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, 2013, 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

<table>
<thead>
<tr>
<th>Name of municipality</th>
<th>Contact person and title</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Wisconsin-Madison</td>
<td>Marisa K. Trapp, Environmental Compliance Specialist</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mailing Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>UW-Madison Environment, Health &amp; Safety Department</td>
</tr>
<tr>
<td>30 East Campus Mall</td>
</tr>
<tr>
<td>Madison, WI 53715</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone no.</th>
<th>608-262-2407</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax no.</td>
<td>608-262-6767</td>
</tr>
<tr>
<td>E-mail address</td>
<td><a href="mailto:mtrapp@fpm.wisc.edu">mtrapp@fpm.wisc.edu</a></td>
</tr>
</tbody>
</table>

Does the municipality have an internet website? ☒ Yes ☐ No
If yes, provide internet address:
www.safety.wisc.edu

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.ehs.wisc.edu/enciti-environmentalcompliance-water.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 biennial report.

<table>
<thead>
<tr>
<th>Authorized representative printed name</th>
<th>Authorized representative title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darrell Bazzell</td>
<td>Vice Chancellor for Administration</td>
</tr>
</tbody>
</table>

Authorized representative signature

[Signature]

Date signed 3/26/13
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.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marisa K. Trapp</td>
<td>Environmental Compliance Specialist</td>
<td>UW-Madison</td>
</tr>
<tr>
<td>Matt Collins</td>
<td>Civil Engineering Advisor</td>
<td>UW-Madison</td>
</tr>
</tbody>
</table>

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:  September 2008, September 2012 (West Campus)

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):
University Chemical Safety Committee

3. Date(s) of meeting(s) to discuss the biennial report:
The report was mailed to Chemical Safety Committee and other campus stakeholders on March 31, 2013.

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 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.

   N/A

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.

See **Appendix B**

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.

See Appendix B

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): See below. Describe in Appendix B the procedures used and schedules for catch basin cleaning. If no, explain:

For cleaning operations performed by the Grounds Department, Eagles Heights/University Houses and Plumbing Shop staff in 2011-2012, 36 cubic yards (c.y.) of solids were collected from catch basins.

For cleaning operations performed by Roto-Rooter in 2011-2012, 83 c.y. were pumped from parking ramp oil/sand separators.

3. Does the municipality perform street sweeping? ☒ Yes ☐ No
If yes, approximate number of street miles swept: 12; approximate amount of solids collected (tons or cubic yards): 285 c.y. Describe in Appendix B the procedures used and schedules for street sweeping. If no street sweeping is performed, explain:

See Appendix B

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): See Appendix B for data.

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 TSS reduction developed urban area performance standard?  □ Yes  □ No
Model used: **WinSLAMM** Version: **9.3.0** Reduction %: **25.2**

In Appendix B, please list or reference all practices that are currently in place that will be used to meet the TSS reduction percentage reported above. Additionally, please describe any maintenance activities that have occurred for these practices in 2011-12.

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, 2013?  □ 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/](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/wns/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.

<table>
<thead>
<tr>
<th>Program Element</th>
<th>2011 Annual Expenditure</th>
<th>2012 Annual Expenditure</th>
<th>2013 Budget</th>
<th>2014 Budget</th>
<th>Source of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Education and Outreach</td>
<td>$13,374</td>
<td>$12,990</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
<tr>
<td>Public Involvement and Participation</td>
<td>$13,456</td>
<td>$13,456</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
<tr>
<td>Illicit Discharge Detection and Elimination</td>
<td>$270</td>
<td>$720</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
<tr>
<td>Construction Site Pollution Control</td>
<td>$72,286</td>
<td>$73,804</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
<tr>
<td>Post-Construction Site Storm Water Management</td>
<td>Combined with construction site pollution control</td>
<td>Combined with construction site pollution control</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
<tr>
<td>Municipal Pollution Prevention</td>
<td>$115,373</td>
<td>$108,703</td>
<td>N/A</td>
<td>N/A</td>
<td>See VII.e below</td>
</tr>
</tbody>
</table>

e. What is the overall estimated annual cost to the municipality for compliance with the permit in 2011: $214,750, 2012: $209,673

Program elements are funded by a variety of University accounts. University monies can only be used for University related purposes and may not be used for any expenditure related to University Hospital & Clinical services. The various program elements that comprise the permit are not budgeted for. University staff make reasonable efforts within their job duties to achieve the goals of the permit. Annual expenditures have been determined by a summary of professional time (best estimate) and actual expenditures (e.g., labor cost for street sweeping). Public Education & Outreach totals do not include group permit expenditures.

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.
GROUP MUNICIPAL STORMWATER DISCHARGE PERMIT:

2011-2012 Biennial Report for
University of Wisconsin-Madison

APPENDIX A
General Information

III.d. & III.e. UW-Madison internally coordinates implementation of the requirements of the municipal stormwater discharge permit between the University’s agencies, departments and programs; and keeps elected and municipal officials and appropriate staff apprised of the municipal stormwater discharge permit in the following ways:

Staff members of the following campus units are responsible for implementing the various requirements of the stormwater permit:

- Arboretum
- Athletic Department
- Campus Planning & Landscape Architecture
- Capital Planning & Development (major projects; includes architectural and engineering staff)
- Eagle Heights/University Houses (faculty and student housing)
- Environmental Health Program, University Health Services
- Environment, Health & Safety Department
- Environmental Services, Grounds Department
- Physical Plant Landscape Architect
- Plumbing Shop
- Recreational Sports
- Transportation Services
- University Housing

The electronic version of the current permit has been shared with the Director of Campus Planning & Landscape Architecture, the Capital Planning & Development’s Civil Engineering Advisor, the Physical Plant’s Landscape Architect and the Environment, Health & Safety Department’s Legal Counsel (Office of Administrative Legal Services).

Meetings have been held with staff members from the Arboretum, Campus Planning & Landscape Architecture, Capital Planning & Development, Eagle Heights/University Houses, Environmental Health Program, Grounds Department, the Physical Plant Landscape Architect and the Plumbing Shop to discuss permit requirements that are pertinent to their respective campus units. Data collection forms are sent annually to the staff of the Arboretum, Eagle Heights/University Houses, Environmental Health Program, Grounds Department, Plumbing Shop and Transportation Services. Any data needed from departments not listed above is collected through e-mails sent to pertinent staff.

III.g. UW-Madison incorporates the requirements of the municipal stormwater permit into all University projects, master planning activities, neighborhood plans, development plans and other comprehensive planning activities in the following ways:

Erosion/sediment controls are included in all project specifications, with reference to the Wisconsin DNR stormwater best management practices. This includes all DFD (Division of Facilities Development) managed projects, University delegated projects, in-house projects and emergency projects (e.g., chilled water line break). Other specific plans and policies that incorporate the municipal stormwater permit requirements include:
• The UW-Madison Policy for Stormwater Management, adopted by the Campus Planning Committee in October 2003. This policy represents a significant commitment by campus staff to use sound stormwater management practices in all campus development. The 2005 Campus Master Plan incorporates this policy.

• The West Campus Stormwater Management Plan finalized in July 2004.

• The 2005 Utilities Master Plan project.

• The Stormwater Runoff Management manual put together in 2005 by several campus graduate students for Facilities, Planning and Management staff. The manual includes procedures for assessing stormwater runoff, a discussion of best management practices that could be used on campus and a selection/discussion of potential mitigation sites for reducing stormwater runoff volumes.

• The UW-Madison Lakeshore Nature Preserve Master Plan finalized in March 2006.

• The UW Arboretum Facility Storm Water Management Plan finalized in July 2006.

