State of Wisconsin
Department of Natural Resources

2009/2010 (Due by March 31, 2011)

Biannual Report
Group Municipal Storm Water Discharge Permit
WPDES Permit No. WI-S058416-2
(Rev. 2/07)

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 biannual 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 a biannual 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 biannual 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-S058416-2. 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-S058416-2.

Complete and submit the biannual 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 Middleton	Contact person and title Gary Huth
Mailing Address 7426 Hubbard Ave. Middleton, WI 53562	Telephone no. 608-821-8370
	Fax no. 608-827-1080
	E-mail address

Does the municipality have an internet website? ☒ Yes ☐ No
If yes, provide internet address:
www.CityOfMiddleton.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:
Permit: http://www.danewaters.co
Annual / Biannual Reports: http://www.ci.middleton.wi.us/City/Departments/works/StormWater/StormWater.htm

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 biannual report.

Authorized representative printed name Lorie J Burns	Authorized representative title City Clerk
Authorized representative signature Lorie J Burns	Date signed 3-16-11

III. GENERAL INFORMATION

a. Has the municipality made any changes under its legal authority that affect 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
Gary Huth	Asst. City Engineer	City of Middleton
Kevin McNulty	Engineering Tech III	City of Middleton

c. Quarterly meetings represented: ☒ February ☒ May ☒ August ☒ November

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: The storm water management plan was completed in winter 2007/2008 with respect to TSS. Revisions to that plan plus final summary were completed in 2010 and posted to the City web site.
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 biannual report be an agenda item for discussion before the appropriate governing board(s) or council(s) contemporaneous with the submittal of the biannual report to the Department of Natural Resources. Accordingly, please provide the following information:

2. Name of board(s)/council(s):
City of Middleton Common Council

3. Date(s) of meeting(s) to discuss the biannual report:
March 15, 2011

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.

City has included on its Land Disturbing Permit Application form the following statement:
"If your construction site includes 1 or more acres of land disturbance and it is not a commercial building site, you also need to obtain storm water construction site permit from the Department of Natural Resources (with few exceptions). For more information, see the DNR Construction Site Erosion Control and Storm Water Management web site at: http://www.dnr.state.wi.us/runoff/stormwater/const.htm or contact Eric Rortvedt (DNR Storm Water Engineer) at 273-5612."

Dane County staff routinely provides similar notification as part of their plan review services on behalf of the City.

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.
Scott Ellarson, Building Inspector - approves plans, oversees Dane County plan review, E.C. inspection
Rich Weihert, Engineering Tech III - approves plans, performs erosion control inspection
Mark Walther, Compliance Officer - monitors field conditions for compliance of a variety of ordinances
7426 Hubbard Ave.
Middleton, WI 53562

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.

Shawn Stauske, City Engineer - designs public improvement projects, oversees PW policies
Gary Huth, Asst City Engineer - staff to WRMC, reviews plans/storm calcs, drafts ordinances
7426 Hubbard Ave
Middleton, WI 53562
608-821-8370

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, provide 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) [NOTE, Includes trash racks**]: 142 C.Y. 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: 4333 lane miles ; approximate amount of solids collected (tons or cubic yards): 4701 C.Y . 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 (tons or cubic yards) collected [NOTE, Includes brush***]: 17,046 C.Y.

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 February 16, 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?
☒ Yes ☐ No

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.

d. Complete the fiscal analysis table provided below.

Program Element	2009/2010 Annual Expenditures	2011 Budget	Source of Funds
Public Education and Outreach	$8,900	$4,500	Water Resources Operating Budget and Personnel Operating Budget
Public Involvement and Participation	$1000	$1000	[Estimated] Personnel Operation Budget from General Fund Taxing Levies: Answering general questions from the public; site investigations; public committee meeting
Illicit Discharge Detection and Elimination	$500	$500	Personnel Operation Budget from General Fund Taxing Levies
Construction Site Pollution Control	$25,179	$12,000	Plan review and site inspection costs are funded from permit fees per fee schedule in ordinance.
Post-Construction Site Storm Water Management	$10,750	$7,000	Plan review and site inspection costs are funded from permit fees per fee schedule in ordinance; Other funding includes Capital Budget, Operating Budget, grants, fees in lieu of detention and TIF.
Municipal Pollution Prevention	$709,563	$350,000**	Operating Budget from General Fund Taxing Levies Next year's budget is an estimate only.

e. What is the overall estimated biannual cost to the municipality for compliance with the permit in 2009/2010? $755,900

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.
Q. 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)?

