

Submittal of Annual Reports and Other Compliance Documents for Municipal Separate Storm Sewer System (MS4) Permits

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. After 120 days your draft is **deleted**.

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Form 3400-224(R8/2021)

Reporting Information :

Will you be completing the Annual Report or other submittal type? Annual Report Other

Project Name: 2025 Annual Report

County: Milwaukee

Municipality: Wauwatosa, City

Permit Number: S065404

Facility Number: 31319

Reporting Year: 2025

Is this submittal also satisfying an Urban Nonpoint Source Grant funded deliverable? Yes No

Required Attachments and Supplemental Information

Please complete the contents of each tab to submit your MS4 permit compliance document. The information included in this checklist is necessary for a complete submittal. A complete and detailed submittal will help us review about your MS4 permit document. To help us make a decision in the shortest amount of time possible, the following information must be submitted:

Annual Report

- Review related web site and instructions for [Municipal storm water permit eReporting](#) [Exit Form]
- Complete all required fields on the annual report form and upload required attachments
- Attach the following other supporting documents as appropriate using the attachments tab above
 - Public Education and Outreach Annual Report Summary
 - Public Involvement and Participation Annual Report Summary
 - Illicit Discharge Detection and Elimination Annual Report Summary
 - Construction Site Pollution Control Annual Report Summary
 - Post-Construction Storm Water Management Annual Report Summary
 - Pollution Prevention Annual Report Summary
 - Leaf and Yard Waste Management
 - Municipal Facility (BMP) Inspection Report
 - Municipal Property SWPPP
 - Municipally Property Inspection Report
 - Winter Road Maintenance
 - Storm Sewer Map Annual Report Attachment
 - Storm Water Quality Management Annual Report Attachment

- TMDL Attachment
 - Storm Water Consortium/Group Report
 - Municipal Cooperation Attachment
 - Other Annual Report Attachment
- Attach the following permit compliance documents as appropriate using the attachments tab above
- Storm Water Management Program
 - Public Education and Outreach Program
 - Public Involvement and Participation Program
 - Illicit Discharge Detection and Elimination Program
 - Construction Site Pollutant Control Program
 - Post-Construction Storm Water Management Program
 - Pollution Prevention Program
 - Municipal Storm Water Management Facility (BMP) Inventory
 - Municipal Storm Water Management Facility (BMP) Inspection and Maintenance Plan
 - Total Maximum Daily Load documents *(*If applicable, see permit for due dates.)*
 - TMDL Mapping*
 - TMDL Modeling*
 - TMDL Implementation Plan*
 - Fecal Coliform Screening Parameter *
 - Fecal Coliform Inventory and Map *(S050075-03 general permittees Appendix B B.5.2 – document due to the department by March 31, 2022)*
 - Fecal Coliform Source Elimination Plan *(S050075-03 general permittees Appendix B - document due to the department by October 31, 2023)*
- Sign and Submit form

Municipal Contact Information- Complete

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 (Department) by March 31 of each year to report on activities for the previous calendar year ("reporting year"). This form is being provided by the Department for the user's convenience for reporting on activities undertaken in each reporting year of the permit term. 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.].

Note: Compliance items must be submitted using the Attachments tab.

Municipality Information

Name of Municipality: Wauwatosa, City

Facility ID # or (FIN): 31319

Updated Information: Check to update mailing address information

Mailing Address: 7725 W. North Ave

Mailing Address 2:

City: Wauwatosa, City

State: WI

Zip Code: 53213 xxxxx or xxxxx-xxxx

Primary Municipal Contact Person (Authorized Representative for MS4 Permit)

The "Authorized Representative" or "Authorized Municipal Contact" includes the municipal official that was charged with compliance and oversight of the permit conditions, and has signature authority for submitting permit documents to the Department (i.e., Mayor, Municipal Administrator, Director of Public Works, City Engineer).

Select to **create new** primary contact

First Name: Maggie

Last Name: Anderson, P.E.

