

Due by March 31, 2015

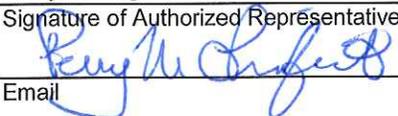
Notice: Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (DNR) by March 31 of each year to report on activities for the previous calendar year. This form is being provided by the DNR for the user's convenience. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

This form is for reporting on activities undertaken in calendar year 2014.

Instructions: Complete each section of the form that follows. If additional space is needed to respond to a question, attach additional pages. Provide descriptions that explain the program actions taken to comply with the general permit. Complete and submit the annual report by March 31, 2015, to the appropriate address indicated on the last page of this form.

SECTION I. Municipal Information			
Name of Municipality		Facility ID No. (FIN)	
Waukesha County		33641	
Mailing Address	City	State	ZIP Code
515 W Moreland Blvd, Room AC 260	Waukesha	WI	53188
County(s) in which Municipality is located	Municipality Type: (select one)		
Waukesha	<input checked="" type="radio"/> County <input type="radio"/> City <input type="radio"/> Village <input type="radio"/> Town <input type="radio"/> Other (specify)		

SECTION II. Municipal Contact Information			
Name of Municipal Contact Person		Title	
Perry Lindquist		Land Resources Manager	
Mailing Address (if different from above)	City	State	ZIP Code
		WI	
Email	Phone Number (include area code)	Fax Number (include area code)	
plindquist@waukeshacounty.gov	(262) 548-7867	(262) 896-8298	

SECTION III. Certification		
<p><i>I hereby certify that I am an authorized representative of the municipality covered under MS4 General Permit No. WI-S050075-2 for which this annual report is being submitted and that the information contained in this document and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.</i></p>		
Authorized Representative Printed Name	Authorized Representative Title	
Perry Lindquist	Land Resources Manager	
Signature of Authorized Representative	Date	
	3/31/15	
Email	Phone Number (include area code)	Fax Number (include area code)
plindquist@waukeshacounty.gov	(262) 548-7867	(262) 896-8298

SECTION IV. General Information	
<p>a. Describe what efforts the municipality has undertaken to invite the municipal governing body, interest groups, and the general public to review and comment on the annual report.</p> <p>The results of the annual report have been discussed with the County Board committee with oversight on this issue. The annual report has been posted on the Land Resources Division (LRD) page of the county web site with an invitation to interest groups and the general public to comment on the report.</p>	
<p>b. Describe how elected and municipal officials and appropriate staff have been kept apprised of the municipal storm water discharge permit and its requirements.</p> <p>LRD has made presentations to the County Board's Land Use Parks and Environment committee, the County Executive, other LRD staff, UW Waukesha staff, Public Works staff, and Parks and Land Use and Public Works department heads. The county has established an MS4 / NR 216 Work Group, with staff from all relevant County departments, to address permit issues involving County-owned properties.</p>	

SECTION IV. General Information (continued)

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

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

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

If yes, describe these cooperative efforts:

Waukesha County has contracted with the following MS4 communities to implement the county's Storm Water Management and Erosion Control ordinance, provide public education and outreach services, and maintain an Internet BMP tracking system:

- Town of Lisbon
- Town of Oconomowoc
- Town of Merton
- Town of Delafield
- Town of Waukesha
- Town of Genesee
- Town of Vernon
- Village of North Prairie
- Village of Merton

Waukesha County has contracted with the following MS4 communities to provide Public Education and Outreach services only:

- Village of Summit
- Village of Mukwonago
- City of Muskego
- Village of Hartland
- City of Delafield
- Village of Big Bend
- Village of Lannon
- Village of Wales
- City of Oconomowoc
- Village of Nashotah
- Village of Dousman
- City of Pewaukee
- City of Waukesha
- Town of Brookfield
- Village of Pewaukee
- Village of Sussex

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

If yes, provide web address:

<http://www.waukeshacounty.gov/LWCPpermit/>

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

If yes, provide web address:

http://www.waukeshacounty.gov/uploadedFiles/Media/PDF/Parks_and_Land_Use/Land_Conservation/Stormwater/MS4_Materials/MS4_LUPE_Slideshow_3-09.pdf

SECTION V. Permit Conditions

a. **Minimum Control Measures:** For each of the permit conditions listed below, provide a description of the implementation of each program element, the status of meeting measurable goals, and compliance with permit schedule in section 2.11 of the MS4 general permit. Provide an evaluation of program compliance with the general permit, the appropriateness of identified best management practices, and progress towards achieving identified measurable goals. Be specific in describing the actions that have been taken during the reporting year to implement each permit condition and whether measurable goals have been met, including any data collected to document a measurable goal. Also, explain the reasons for any variations from the compliance schedule in the MS4 general permit.

- **Public Education and Outreach**

The county has executed intergovernmental agreements to provide education and outreach services with 25 towns, villages, and cities within the county.

The attached spreadsheet and report summarize events and numbers of participants involved in the various programs. Activities included hosting a national webinar on BMP maintenance, distribution 100,000 newsletters, and collecting 211,000 pounds of household and agricultural hazardous waste.

A storm water environmental education web page has been included on the county's web site. This page received 5,701 views by 4,822 visitors during the year. The Citizen-Water Quality Monitoring web page was viewed 453 times by 422 visitors. 2,301 individuals visited the rain garden webpage a total of 2,807 times.

The county has developed a storm water best management practice database available for access to municipal officials on the county's Internet GIS mapping system. The public can access map layers showing storm water permits and storm water BMPs.