A. Major changes to the Storm Water Runoff Control ordinance were adopted in 2007 to comply with state and county standards. Minor changes in the language for clarity were adopted in June, 2008. Additional changes are contemplated by Dane County for 2011. The City likely will follow the County's lead on these changes which affect the infiltration standards.

III d.
Q. Describe 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.

A. The City's Water Resources Management Commission (WRMC) provides the lead in setting policy and providing recommendations to the Common Council regarding issues related to the management of storm water, erosion control and general matters related to any of the water resources of the City. Various staff within the Planning Department, the Department of Public Works, and the Building Inspection Department review submitted plans. Each department provides written comments to the submitter with copies to committees as applicable. The Plan Commission (PC) makes referrals when warranted to the WRMC and provides review comments to the Public Works Committee. At times, staff will take the initiative to seek input from the WRMC regarding a specific submission.

In addition to reviews performed in-house, the City has contracted with Dane County Land Conservation to provide the City with plan review and site inspection services for both Erosion Control and Storm Water Management plans. Dane County staff makes recommendations on any required enforcement action, which is then performed by City personnel.

The various committees provide broad direction to the plan submitter and delegate to staff the responsibility to ensure plans comply with the broad directives as well as applicable ordinances, codes, procedures, policies and practices. City staff and members of the Common Council and various committees receive copies of minutes of the meetings.

Staff attends the quarterly meetings with the Madison Area Municipal Storm Water Partnership (MAMSWaP) group and briefs the WRMC and department heads on developments as appropriate. Staff has also joined DNR in the formation of a Green Tier Charter to seek more effective ways to realize improvements to waters of the state through cooperation and coordination.

The City also has a Conservancy Lands Commission which sets policies for the Public Lands Department with respect to managing conservancy lands in the City. Management activities include implementing vegetation plantings in wetlands and pond buffer areas, and installing and maintaining channel bank stabilization measures along Pheasant Branch and other drainage ways. These management activities enhance the water quality and ecosystems and reduce erosion from channel banks.

The City received a Gold Star rating in 2010 from the Water Star Wisconsin program.

See copy of WRMC minutes for 2009-2010 e-mailed to Eric Rortvedt, 03-11-2011.

III e.
Q. Describe 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.

A. See answer III d. above.

III g.
Q. Describe 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.

A. Much of this process is described in III d. above. In addition, one of the primary issues on which the City has focused its planning efforts is the delineation of appropriate areas for development, and areas that are environmentally sensitive and merit consideration for being set aside and preserved. For the areas that are considered developable, the City has set high standards for development, including storm water management techniques and approaches. The City has incorporated storm water management requirements through adoption of ordinances, the design review process, and review of development trends at a larger scale.

In 2008, the City hired a consultant to perform a comprehensive hydrologic study of Graber Pond, including the installation of a weather station and attendant data collection, with resulting recommendations to be coordinated with the Master Plan for Graber Pond Park. The final hydrologic report was delivered in 2010 and posted to the City's web site. These plans will guide development requirements for the remaining, largely undeveloped kettle pond basin in the City.

Appendix B
Storm Water Management Program

IV a. 4.
Q. Describe how any materials produced by Dane County on behalf of the municipality have been used and/or distributed. Provide examples.

A. The City has placed on display at three locations (City Hall, Public Works, Public Library) free copies of various pamphlets provided by MAMSWaP. (Copies previously submitted to DNR.) The City includes relevant articles in its semiannual newsletters. (See enclosed copy of the Spring and Fall newsletters. Other publication samples were submitted with previous annual reports.)

Also available at the Public Library in Middleton is a copy of the storm water educational video, Dane Waters: A Reflection on Us All," developed by MAMSWAP.
Other activities include:
Submitted ad to Middleton Times Tribune to advise homeowners against raking leaves into street.
Placed Yard Signs for Leaf Collection on City lands to advise the public not to rake leaves into the street.
Distributed Love your Lakes Don't leaf them coasters to area business.
Distributed "Plant Middleton" Rain Garden program flyers to City Hall.
Added and article for Deicing is harmful to Aquatic life in Newsletter.
Included article on salt use for roads in City Newsletter.
City staff attended winter road maintenance seminar regarding harmful consequences resulting from use of salt.