Select to **update** current contact information

Title: Senior Civil Engineer

Mailing Address: 7725 W. North Ave

Mailing Address 2:

City: Wauwatosa

State: WI

Zip Code: 53213 xxxxx or xxxxx-xxxx

Phone Number: 414-479-3444 Ext: xxx-xxx-xxxx

Email: manderson@wauwatosa.net

Additional Contacts Information (Optional)

I&E Program

**Individual with responsibility for:
(Check all that apply)**

- IDDE Program
- IDDE Response Procedure Manual
- Municipal-wide Water Quality Plan
- Ordinances
- Pollution Prevention Program
- Post-Construction Program
- Winter roadway maintenance

First Name:

Last Name:

Title:

Mailing Address:

Mailing Address 2:

City:

State:

Zip Code: xxxxx or xxxxx-xxxx

Phone Number: Ext: xxx-xxx-xxxx

Email:

**Individual with responsibility for:
(Check all that apply)**

- I&E Program
- IDDE Program
- IDDE Response Procedure Manual
- Municipal-wide Water Quality Plan
- Ordinances
- Pollution Prevention Program
- Post-Construction Program
- Winter roadway maintenance

First Name:

Last Name:

Title:

Mailing Address:

Mailing Address 2:

City:

State:

Zip Code: xxxxx or xxxxx-xxxx

Phone Number: Ext: xxx-xxx-xxxx

Email:

- I&E Program

**Individual with responsibility for:
(Check all that apply)**

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Last Name:

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Mailing Address 2:

City:

State:

Zip Code: xxxxx or xxxxx-xxxx

Phone Number: Ext: xxx-xxx-xxxx

Email:

**Individual with responsibility for:
(Check all that apply)**

- I&E Program
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- Municipal-wide Water Quality Plan
- Ordinances
- Pollution Prevention Program
- Post-Construction Program
- Winter roadway maintenance

First Name:

Last Name:

Title:

Mailing Address:

Mailing Address 2:

City:

State:

Zip Code: xxxxx or xxxxx-xxxx

Phone Number: Ext: xxx-xxx-xxxx

Email:

Select to **create new** Billing contact

First Name: Kristen

Last Name: Kilsdonk

Select to **update** current contact information

Title: Business Manager

Mailing Address: 11100 W Walnut Rd

Mailing Address 2:

City: Wauwatosa

State: WI

Zip Code: 53226 xxxxx or xxxxx-xxxx

Phone Number: 414-831-0804 **Ext:** xxx-xxx-xxxx

Email: kkilsdonk@wauwatosa.gov

1. Does the municipality rely on another entity to satisfy some of the permit requirements?

Yes No

Public Education and Outreach SWWT

Public Involvement and Participation SWWT

Illicit Discharge Detection and Elimination SWWT

Construction Site Pollutant Control

Post-Construction Storm Water Management

Pollution Prevention

2. Has there been any changes to the municipality's participation in group efforts towards permit compliances (i.e., the municipality has added or dropped consortium membership)?

Yes No

Missing Information

Do not close your work until you SAVE.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7.

Form 3400-224 (R8/2021)

Minimum Control Measures- Section 1 : Complete

1. Public Education and Outreach

- a. Does MS4 conduct any educational efforts or events independently (not with a group) Yes No
- b. How many total educational events were held during the reporting year:
- c. Were any of the public education and outreach delivery mechanisms conducted during the reporting year active or interactive? Yes No
- d. Please select all storm water topics, target audiences, and delivery mechanisms used in the reporting year

Public Education and Outreach Delivery Mechanisms (Active and Passive)	
Active/Interactive Mechanisms	Passive Mechanisms
<input type="checkbox"/> Education activities (school presentations, summer camps)	<input type="checkbox"/> Passive print media (brochures at front desk, posters, etc.)
<input checked="" type="checkbox"/> Information booth at event	<input checked="" type="checkbox"/> Distribution of print media (mailings, newsletters, etc.) via mail or email.
<input type="checkbox"/> Targeted group training (contractors, consultants, etc.)	<input checked="" type="checkbox"/> Media offerings (radio and TV ads, press release, etc.)
<input checked="" type="checkbox"/> Government event (public hearing, council meeting)	<input checked="" type="checkbox"/> Social media posts
<input checked="" type="checkbox"/> Workshops	<input type="checkbox"/> Signage
<input type="checkbox"/> Tours	<input checked="" type="checkbox"/> Website
<input checked="" type="checkbox"/> Other: <input type="text" value="Stormwater Tree Pickup Event"/>	<input checked="" type="checkbox"/> Other: <input type="text" value="TV Display"/>

