhawk Council) recently received permission from Fitchburg Public Works to conduct an environmental awareness project on storm sewer drains.

To fulfill one of the requirements of advancement in their rank, Troop 2967 chose to glue 60 plastic storm drain markers to existing storm inlets in the City of Fitchburg and distribute brochures to adjacent residents explaining where the stormwater drains to and the importance of keeping these drains open and clean.

"Storm Drain Marking 1" (bottom left) shows Kelsey Pacetti (left) and Carissa Witthuhn (right) holding a sample storm drain marker and brochures.

"Storm Drain Marking 2" (bottom right) shows (front row, left to right – Cassidy Wastlick, Abbey Shaughnessy, Carissa Withhuhn, Ashley Payne, Second row, left to right – Celia Kiela, Sylvia Lewis, Kelsey Pacetti, Claire Evensen, Natalie Schad, Zoe Hansen, Rick Eilertson, Third Row – Amy Witthuhn).

Thank you, Troop 2967, for your efforts to keep our pollution out of our lakes and creeks!

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 flow into Lake Waubesa. Nutrients found in yard waste encourage the growth of aquatic plants and algae, contributing to the unappealing smell and color of local ponds, lakes and streams.

To help keep trash out of the sewer pipes and waterways, Fitchburg cleans streets in the urban service area with a high-powered street sweeper

An important contribution everyone can make to prevent water pollution is to keep yard waste and other contaminants out of the City streets. If you live near a storm sewer inlet and see something that shouldn't be there, 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 2009 *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
NaCl: Sodium Chloride or "rock salt"	15° F	~$5 / 50 lb.	Contains cyanide Chloride impacts
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

Stormwater Articles appearing in the Spring 2010 *Fitchburg Update*

YOU CAN HELP FITCHBURG'S CREEKS DURING WINTER/SPRING RUNOFF

It's very important to continue to pick up after your pet all year long, especially during winter and spring. If you don't pick up pet waste right away, it can soon be encased in snow and ice, ready to be carried away with melt water when it warms up. Grassy areas that would normally allow water to soak in are frozen during winter, so they're more like a parking lot, greatly increasing the surface area from which runoff flows. As a result, the bacteria and nutrients found in pet waste are much more likely to make their way to the nearest storm drain. And contrary to common belief, rain and melting snow that goes into storm drains do not go to the wastewater treatment plant. Rather, this runoff goes to the nearest Fitchburg creek. Fitchburg is the headwaters of the following creeks which drain to downstream lakes and rivers: Nine Springs Creek, Swan Creek, Murphy's Creek, Badfish Creek, Story Creek/Allen Creek, and Badger Mill Creek. So, be sure to continue to scoop the poop and either flush it down your toilet or bag it and place it in your refuse cart.

Fitchburg's Creek Supporter Pledge Program (http://www.city.fitchburg.wi.us/public_works/CreditRebateOpportunities.php) offers residents a reduction in their stormwater utility bill of $4 to $8 per year for pledging to do at least 30 actions (eg: like scooping the poop). Much better than the $114 citation that could get issued if a pet's owner is found leaving it behind.

For more ideas on how you can help improve water quality near you, visit http://www.city.fitchburg.wi.us/public_works/stormwater.php or www.myfairlakes.com.

SPRINGTIME BRINGS MORE THAN FLOWERS WITH THOSE SHOWERS

Whether March comes in like a lion or a lamb, it also brings spring showers and melting snow. When snow melts and rain falls, it flows across streets, driveways, parking lots and rooftops and transports sand, salt, leaves, oil, trash and many other pollutants directly to storm drains, which eventually ends up in our lakes and streams.

Some folks mistakenly think that water running off streets goes into a sewage treatment plant. But the truth is that it goes right to our lakes and streams.

You Can Help

There are many things each of us can do to prevent storm water pollution.