• The UW Arboretum Stormwater Management Plan draft in September 2006.


• The UW Arboretum Curtis & Coyote Ponds Stormwater Management Plan draft in March 2011.

• The Stormwater Quality Management Plan, West Campus Technical Revision finalized June 2011.

• The Stormwater Management Plan, West Campus Stormwater Facilities Project finalized September 2012.

• The UW-Madison Curtis Prairie Stormwater Plan finalized November 2012.

• The UW Builds Green (LEED Certification) initiative, 2008-2012 with four currently certified building projects and 10 projects seeking certification.

• The collaborative Lake Response Analysis study for Lake Wingra, started in 2012 with final report expected early 2014.
APPENDIX B
Storm Water Management Program

IV.a.3. Materials produced by Dane County on behalf of UW-Madison have been used and/or distributed in the following ways:

Copies of the fall leaf campaign pamphlet “Love Your Lakes, Don’t Leaf Them” and the spring rain garden campaign pamphlet “Plant Dane! Rain Garden Plant Cost-Share Program,” developed by the I&E subcommittee of the Madison Area Municipal Storm Water Partnership, were made available in the UW-Madison Environment, Health & Safety Department reception area and on the department website. Campaign materials were also distributed at various informational expos on campus throughout the academic years of 2010/2011 and 2011/2012.

Salt use instructional videos hosted at www.myfairlakes.com and information sent via email by the Dane County Office of Lakes & Watersheds Storm Water Education Coordinator were distributed via the UW-Madison Environment, Health & Safety email listserv. In addition, the “Low Salt Diet” poster developed by the Storm Water Education Coordinator was distributed to UW-Madison Grounds staff responsible for salt application on campus and to the Environment, Health & Safety department.

IV.a.4. The following information and education (I&E) articles were published and I&E activities undertaken by campus and Arboretum staff in 2011 and 2012:

An annual spring notice regarding pesticide use on campus was published in the UW News (www.news.wisc.edu) April 10, 2011 and April 17, 2012 editions (Attachments 1 and 2). In addition, the following articles and notices regarding water quality and conservation were also published in UW News publications:

- "Water, water everywhere focus of new sustainability project," UW News, January 2011
- "New pond will protect Arboretum, Lake Wingra from stormwater influx," UW News, August 2011
- "Campus Pesticide Use and Stormwater Awareness," EH&S Feature Article, May 2012 (Attachment 3)
- "Growing a green lawn means finding grasses that need less water," UW News, July 2012
- "Showing the Lakes Some Love," EH&S Feature Article, October 2012 (Attachment 4)

The Arboretum offers many education and outreach programs. Examples of these opportunities include:

- Designing Native Gardens (including rain garden sessions and demonstration plantings)
- Friends of the Arboretum (volunteers) Native Plant Sale
- Participation in Madison’s rain garden tours

The UW Cooperative Extension offers many stormwater and watershed modeling related courses throughout the year through the Department of Engineering Professional Development, which are open to University faculty, staff and the general public. Faculty and staff are routinely involved in educational and outreach activities, such as producing written publications, teaching and committee membership in Madison, surrounding communities and at the national level.

These articles, fact sheets, classes and outreach opportunities are all designed to: raise awareness of stormwater management issues; encourage people to think about how their individual actions can lead either to degradation or improvement in water quality; and encourage a personal relationship with our local bodies of water. An I&E program that can achieve these outcomes can be labeled a success.
IV.b.4. UW-Madison offered the following opportunities and types of forums for public involvement and participation in permit-related activities in 2011 and 2012:

The 2011-2012 Biennial Stormwater Report will be distributed to the UW-Madison Chemical Safety Committee, Arboretum and Lakeshore Nature Preserve committee chairs and other interested parties. The report is also posted along with past reports and campus stormwater information on the UW-Madison Environment, Health & Safety Department website at: www.safety.wisc.edu. Comments on the report and/or the campus stormwater management program are always welcome.

The University solicits comments and advice from the public in all public information and training endeavors. In significant new developments, stormwater management is a topic for discussion when developing Environmental Impact Statements (EIS) or in Environmental Impact Assessments (EIA). These statements are distributed widely for public comment and are also discussed at public hearings.

Two University committees, the Joint Southeast Campus Area Committee and the Joint West Campus Area Committee, are used as forums for discussion regarding development on the southeast and west portions of the campus. Stormwater management plays a significant role in many group discussions. Membership includes representatives from various University committees and departments, the City of Madison Mayor’s office, various City of Madison committees and departments, City of Madison Alders representing pertinent districts and various neighborhood organizations representing neighborhoods located in close proximity to the University.

Arboretum and University staff developed a stormwater management plan for the Arboretum (completed in July 2006). City of Madison staff and the Friends of Lake Wingra were also involved in the development of the plan. A master plan has also been developed for the UW-Madison Lakeshore Nature Preserve (completed in March 2006), which identifies and makes recommendations for addressing stormwater and erosion issues in the Preserve and surrounding area.

Welcoming the public into the planning process has worked well for the University and the public. The participatory framework of meetings, hearings and reviews often results in solutions that everyone can feel a part of.

IV.c.1 & IV.c.2. An Illicit Discharge and Elimination program was submitted with the original stormwater discharge permit in 1995; the following describes how the UW-Madison program is implemented, along with field screening results for 2011 and 2012:

Illicit discharge detection, investigation and elimination require a joint effort between the Physical Plant Plumbing Shop and the Environmental Health Program, a division of University Health Services. Illicit discharges are reported to the Environmental Health Program, Plumbing Shop, Central Answering and Response Service (CARS) and/or the Environment, Health & Safety Department. All discharges are reported to the Wisconsin DNR. If necessary, discharges are reported to the Wisconsin DNR and to the City of Madison if the discharge was to the City’s storm sewer system.

Inspections are conducted of older buildings on campus to detect and remove illicit connections to the storm sewer system. Such inspections may include field sampling, dye testing or other methods of detection. Environmental Health Program staff walked the lakeshore throughout the spring, summer and fall of 2011 and 2012. All pipes that enter Lake Mendota were monitored; no unusual discharges were found. Environmental Health Program staff conducted walk-through inspections of the agricultural campus several times throughout the summer and fall of 2011 and 2012. Periodic inspections ensure the following:

- Storm inlets are clear of straw.
- Manure is properly managed.
- Farm equipment is washed indoors so that wash waters flow into the sanitary sewer.
Berm around the horse barn yard is functioning properly. The berm contains rainwater and directs it to the inlet located in the barn yard; this inlet drains to the sanitary sewer.

Environmental Health Program staff in conjunction with Environment, Health & Safety department and Capital Planning & Development staff also conducted walk-through inspections of the western, central and eastern sections of campus in 2012. The 2011 and 2012 inspections confirmed that animal wastes have been appropriately contained; no illicit discharges were noted.

The program works well. If an illicit discharge is discovered, people know who to call; participants in the program can respond quickly to an incident. Prevention activities, such as the annual walk along the lakeshore and inspections conducted on older buildings help to avert potential illicit discharges to the lake. University Police also have the power (UWS 18.03 (1)) to enforce UWS 18.06 (1), which prohibits dumping on University lands and illicit discharges into storm sewers.

Outdoor spills are responded to by either or all of the following: Environment, Health & Safety department staff, University Police or by the individual(s) responsible for the spill if the spill can be easily contained. If the spill cannot be easily contained, 911 is called and Madison’s Hazardous Incidence Team will respond.