Topics Covered	Target Audience
<input checked="" type="checkbox"/> Illicit discharge detection and elimination	<input checked="" type="checkbox"/> General Public
<input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing	<input checked="" type="checkbox"/> Public Employees
<input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application	<input checked="" type="checkbox"/> Residents
<input checked="" type="checkbox"/> Stream and shoreline management	<input checked="" type="checkbox"/> Businesses
<input checked="" type="checkbox"/> Residential infiltration	<input checked="" type="checkbox"/> Contractors
<input checked="" type="checkbox"/> Construction sites and post-construction storm water management	<input checked="" type="checkbox"/> Developers
<input checked="" type="checkbox"/> Pollution prevention	<input checked="" type="checkbox"/> Industries
<input checked="" type="checkbox"/> Green infrastructure/low impact development	<input checked="" type="checkbox"/> Public Officials
<input checked="" type="checkbox"/> Other: <input type="text" value="Snow and Ice Control, General Waters..."/>	<input type="checkbox"/> Other: <input type="text"/>

- e. Will additional information/summary of these education events be attached to the annual report? Yes No

If no, please provide additional comment in the brief explanation box below. *Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See attachment I for more information about the activities performed in partnership with SWWT.

Missing Information

Do not close your work until you SAVE.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 2 : Complete

2. Public Involvement and Participation

a. Permit Activities. Select all of the following topics the Permittee did to engage public participation and involvement.

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input checked="" type="checkbox"/> Other: <input type="text" value="Presentation to BPW"/>	<input checked="" type="checkbox"/> General Public <input checked="" type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input checked="" type="checkbox"/> Public Officials <input type="checkbox"/> Other	<u>11-50</u>	<input type="radio"/> Yes <input checked="" type="radio"/> No

b. Volunteer Activities. Select all of the following audiences targeted for volunteer involvement and participation related to storm water.

NA (Individual Permittee)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
Volunteer Opportunity	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input checked="" type="checkbox"/> Businesses <input checked="" type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Public Officials <input type="checkbox"/> Other	<u>51-100</u>	<input type="radio"/> Yes <input checked="" type="radio"/> No

c. Brief explanation on Public Involvement and Participation reporting. *Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment I & II for more information about activities performed in partnership with SWWT and on the City's individual efforts to educate and involve public officials, residents, business owners, etc.

Missing Information

Do not close your work until you **SAVE**.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 3 : Complete

3. Illicit Discharge Detection and Elimination

- | | |
|---|----------------------------------|
| a. How many total outfalls does the municipality have? | <input type="text" value="172"/> |
| b. How many major outfalls does the municipality have? | <input type="text" value="49"/> |
| c. How many outfalls did the municipality evaluate as part of their routine ongoing field screening program? | <input type="text" value="17"/> |
| d. From the municipality's routine screening, how many were confirmed illicit discharges? | <input type="text" value="0"/> |
| e. How many illicit discharge complaints did the municipality receive? | <input type="text" value="4"/> |
| f. From the complaints received, how many were confirmed illicit discharges? | <input type="text" value="2"/> |
| g. How many of the identified illicit discharges did the municipality eliminate in the reporting year (from both routine screening and complaints)? | <input type="text" value="2"/> |

(If the sum of 3.c. and 3.e. does not equal 3.f., please explain below.)

- h. What types of regulatory mechanisms does the municipality have available to compel compliance with this program? Check all that are available and how many times each were used in the reporting year.