IV a. 5.
Q. Describe 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.

A. The City posts on its web site the final reports for Pond Studies, environmental studies, hydrologic studies, and its storm water management plan.

The Public Works Department has a publicly accessible rack of various publications and pamphlets from Dane County / City of Madison Clean Sweep. Also on display is the Plant Dane! poster.

The City continues to upgrade and enhance its web site, including links to external sites with information on the topic of storm water. The web site includes the previous WPDES annual / biannual reports, along with this current one.

In 2008, the City laid the groundwork to reinstate "Middleton Rains" - a grant program to supplement the County's Plant Dane program to encourage residents to construct rain gardens in their yards. The program was begun in 2007 and resumed in 2009. The program was not operational in 2008, 2010.

Trail signs throughout the City provide public education related to environmental issues.

City's consultant taught a session on storm water at Middleton High School including a showing of "Dane Waters" video.

These programs have helped significantly in the raising of awareness among the public and builders of the importance of storm water management and especially of erosion control. The evidence in recent years is seen in the marked reduction of non-compliance with erosion control practices and a reduction in conflicts with builders whose projects do fall out of compliance. It is also seen in the positive feedback from the public which has contributed to the City's effectiveness in identifying non-compliant sites.

IV b. 4.
Q. Describe 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.

A. The public provides feedback directly to City staff and through opportunities to speak at public meetings of the Common Council, Plan Commission, Public Works Committee, Parks Recreation and Forestry Commission, Conservancy Lands Committee and the Water Resources Management Commission. The latter two are most heavily involved with issues related to impacts of storm water generated events.

The level of public participation remains high for issues adjacent to residential areas or those affecting the major water features of the City. Activities in the business parks do not seem to generate as much interest unless a major erosion event or flood event occurs. Overall, members of the public that do participate appear well-informed, dedicated, sincere and persistent in tracking the issues to resolution.

IV c. 1.
Q. Describe 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 an 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.

A. City staff perform routine observations as part of normal facilities inspections. In addition, staff periodically conducts site visits to major outfalls to determine whether dry weather flows are occurring. No illicit discharges were reported in 2009-2010.

IV c. 2.
Q. Has the municipality performed any field screening for the reporting year? If yes, please provide documentation of the results of the field screening.

A. An initial visit to discharge sites was done in 2010 as part of the screening program. A follow-up visit will be done in 2011 to confirm findings of 2010. For sites showing flows during both visits, the City will investigate further to determine likely causes and whether remediation is needed.

IV c. 3.
Q. Has the municipality investigated any instances of spills, improper disposal of waste or dumping? If yes, please provide documentation of the results of the investigations.

A. Staff found no record of improper disposal of waste or of dumping. City crews on occasion will also respond to spills that are incidental to car crashes. However, the Fire Department responds to the majority of minor spills and all major spills since its crews are trained in handling of hazardous waste. For routine minor spills, crews will place an oil dry product on the spilled fluids and allow it to stand for 24 hours. The City street crew will sweep the site the following day using the power street sweeper. The sweepings are ultimately dumped at the municipal landfill.

The Fire Department reported no major spills in 2009-2010 and a total of 6 minor spills as a result of vehicular crashes or leaking vehicles, all of which were cleaned according to the described procedure. Copies of spill reports are attached.

IV c. 4.
Q. Describe how the municipality facilitates public reporting of illicit discharges.

A. Upon receipt of a notice of a spill, the Fire Department notifies Dane County Communications Center of the site location and severity of spill hazard. After clean-up is completed, FD staff fills out a spill report and files same on site.

IV d. 2.
Q. Describe 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.
IV d. 3.
Q. Describe 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.

A. The City of Middleton has an intergovernmental agreement with Dane County for their staff to perform rigorous reviews of erosion control and storm water runoff control plans, and inspections of active construction sites. The City requires permit applicants to provide a copy of submitted erosion control and storm water runoff control plans to the LCD whose staff reviews the plans to determine whether they meet the standards set forth under Middleton Municipal Code, Chapter 28 and NR 151. Where applicable, D.C. staff will notify the permit applicant of potential NR 216 requirements. If the submitted plan meets the erosion control requirements, LCD staff notifies the municipal official that the plan is complete. The authorized municipal official then issues the applicant an erosion control and storm water runoff control permit.