- Use salt sparingly during the winter.
- Sweep up any excess sand left over from the snow shoveling season.
- Clean up pet waste year round–flush it down the toilet or collect it in a bucket until you can bury it properly.
- Keep cars well maintained repairing fluid leaks; but consider walking, public transportation or riding a bike whenever you can.
- Direct rainwater away from paved areas to lawns or gardens where it can soak in.
- Keep leaves and grass clippings out of the street. Compost yard waste, debris and leaves.
- Get a soil test before applying fertilizer to your lawn. Don't pay for something you don't need. If a test shows that your lawn does need fertilizer, apply it according to directions and carefully clean up any spills on paved surfaces.
- 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 into the ditch.

Go to www.myfairlakes.com for more ideas on how you can help our lakes and streams.

2010 STORMWATER UTILITY PROJECTS

Cheryl Drive Storm Sewer Installation

Storm sewer will be installed along the grass terrace area on the south side of Cheryl Drive from ~150' west of Jacquelyn Street to Lyman Lane. A Public Information Meeting was held on February 15, 2010. Construction is anticipated during Spring and Summer of 2010.

Apache Drive Wet Pond Construction

Fitchburg is coordinating construction of a wet pond near the intersection of Apache Drive and Crescent Road to improve stormwater quality and reduce peak flow rates entering Dunn's Marsh. This project is being funded by the Fitchburg Stormwater Utility and a $100,000 grant from DNR. A walk-through with the Marsh Protection Committee of the Dunn's Marsh Neighborhood Association was held February 8, 2010. Next steps include clearing of the existing honeysuckle, buckthorn, and box elder trees in the vicinity of the proposed pond and conducting topographic surveys to finalize the pond design during Summer 2010. Construction is anticipated between Fall 2010 and Spring 2011.

Nine Springs Creek Watershed – Public Education and Outreach Plan

Fitchburg received a $33,200 grant from DNR for the following projects, to be done between January 2010 and December 2011:

1. Class Talks and On-site Tours w/ schools in the watershed
2. Earth Day Tours throughout the watershed
3. Design and Installation of Stormwater Information Signage
4. Stormwater Brochures and Web Site Enhancements

Nine Springs Creek Watershed - Stormwater Master Plan

Fitchburg received a $75,000 grant from DNR for the following six projects, to be done between July 2010 and June 2012:

1. Compile historical information on stormwater facilities in the Nine Springs Creek Watershed
2. Hold three Public Involvement Meetings
3. Identify necessary stormwater management or maintenance projects within the watershed, including a review and update of current ordinances and nutrient management plans
4. Update Fitchburg's Stormwater System Maps
5. Make Financial Recommendations, and
6. Draft a specific stormwater management plan for the Dunn's Marsh Watershed

Further information on the grant applications and awards noted above can be viewed at: http://www.city.fitchburg.wi.us/public_works/Grants.php Copies of historical stormwater plans, studies, and reports are being scanned and can be viewed at: http://www.city.fitchburg.wi.us/public_works/Studies.php

Anyone with questions or comments on any of these projects may contact Rick Eilertson, Fitchburg Environmental Engineer at rick.eilertson@city.fitchburg.wi.us or 270-4264.

Stormwater Articles appearing in the Summer 2010 *Fitchburg Update*

Fitchburg Environmental Project Staff Wins Water Champions Award
Although the City of Fitchburg doesn't have any of the Yahara lakes within its municipal boundaries, their Environmental Project Staff, Rick Eilertson and Felipe Avila, have a champion's understanding of how stormwater impacts creeks and other tributaries draining to the lakes.