- | | |
|---|--------------------------------|
| <input checked="" type="checkbox"/> Verbal Warning | <input type="text" value="1"/> |
| <input checked="" type="checkbox"/> Written Warning (including email) | <input type="text" value="1"/> |
| <input checked="" type="checkbox"/> Notice of Violation | <input type="text" value="0"/> |
| <input checked="" type="checkbox"/> Civil Penalty/ Citation | <input type="text" value="0"/> |

Additional Information:

- i. Brief explanation on Illicit Discharge Detection and Elimination reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment IV

Missing Information

Do not close your work until you **SAVE**.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 4 : Complete

4. Construction Site Pollutant Control

- a. How many total construction sites with one acre or more of land disturbing construction activity were active at any point in the reporting year?
- b. How many construction sites with one acre or more of land disturbing construction activity did the municipality issue permits for in the reporting year?
- c. How many erosion control inspections did the municipality complete in the reporting year (at sites with one acre or more of land disturbing construction activity)?
- d. What types of regulatory mechanisms does the municipality have available to compel compliance with this program? Check all that are available and how many times each were used in the reporting year.
- | | |
|---|---------------------------------|
| <input checked="" type="checkbox"/> Verbal Warning | <input type="text" value="2"/> |
| <input checked="" type="checkbox"/> Written Warning (including email) | <input type="text" value="22"/> |
| <input type="checkbox"/> Notice of Violation | <input type="text"/> |
| <input checked="" type="checkbox"/> Civil Penalty/ Citation | <input type="text" value="1"/> |
| <input checked="" type="checkbox"/> Stop Work Order | <input type="text" value="0"/> |
| <input checked="" type="checkbox"/> Forfeiture of Deposit | <input type="text" value="0"/> |
| <input type="checkbox"/> Other - Describe below | <input type="text"/> |
- e. Brief explanation on Construction Site Pollutant Control reporting . *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*
- See Attachment VI for supplemental information on Construction Site Pollutant Control.

Missing Information

Do not close your work until you **SAVE**.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 5 : Complete

5. Post-Construction Storm Water Management

- a. How many new structural storm water management Best Management Practice (BMP) have received local approval ?
*Engineered and constructed systems that are designed to provide storm water quality control such as wet detention ponds, constructed wetlands, infiltration basins, grassed swales, permeable pavement,
- b. Does the MS4 have procedures for inspecting and maintaining private storm Yes No

water facilities?

- c. If Yes, how many privately owned storm water management facilities were inspected in the reporting year? Inspections completed by private landowners should be included in the reported number.

32

- d. Does the municipality utilize privately owned storm water management BMP in its pollutant reduction analysis? Yes No
- e. Does MS4 have maintenance authority on these privately owned BMPs? Yes No

- f. What types of enforcement actions does the municipality have available to compel compliance with the regulatory mechanism? Check all that apply and enter the number of each used in the reporting year.

<input checked="" type="checkbox"/> Verbal Warning	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Written Warning (including email)	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Notice of Violation	<input type="text" value="0"/>
<input type="checkbox"/> Civil Penalty/ Citation	<input type="text"/>
<input checked="" type="checkbox"/> Forfeiture of Deposit	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Complete Maintenance	<input type="text" value="0"/>
<input checked="" type="checkbox"/> Bill Responsible Party	<input type="text" value="0"/>
<input type="checkbox"/> Other - Describe below	<input type="text"/>

- g. Brief explanation on Post-Construction Storm Water Management reporting. *If marked 'Unsure' on any questions above, justify your reasoning. Limit your response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment VII for supplemental information on Post-Construction Storm Water Management.

Missing Information

Do not close your work until you SAVE.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 6 : Complete

6. Pollution Prevention

Storm Water Management Best Management Practice Inspections Not Applicable

- a. Enter the total number of "municipally owned" (i.e., publicly owned BMPs) or operated (i.e., privately owned BMPs) structural storm water management best management practices.

- b. How many new municipally owned storm water management best management practices were installed in the reporting year?
- c. How many municipally owned (public) storm water management best management practices were inspected in the reporting year?
- d. What elements are looked at during inspections (250 character limit)?

See Attachment V

- e. How many of these facilities required maintenance?