- **Public Involvement and Participation**

An MS4 web page has been created on the county's web site. The URL is given on the previous page of this report. The web page includes background information on the permit, a copy of the permit, a copy of the annual report, a link to the county storm water management and erosion control ordinance (including illicit discharge detection and elimination), the illicit discharge program, and the internal education program. There is also a link to the county environmental education web page. Public comment is invited on all aspects of the programs, and an email link is provided. The storm water web page received 1,740 views by 1,201 visitors.

- **Illicit Discharge Detection and Elimination**

The county adopted an ordinance including illicit discharge detection and elimination on March 22, 2005. Illicit Discharge Detection Program and Illicit Discharge Detection Procedures were submitted to the WDNR on November 3, 2008. During 2014, field screening was performed on the county's 14 major outfalls. In a report submitted to the WDNR, the county reported that none of the outfalls had an observed discharge in dry weather inspections. Our conclusion was that there did not appear to be any evidence of illicit discharge to the storm sewers.

- **Construction Site Pollutant Control**

The county adopted an ordinance encompassing construction site erosion control on March 22, 2005, and implements it for the nine communities listed above in IV.d. A summary of the number and type of inspections and enforcement actions taken in 2014 is included below in VII.e.

- **Post-Construction Storm Water Management**

The county adopted an ordinance encompassing post-construction storm water management on March 22, 2005. As part of the ordinance implementation efforts in 2014, as-built surveys of BMPs were approved for 4 completed developments, 13 draft storm water maintenance agreements were reviewed and 5 were approved, and 10 maintenance agreements were recorded.

SECTION V. Permit Conditions (continued)

• Pollution Prevention

A Winter Road Management Plan has been separately submitted to the WDNR. The county has developed storm water pollution prevention plans (SWPPPs) for the 11 county-owned facilities where there are materials or activities that may generate storm water pollutants. These plans were submitted to the WDNR in April 2009. Staff conduct annual dry-weather and wet-weather inspections of the discharge points. The county has developed an internal education program aimed at teaching county staff good housekeeping practices to minimize storm water pollution. Implementation of the program began in February 2009. County staff conducted bi-annual street sweeping of approximately 100 miles of urban roads with curb-and-gutter.

The county Household Hazardous Waste program collected over 211,000 pounds of household and agricultural hazardous waste from 4 permanent county collection points and several seasonal sites with a total of nearly 4,900 participants. More information is available on the county web page.

The county Yard Waste Composting operation site received and processed 4,200 tons of community yard waste at the county Yard Waste Composting site in the Town of Genesee.

b. Winter Road Management Activities (Optional reporting for 2014):

Provide the name, title, and phone number for the individual(s) with overall responsibility for winter roadway maintenance.

Peter Chladil, Highway Operation Manager, 262-548-7843

Describe the types of products used for winter road management (e.g. deicing, pre-wetting, salting, etc.).

De-icing agents are used under appropriate winter maintenance conditions to prevent the formation of ice, prevent the formation of a bond between accumulated snow, ice, or slush and the pavement and keep the accumulation "plowable" and de-ice (melting of bonded ice or snow). Plowing, dry salt, and pre-wetting salt with a brine solution are the dominant de-icing technique the department will utilize. Applying the de-icing agents during the storm will prevent the bond of accumulated precipitation and to keep the snow in a plowable condition. The de-icing agents utilized for the storm event will depend on winds, temperatures of the pavement and air, and drifting conditions. Dry salt may be most effective during a rain and freezing rain event when the pavement temperatures are below 32 degrees. Pre-wetting of dry salt with salt brine may be appropriate to reduce the loss of de-icing materials that are blown or bounce off the pavement as a result of traffic or the act of dispensing the material from a moving truck. Salt brine will be applied on the trucks using a spray bar with controls at the salt shoot to provide uniform application which is calibrated annually or as needed.

Waukesha County pre-wets all salt as it is spread. The only time pre-wetting of salt is not performed is as described above in a rain/freezing rain event.

Describe the type of equipment used to apply the products.

Waukesha County trucks are equipped with salt brine tanks ranging from 65 gallons to 500 gallons. Our typical truck sprays salt brine onto the salt at 8 gallons of salt brine per ton of salt. Our larger capacity trucks will spray 20-40 gallons of salt brine per ton of salt with the operator setting the application rate.

We have 3 units in our fleet that have variable spread speeds and liquid application rates. These trucks are able to spray 100% salt brine or 100% salt and every ratio in between. Our trials with the application rates shows us that a 70% salt to 30% brine mixture is the best ratio. These units use 20-35% less salt than our conventional units.

Report the amount of product used per month.

The county will begin reporting quantities as part of the 2015 annual report.

Report the snow disposal locations, if snow is hauled away.

None.

Describe any anti-icing, equipment calibration, and salt reduction strategies considered.

Anti-icing is a proactive snow and ice control strategy aimed at preventing the formation or the development of bonded snow and ice by the timely application of a freezing point depressant. The department will use a salt brine

SECTION V. Permit Conditions (continued)

mixture of 23.3% if an anti-icing technique is utilized. In order to depress the freezing point of the salt brine mixture the county may choose to use additives to the salt brine solution. The current additives are a beet juice derivative (Geomelt) and calcium chloride 32% solutions. The typical ratio is 85% salt brine, 10% beet juice and 5% Calcium Chloride. Anti-icing should be done during normal, low traffic volume. If anti-icing techniques are utilized, it is conducted prior to forecasted frost, freezing fog, or black ice events on bridge decks and pavement trouble spots (such as hills, curves, shaded areas, or intersections) on an as needed basis. Anti-icing techniques may also be utilized prior to predicted light sleet and light or moderate snow event and to prevent a re-freeze situation. Pavement temperature is recommended to be at or above 23°F or the pavement temperatures are forecasted to rise and stay above 23°F.