**IV.c.3. UW-Madison investigated the following instances of spills, improper disposal of waste or dumping for 2011-2012:**

2012:
A biodiesel fuel spill of less than 5 gallons (approximately 1-4 gallons) occurred on May 9, 2012 along the mall and parking ramp area between the Engineering Centers and Mechanical Engineering buildings on the UW-Madison campus. The Wisconsin DNR was notified of the spill and a contractor was called to the scene to clean up the spilled biodiesel. The spilled biodiesel was extracted from the parking lot using an absorbent oil dry product and no diesel was observed to have entered the storm sewer system. Further response actions included: street sweeping the affected area to remove any residual dust or oil dry product and follow-up with responsible UW staff and supervisors to ensure fuel oil storage and transfer activities are conducted according to the UW-Madison SPCC (Spill, Prevention, Control & Countermeasure) plan and associated policies.

A hydraulic oil spill of less than 1 gallon occurred on December 6, 2012 along the UW-Madison Memorial Union lakeshore (Lake Mendota) as a result of a construction company equipment leak. The construction company and the Wisconsin DNR were notified and the construction company responded to the scene to clean up the spilled hydraulic oil. No remaining oil or oil residue was observed during a follow-up site visit on December 7, 2012. The UW-Madison Environment, Health & Safety Department received a WDNR SERTS report copy on December 17, 2012 indicating the incident case closed.

**IV.c.4. UW-Madison facilitates public reporting of illicit discharges in the following ways:**

The Illicit Discharge Notification form is used to report spills to the Madison storm sewer system, along with any necessary phone calls to the City of Madison Engineering and the Wisconsin DNR. Copies of the form are sent to the Wisconsin DNR and the City’s Engineering and Health departments. The Wisconsin DNR is always notified of any spills into the University storm sewer system; a report is kept on file. Major spills that would have a major impact on lakes Mendota or Monona would also be reported to University Communications (262-3571, 27 Bascom Hall) who would manage information collection and dissemination.
Parts D and E are combined because the processes and personnel are similar for both stages of construction.

IV.d.2 and IV.e.1. The procedures UW-Madison employs to incorporate timely consideration of potential water quality impacts from construction sites and ensure implementation of the standards of ss. NR 151.11, 151.12, 151.23 and 151.24, Wis. Adm. Code, or equivalent local standards are described below:

Major Projects >$100,000 and Small Projects (not delegated to UW) $30,000 to <$100,000

These are construction projects (development and re-development) that are managed by the Department of Administration (DOA) - Division of Facilities Development (DFD). Construction site authority is granted to DFD by Chap. 16, Stats. Section 16.85(1) stats. This statute declares that the DOA shall “take charge of and supervise all engineering or architectural services or construction work... performed by, or for, the state...” Section 16.85(12) stats. gives DOA the authority to review plans and specifications for all UW System projects (including UW Hospitals & Clinics Authority). DOA is also empowered to periodically review the progress of all construction activities to ensure compliance with plans and contract specifications.

DOA requires compliance with the standards written into NR 151.11, 151.12, 151.23 and 151.24. Compliance is achieved through specifications and requirements contained in contracts for state construction projects. DFD has issued a Policy and Design Manual for architects and engineers that details stormwater management and erosion control requirements for state construction projects (those in progress and post construction). The manual states that contract requirements pertaining to stormwater management and erosion control apply to all construction projects, regardless of size. “Chapter 151.....includes rules and performance standards for site design and management and shall be strictly adhered to,” and “DFD expects the A/E to design the site-work in compliance with local codes and zoning requirements related to stormwater discharge, even if more restrictive than [the normal state requirements], with the concurrence of the project manager.” State contracts empower DOA with the responsibility and authority to inspect construction sites to ensure compliance with contract requirements for stormwater management and erosion control. In 2006, DFD, with input from the Wisconsin DNR, re-wrote the General Conditions section of the Construction Contract. The new language requires contractors to strictly adhere to the NR151 standard.

Small Projects $30,000 to <$100,000 (delegated to UW), UW-Managed Projects <$30,000

UW-Madison’s Planning and Design Team is cognizant of the need to consider a project’s impact on the quality of Madison’s lakes and the need for strict adherence to best management practices for stormwater controls, both during and post construction. Projects in this category have contract or project specifications that delineate requirements for stormwater management and erosion control – all contractors and University personnel are required to follow these specifications. In October 2003, the Campus Planning Committee adopted a campus stormwater management policy that applies to all projects – DFD and UW managed – “…that ensures that the amount of runoff from newly developed and redeveloped areas be no greater than the amount that occurred under native conditions.”

Project Review Process for DFD and UW-Managed Projects

Project review for Major Projects is conducted by DFD and UW staff. The project review process consists of three phases: 35%, 65% and 100%. Early project review enables staff to identify and correct errors and problems before they become more difficult to remedy. Contracts and project specifications for Small Projects (DFD or UW delegated) and UW-managed projects (<$30,000) are reviewed by various departments and staff at UW-Madison; multi-department review and cooperation on campus projects helps to ensure issues related to campus stormwater management are identified and addressed in a timely manner.
**IV.d.3 and IV.e.2.** The procedures UW-Madison employs for the inspection of construction sites, installation of stormwater best management practices, enforcement of erosion control standards and other enforcement actions to ensure compliance with post-construction stormwater management standards are described below:

Inspection of DFD managed project sites can be performed by three individuals: the DFD Project Manager, DFD Field Representative and the UW-Madison Physical Plant Landscape Architect (LA; also appointed by DFD as their representative). The majority of site inspections are conducted by the LA; however, as DFD projects are managed by the State (and not the University), the LA has no enforcement authority. If problems are encountered, the LA will inform the DFD Project Manager who, in turn, will inform the contractor.

Inspection of UW-Madison managed project sites is conducted by the LA. As above, any problems encountered will be brought to the attention of the campus Project Manager. University staff have developed an inspection sheet titled "Erosion and Sediment Control Inspection Sheet," which is now used on all construction sites. In addition, an annual notice on construction activity and erosion prevention guidance is published in the campus facility manager bulletin and posted on the Environment, Health & Safety department website.

**IV.d.4 and IV.e.3.** Contact information of all persons designated with the responsibility to ensure implementation of the standards of ss. NR 151.11, 151.12, 151.23 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, is provided below:

A list of duties is not included in this report; the individual titles should, in most cases, explain the responsibilities of the position. A position description will be provided upon request. Furthermore, there are other DFD project managers, not listed below, who have the potential to manage University construction projects.

**Wisconsin Department of Administration**

**Katherine Kalscheur**, DFD, Project Manager, Engineer: katherine.kalscheur@wisconsin.gov; 608-267-0509; 101 E. Wilson, 7th floor, Madison, WI 53703.

**Jim McMillan**, DFD, Project Manager, Engineer: jim.mcmillan@wisconsin.gov; 608-266-3855; 101 E. Wilson, 7th floor, Madison, WI 53703.

**Phillip Michalski**, DFD, Project Manager, Engineer: philip.michalski@wisconsin.gov; 608-267-6941; 101 E. Wilson, 7th floor, Madison, WI 53703.

**Tammy Olson**, DFD, Construction Quality Control: tammy.olson@wisconsin.gov; 608-264-9560; DFD Beltline Office.

**Eric Pedersen**, DFD, Construction Quality Control: eric.pedersen@wisconsin.gov; 608-576-9882; DFD Beltline Office.

**UW-Madison Administration**

**Darrell Bazzell**, Vice Chancellor for Finance and Administration: dbazzell@vc.wisc.edu; 608-263-2467; 100 Bascom Hall, 500 Lincoln Dr., Madison, WI 53706.

**Bill Elvey**, Associate Vice Chancellor for Facilities Planning & Management: belvey@fpm.wisc.edu; 608-262-3488; Room 957e WARF, 610 Walnut St., Madison, WI 53726.