All active construction sites are inspected on a weekly basis. Frequency of inspections may increase based on weather conditions, scale of the construction activity, whether a site is in a sensitive area or has a greater potential for damage due to erosion, and when follow-up is required due to enforcement action.

When a non-compliance issue has been identified during an inspection, the inspector first tries to contact the designated person listed on the erosion control plan. For sites where the non-compliance issue is minor and has not been committed blatantly, the inspector will verbally give the developer a deadline to bring the site back into compliance. The vast majority of non-compliance issues are corrected in this manner, but if the verbal deadline is not met, an enforcement memo is sent to the developer and the City. The memo outlines the necessary actions to be completed by a specific time

and date in order to avoid an enforcement action. Enforcement actions are carried out by City staff at the recommendation of the LCD and may include stop-work orders, citations, or a combination of both. The City determines the type and magnitude of the enforcement action. Stop-work-orders remain in effect and citations continue (each day is considered a new violation) until the LCD inspects the site and deems it in compliance.

If a non-compliance issue has been committed blatantly or if there is potential for significant erosion to occur, immediate enforcement action is recommended to the City. The City has the ability to issue a stop-work order, without notice, when conditions warrant immediate action.

See attached copies of citations for 2009-2010.

See Table 1. for Erosion Control and Storm Water Runoff Control Site Inspection Summary.

Table 1. 2009-2010 Erosion Control & Storm Water Runoff Control Site Inspection Summary

Municipality	Sites Inspected	Inspections (Total)	Instances of Contact (Verbal or email)	Notices Sent (Written Non-compliance Notices)	Follow-up Actions (Enforcement Action Recommendations)	Enforcement Action Taken (Citation/SWO)
City of Middleton	71	824	220	11	5	1

IV d. 5.
Q. Include 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.

A. The construction site erosion control portion of the water quality program has been a major success because of the time, effort and expertise provided by Dane County personnel. Also, there appears to be noticeably greater concern on the part of property owners to maintain compliance.

IV e. 1.
Q. Describe 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.
IV e. 2.
Q. Describe 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. 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.

A. The City of Middleton has an agreement with Dane County for their staff to perform rigorous reviews of storm water runoff control plans and calculations submitted by developers (or for plans developed in-house for small projects) for compliance with the requirements of Middleton ordinance, Chapter 26, and NR 151.12 and 151.24. For large City projects, the City may hire a consultant to assist with the plan preparation and review.

Dane County staff prepares review comments which are supplemented by City staff comments as may be warranted. These comments are sent to the developer's engineer as notification of any deficiencies in the plan and copies of the comments and plan are submitted to the Water Resources Management Commission for input from the members. The project engineer generally attends these meetings to brief the Commission on the plan and to solicit feedback regarding suggested improvements to the plan. Resubmitted plans undergo the same review and comment procedure and, if needed, are brought back to the WRMC for further review and approval.

The City uses a template Storm Water Management Maintenance Agreement form (copy available on web site) that must be completed and signed by any developer (and co-signed by the City) to identify a responsible party for long term maintenance of the storm water runoff control practices.

Since early 2005, the City approval process has included the issuance of a permit for storm water runoff control practices. The permit includes an attendant fee schedule to cover the cost of plan review and site inspections.

Construction observation services for a given project are performed by City consultants. The City has standing agreements with several firms (currently seven) to provide such services on an as-needed

basis. For developer projects, the City requires developers to deposit fees sufficient to cover the cost of these services. For City projects, the cost is included in the project budget. The construction observer will perform a final review of the project prior to final acceptance of the project by the City (public controls) or prior to release of the Letter of Credit guaranteeing the proper construction of the project (private controls).

When a non-compliance issue is identified during an inspection of a developer project, the construction observer first contacts the developer's project engineer to inform the engineer of the necessary corrective actions. If a problem persists, the construction observer will notify the City Engineer as well. A call from the City Engineer to the project engineer is generally sufficient to achieve project compliance with the approved plan.

OTHER TOPICS

The City contracted with UW-Madison to study a major failure of a local private bioretention system. Preliminary results suggest that salt may be the cause. A final report is due in 2011.

The City was awarded a Gold Star rating from the Water Star Wisconsin program for excellence in water resources management, protection and conservation.

The City coordinated with DNR to form a Green Tier Charter, whereby members work cooperatively to enhance the effectiveness of programs for water resources management and for sustainability. The kick-off meeting was held in early 2011.