- f. Brief explanation on Storm Water Management Best Management Practice inspection reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment V

Public Works Yards & Other Municipally Owned Properties that require a stormwater pollution prevention plan (SWPPP)* Not Applicable

- g. How many municipal properties require a SWPPP?

- h. How many inspections of municipal properties have been conducted in the reporting year?

- i. Have amendments to the SWPPPs been made?

Yes No

- j. If yes, describe what changes have been made. Limit response to 250 characters and/or attach supplemental information on the attachment page:

Draft SWWP has been updated with DNR comments.

- k. Brief explanation on Storm Water Pollution Prevention Plan reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

Draft SWWP has been updated with DNR comments. See Attachment VIII for supplemental information on Public Works Yard Inspections completed in 2025.

* Any municipally owned property that has the potential to generate stormwater pollution should have a SWPPP. For example, if a municipal property stores compost piles, material storage, yard wastes, etc., outside and can contaminate stormwater runoff—a SWPPP is required.

Collection Services - *Street Sweeping Program* Not Applicable

- l. Did the municipality conduct street sweeping during the reporting year?

Yes No

- m. If known, how many tons of material was removed?

- n. Does the municipality have a [low hazard exemption](#) for this material? Yes No

- o. If street sweeping is identified as a storm water best management practice in the pollutant loading analysis, was street cleaning completed at the assumed frequency?

Yes - Explain frequency Every 5-6 weeks

No - Explain _____

Not Applicable

Collection Services - *Catch Basin Sump Cleaning Program* Not Applicable

- p. Did the municipality conduct catch basin sump cleaning during the reporting year? Yes No
- q. How many catch basin sumps were cleaned in the reporting year?
- r. If known, how many tons of material was collected?
- s. Does the municipality have a low hazard exemption for this material? Yes No
- t. If catch basin sump cleaning is identified as a storm water best management practice in the pollutant loading analysis, was cleaning completed at the assumed frequency?
- Yes- Explain frequency Every other year
- No - Explain _____
- Not Applicable

Collection Services - *Leaf Collection Program* Not Applicable

- u. Does the municipality conduct curbside leaf collection? Yes No
- v. Does the municipality notify homeowners about pickup? Yes No
- w. Where are the residents directed to store the leaves for collection?
- Pile on terrace Pile in street Bags on terrace
- Other - Describe _____
- x. What is the frequency of collection?
4 passes in 2025
- y. Is collection followed by street sweeping? Yes No
- z. Brief explanation on Collection Services reporting. *Limit response to 250 characters and/or attach supplemental information on the attachments page*
-

Winter Road Management Not Applicable

*Note: We are requesting information that goes beyond the reporting year, answer the best you can.

- aa. How many lane-miles of roadway is the municipality responsible for doing snow and ice control? (*One mile of a two-way road equals two lane miles.*)
- ab. Provide amount of de-icing products used by month last winter season?
Solids (tons) (ex. sand, or salt-sand)

Product	Oct	Nov	Dec	Jan	Feb	Mar
<u>Salt</u>	<input type="text" value="0"/>	<input type="text" value="722"/>	<input type="text" value="1590"/>	<input type="text" value="2140"/>	<input type="text" value="509"/>	<input type="text" value="0"/>
<u>None</u>	<input type="text" value="0"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Liquids (gallons) (ex. brine)

	Oct	Nov	Dec	Jan	Feb	Mar
Brine	0	4775	10589	11944	15168	2500

- ac. Was salt applying machinery calibrated in the reporting year? Yes No
- ad. Have municipal personnel attended salt reduction strategy training in the reporting year? Yes No

Training Date	Training Name	# Attendance
10/15/2025	Smart Salting Workshop	4

- ae. Brief explanation on Winter Road Management reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page*

See Attachment I for more information on activities.

Internal (Staff) Education & Communication

- af. Has the municipality provided an opportunity for internal training or education to staff implementing the municipality's procedures for each of the pollution prevention program element? Yes No

If yes, describe what training was provided (250 character limit):

Prior to winter season and in advance of each snow event the staff is directed on correct usage.

- ag. Describe how the municipality has kept the following local officials and municipal staff aware of the municipal storm water discharge permit programs, procedures and pollution prevention program requirements.