**UW-Madison Facilities, Planning & Management**

**Gary Brown**, Director, Campus Planning & Landscape Architecture: gbrown@fpm.wisc.edu; 608-263-3023; Room 919 WARF, 610 Walnut St., Madison, WI 53726.

**Rhonda James**, Landscape Architect, Senior, Campus Planning & Landscape Architecture: rjames@fpm.wisc.edu; 608-263-3032; Room 930 WARF, 610 Walnut St., Madison, WI 53726.
Matt Collins, Civil Engineering Advisor, Capital Planning & Development: mcollins@fpm.wisc.edu; 608-263-3031; Room 985 WARG, 610 Walnut St., Madison, WI 53726.

Julie Grove, Architect/Project Manager, Capital Planning & Development: jgrove@fpm.wisc.edu; 608-265-0465; Room 989 WARG, 610 Walnut St., Madison, WI 53726.

Ann Hayes, Architect/Project Manager, Capital Planning & Development: ahayes@fpm.wisc.edu; 608-265-4673; Room 944 WARG, 610 Walnut St., Madison, WI 53726.

Pete Heaslett, Architect/Project Manager, Capital Planning & Development: pheaslett@fpm.wisc.edu; 608-263-3012, Room 950 WARG, 610 Walnut St., Madison, WI 53726.

Daniel Okoli, Director & University Architect, Capital Planning & Development: dokoli@fpm.wisc.edu; 608-263-3159; Room 940b WARG, 610 Walnut St., Madison, WI 53726.

Marisa Trapp, Environmental Compliance Specialist, Environment, Health & Safety Department: mtrapp@fpm.wisc.edu; 608-262-2407; 30 East Campus Mall, Madison, WI 53715.

Paul Umbeck, Director, Environment, Health & Safety Department: pumbeck@fpm.wisc.edu; 608-262-9739; 30 East Campus Mall, Madison, WI 53715.

Kris Ackerbauer, Assistant Director, Physical Plant: kackerbauer@fpm.wisc.edu; 608-265-2758; Room 201a Service Building, 1217 University Ave., Madison, WI 53706.

Robert Lampea, Director, Physical Plant: rlampea@fpm.wisc.edu; 608-263-3077; Room 201 Service Building, 1217 University Ave., Madison, WI 53706.

Marcelle Otter, Plumbing Shop Supervisor, Physical Plant: motter@fpm.wisc.edu; 608-265-3967; Room 402, 30 N. Mills St., Madison, WI 53715.

Faramarz Vakili-zadeh, Associate Director, Physical Plant: fvakili@fpm.wisc.edu; 608-265-2757; Room 201b Service Building, 1217 University Ave., Madison, WI 53706.

Chris Velea, Engineering Specialist, Shops: cvele@fpm.wisc.edu; 608-263-3018; Room 402 Service Building, 1217 University Ave., Madison, WI 53706.

UW-Madison University Health Services
Randy Hentschel, Environmental Health Program Manager: rhentsc@uhs.wisc.edu; 608-262-0924; Room 8305, 333 East Campus Mall, Madison, WI 53715.

**IV.d.5. and IV.e.4.** An assessment of the effectiveness of UW-Madison’s construction-site pollution control and post-construction site stormwater management programs in meeting the standards of ss. NR 151.11, 151.12, 151.23 and 151.24, Wis. Adm. Code, including enforcement efforts is provided below:

The project planning and review process works very well. As previously stated, the University is strongly committed to considering not only the impact of individual projects on lake quality, but also the incremental impact of all projects on lake quality.

Inspection frequency is somewhat limited by personnel and campus unit resources; however, the campus Landscape Architect (LA) in the Physical Plant does an excellent job of communicating with contractors and assisting them in correcting erosion and sediment controls that have not been installed properly. Contractors frequently begin a project using an incorrect approach to erosion control. When the LA observes this on their inspection rounds, they will help contractors choose the correct controls and explain why the recommended controls are necessary.

DFD now requires all pre-construction meetings to include discussion of project-specific erosion control BMPs. Erosion control issues are now also included as an agenda item at all progress meetings. In the fall of 2006, all DFD project managers and field representatives attended “Effective Construction Erosion Control,” a seminar conducted jointly by the Wisconsin DNR, the Wisconsin Department of Commerce.
and the UW-Madison Department of Engineering Professional Development. Topics included, but were not limited to: regulatory overview, basic principles of hydrology and sedimentology, a review of common erosion control practices and their effectiveness.

No campus authority exists for the enforcement of DFD-managed projects. To date, DFD has never issued a stop work order for lack of or improper installation of erosion and sediment controls. The same can be said for UW-Madison managed projects.

**IV.f.1. An inventory of long-term stormwater best management practices owned, operated, managed or maintained by the UW-Madison is provide below, along with a description of the maintenance procedures used and schedules for each long-term stormwater best management practice, and the approximate amount of solids collected from structural controls receiving maintenance:**

**Charter Street Heating Plant Redesign Project**

The Charter Street Heating Plant (CSHP) on the UW-Madison campus is currently under construction to convert from a coal burning heating plant to one that is fueled by natural gas with fuel oil backup. Construction of Phase 1 began in September 2010, and final completion of the whole project is projected for August 2013. Phase 1, which is currently under construction, includes the Dayton Street boiler building, at the corner of W. Dayton Street and N. Mills Street and the construction staging and laydown area across N. Mills Street. Phase 2 includes the remainder of the plant site, which encompasses the block bordered by N. Charter Street on the west, W. Dayton Street on the north, N. Mills Street on the east, and the Southwest Commuter Bike Path on the south, as well as a 0.3-acre parcel located northeast of the N. Charter Street/W. Dayton Street intersection. The 1.5-acre East Parcel will continue to be used as a construction staging and laydown area until completion of the project. Phase 2 construction began with fuel oil tank foundation excavation in June 2011 and will continue until the end of the project in August 2013 with final site stabilization.