The City contracted with UW-Madison for a multi-year study of existing rain gardens and similar infiltration measures to assess their efficacy and in some cases the causes for failure. UW staff finished field work in the Fall of 2007. Since then, they have been working on the details of the protocol, attending the rain garden symposium in the Spring of 2008, working the information gained at that symposium into the protocol, and working on making the entire write-up a flowing and informative document.

City's consultant completed a preliminary design for a sedimentation pond to be constructed in Lakeview Park, a sixty acre park in the southeast portion of Middleton, with mixed pond water/storm water/spring flow flowing through it in a ditch to Lake Mendota. The pond will treat runoff from a 140 acre drainage area, thereby reducing the pollutant loading into the Lake including nutrients (nitrogen and phosphorus), heavy metals, oil and grease, suspended sediment and other pollutants from this storm water conveyance system.

City's consultant also prepared and submitted three grant applications (WDNR Urban NPS Construction, WDNR Lake Protection and Dane County Urban Water Quality) to finance a portion of the Lakeview Park Pond. Grants totaling $143K were awarded to the City.

IV e. 4.
Q. Include 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.

A. The efficacy of the City's efforts over the years has been exceptional as evidenced by the monitoring by USGS of Pheasant Branch at US 12.

IV f. 1.
Q. List 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.

A. Drainage ways are inspected annually or biannually for sediment build-up and vegetation overgrowth. Maintenance is performed as needed. Sediment traps on drainage ways are inspected weekly and after storms and are cleaned as needed.

The City hired a consultant to develop a storm water management plan. The plan was completed in 2010 and includes recommendations for maintenance. The City has formed a sub-committee to identify priorities from the plan and explore feasible funding alternatives.
Historically, maintenance has been done on an as-needed basis, generally as part of the routine landscape and creek channel maintenance, annual drainage ditch maintenance, and annual concrete

repair projects. In addition, the City has performed extensive vegetative restoration of prairie and wetland areas.

See attached inventory list. New features this reporting period include an infiltration basin at Sauk Trail School.

IV f. 2.
Q. Does the municipality perform catch basin cleaning? Describe the procedures used and schedules for catch basin cleaning.

A. ** (NOTE: Quantity includes 33 C.Y. catch basin sediment and 109 C.Y. trash rack debris.) City crews inspect inlets and manholes annually for structural damage and leaking, and perform repairs as needed. Once per year in the spring, City crews visit virtually every catch basin in the storm sewer system. Using a Vactor truck, they clean the water and sediments from the sump. Sumps may be cleaned a second time in the fall as time permits. Sediments are deposited in the yard at the City garage and are later transported to the landfill.

IV f. 3.
Q. Describe the procedures used and schedules for street sweeping.

A. Sweeping is done almost daily during non-winter (freezing weather) months, approximately March through November. The sweeper covers every street in the City a minimum of approximately once per month, and high-use / heavy-load streets approximately twice per month. The latter includes primarily the truck routes. The sweeping is done principally in the outside lane, against the curb. Parking prohibitions are not used to facilitate sweeping. Hence, if a parked car is encountered, the sweeper circumvents it. Sweepings are dumped at the landfill.

IV f. 4.
Q. Describe 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.

A. The County performs snow removal on County routes. City crews use snow plow trucks which carry salt in the truck box. Plowing begins upon snowfall of 2". Depending on the forecast, salt will be applied prior to a snow or freezing rain that may result in treacherous conditions.

A typical salting pattern includes approaches to intersections, horizontal curves, hills, and school zones. When temperatures fall below 15° F, salt is not applied. Sand is used instead if needed for traction. Salt typically is not applied to flat, low traffic, mid blocks of streets. Ice storms require more salting of the streets. In extreme cases, salt is applied to all streets.

The trucks have remote controlled tailgate spreaders to regulate the salt application to minimal amounts.

In 2009-2010, approximately 1503 tons of salt and 175 tons of sand were applied.

IV f. 5.
Q. Does the municipality haul snow to off-site disposal locations? If yes, provide 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.

A. Occasionally, the City will haul excess snow to Quisling Park parking lot on Airport Rd. An end loader is used to fill a dump truck for transport. No additional salt is added. The site has a very flat gradient. Approximately 150 feet of grass lies between the edge of the parking lot and the nearest drainage ditch.

IV f. 6.
Q. Does the municipality own or operate salt storage facilities? If yes, provide the locations of all salt storage facilities.