Anti-icing techniques are not utilized prior to forecasted rain or freezing rain events, when winds are more than 15 m.p.h., and when they cause blowing or drifting snow to stick to the roadway, pavement temperature is below 20°F or forecasted to fall below 20°F, or snow packed roadway.

Describe any other additional measurable data or information that the permittee used to evaluate its winter road management activities.

Because salt usage is related to snowfall, and snowfall is highly variable, ranging from 22 to 111 inches since 2001, the most effective basis of comparison has been to compare years with similar snowfall totals. Broadly, county salt usage has decreased by 23% since the early 2000s despite a 4% increase in lane miles.

Monthly records shall be kept per use event for November 1st through March 31st include how much and which product was used, weather data including temperature ranges and precipitation amounts, hours worked, number of trucks in service, hours of post-event clean up, and other measurable data that is useful to the department to evaluate the program on a yearly basis. Waukesha County uses the Wisconsin Department of Transportation (WDOT) storm reporting system to track the above information as well as individual spreadsheets and payroll records to track storm information.

Weather data is provided by Iteris MDSS (Maintenance Decision Support System) and National and Local Weather Services. The MDSS uses forecasting models based on the length, duration and forecast of the storm to give the County treatment recommendations for particular segments of state highways. The treatment recommendations are then communicated to the operators for setting the salt controllers.

The MDSS system uses real time temperature and salt spreading application rates from the trucks to tailor the application rates that we convey back to our operators. This is accomplished by the AVL/GPS system we have installed in the trucks. The GPS reports every two minutes on material usage, road temperature, plow and wing positions and liquid usage.

c. Municipal facility(s) (Optional reporting for 2014):

Provide an inventory of municipally owned or operated structural storm water management facility(s), include: Location of each facility and contact information for the individual(s) with overall responsibility for each facility.

Waukesha County will begin reporting on municipal facilities in the 2015 annual report.

Describe the housekeeping activities and best management practices installed to reduce or eliminate storm water contamination.

Discuss recommendations for improvements to current storm water management practices at the facility(s) and a timeline for installation and/or implementation of these recommendations.

SECTION V. Permit Conditions (continued)

Describe the municipal facility(s) employee training on storm water pollution prevention provided.

Describe the spill prevention and response procedures in place at the municipal facility(s).

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

If yes, provide the following: Model used WinSLAM Version 9.4 Reduction (%) 50

If no, include a description of any actions the municipality has undertaken during 2014 to help achieve the 20% standard.

- 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:

Waukesha County does not own any structural flood control facilities.

- e. Best Management Practices Maintenance: Does the municipality have a maintenance program for installed storm water best management practices? Yes No

If yes, describe the maintenance program and any maintenance activities that have occurred for best management practices in 2014. If available, attach any additional information on the maintenance program.

A memo describing Waukesha County's Procedures for Post-Construction Storm Water Management was submitted to the WDNR on November 3, 2008. A memo summarizing the results of the 2014 inspections of storm water BMPs owned and operated by Waukesha County has also been submitted recently.

A total of 35 county-owned BMPs were inspected. The locations of the BMPs are shown on the MS4 map. Minor erosion was noted in four BMPs, and is in the process of being repaired.

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

CTH VV was reconstructed from Marcy Rd to the Fox River, adding five bioretention basins in the highway median. The ten bioretention basins in CTH VV are noted as a single BMP on the map. CTH L was reconstructed from CTH Y to Lannon Rd, adding one wet detention basin. The MS4 map was revised to include the urban areas per the 2010 census. This added roughly 20 miles of county highways to those previously mapped. In the census a number of areas that had previously been deemed urban were re-classified as non-urban. These areas have been left as urban in the MS4 map, however. Revision of the map, including a detailed analysis of the conveyances and contributing watersheds is on-going, and will be completed by Fall 2015.

SECTION VI. Fiscal Analysis

- a. Provide a fiscal analysis that includes the annual expenditures for 2014, and the budget for 2014 and 2015. A table to document fiscal information is provided on page 9.

See table.

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

Storm water utility General fund Other _____

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

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

Storm water permit fees and a DATCP conservation staffing grant (SWRM program) help support ordinance enforcement and storm water planning activities. Municipal service fees help support public education and outreach programs. All other programs are supported by county levy.

SECTION VII. Inspections and Enforcement Actions

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

- a. As of the date of this annual report, has the municipality updated or revised its construction site pollutant control ordinance in accordance with subsection 2.4.1 of the general permit? Yes No If yes, attach copy or provide web link to ordinance:
http://www.waukeshacounty.gov/defaultwc.aspx?id=41770
- b. As of the date of this annual report, has the municipality updated or revised its post-construction storm water management ordinance in accordance with subsection 2.5.1 of the general permit? Yes No
If yes, attach copy or provide web link to ordinance: http://www.waukeshacounty.gov/defaultwc.aspx?id=41770
- c. As of the date of this annual report, has the municipality updated or revised its illicit discharge detection and elimination ordinance in accordance with subsection 2.3.1 of the general permit? Yes No If yes, attach copy or provide web link to ordinance:
http://www.waukeshacounty.gov/defaultwc.aspx?id=41770
- d. As of the date of this annual report, has the municipality adopted any other ordinances it has deemed necessary to implement a program under the general permit (e.g., pet waste ordinance, leaf management/yard waste ordinance, parking restrictions for street cleaning, etc.)? Yes No If yes, attach copy or provide web link to ordinance:
- e. Provide a summary of available information on the number and nature of inspections and enforcement actions conducted during the reporting period to ensure compliance with the ordinances described in a. to d. above.