Rick and Felipe serve as the primary engineering and environmental staff for Fitchburg's Stormwater Utility which provides the following services for the City:

- Reviewing and inspecting construction site erosion control plans and permits and ensuring proper erosion control methods are being followed for new development and redevelopment,
- Coordinating maintenance of the City's stormwater infrastructure, including incorporation of retrofits to improve stormwater quality and reduce stormwater quantity wherever and whenever possible,
- Providing public education and outreach to residents on positive stormwater behaviors that result in improved stormwater quality and reduced stormwater quantities (eg: Rebates for rain barrels and stormwater cisterns; Credits for Fitchburg's Creek Supporter Pledge Program – 50 recommended behaviors which can trigger a credit in the stormwater utility; Credits for private rain gardens and other biofiltration facilities, Credits for private stormwater ponds; Recognition for service groups initiating storm drain marking; and Coordination of Annual Waterway Volunteer Cleanups throughout Fitchburg

Rick and Felipe also staff Fitchburg's Resource Conservation Commission (RCC), which is responsible for overseeing the public outreach components of Fitchburg's Stormwater Utility. Work done by Rick and Felipe, along with efforts by Fitchburg's Planning staff, Water Utility staff, and RCC was instrumental in the City of Fitchburg's designation as a Gold Water Star Community by Water Star Wisconsin.

Not only are they willing to conduct their own educational programs, but they readily offer to help with outreach projects such as videos, garden tours, staffing tables at expos and more, and do so enthusiastically and bring a wealth of knowledge to share with those interested in learning.

They contribute their time and talent to the Madison Area Municipal Storm Water Partnership's (MAMSWaP) Information and Education Committee, as well as MAMSWaP's quarterly meetings.

Rick and Felipe are outstanding examples in storm water education, partnering and water resource protection and improvement.

Fitchburg Wins Water Star Gold Award
As a charter member of a water conservation program launched statewide on Earth Day 2010, Fitchburg was the first to receive the program's highest recognition.

The new program, Water Star, honors cities, villages, towns and counties that have taken important steps to protect surface water and groundwater, such as strengthening stormwater controls, ensuring water quality, protecting habitats and encouraging residents to conserve water. Based on how well a municipality meets its recommended standards, the Water Star program ranks municipalities with strong water resource protections by identifying them as gold, silver or bronze star communities.

"Too often we complain about what isn't being done instead of celebrating the positive steps municipalities are taking," said Suzanne Wade, a University of Wisconsin-Extension basin educator and Water Star coordinator. "I'm amazed at the local wisdom that these municipal staff and elected officials have used in solving problems. Water Star is one way for them to share their good work."

Felipe Avila, Fitchburg's engineering and GIS specialist said "Fitchburg has worked hard to rigorously protect local water resources and welcomes the recognition the program offers."

Fitchburg has established regulations prohibiting septic tanks and limited development to areas that can be served by gravity-fed sewer systems. The community is in the process of installing a stormwater pond near Dunn's Marsh to protect wetlands from pollution and trash, and is involved with a pilot study irrigating a portion of its Nine Springs Golf Course with wastewater effluent to conserve water and reuse treated wastewater.

For its achievements, the Water Star program recognized Fitchburg as a Gold Star Community during a ceremony at the April 20th Common Council meeting. Only two other communities in Wisconsin, Dane County and the City of River Falls have received the Gold Star Community Award.

More information on this award can be obtained by visiting http://www.waterstarwisconsin.org.

Thank You Fitchburg Waterway Cleanup Volunteers!

The City of Fitchburg and the Fitchburg Resource Conservation Commission (RCC) would like to thank all the volunteers who helped with Fitchburg's Annual Waterway Cleanups this year. This year's cleanup activities spanned over 3 weekends (April 17, 24, and May 1). 44 volunteers and 3 Fitchburg staff members pitched in to remove debris from the waterways in 7 separate areas:

- Fitchburg waterways draining to Dunn's Marsh,
- Arrowhead Park and its 2 wet ponds, and
- Dawley Conservancy and Seminole Highway
- Waterways and wet ponds within Highlands of Seminole and Hatchery Hill Neighborhoods and Yarmouth Creek east of Yarmouth Greenway

- Waterways, wet ponds, and a wetland within and downstream of the Swan Creek of Nine Springs Neighborhood, and
- Lacy Road from S. Fish Hatchery Rd to County MM

Volunteers removed thirty four 30-gallon bags of refuse and twelve 30-gallon bags of recyclables. They also removed 2 sofas, 1 table, 5 tires, 1 wheel rim, 1 tar bucket, 2 basketballs, 2 oil filters, 10 spray paint cans, 1 blanket, 2 size 9 Air Jordan shoes, 1 ski boot, and various large scrap metal objects and bicycle parts from these 7 areas.