Coal is no longer used or kept onsite at the CSHP and a new Stormwater Pollution Prevention Plan (SWPPP) and Stormwater Management Plan (SWMP) for the heating plant were developed in the fall of 2011 and implemented in 2012.
<table>
<thead>
<tr>
<th>BMP</th>
<th>Location</th>
<th>Description</th>
<th>Solids Collected, cubic yards (c.y.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flo-Gard™ + Catch Basin Insert Filters</td>
<td>Walnut Street Research Greenhouses (replacement buildings)</td>
<td>The insert filters were installed in the storm inlets surrounding the Walnut Street Research Greenhouses (completed in 2005). These filters are designed to capture sediment, debris, trash and oils/grease from stormwater before the pollutants reach the storm sewers.</td>
<td></td>
</tr>
<tr>
<td>Detention Pond Series (4)</td>
<td>Recreational Sports Play Fields (restoration; west campus)</td>
<td>In conjunction with the restoration of the Recreational Sports playing fields, a series of four detention ponds were installed (in 2005) on the southern periphery, along Observatory Drive. Each will be a either a dry- or wet-detention pond, depending on ground water elevations and seasonal precipitation. The ponds are referred to as a forebay system; the first ponds will receive the highest amounts of sedimentation and will require dredging more often. The first pond fills then overflows via a weir into the next pond and so on. The design allows the heaviest particles and some suspended solids to settle out before the pond over flows into the next. Each pond will settle out more material as the water flows through the system. Finally, water flows from the fourth pond into a pipe that carries the water to an underground detention area. Here, the water is cooled prior to its release into the lake.</td>
<td></td>
</tr>
<tr>
<td>Parking Ramp Oil/Sand Separators</td>
<td>Ramp 5 – Helen C. White Library Ramp 7 – Grainger Hall Ramp 17 – Camp Randall Stadium Ramp 20 – McArdle Lab Ramp 23 – Van Hise Hall Ramp 29 – 21 North Park Street Ramp 36 – Steenbock Library Ramp 38 – 15645 Observatory Drive Ramp 46 – Johnson Street Ramp 76 – University Bay Drive Ramp 79 – Clinical Sciences Center Ramp 83 – Fluno Center Ramp 95 – Health Sciences Learning Center (one-level parking, located in basement underneath bldg.)</td>
<td>All future and existing parking ramps on campus will be or are equipped with oil/sand interceptors. The separator is designed to collect sand and oil, thus preventing these materials from entering the storm sewer. Gradually, the accumulated sand will plug up an inverted elbow on the outlet. Approximately every three years or when needed, Roto-Rooter pumps out the unit(s). The lower-level drains begin to drain slowly when the intercept becomes clogged with debris; this is an indication that the unit needs to be cleaned out.</td>
<td>A total of 10,150 gallons, or 50 c.y., were pumped in 2011; and 5,550 gallons, or 33 c.y., were pumped in 2012.</td>
</tr>
<tr>
<td>Parking Ramp Oil/Sand Separator with Infiltration Garden</td>
<td>Ramp 76 – University Bay Drive</td>
<td>An infiltration garden was installed on the north side of the parking ramp (completed in 2005). Stormwater flows through the ramp's oil/sand interceptor and then into the native perennial garden to cool the stormwater before it enters the storm sewer system.</td>
<td></td>
</tr>
<tr>
<td>Porous Asphalt and Bio-retention Basin</td>
<td>Parking Lot 34</td>
<td>Parking Lot 34 was reconstructed in the summer of 2007. Three quarters of the lot was reconstructed using conventional asphalt and one quarter of the lot was paved with porous asphalt that will allow stormwater to infiltrate. New curb and gutter channels any remaining</td>
<td></td>
</tr>
<tr>
<td>Porous Asphalt with Infiltration Bed</td>
<td>Parking Lot 60</td>
<td>A 720-square-foot porous asphalt area with an underlying infiltration bed was installed in Lot 60 in 2009 to alleviate flooding in a low spot in the parking lot.</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Rain Garden</td>
<td>UW Medical Foundation Centennial Building</td>
<td>A 1,200-square-foot rain garden was installed in 2010 for infiltration of rooftop runoff at UW Medical Foundation Centennial Building.</td>
<td></td>
</tr>
<tr>
<td>Recharge Bed</td>
<td>Parking Lot 92</td>
<td>A recharge bed was installed in the middle of Lot 92 in September 2006. This was a pilot project and was funded by UW-Madison Transportation Services. Plans are to install one recharge bed per year.</td>
<td></td>
</tr>
<tr>
<td>Roof Water Collection</td>
<td>Wisconsin Institutes for Medical Research (WIMR)</td>
<td>A 1,000-gallon cistern for roof water collection and reuse was installed in 2010 at Wisconsin Institutes for Medical Research (WIMR).</td>
<td></td>
</tr>
<tr>
<td>Wash Down Facility</td>
<td>Herrick Drive</td>
<td>In the fall of 2006, a wash down area was constructed behind the Biotron at the corner of Herrick and Linden drives. The facility consists of a drainage swale with several sediment trapping devices along the flow path. Sediments will be captured not only from street runoff but also from washing down the Elgin street sweeper and lawn mowers.</td>
<td></td>
</tr>
<tr>
<td>1918 Marsh, Willow Creek, Nielsen Pond</td>
<td>West Campus</td>
<td>These facilities are inspected and assessed, at a minimum, on an annual basis. Problems found and any corrections taken are noted on a form that is then submitted to the campus stormwater permit manager. Nielsen Pond repairs and modifications took place in 2006; the project primarily consisted of dredging and bank stabilization. A stone infiltration trench was installed in 2009 along the south edge of the soccer field at the end of the Class of 1918 Marsh to capture and treat runoff from the soccer field. Plans are in development for a new stormwater facility on the north side of the marsh to mitigate stormwater in the area. Phase I of the project is currently underway with Phase II completion expected in 2014. Discussions have begun with the City of Madison on plans for mitigating stormwater and its impacts to Willow Creek.</td>
<td>3,850 c.y. sediment; 935 c.y. parent material and 2,475 c.y. unsuitable parent material (total = 7,260 c.y.; 2006 dredging operations).</td>
</tr>
</tbody>
</table>

**Arboretum – Stormwater Management Practices**

The UW Arboretum Stormwater Facility Maintenance Plan was developed to identify responsibilities and provide direction for maintaining stormwater management facilities within the Arboretum, to prevent deterioration of those facilities, maintain their operating effectiveness and avoid unnecessary or premature repair and rehabilitation. Arboretum personnel are responsible for regular inspection and preventative maintenance of stormwater facilities, while the UW-Madison Department of Facilities, Planning & Management (FP&M) is responsible for periodic facility evaluation and corrective maintenance. Arboretum regular inspection and maintenance activities of stormwater facilities are scheduled biannually and after major storms (2-year 24-hour), identify damage (e.g., erosion) or maintenance needs (e.g., repair conveyance), identify vegetation for removal (mow/burn/cut), note pond levels and drainage, and hand clear trash gates. FP&M major maintenance activities of stormwater facilities include: engineering performance evaluation; mechanical clearing of trash gates, weirs and forebays; and cleaning, repair and replant of conveyances. Logs of inspection and maintenance activities of each stormwater facility are kept by the Arboretum and reported to FP&M annually. FP&M and inter-governmental agreement co-signatories are responsible for major facility rehabilitation (e.g., muck-out ponds, replacement of controls structures).
<table>
<thead>
<tr>
<th>BMP</th>
<th>Location</th>
<th>Description</th>
<th>Solids Collected, cubic yards (c.y.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detention Basin</td>
<td>Curtis Pond</td>
<td>In summer 2009 the culvert downstream of the outlet was replaced. In summer 2010 the outfall pipe was replaced and the slope was redressed with rock. Planting of native plants in the disturbed area followed the work. Curtis and Coyote ponds are currently in the redesign process.</td>
<td></td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Greene Prairie; adjacent to Dunn's Marsh</td>
<td>In 2007, the City of Madison relocated the existing Seminole Highway outfall that drains onto Greene Prairie, to instead drain onto a new wet detention pond adjacent to Dunn's Marsh. Coordination continues with the City of Fitchburg on drainage modifications related to the new bike path to be built on the railway corridor along the south border of Greene Prairie.</td>
<td></td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Ho-Nee-Um Pond</td>
<td>The City of Madison removed the existing stormwater outfall in 2008, as part of a project to upgrade the Pickford Street box channel. The City also dredged accumulated sediment from the around the abandoned outfall. Project cost-sharing is between UW-Madison and the City of Madison.</td>
<td></td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Marion Dunn Pond</td>
<td>In 2003/04, 3,900 c.y. of sediment was dredged from the pond; an additional 3,900 CY of native material was removed to deepen the pond. The pond will be dredged at 20-year intervals.</td>
<td>3,900 c.y. sediment, 3,900 c.y. native material (2003/4)</td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Johannsen Pond (Pond 2)</td>
<td>This project is complete. An off-line wetland basin was constructed south of the existing pond. During 2009-2010, Pond 2 was rehabilitated and a spill-containment forebay added. Total TSS removal for the system is six tons per year (88%). Project cost-sharing is between UW-Madison, the City of Madison and the Town of Madison. As part of the project, an adjoining property owner installed a proprietary device to treat runoff from the Town of Madison upstream of the pond. Pond 2 is designed to remove 12,450 lb/year of TSS.</td>
<td>3,600 c.y. sediment, 2,440 c.y. parent material.</td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Pond 3</td>
<td>The UW and the City of Madison will collaborate in repairing Pond 3. During 2009, the City of Madison completed repairs to the conveyance leading into the pond and cleared the pond berm of woody vegetation. UW-Madison made maintenance repairs to the east outlet structure. An engineer has been selected by the City of Madison for design of a large regional treatment system combining Pond 3 with two adjoining treatment basins. Construction was completed in 2012; pond and greenway were reconstructed with significant size expansions and debris collection systems.</td>
<td></td>
</tr>
<tr>
<td>Detention Basin</td>
<td>Pond 4</td>
<td>This project is complete. During 2009-2010 an enlarged wet detention pond was constructed to replace the failed pond. The new pond provides removal of 35 tons per year (65%) of TSS and control of peak flows entering the Southeast Marsh and Gardener Marsh. Project cost-sharing is between UW-Madison, the City of Madison, the City of Fitchburg and the Town of Madison. Pond 4 is designed to remove 69,790 lb/year of TSS.</td>
<td>2,950 c.y. sediment, 22,335 c.y. parent material.</td>
</tr>
<tr>
<td>Stormwater Energy Dissipater Structure, Detention Pond</td>
<td>Secret Pond Trench (AKA Manitou Way Outfall Trench)</td>
<td>A stormwater energy dissipation structure was installed in 2004 to reduce velocities and decrease sediment loads to Lake Wingra from downstream erosion. An October 2009 maintenance inspection revealed blockages of the conveyance and erosion of accumulated sediment from the pond. In summer 2010, the channel was cleared of obstruction. Rehabilitation construction was completed in 2011 to eliminate erosion between Manitou Way and Secret Pond as well as to remove accumulated sediment from the pond.</td>
<td>2,200 c.y. sediment, 37,520 c.y. parent material.</td>
</tr>
</tbody>
</table>
IV.f.2. Procedures used and schedules for catch basin cleaning at UW-Madison are listed below:

**Arboretum:** There are no catch basins located in the Arboretum.

**Campus:** Grounds Department crews begin the cleaning process. Street sweepers clean off the grates that cover basins located in the streets. Crews manually clean the grates of basins located in parking lots, patios and other non-street areas. If the basin is plugged, crews will clean to a depth of two feet. Should the drain be plugged beyond that point, crews will inform the Plumbing Shop and the Plumbing Shop will then call in Roto-Rooter to clean out the line. Once every two weeks, Grounds crews clean the grates on all inlets, including those without catch basins. Plugged inlets, as stated above, are cleaned deeper. Grounds crews inspect all inlets during rain events to ensure rain is entering the drains unobstructed.

**Eagle Heights/University Houses:** A preventive maintenance schedule is in place for all storm inlets (located in parking areas, drive troughs and grassy areas). All inlets are inspected regularly for any obstructions. Roto-Rooter is called in to clear any drains that staff are unable to clear. When possible, all inlets will be inspected ahead of any predicted heavy rain; inlets will be inspected again during a heavy rain to ensure rainfall is entering the drains unobstructed.

IV.f.3. Procedures used and schedules for street sweeping at UW-Madison are listed below:

The following information does not include the interior of Eagle Heights/University Houses (i.e., parking areas, Eagle Heights Drive and drive troughs).

**Arboretum:** Arboretum Drive is brushed once in the spring (approximately 3 street miles swept).

**Campus:** Grounds Department crews begin sweeping sand from the streets as early as January, if weather conditions permit. Cleaning continues through the spring and summer, once per week to once every two weeks. In the fall, leaves are vacuumed from the streets every morning. The streets are then swept once to twice per week. Approximate number of street miles swept in 2011 and 2012: 12 street miles (each time).

**Transportation Services:** Transportation Services staff call in Roto-Rooter to clean out oil/sand separators in campus parking lots.

IV.f.4. UW-Madison’s procedures for roadway snow removal and de-icing, including an estimate of the annual amount of salt and/or sand used for roadway de-icing are described below:

It should be noted that the sand use reported by the campus and Arboretum represents the 5% salt/sand mix. The campus will add more salt to the mix if weather conditions warrant. The salt use reported by campus represents the quantity of salt that is added to the mix. The Arboretum does not use additional salt. The salt use at Eagle Heights/University Houses represents the quantity of Ice Slicer salt mix product applied. Arboretum, Eagles Heights/University Houses and campus staff must comply with the University’s Salt Best Management Practice. This policy is available on the Environment, Health & Safety department website: [www.safety.wisc.edu](http://www.safety.wisc.edu).

The salt and sand use totals for the Arboretum, campus and Eagles Heights/University Houses are for the 2010/2011 and 2011/2012 snow seasons. Totals for Eagles Heights/University Houses include amounts spread on all interior areas. Eagles Heights/University Houses has one road; the rest of the property consists of parking areas, drive troughs and sidewalks.

<table>
<thead>
<tr>
<th><strong>Table 3. UW-Madison Total Salt/Sand Use on Campus, Eagles Heights/University Houses and Arboretum Streets.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Arboretum</td>
</tr>
<tr>
<td>Campus</td>
</tr>
<tr>
<td>Eagle Heights/University Houses</td>
</tr>
</tbody>
</table>
During night hours, if conditions warrant, University Police call the Grounds Department Supervisor who, in turn, calls in the snow removal crew. Police are not involved in storms occurring during daytime hours. Depending on conditions, the crew will use either 100% sand or a salt/sand mixture. The mix typically consists of one part salt to two parts sand. If the situation warrants, the salt ratio can be increased. All Grounds supervisors have attended the “Managing Snow and Ice Control” course that is offered by UW Professional Development.

Snow Plowing Scenarios

- ½” or less – No plowing. Salt/sand mix is applied to streets.
- ¾” or more – Plow, if necessary. Once streets are plowed, apply sand or salt/sand mix. Plowing and application may be simultaneous.
- Heavy snow that is continuing over several hours – Repeat, as often as necessary, plow, apply sand or salt/sand mix.

Eagle Heights/University Houses

Eagle Heights/University Houses personnel shovel and plow the interior areas only. The campus Grounds Department staff plows the exterior streets, i.e., University Bay Drive and Lake Mendota Drive. Snow removal is a collective effort by all staff. Training in plowing operations and salt/sand management are included in orientation activities for new employees. When to plow is a judgment call. The decision factors in safety and road access issues. Typically, plowing will not begin until the snow has ended; however, hilly areas are plowed, if necessary, to facilitate driving. Walk areas are kept clear at all times, even with only a dusting of snow. All steps are salted and sanded. Salt and sand are purchased from Dane County. Salt is mixed into the sand on site; the amount of salt used depends on the intensity of the storm.

Arboretum

Arboretum staff are responsible for their own plowing. A salt/sand mix (supplied by the campus Grounds Department) is applied to Arboretum Drive on hills, curves and intersections. To minimize amounts applied, applications are done once, after the storm has ended.

**IV.f.5. The location of all off-site snow disposal locations and practices and procedures used to protect water quality from snow and ice melt from the disposal site at UW-Madison are provided below:**

The snow disposal site is not located off campus; however, due to the snow pile’s high visibility, the site will be addressed in this report. The campus snow pile melt site has been redesigned and the project completed (2012) in order to provide a stable surface for snow pile storage and melt operations. The site has an access road for dump trucks to queue up for dumping snow and exiting the area. The melting system has been designed to allow snow melt water and sediment to pass through it from the melt coming through the inside of the pile. The snow melt will be collected and sent into drainage ditches and sediment basins. Based on chloride monitoring conducted in previous snow seasons, the snow pile’s impact to the 1918 Marsh and Lake Mendota is negligible.