Inspections

786 construction inspections by Waukesha County staff
54 Sites passed final inspection (included in total above)
16 Sites failed final inspection (included in total above)

Permits

83 Permit applications received
14 Permits issued with NR 216 coverage
64 Permits issued without NR 216 coverage
13 Permits extended
57 Permits terminated

Enforcement Actions Taken*

5 Investigations conducted
1 enforcement conference held
1 Notice of non-compliance issued
3 Notices of violation issued
5 Satisfactions of enforcement

*Refer to the Enforcement Action Summary for 2014 and the Storm Water Database for details.

SECTION VIII. Water Quality Concerns

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

The road ditches of CTH I discharge to the Mukwonago River between sections 27 and 29 of the Town of Mukwonago. The road ditches of CTH K discharge to the Oconomowoc River in Section 19 of the Town of Merton. Parts of CTH D and DE in Section 15 of the Town of Genesee discharge to Genesee Creek.
- b. Does any part of the MS4 discharge to an impaired waterbody listed in accordance with section 303(d)(1) of the federal Clean Water Act, 33 USC § 1313(d)(1)(C)? (A list of the most current Wisconsin impaired waterbodies may be found on the Department's Internet site at: <http://dnr.wi.gov/water/impairedsearch.aspx?status=303d>) Yes No If yes, complete the following:
 - Impaired waterbody to which the MS4 discharges:
The Upper Fox River.

SECTION VIII. Water Quality Concerns (continued)

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

The county has adopted and implemented an ordinance that includes construction site pollutant control, post construction storm water management, and illicit discharge elimination. The county has implemented an outreach and education program, that includes such activities as storm drain stenciling within the watershed of the impaired water body. The county uses a vacuum- and water-assisted sweeper to clean the urban cross-section streets within the watershed twice annually. The county has developed a storm water maintenance plan for the best management practices operated by the county within the watershed. The county has not developed or implemented a municipal storm water management program because the county's assessment of compliance indicated that the NR 151.13(2) total suspended solids reduction goals were already being met county-wide, and the stated purpose of the program is to bring a non-complying municipality into compliance.

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

None observed. See discussion below in (d).

- 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.

During 2014, the DNR stream biologist was contacted once during the summer regarding very low oxygen levels in Pewaukee River. The stream biologist investigated and believes there was a short time period of oxygen depletion following a die off of a fairly large quantity of aquatic vegetation. Oxygen levels returned to more normal levels within a week. We also continue to monitor conductivity during the winter as an indicator of road salts. We found two sites that had EPA chronic levels for an extended period. Water samples were submitted to the state lab. Waukesha County continues to use innovative methods of road salt application to reduce the amounts being applied. Chloride levels all over the state continue to rise. We also completed phosphorus sampling on Pebble Creek and levels measured at the state lab met acceptable water quality standards.

SECTION IX. Proposed Program Changes

Describe any proposed changes to the storm water management program being contemplated by the municipality for 2015 and the schedule for implementing those changes. Proposed program changes must be consistent with the requirements of the general permit.

The county will revise its water quality assessment model to reflect changes in the MS4 map. The map will be completed for the Rock River TMDL, and the water quality assessment for the TMDL will also be completed.

SECTION X. Other

Any other additional information the permittee would like to provide in the Annual Report regarding their storm water program?

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

Program Element	Annual Expenditure 2014	2014	Budget 2015	Source of Funds
Public Education and Outreach				Cannot divide up county costs as requested. All program funds are combined, and activities are currently performed in-house (no contracts). See totals below
Public Involvement and Participation				
Illicit Discharge Detection and Elimination				
Construction Site Pollutant Control				
Post-Construction Storm Water Management				
Pollution Prevention				
Storm Water Quality Management (including pollutant-loading analysis)				
Storm Sewer System Map				
Other:	597,051	688,374	697,294	

NORTHERN REGION COUNTIES

Ashland	Langlade	DNR Service Center
Barron	Lincoln	Attn: Storm Water Program
Bayfield	Oneida	5301 Rib Mountain Rd.
Burnett	Polk	Wausau, WI 54401
Douglas	Price	Phone: (715) 359-4522
Florence	Rusk	
Forest	Sawyer	
Iron	Taylor	
	Vilas	
	Washburn	

WEST CENTRAL REGION COUNTIES

Adams	Marathon	DNR Service Center
Buffalo	Monroe	Attn: Storm Water Program
Chippewa	Pepin	5301 Rib Mountain Rd.
Clark	Pierce	Wausau, WI 54401
Crawford	Portage	Phone: (715) 359-4522
Dunn	St. Croix	
Eau Claire	Trempealeau	
Jackson	Vernon	
Juneau	Wood	
La Crosse		

NORTHEAST REGION COUNTIES

Brown	Marquette	DNR Northeast Region
Calumet	Menominee	Attn: Storm Water Program
Door	Oconto	2984 Shawano Ave.
Fond du Lac	Outagamie	Green Bay, WI 54313
Green Lake	Shawano	Phone: (920) 662-5100
Kewaunee	Waupaca	
Manitowoc	Waushara	
Marinette	Winnebago	

SOUTH CENTRAL REGION COUNTIES

Columbia	Jefferson	DNR South Central Region
Dane	LaFayette	Attn: Storm Water Program
Dodge	Richland	3911 Fish Hatchery Rd.
Grant	Rock	Fitchburg, WI 53711
Green	Sauk	Phone: (608) 275-3266
Iowa		

SOUTHEAST REGION COUNTIES

Kenosha	Sheboygan	DNR Service Center
Milwaukee	Walworth	Attn: Storm Water Program
Ozaukee	Washington	141 NW Barstow Street,
Racine	Waukesha	Room 180
		Waukesha, WI 53188
		(262) 574-2100