Elected Officials

Common Council on 3/24/26

Municipal Officials

Board of Public Works on 3/18/26

Appropriate Staff (such as operators, Department heads, and those that interact with public)

Meetings with SWWT

- ah. Brief explanation on Internal Education reporting. *If you marked Unsure for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment I for more information on activities performed in partnership with SWWT.

Missing Information

Do not close your work until you **SAVE**.

Note: For the minimum control measures, you must fill out all questions in sections 1 through 7

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 7 : Complete

7. Storm Sewer System Map

a. Did the municipality update their storm sewer map this year?

Yes No

If yes, check the areas the map items that got updated or changed:

Storm water treatment facilities

Storm pipes

Vegetated swales

Outfalls

Other - Describe below

b. Brief explanation on Storm Sewer System Map reporting. *If you marked Unsure for an question for any questions above, justify the reasoning. Limit response to 250 characters and/or attach supplemental information on the attachments page.*

See Attachment XIII

Missing Information

Do not close your work until you SAVE.

Form 3400-224 (R8/2021)

Final Evaluation - Complete

Fiscal Analysis

Complete the fiscal analysis table provided below. For municipalities that do not break out funding into permit program elements, please enter the monetary amount to your best estimate of what funding may be going towards these programs.

Annual Expenditure Reporting Year	Budget Reporting Year	Budget Upcoming Year	Source of Funds
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Element: Public Education and Outreach

Storm water utility

Element: Public Involvement and Participation

Storm water utility

Element: Illicit Discharge Detection and Elimination

Storm water utility

Element: Construction Site Pollutant Control

Storm water utility

Element: Post-Construction Storm Water Management

Storm water utility

Element: Pollution Prevention

Storm water utility

Other (describe)

Storm water utility

Please provide a justification for a "0" entered in the Fiscal Analysis. *Limit response to 250 characters.*

Water Quality

a: Were there any known water quality improvements in the receiving waters to which the

municipality's storm sewer system directly discharges to?

Yes No Unsure If Yes, explain below:

b: Were there any known water quality degradation in the receiving waters to which the municipality's storm sewer system directly discharges to?

Yes No Unsure If Yes, explain below:

c: Have any of the receiving waters that the municipality discharges to been added to the impaired waters list during the reporting year?

Yes No Unsure

d: Has the municipality evaluated their storm water practices to reduce the pollutants of concern?

Yes No Unsure

Storm Water Quality Management

a. Has the municipality completed or updated modeling in the reporting year (relating to developed urban area performance standards of s. NR 151.13(2)(b)1., Wis. Adm. Code)? Yes No

b. If yes, enter percent reduction in the annual average mass discharging from the entire MS4 to surface waters of the state as compared to implementing no storm water management controls:

Total suspended solids (TSS)

Total phosphorus (TP)

Additional Information

Based on the municipality's storm water program evaluation, describe any proposed changes to the municipality's storm water program. *If your response exceeds the 250 character limit, attach supplemental information on the attachments page.*

Do not close your work until you SAVE.

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Form 3400-224 (R8/2021)

Requests for Assistance on Understanding Permit Programs

Would the municipality like the Department to contact them about providing more information on understanding any of the Municipal Separate Storm Sewer Permit programs?

Please select all that apply:

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Pollutant Control
- Post-Construction Storm Water Management
- Pollution Prevention
- Storm Water Quality Management
- Storm Sewer System Map
- Water Quality Concerns
- Compliance Schedule Items Due
- MS4 Program Evaluation

Do not close your work until you **SAVE**.

Form 3400-224(R8/2021)

Required Attachments and Supplemental Information

Any other MS4 program information for inclusion in the Annual Report may be attached on here. Use the Add Additional Attachments to add multiple documents.

Upload Required Attachments (15 MB per file limit) - [Help reduce file size and trouble shoot file uploads](#)

*Required Item

Note: To replace an existing file, use the 'Click here to attach file ' link or press the to delete an item.