**IV.f.6. The locations of all salt storage facilities at UW-Madison are provided below:**

The salt storage facility for the campus is located at 515 Herrick Drive and for Eagle Heights/University Houses at 2902 Haight Road. Salt storage at EH/UH is in compliance with Wis. Admin. Code Trans. 277 storage requirements.

**IV.f.7. Leaves Collected in 2011 and 2012 at UW-Madison:**

- Arboretum – no leaves collected
- Athletic Department + Recreational Sports – no leaves collected
- Eagle Heights/University Houses – 600 c.y. in 2011, 2 tons in 2012
- Grounds Department – 214 c.y. in 2011, 177 c.y. in 2012
IV.f.8. UW-Madison’s procedures for leaf, yard waste and grass clipping collection and/or instruction to personnel for on-site management of these items are described below:

The following units are responsible for mowing lawns and collecting leaves:

- Athletic Department
- Arboretum
- Eagle Heights/University Houses
- Recreational Sports
- Remaining campus lawns (all, including Residence Halls) are mowed by Grounds Department staff

Campus

Grass Clippings
All mowing units keep grass clippings in place, i.e., with the use of mulching or recycling mowers.

Leaf Collection
Approximately 90% of the total leaf drop at Eagle Heights/University Houses is mulched and returned back to the soil. The remaining leaves are collected and taken to the Eagle Heights/University Houses gardens; gardeners use the leaves for compost in their garden plots. All work is conducted by a contractor. Leaves are collected in a central location by Recreational Sports; Grounds Department staff then take the leaves to the West Madison Agricultural Research Station for composting, located at 8502 Mineral Point Road.

Athletic lawns do not have many trees; therefore, no leaves are collected. Grounds Department staff are responsible for collecting leaves on campus streets, residence halls lawns and lawns not managed by Athletics or Eagle Heights/University Houses. Leaves are vacuumed from the streets every morning. This process is followed by street sweeping once to twice per week. Most leaves collected from the streets are composted; however, a small amount is landfilled due to a high dirt content. In the fall, Grounds Department staff clear the lawns of leaves and grass simultaneously. Collected wastes are blown into a hopper and then taken out to Picnic Point for temporary storage. Once the growing season has ended, the only activity is to vacuum leaves, daily, from lawn areas and then transfer them to Picnic Point. Once enough leaves have accumulated at Picnic Point, they are transferred to the West Madison Agricultural Research Station for composting.

Arboretum

Grass Clippings
Grass clippings are left in place.

Leaf Collection
Leaves are not collected in the Arboretum. Leaves that fall in the woods remain on the ground and leaves that fall in lawn areas are shredded by a mulching mower and left to enrich the soil.

IV.f.9. & IV.f.10. UW-Madison’s policies and procedures for the use and application of lawn and garden fertilizers on University controlled properties are provided below:

All units on campus and the Arboretum are required to follow the University’s Pesticide Use Policy. This policy was updated and reviewed in 2012 by the UW-Madison Chemical Safety Committee and Environment, Health & Safety department staff; the current policy is available on the Environment, Health & Safety department website at: www.safety.wisc.edu. The following units are responsible for applying fertilizers, herbicides and pesticides:

- Arboretum
- Athletic Department
- Grounds Department (all lawns, with the exception of Athletics, Recreational Sports)
- Lakeshore Nature Preserve
- Recreational Sports
- Residence Halls
Campus

No herbicides or fertilizers are applied at Eagle Heights/University Houses due to the proximity of the Lakeshore Nature Preserve Area and Lake Mendota. The policy for woody plant removal in the Lakeshore Nature Preserve is to repeatedly cut plants as an alternative to applying herbicide to the stump at the first cutting.

Lawn areas in Athletics, Recreational Sports and the remainder of campus (excluding residence halls and Eagle Heights/University Houses) have been soil-tested for phosphorus content. Starter grade fertilizers (phosphorus containing) may be used by Grounds Department staff when sodding and seeding lawn areas. This fertilizer is incorporated into the soil prior to seeding or placing the sod. Slow-release nitrogen sources are used in established turf. An aerator is used prior to fertilizing.

Fertilizers are used, when necessary, on the Recreational Sports and Athletics lawn areas. Phosphorus-containing fertilizers will be used where testing has indicated it is needed. Recreational Sports aerates soils prior to all fertilizer applications; Athletics occasionally aerates soils prior to application. Residence Halls staff are responsible for the financing of and contracting for fertilizer applications; however, the staff work with the Grounds Department for decisions on product selection and application. Herbicides are applied by Recreational Sports and Athletics when necessary, to rid the lawn areas of weeds. Herbicides used on the residence hall lawns are applied by a contractor under the direction of the Grounds Department. All other campus lawns and gardens are scouted for weeds and receive herbicide applications only where necessary. Plantings on campus receive pesticide applications by Grounds Department staff only when required to preserve plant health.

Arboretum

No fertilizers, insecticides, rodenticides or fungicides are currently applied in the Arboretum. Pesticide applications are limited to herbicides.

IV.f.11. An assessment of the effectiveness of UW-Madison's pollution prevention efforts through the municipal pollution prevention program is provided below:

The program works well. University staff are very aware that their methods of operation can have a deleterious impact on lake water quality. UW-Madison is continually searching for ways to improve operations and methods that will result in a steady improvement to lake quality. For example:

- Using phosphorus-containing fertilizers only where testing shows it is needed.
- Frequent cleaning/inspections of storm inlets to ensure they will perform during storm events.
- Frequent street sweeping.
- Vacuuming leaves from the streets, daily, in the fall.
- Routine inspections of storm sewer outfalls and drains.

IV.g.1. UW-Madison's past (2011-12) and proposed actions implemented to meet the 40% TSS reduction standard by March 10, 2013 are described below:

The UW-Madison Stormwater Quality Management Plan (2008) and the UW-Madison Stormwater Management Plan for West Campus Stormwater Facilities (2012) present a number of strategies to meet the 40% TSS reduction standard by 2013 (a 25.2% reduction has already been achieved). Based on cost effectiveness, feasibility and percent TSS removal, the following campus and Arboretum stormwater BMP improvements have been proposed for implementation to achieve the additional 14.8% TSS reduction needed to meet the overall 40% TSS reduction standard:


West Campus Stormwater Facility Project – UW-Madison is proposing to install seven (7) stormwater management facilities on the west campus to improve stormwater quality discharge to Lake Mendota. The seven facilities include five (5) bioretention facilities and two (2) wet detention ponds. Two of the bioretention facilities are located within the University Housing Apartment complex, two within the Eagle Heights Apartment complex and one along
University Bay Drive. The wet detention ponds are located north of Lot 60 east of the softball field along the Lakeshore path. The projects will be constructed in two phases, Phase 1 and Phase 2. Phase 1 construction is intended for summer 2012-2013 and consists of the four (4) bioretention facilities in Eagle Heights Apartments. Phase 2 is intended for construction in 2014 and consists of the two wet detention ponds north of Parking Lot 60 and Triangle Marsh east of Lot 60 and a bioretention swale along University Bay Drive.

**West Campus Technical Revision Report** – The Technical Revision to the 2008 UW-Madison Stormwater Quality Management Plan provides updated storm water modeling and treatment devices to meet the WDNR stormwater treatment goals of NR151 and NR216. The project study area in this revision includes UW-Madison-owned lands west of Willow Creek. The updated modeling includes the removal of non-campus owned lands that were included in the 2008 plan and the inclusion of proposed best management practices (BMPs) expected to meet state storm water quality requirements.