Unfortunately, we've been finding that many of our waterways end up as dumping grounds from construction sites, upstream residents, and litterbugs. An amazing amount of plastic bags, plastic film, and block polystyrene was collected that could have been recycled if clean. 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 rick.eilertson@city.fitchburg.wi.us or 270-4264 for more information. Utility customers who complete and submit a Fitchburg Creek Supporter Pledge Form (available at: http://www.city.fitchburg.wi.us/public_works/CreditRebateOpportunities.php) may be eligible for a reduction in their stormwater utility bill for pledging to help keep Fitchburg's waterways clean.

Stormwater Articles appearing in the Fall 2010 *Fitchburg Update*

Nine Springs E-Way Watershed Bicycle Tour
Have you biked on the Capital City Trail and wondered why there are ponds along the way, or what exactly the Nine Springs E-way's purpose is? Ride with the City of Fitchburg Department of Public Works to find out! The Department of Public Works is hosting a Watershed Bicycle Tour on Sunday, September 19. The tour will begin on the Capital City Trail at the Syene Road Trail Head at 12:30 pm. A state trail pass is required for the ride. Daily trail passes are available for purchase at the Syene Road Trail Head for $4. Riders needing to purchase a Trail Pass should bring a check or exact change.

Rick Eilertson, City of Fitchburg Environmental Project Engineer, will lead the tour and provide information on habitat restoration and water management features on the route. The tour will be an easy ride, approximately 5 miles in length and 2 hours long. Please visit www.city.fitchburg.wi.us as the event approaches for a map and specific schedules for each stop.

A portion of the Watershed Tour route will be shared with the Wisconsin League of Conservation Voters (WLCV) Election Cycle, a 25-mile bicycle ride also taking place on September 19. The WLCV is a non-profit organization that works to protect Wisconsin's public health and natural resources. To learn more about the WLCV or to sign up for the Election Cycle, visit their website: http://www.conservationvoters.org

Three Watershed Bicycle Tour stops on the Capital City Trail will be optional for Election Cycle riders, and the two rides will share a rest stop with refreshments at Dawley Conservancy. Volunteers from DreamBikes will also be at the Dawley Conservancy rest stop to provide basic bicycle maintenance and adjustments.

Visit the City of Fitchburg website for more information about the Watershed Bicycle Tour including a route map: http://www.city.fitchburg.wi.us

For more information and to RSVP for the Watershed Bicycle Tour, please contact:
Rick Eilertson, City of Fitchburg Environmental Project Engineer
Rick.eilertson@city.fitchburg.wi.us
608-270-4264

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 flow into Lake Waubesa. Nutrients found in yard waste encourage the growth of aquatic plants and algae, contributing to the unappealing smell and color of local ponds, lakes and streams.

To help keep trash out of the sewer pipes and waterways, Fitchburg cleans streets in the urban service area with a high-powered street sweeper

An important contribution everyone can make to prevent water pollution is to keep yard waste and other contaminants out of the City streets. If you live near a storm sewer inlet and see something that shouldn't be there, 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 2010 *Fitchburg Update*

Fitchburg Road Salt Reduction
Recently Fitchburg has taken two actions aimed at reducing salt use without compromising road safety. Last year the City formalized its salt reduction practices with written policy and procedures. For example, the City's winter maintenance plan calls for reduced or zero salt use on cul-de-sacs and less traveled roads and more plowing.

Second, improvements to salting equipment and trucks are making salt applications more efficient. Improvements include recalibration of controls on each of the eight trucks comprising Fitchburg's fleet. Additionally, three trucks were outfitted with automatic controls and two of these three with 100-gallon brine pre-wetting tanks.