INFC

Target --from workplan	Date	What
Contractors, Dev. & Consul	4-9-14	1. Workshop
Contractors, Dev. & Consul	5-21-14	training
Contractors, Dev. & Consul	10-16-14	training
General Public	6-4-14	1. Storm Drain Stenciling
General Public	5-3-14	10 . Stream monitoring
General Public	5-8-14	10 Stream Monitoring
General Public	5-10-14	10 Stream Monitoring
General Public	5-23-14	10 Stream Monitoring
General Public	5-24-14	10 Stream Monitoring
General Public	1-25-14	10. Stream Monitoring
General Public	5-7-14	10. Stream Monitoring
General Public	5-19-14	10. Stream Monitoring
General Public	6-10-14	10. Stream Monitoring
General Public	2-27-14	2. news releases/articles
General Public	6-2-14	2. news releases/articles
General Public	7-7-14	2. news releases/articles
General Public	1-19-14	2. Presentation
General Public	3-12-13	3. Presentation
General Public	4-14-14	3. Presentation
General Public	4-24-14	3. Presentation
General Public	4-26-14	3. Presentation
General Public	4-27-14	3. Presentation
General Public	5-3-14	3. Presentation
General Public	5-6-14	3. Presentation
General Public	5-13-14	3. Presentation
General Public	6-18-14	3. Presentation
General Public	7-8-14	3. Presentation
General Public	7-24-14	3. Presentation
General Public	11-15-14	3. Presentation
General Public	6-17/20-14	3. Presentation
General Public	9-20-14	4. Displays and Handouts
General Public	2-8-14	4. Displays and Handouts
General Public	2-9-14	4. Displays and Handouts
General Public	3-15-14	4. Displays and Handouts
General Public	3-21-14	4. Displays and Handouts
General Public	3-23-14	4. Displays and Handouts
General Public	3-27-14	4. Displays and Handouts
General Public	3-29-14	4. Displays and Handouts
General Public	4-9-14	4. Displays and Handouts
General Public	4-17-14	4. Displays and Handouts
General Public	5-3-14	4. Displays and Handouts
General Public	5-20-14	4. Displays and Handouts
General Public	5-31-14	4. Displays and Handouts
General Public	5-31-14	4. Displays and handouts

General Public	4. Displays and Handouts	6-12-14
General Public	4. Displays and Handouts	6-19-14
General Public	4. Displays and Handouts	6-21-14
General Public	4. Displays and Handouts	6-23-14
General Public	4. Displays and Handouts	7-2-14
General Public	4. Displays and Handouts	7-12-14
General Public	4. Displays and Handouts	7-23-14
General Public	4. Displays and Handouts	7-30-14
General Public	4. Displays and Handouts	8-5-14
General Public	4. Displays and Handouts	8-5-14
General Public	4. Displays and Handouts	8-8-14
General Public	4. Displays and Handouts	8-11-14
General Public	4. Displays and Handouts	8-19-14
General Public	4. Displays and Handouts	8-21-14
General Public	4. Displays and Handouts	9-6-14
General Public	4. Displays and Handouts	11-10-14
General Public	4. Displays and Handouts	11-17-14
General Public	4. Displays and Handouts	12-2-14
General Public	4. Displays and Handouts	10-3/10-14
General Public	4. Displays and Handouts	12-19 to 1-2
General Public	4. Displays and Handouts	1-3 to 1-17-14
General Public	4. Displays and Handouts	8-9/10-14
General Public	4. Displays and Handouts	9-12/14-14
General Public	6. rain garden and rain barrels	2-19-14
General Public	6. rain garden and rain barrels	3-14-14
General Public	6. rain garden and rain barrels	3-22-14
General Public	6. rain garden and rain barrels	4-26-14
General Public	6. rain garden and rain barrels	4-29-14
General Public	6. rain garden and rain barrels	5-10-14
General Public	6. rain garden and rain barrels	5-17-14
General Public	6. rain garden and rain barrels	9-4-14
General Public	6. rain garden and rain barrels	10-9-14
General Public	8. Hazardous waste	3-25-14
General Public	8. Hazardous waste	8-5-14
General Public	8. Hazardous waste	11-10-14
General Public	9. Composting	3-13-14
General Public	9. Composting	3-19-14
General Public	9. Composting	3-22-14
General Public	9. Composting	4-3-14
General Public	9. Composting	4-8-14
General Public	9. Composting	4-14-14
General Public	9. Composting	4-17-14
General Public	9. Composting	4-22-14
General Public	9. Composting	4-29-14
General Public	9. Composting	5-8-14
General Public	9. Composting	5-10-14
General Public	9. Composting	5-15-14

General Public	9. Composting	9-16-14
General Public	9. Composting	9-17-14
General Public	9. Composting	9-18-14
General Public	9. Composting	9-22-14
General Public	9. Composting	9-23-14
General Public	9. Composting	9-25-14
General Public	9. Composting	10-7-14
General Public	9. Composting	10-8-14
General Public	9. Composting	10-11-14
Internal	training	1-16-14
Internal	training	1-16-14
Internal	training	1-22-14
Internal	training	1-30-14
Internal	training	2-3-14
Internal	training	2-11-14
Internal	training	2-12-14
Internal	training	2-12-14
Internal	training	2-25-14
Internal	training	2-26-14
Internal	training	3-4/5-14
Internal	training	3-21-14
Internal	training	4-9-14
Internal	training	4-14-14
Internal	training	5-21-14
Internal	training	6-9-14
Internal	training	6-23-14
Internal	training	6-29-14
Internal	training	7-9-14
Internal	training	7-12-14
Internal	training	7-14-14
Internal	training	7-22-14
Internal	training	8-4-14
Internal	training	8-5-14
Internal	training	8-27-14
Internal	training	9-8-14
Internal	training	9-15-14
Internal	training	9-15-14
Internal	training	9-16-15
Internal	training	9-17-14
Internal	training	9-18-14
Internal	training	10-8-14
Internal	training	10-9-14
Internal	training	10-13-14
Internal	training	10-14-14
Internal	training	10-16-14
Internal	training	10-21-14
Internal	training	2-5/6-14