A. The salt shed is located on the same site as the city garage at 3300 Laura Ln.

IV f. 8.
Q. Describe 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 for the disposal of leaves, yard waste, and grass clippings.

A. * (NOTE: Quantity includes 6462 C.Y. brush and 10,584 C.Y. leaves and yard waste.)**
The City collects in bulk non-woody vegetation such as leaves and yard waste. Leaves are collected curb-side via a vacuum leaf collector during October and November. Each street is visited 4 to 6 times during this period. The City disposes of leaves and yard waste either at UW farms, at individual farmsteads or at the compost site at the landfill on CTH Q. Property owners must dispose of their own grass clippings, typically through home composting or by hauling to the City's compost site on CTH Q. Brush is collected curb-side during warm weather months, chipped and composted or spread on farmland.

The City provides information in the semi-annual newsletter and encourages disposal via tilling,

mulching or composting. Items to be added to the newsletter include links to other information sources on these and related topics.
IV f. 9. Q. Describe 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.
A. The City uses very little fertilizer – primarily on active ball diamonds at the High School and at Lakeview Park. None are applied in any of the kettle pond parks.
IV f. 10. Q. Describe 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.
A. The City uses only non-restricted herbicides including RoundUp, Garlon and Poast to control invasive species. Herbicides are applied by hand or by use of a boom sprayer. Projects in which herbicides are applied include conservancy restoration including wetlands, prairie and oak savanna. The above chemicals are stored in ANSI compliant, fire-proof cabinets and are applied by trained staff in strict conformance with the manufacturer's recommendations. The City does not use pesticides.
IV f. 11. Q. Describe any local program the municipality employs to regulate the private use of lawn and garden fertilizers, and pesticides and herbicides.
A. None are in place at this time. **OTHER TOPICS:** **Waste oil is collected at the City garage (from municipal garage operations and from the community at large) and recycled. Maintenance on City vehicles, including mechanical repairs and washing, is done in a closed garage. (Exception: muddy vehicles are rinsed outside adjacent to a grassy area which drains to a vegetated swale.)** **Other storage: street light poles, are stored outside; wood chip piles, gravel piles and dirt piles are stored outside on flat grade, separated from a drainage way by a vegetated surface, or inside in a shed.**
IV f. 12. Q. Include an assessment of the effectiveness of the municipality's pollution prevention efforts through the municipal pollution prevention program.
A. The implementation of the municipal pollution prevention program is consistent with the described policies. The effectiveness is a measure of how much pollution is delivered to Lake Mendota versus how much would have been delivered absent the program. The City has not done scientific research on this particular measurement. However, the monitoring done by USGS in cooperation with the City at the USH 12 gaging station shows significant drops in total suspended solids in Pheasant Branch Creek following the construction of the Confluence Pond.

Appendix D
Monitoring Program

VI c.
Q. Provide 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.

A. The City participates in the annual cost of continuous monitoring by USGS of Pheasant Branch Creek. This completed biennial contribution was $53,615.

In addition, the City contirbuted $6300 to WGNHS to upgrade the regional groundwater model. An additional $6125 is budgeted for 2011.

Appendix E
Additional Information

VII a.
Q. Provide a description of any revisions or proposed revisions to any element of the municipality's storm water management program.

A. In 2007, as previously reported, the City revised its Storm Water Runoff Control ordinance. The amendment provided language to account for the changes in NR 151 and the Dane County ordinance to require infiltration. While the City's ordinance already had required this, the new ordinance meets or exceeds the new standards. A subsequent modification to the ordinance in June 2008 provided improvements to the clarity of the language.

The ordinance is posted on the City's web site.

VII b.
Q. Provide 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.

A. See attached listing of permits issued for New Commercial Sites for 2009-2010. The City does not have any information on the industrial codes assigned to the commercial sites.

VII c.
Q. Provide a summary of any other activities undertaken to comply with the conditions of this permit or other information of which you feel the Department of Natural Resources should be aware.

A. The City installed two infiltration basins in 2008 as previously reported, one in an existing detention pond (Shorecrest) and one in an off-line natural kettle, thought to be a remnant streambed (Park St). An additional site (Sauk Trail School) was constructed in 2009.

The City initiated the design and grant applications for funding for a new sediment pond to be constructed in Lakeview Park in 2011. This pond will treat runoff from a catchment of approximately 140 acres in size.

See previous reports for other similar projects completed.