Truck valves and controls were adjusted to reduce minimum salt application rates. Automatic controls further improve efficiency by varying the application rate according to the truck's speed. Wetting tanks with salt brine moistens the salt as it is being applied to the road. This pre-wetting activates the salt faster, reduces the quantity of salt needed and helps prevent salt from bouncing off the road.

Sharply reduced salt use last winter has inspired the City to pursue more efficiencies. For example, the City is now looking into acquiring equipment that would allow it to pre-treat roads with salt brine. Treating roads with brine before an anticipated snowfall keeps the snow from bonding to the road and reduces the overall quantity of salt needed to keep roads safe.

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
NaCl: Sodium Chloride or "rock salt"	15° F	~$5 / 50 lb.	Contains cyanide Chloride impacts
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

Dane County Water Balancing Act

Dane County is one of the country's largest population centers served solely with groundwater. While groundwater supply is still plentiful, the groundwater table has dropped significantly. Given anticipated population growth and the resulting increased demand for water, it is possible that water quantity may become an increasing concern in the future. Water recycling is one potential practice that could be used to address water quantity concerns. This is a common practice in water-poor states like Arizona and California. Can water recycling options reduce groundwater impacts in Dane County?

Madison Metropolitan Sewerage District (MMSD), the City of Fitchburg and its residents, and UW-Madison Water Resources Management (WRM) graduate students are working together on a project to evaluate the potential for groundwater recharge in the City of Fitchburg. This project will examine the possibility of recycling treated water from the Nine Springs Wastewater Treatment Plant.

Please join us in a public discussion on **Thursday, January 27th, 2011 from 6:30-8:30PM in the Fitchburg Room of the Fitchburg Community Center at 5510 Lacy Road, Fitchburg** to discuss engineering, water quality, regulatory, and social factors in the early stages of this project. We invite you to come voice your comments, concerns, and ideas in small discussion groups facilitated by the WRM graduate students. Background information will be elaborated by the following speakers:

- Ken Bradbury, Hydrogeologist, Wisconsin Geological and Natural History Survey
- Steve Gaffield, Hydrologist, Montgomery Associates: *Resource Solutions*, LLC
- Dave Taylor, Environmental Scientist, MMSD

Contact info: Rick Eilertson, Fitchburg Environmental Engineer, 270-4264 or rick.eilertson@city.fitchburg.wi.us

APPENDIX D
Water Quality Concerns

VI.b. Impaired Waterbody: Nine Springs Creek. The following practices were used to improve the water quality discharging into the creek: detention ponds, street sweeping, and public education and outreach for the Nine Springs Creek watershed. A Stormwater Master Plan for Nine Springs Creek was being created until grant funding was removed by the DNR in 2009. A new grant for the Stormwater Master Plan was awarded by DNR in 2010 and subsequently defunded again.

Impaired Waterbody: Lake Wingra. The following practices were used to improve the water quality discharging into the pond: detention basins, street sweeping, BMP's for construction. A new wet detention pond (Pond 4 in the UW Arboretum) was built to trap stormwater pollutants, for which the City of Fitchburg was charged ~$260,000 based on contributing urban drainage area.

VI.c. The TSS reduction for the Nine Springs watershed has improved 3% during 2009 and 2010. The TSS reduction into Lake Wingra has improved 68% since the construction of the pond.

VI.d. Existing urban development contributes to water quality degradation in the receiving waters. The City's Stormwater Utility Credit and Rebate program, municipal stormwater facility retrofits, and improved public education and outreach are all helping to reduce the degradation and improve water quality for these receiving waters.

APPENDIX E
Additional Information

VII.a. The City is hoping to obtain funding for creating a Citywide Stormwater Master Plan to guide future improvements to water quality.

VII.b. N/A

VII.c. 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, stormwater pond and streambank improvements, and public education and outreach.

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. Credits and Rebates to this stormwater utility fee are available to property owners.