Internal	training	3-10 to 3-12-14
Internal	training	7-16 to 18-14
Internal	training	11-6-14
Internal	training	11-11-14
Internal	training	11-18-14
Internal	training	11-21-14
Internal	training	12-8-14
Internal	training	12-15-14
Teachers and Students	1. training	4-8-14
Teachers and Students	1. training	7-28/31-14
Teachers and Students	3. Presentation	2-18-14
Teachers and Students	3. Presentation	3-7-14
Teachers and Students	3. Presentation	4-2-14
Teachers and Students	3. Presentation	4-25-14
Teachers and Students	3. Presentation	5-9-14
Teachers and Students	3. Presentation	5-13-14
Teachers and Students	3. Presentation	5-16-14
Teachers and Students	3. Presentation	5-23-14
Teachers and Students	3. Presentation	6-5-14
Teachers and Students	3. Presentation	6-5-2014
Teachers and Students	3. Presentation	10-1-14
Teachers and Students	3. Presentation	10-7-14
Teachers and Students	3. Presentation	10-20-14
Teachers and Students	3. Presentation	10-20-14
Teachers and Students	3. Presentation	4-16/17-14
Teachers and Students	4. Displays and Handouts	1-15-14
Teachers and Students	4. Field Experience	5-20-14
Teachers and Students	4. Field Experience	5-22-14
Teachers and Students	4. Field Experience	5-29-14
Teachers and Students	4. Field Experience	5-30-14
Teachers and Students	4. Field Experience	5-30-14
Teachers and Students	4. Field Experience	6-6-14
Teachers and Students	4. Field Experience	6-6-14
Teachers and Students	4. Field Experience	6-16-14
Teachers and Students	4. Field Experience	9-15-14
Teachers and Students	4. Field Experience	9-23-14
Teachers and Students	4. Field Experience	9-23-14
Teachers and Students	4. Field Experience	11-14-14
Teachers and Students	4. green schools	4-30-14
Teachers and Students	4. green schools	5-17-14

FORMATION AND EDUCATION LEDGER OF ACTIVITIES

Where	# People	Additional Description or Information
Waukesha	96	annual stormwater workshop at Ruekert and Mielke
Waukesha County	5	hosted webinar on BMP maintenance--1 county staff and
statewide	35	provided Water Star Webinar on BMP maintenance
Menomonee Falls		made supplies available to Menomonee Falls High School
Waterville field station	19	annual volunteer monitoring training
Mill Creek	1	benchmark at Mill Creek from Big Bend Rd
Hartland	2	benchmark for Bark River in Nixon Park
Scuppernong Creek	1	benchmark for Scuppernong Creek at Highway 18
Muskego	3	benchmark for creek
Retzer Nature Center	24	annual volunteer appreciation event
Pewaukee River	3	benchmark at Siepmann site
Scuppernong River	1	benchmark for Hwy Z location
Waukesha	1	Benchmark for Fox River at EB Shurts Bldg. press release for rain garden grant program Lawn Care/Follow the Flow article
countywide		press release for oil filter and antifreeze recycling
Retzer Nature Center	200	aquatic macros at Retzer Jan-boree event
TV		appearance on Morning Blend show to promote compost
Menomonee Falls	22	speaking for "Newcomers" group at library
Retzer Nature Center	17	Soil and Water Conservation merit badge clinic
Waukesha	259	MRF open house
Elm Grove	13	organic lawn care workshop
Stone Bank	10	organic lawn care workshop
Mukwonago	27	organic lawn care workshop
North Prairie	21	presentation for girl scout troop at Prairieview Elementar
Menomonee Falls	40	activities for Cub Scout Day Camp
Muskego	13	power point presentation at public library
Waukesha	28	program for Waukesha Public Library kids program
Waukesha	252	used watershed model at Material Recycling Facility open
Retzer Nature Center	62	Environmental Science merit badge class
Retzer Nature Center	5000	outreach booth at annual Apple Harvest Fest
Elm Grove	70	display at sustainable living event at Sisters of Notre Dam
Oconomowoc	200	display at winter farmers market
Hamilton High School	2500	display at Sussex Spring Fest
Burlington	140	display at Fox River Summit
St. Bruno's, Dousman	110	display at St. Brunos to accompany special stewardship pi
WCTC Waukesha campus	200	display at recreation and education fair at WCTC downtow
Arrowhead HS	2500	display at Lake Country Community Fest
Waukesha	200	after school spring fair event--used watershed model
Oconomowoc	11	Part of Chamber roundtable at Nature Hill Elementary
Village of Merton	350	display at pancake breakfast at firestation
Town of Lisbon	100	display at firehouse open house and blood drive
Retzer Nature Center	100	set up Carry Creek display for one week in lobby of Retzer
Wales	50	display at Waukesha Co. Green Team Green Market in W;