**IV.g.2. Evaluation of UW-Madison owned or operated structural flood control facilities to determine the feasibility of retrofitting to increase TSS removal:**

An evaluation of UW-Madison campus and Arboretum structural stormwater and flood control facilities was completed in 2001 as part of the **UW-Madison Evaluation of Stormwater Facilities** report.

UW-Madison flooding concerns primarily center around the West Campus, home to the University Hospital and other UW health facilities, which was developed before current stormwater practices were in place and for which future development may pose additional stormwater challenges. The **Stormwater Quality Management Plan, West Campus Technical Revision** (finalized June 2011) and the **Stormwater Management Plan, West Campus Stormwater Facilities Project** (finalized September 2012) include an updated evaluation of and recommendations for stormwater and flood control facilities in this part of campus.
For the record

April 20, 2011

Pesticide use policy reminder

In accordance with the university’s stormwater permit and pesticide use policy, pesticide applicators are to notify the Central Answering and Response Service (CARS) at 263–3333 prior to using a pesticide. In addition, applicators are to notify faculty, staff, students and visitors of their pesticide use by a reasonable and effective means, such as posting signs where pesticides have been applied, distributing posters, flyers or electronic mail to people who may frequent the application area. Notices may be published on the Department of Environment, Health & Safety (EH&S) website. The policy is also posted on the EH&S website.

The pesticide use policy encourages best management practices (BMPs) that maximize effectiveness and safety, and minimize environmental impact. Pesticides used in research and teaching are expected to abide by this policy's objectives, although alternative procedures may be allowed for the purposes of academic study. Visit the website or contact Marisa Trapp of the Environment, Health & Safety Department at 262–2407 for pesticide label information, information about hazards and exposures to using pesticides, or information regarding pollutants in stormwater.

Annual pesticide application notification

UW–Madison has traditionally applied fertilizer and herbicides to turf areas and landscape display beds in the general areas of campus and to invasive plants in the Lakeshore Nature Preserve. For a listing of products used on campus and the Lakeshore Nature Preserve, visit Chemical and Environmental Safety online.

The Environmental Services–Grounds Department and Lakeshore Nature Preserve are sensitive to the community's concerns regarding the use of herbicides and fertilizers. Therefore, we emphasize that their use is a tool as part of an Integrated Plant Management program. Promoting healthy turf and landscape displays minimizes pesticide use. Promoting diverse biological communities in natural areas minimizes pesticide use for weed control.

Share this story:

Delicious   Digg   Reddit   StumbleUpon
Reminder about pesticide use on campus

April 17, 2012

In accordance with the university's stormwater permit and Pesticide Use Policy, pesticide applicators are to notify the Central Answering and Response Service (CARS) at 263-3333 prior to using a pesticide.

In addition, applicators are to notify faculty, staff, students and visitors of their pesticide use by a reasonable and effective means, such as posting signs where pesticides have been applied, or distributing posters, flyers or electronic mail to people who may frequent the application area. Notices may be published on the Department of Environment, Health & Safety (EH&S) website at: http://www.ehs.wisc.edu/engit-environmentalcompliance-pesticides.htm. The Pesticide Use Policy is also posted on the EH&S website.

The Pesticide Use Policy encourages best management practices that maximize effectiveness and safety, and minimize environmental impact. Pesticides used in research and teaching are expected to abide by this policy's objectives, although alternative procedures may be allowed for the purposes of academic study.

Visit www.safety.wisc.edu or contact Marisa Trapp of the Environment, Health & Safety Department at 262-2407 for pesticide label information, information about hazards and exposures to using pesticides, or information regarding pollutants in stormwater.

Annual pesticide application notification

UW-Madison has traditionally applied fertilizer and herbicides to turf areas and landscape display beds in the general areas of campus and to invasive plants in the Lakeshore Nature Preserve.

For a listing of products used on campus and the Lakeshore Nature Preserve, please see the UW-Madison Environment, Health & Safety website at http://www.ehs.wisc.edu/engit-environmentalcompliance-pesticides.htm.

The Environmental Services–Grounds Department and Lakeshore Nature Preserve are sensitive to the community's concerns regarding the use of herbicides and fertilizers. Therefore, we emphasize that their use is a tool as part of an Integrated Plant Management program. Promoting healthy turf and landscape displays minimizes pesticide use, and promoting diverse biological communities in natural areas minimizes pesticide use for weed control.
Environment, Health & Safety

Campus Pesticide Use and Stormwater Awareness

With the warmer spring weather, many of us are enjoying spending more time outdoors, planting gardens and caring for landscape and turf areas. EH&S would like to take this opportunity to remind faculty, staff, students and visitors of the University’s pesticide use policy and stormwater management goals.

The pesticide use policy encourages best management practices that maximize effectiveness and safety, and minimize environmental impact. Pesticides used in research and teaching are expected to abide by the policy’s objectives, although alternative procedures may be acceptable for the purposes of academic study. Visit the EH&S Environmental Compliance pesticide page to view the current policy, EPA worker protection standard, campus pesticide use announcements, and links to other regulatory agency information.

In addition, the University has traditionally applied fertilizer and herbicides to turf areas and landscape display beds in the general areas of campus and to invasive plants in the Lakeshore Nature Preserve. The Environmental Services-Grounds Department and Lakeshore Nature Preserve are sensitive to the community’s concerns regarding the use of herbicides and fertilizers. Therefore, we emphasize that their use is a tool as part of an Integrated Plant Management program. Promoting healthy turf and landscape displays minimizes pesticide use. Promoting diverse biological communities in natural areas minimizes pesticide use for weed control.

Spring rains also result in more stormwater runoff to our lakes and streams. The University strives to meet campus stormwater management goals through a stormwater Illicit Discharge and Elimination program, installation of stormwater best management practices and effective policies and procedures to protect water quality from snow and ice melt as well as lawn and garden fertilizer use on University lands. Additional information can be found on the EH&S Environmental Compliance water page.

UW-Madison is also a member of the Madison Municipal Stormwater Area Partnership. The education and outreach division of this partnership, MyFairLakes.com, promotes good stewardship of Dane County lakes and streams through initiatives to ensure only rain goes down storm drains. Visit MyFairLakes.com for more information on rain gardens, rain barrels, home and yard maintenance tips and other ways to positively impact stormwater runoff in your local area.
Environment, Health & Safety

Showing the Lakes Some Love

Although some leaves began falling with the drought, it won't be long until it's time to start thinking about leaves falling en masse. Remember that leaves in the street this fall result in green lakes next summer. By keeping leaves and other yard waste out of the street, you are proudly displaying your love of Dane County's lakes and streams.

Leaves or grass clippings in the street can get washed directly to the nearest lake or stream via storm drains when it rains. Even if the leaves never move, rain water running over and through them makes a nutrient-rich tea that's carried directly to the storm drains promoting algal growth. There are easy alternatives to raking:

- Use your lawn mower to mulch leaves directly on your lawn.
- Place them on your vegetable gardens, flowerbeds or around your trees and shrubs to help suppress weeds.
- Compost your leaves and use them next year in your gardens.

If you rake, keep leaves on the terrace, not in the street. Check with your municipality for curbside collection dates and other requirements so that your leaves are at the curb for as short a time as possible. No matter how far you live from the water's edge, storm drains lead to the nearest lake or stream. So, when you see someone keeping leaves out of the street, you know they're showing their love for the lakes by keeping algal-feeding nutrients out of our surface waters.

For more information on "Love Your Lakes, Don't Leaf Them," or to obtain yard signs and brochures, visit www.myfairilakes.com or call 224-3746.

UW-Madison is a member of the Madison Area Municipal Storm Water Partnership and is committed to meeting campus stormwater management goals.