Oconomowoc	300	used watershed model for outreach at Moonlit Movies in
Sussex	50	display at Sussex Cruise Night
Pewaukee	300	Carry Creek display for Clean Water Festival on the beach
Hartland	400	display boards at Public library for one week
Dousman	30	display at local Farmers Market
Genesee Depot	120	watershed model at Depot Daze
Pewaukee	30	watershed model at Waterfront Wednesday event
Hartland	400	booth at Hartland Kids Fest
Merton	300	display at annual night out event
Mukwonago	300	staffed display at night out event
Sussex	50	staffed display at movie night
Lisbon	50	unmanned display at Soccer Camp in Lisbon
Oconomowoc	500	display at kids fest in Roosevelt Park
Hartland	50	aquatic bugs at movie night
Oconomowoc	75	outreach booth at Farmers Market
Hartland	40	handed out EE guides at Girl Scout leaders area meeting
Mukwonago	20	handed out EE guides at Girl Scout leaders area meeting
Merton	150	display at annual tree lighting and visit with Santa event
Oconomowoc	420	display at public library for stormwater week
Pewaukee	200	display at City Hall during tax time
Muskego	500	display at Muskego City Library
Lisbon	1500	unmanned display at Heritage Days in Lisbon
North Prairie	4500	display at annual fall harvest event
Oconomowoc	58	rain garden program in cooperation with County Green Tr
countywide	64	annual rain garden plant sale---64 orders received
Retzer Nature Center	13	rain garden/rain barrel workshop
Waukesha	9	rain garden/barrel program at Good Harvest Market
Delafield	29	rain garden/barrel program with County Green Team at C
Retzer Nature Center	50	sold 47 single barrels and 3 tandem barrels at Retzer sprir
Retzer Nature Center	57	plant pick up for Graham martin foundation program
New Berlin	3	evening program at Poplar Creek Garden Center
Oconomowoc	26	rain garden/barrel presentation for retired teachers grou
Elm Grove	26	Green Cleaning program
Muskego	15	Green Cleaning program
New Berlin	10	Green Cleaning program
Hartland Library	17	composting class
Hartland	17	composting program at public library
Retzer Nature Center	17	organic lawn care workshop
New Berlin	9	composting class at New Berlin Public Library
Mukwonago	42	composting class at Mukwonago Public Library
Eagle	9	composting program at public library
Menomonee Fallas	28	composting program at public library
Elm Grove	20	composting program at public library
Muskego	41	composting program at public library
Delafield	33	composting program at public library
Retzer Nature Center	45	composting class to go with compost bin sale
Chenequa	60	composting program at public library

Elm Grove	16	fall leaf and yard care class
Menomonee Falls	8	fall leaf and yard care class
Waukesha	22	fall leaf and yard care class
Brookfield	31	fall leaf and yard care class
Delafield	24	fall leaf and yard care class
Mukwonago	22	fall leaf and yard care class
Pewaukee	20	fall leaf and yard care class
Muskego	12	fall leaf and yard care class
Retzer Nature Center	5	fall leaf and yard care class
webinar	1	NACD webinar on effective Information and Education Str
webinar	1	Water Star Webinar on Impacts of local codes on Green Li
webinar	1	webinar on Informaton and Education programs
webinar	5	Forester University webinar titled "Voodoo Hydrology"
Waukesha DPW	3	survey training
Ruekert and Mielke	1	TMDL/flooding training
webinar	4	pervious pavement webinar
	1	ArcHydro GIS Tool training
country Springs	1	Permeable pavement
	1	NRCS Technical Update
Neenah	1	Fox Wolf Watershed Alliance Conference
	2	Fox River Summit
Waukesha County	4	Waukesha County Stormwater Workshop
Waukesha DPW	1	bridge inspections
webinar	1	BMP maintenance CWP
Waukesha DPW	1	Intersection improvement
Waukesha DPW	2	transportation project plats seminar
Agrecol	1	site stabilization, revegation, BMP's
Waukesha DPW	3	storm sewer mapping
LuLu Lake Conservancy	1	corbicula monitoring training
Waukesha DPW	3	Autocad workshop
	1	USGS webinar on impacts of salts on surface waters
Waukesha DPW	1	retaining walls
Oregon	2	Stormcon conference
Waukesha County	8	annual LRD tour
Spancrete	4	Permeable pavement
Waukesha DPW	1	access permits
webinar	1	Wetlands, Wildlife and Flood hazards in the Rock River W
	1	Wi Leadership Initiative Training
Waukesha County	4	LIDAR training
webinar	1	Water Star webinar on storm water management
	1	Cover Crop training
webinar	2	MS4 overview
Waukesha DPW	1	traffic engineering
	3	SE area Land and Water Tour
	1	healthy soils training class
Rock River	1	identification of actually restorable wetlands
conference	3	NASECA conference

	4	WLWCA Professional Improvement Conference
Eagle River	2	stream biology training
WEF	1	Potential impacts of Waters of the US rulemaking on Stor
webinar	1	Cost benefit analysis and natural conservation as a mitiga
webinar	3	NACD Soil Health Webinar
DNR Waukesha	4	ALP quarterly meeting and wetland updates
	1	Nutrient Management, Soil Health and Cover Crop trainin
Waukesha DPW	1	Pavement management
Retzer Nature Center	14	Project WET for green schools training
Brookfield	10	4-day training class for teachers through WEI academy
New Berlin	29	watershed model used for career day at New Berlin West
Carroll University	13	water quality testing lab at Carroll
Merton Intermediate	100	power point presentation for 5th grade followed by hand
Genesse Depot	60	Magee Elementary Earth Day celebration program
Menomonee Falls	335	7th grade students attending storm water expo
Eagleville Elementary	97	Soils presentations for entire school activity
Dixon Elementary	11	presentation to students at high interest day activities
Pewaukee High School	240	powerpoint program for 5th grade in preparation for Carr
Waukesha	45	Butler Middle School presentation
New Berlin	44	Holy Apostles 5th grade class
New Berlin	33	watershed model at Career Day
Waukesha	66	presentation at career expo in Waukesha serving schools
Prairie Elementary	127	Waukesha Schools soil program for 2nd and 3rd grades
Nature's Classroom Institute	12	WAV training for 7/8 grade students
Sussex	132	groundwater program using model for all 5th grade at Wc
Eagleville Elementary	75	watershed model at school event
Muskego High School	21	water testing with science class
Eagleville Elementary	103	water study for all students with jericho creek
Camp Whitcomb	150	lake study program for Pewaukee 5th graders
Camp Whitcomb	100	lake study program for Pewaukee 5th graders
Bethesda Park, Waukesha	100	New Berlin 6th grade
Waukesha	50	Holy Apostles 5th grade class at Bethesda park for field e
Mukwonago	8	trained 2nd Chance class to do monitoring at Jericho Cree
Eagleville Elementary	60	monitoring with 5th and 6th grade summer school and st
Menomonee Falls	18	provided soil probes for use in 5th grade class
Muskego	11	water testing with high school science class
Menomonee Falls	25	water testing with science class
UW-Waukesha Field Station	20	field experience in water testing for Field Biology class of
Prairie Hill Waldorf		provided rain barrel and diverter for use at school throug
St. Paul's Genesee		provided rain garden plants to expand rain garden

Enforcement Actions 2014

<u>NoteDate</u>	<u>NoteDesc</u>	<u>ProjectName</u>	<u>Insert_By</u>
3/16/14	Sent Notice of Non-Compliance	A test project	abarrows
7/7/14	Sent Notice of Violation	Cadd fill	lhauge
7/10/14	Satisfaction of Enforcement	Cadd fill	lhauge
9/15/14	Sent Notice of Violation	CTH NN Gas Main	abarrows
11/6/14	Satisfaction of Enforcement	CTH NN Gas Main	abarrows
6/2/14	Posted Stop Work Order	Hamilton High School Indoor Practice Facility	abarrows
11/7/14	Conducted Inspection / Investigation	Jahnke Fill Complaint	lhauge
4/2/14	Other Note	Kaishian Fill Site	plindquist
8/19/14	Other Note	Nehlsen Property	abarrows
8/28/14	Conducted Inspection / Investigation	Nehlsen Property	abarrows
9/8/14	Conducted Inspection / Investigation	Nehlsen Property	abarrows
9/9/14	Other Note	Nehlsen Property	abarrows
9/15/14	Other Note	Nehlsen Property	abarrows
10/2/14	Other Note	Nehlsen Property	abarrows
10/15/14	Enforcement Conference	Nehlsen Property	abarrows
7/3/14	Conducted Inspection / Investigation	Schubert Landscaping	lhauge
3/13/14	Sent Notice of Violation	Thelen Funeral Home	lhauge
3/14/14	Set New Compliance Deadline	Thelen Funeral Home	lhauge
3/18/14	Conducted Inspection / Investigation	Thelen Funeral Home	lhauge
3/18/14	Satisfaction of Enforcement	Thelen Funeral Home	lhauge

2014 Activity Summary Report Waukesha County Storm Water Education Program

As part of the agreements Waukesha County has with 25 participating communities, and as required in our storm water discharge permits from DNR, an annual report of storm water education activities is required. This report represents a summary of the activities Waukesha County has been involved with during 2014, sorted by the target audience.

Target Audience: Contractors, Developers, Consultants and Municipal officials

- Held annual storm water workshop in April, focused on storm water regulations, planning and BMP updates. Workshop was filled with 96 people and received very positive ratings in evaluations.
- Presented to 35 people statewide in Water Star webinar on BMP Maintenance.
- Presented to 1 municipal board meeting with 25 in attendance with information on the storm water program as well as recycling updates.
- Hosted national webinar for municipalities on BMP maintenance.

Target Audience: General Public

- One school group and one municipality stenciled.
- Made one TV appearance on the Morning Blend promoting composting and recycling.
- Produced and released 8 different news articles or ads on various topics such as rain gardens, stream monitoring, rain barrels and water conservation.
- Distributed over 100,000 newsletters with recycling and storm water information
- Presented hands-on programs on storm water runoff and pollution prevention actions to 456 county residents at 13 different events/locations.
- Toured the display boards to 30 different community events/locations with an estimated audience of over 21,000 people. The display covers basic storm drain and runoff information as well as specific information on rain gardens, rain barrels, shoreland restoration, pet waste, car washing, fertilizer, chemical use and more.
- Gave 6 presentations on rain gardens and rain barrels to 138 people.
- Sold 53 rain barrels in promotional 1 day sale.
- Sold and distributed 3900 rain garden plants to 64 people through the Graham Martin Foundation grant program.
- Provided equipment and maintained 40 stream monitoring sites throughout the county. Of these, 34 sites were monitored at level 1 and 7 sites were monitored at level 2. Nineteen new volunteers were trained this year and a waiting list is established for 2015.
- Taught 21 yard care/composting classes to 498 people.
- Sold over 55 compost bins through special sales.
- Composted over 4200 tons of community yard waste at the Waukesha County Yard Waste Composting site in the Town of Genesee.

- Collected over 211,000 pounds of household and agricultural hazardous waste from 4 permanent county collection points and several seasonal sites with a total of nearly 4900 participants.
- Taught 3 Green Cleaning classes to 51 people.

Teachers and Students

- Trained 10 local teachers through a week-long Wisconsin Education Innovations Summer Academy course. Training included soils and erosion, natural resources, composting, water pollution, watershed management and groundwater protection.
- Trained 14 teachers/naturalists in Project WET (Water Education for Teachers), a hands-on supplement of water related educational activities.
- Presented at 16 schools to over 1400 students information on runoff pollution and how to prevent it.
- Provided field experience in water testing for 12 schools and over 660 students.
- Funded two water projects through the Green Schools program. Through this program, the county offers technical and financial assistance in recycling, waste reduction, water conservation and water pollution control activities. Projects included expanding a rain garden at St. Paul's in Genesee Depot and a rain barrel at Prairie Hill Waldorf School.