Municipal Facility SWPPP

 File Attachment

Attach - Other Supporting Documents

AR EO

 File Attachment

[I City of Wauwatosa 2025 SWWT Report.pdf](#)

AR IP

 File Attachment

[II Wauwatosa SW Education-Public Info.pdf](#)

AR CSPC

 File Attachment

[VI Construction Site Pollutant Control Information.pdf](#)

AR PCSSW

 File Attachment

[VII Post Construction SW Information.pdf](#)

AR MuniFacInsp

 File Attachment

[VIII Public Works Yard Inspections 2025.pdf](#)

AR IDDE

 File Attachment

[IV IDDE Reporting.pdf](#)

AR WintRdMain

 File Attachment

[XII WINTER ROADWAY MAINTENANCE GUIDE.pdf](#)

AR_LeafYardMgmt

 File Attachment

[XVIII_Leaf Management.pdf](#)

AR_BMPInspSum

 File Attachment

[V-Green Alley Maintenance Guidance.pdf](#)

AR_SWMap

 File Attachment

[XIII_STORM SEWER SYSTEM MAP.pdf](#)

AR_Other

 File Attachment

[XII_Budget.pdf](#)

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

Attach - Permit Compliance Documents

(To remove items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

Missing Information

Draft and Share PDF Report with the permittee's governing body or delegated representatives.

Press the button below to create a PDF. The PDF will be sent to the email address associated with the WAMS ID that is signed in. After the annual report has been reviewed by the governing body or delegated representative, return to the MS4 eReporting System to submit the final report to the DNR.

[Draft and Share PDF Report](#)

Complete and Submit Your Application

You have not completed all areas of the application. Please return to the application and complete all missing items.

Contact Information: Complete

Minimum Control Measures Section 1: Complete

Minimum Control Measures Section 2: Complete

Minimum Control Measures Section 3: Complete

Minimum Control Measures Section 4: Complete

Minimum Control Measures Section 5: Complete

Minimum Control Measures Section 6: Complete

Minimum Control Measures Section 7: Complete

Attachments: Has Missing Items

Final Evaluation: Complete

STORM WATER POLLUTION PREVENTION PLAN

Wauwatosa Department of Public Works

11100 W. Walnut Road
Wauwatosa, WI 53226



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Project Reference #21231

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STORM WATER POLLUTION PREVENTION PLAN

Management Certification

I certify under penalty of law that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information contained in the plan. Based on my inquiry of the person, or persons, who manage the system, or those persons directly responsible for gathering the information; the information contained in this document is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for providing false information, including the possibility of fine and imprisonment. In addition, I certify under penalty of law that, based upon inquiry of persons directly under my supervision, to the best of my knowledge and belief, the provisions of this document adhere to the provisions of the storm water permit for the development and implementation of a Storm Water Pollution Prevention Plan and that the plan will be complied with.

Name

Title

Signature

Date

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Introduction

The Wauwatosa Department of Public Works, located at 11100 West Walnut Road in Wauwatosa, serves as the main garage for the City of Wauwatosa. It also houses the offices for the foreman and other public works employees. The facility houses a variety of equipment and miscellaneous materials, both indoors and outdoors, used by the city staff in maintaining the City's infrastructure. The site is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) following the requirements in NR 216.

The goal of the SWPPP is to prevent contaminants from polluting waters of the state through discharge in storm water. This document has been prepared utilizing the WDNR's Industrial Storm Water Pollution Prevention Planning manual and the permit as guidance.

Purpose

The primary goal of the storm water program is to improve the quality of surface waters by reducing the pollutants potentially contained in storm water runoff. Industrial facilities subject to the program must prepare and implement a SWPPP which should:

1. Identify sources of potential storm water contamination
2. Identify appropriate best management practices (BMPs). "Source area control" BMPs should be considered first and if they are not sufficient to prevent contamination, then "storm water treatment" BMPs should be considered as needed
3. Identify non-storm water discharges covered by a WPDES permit
4. Prescribe an implementation schedule for implementing the SWPPP and evaluating BMPs

Pollution Prevention Individuals

The Operations Superintendent is responsible for developing, implementing, maintaining, and revising this SWPPP. The individuals involved in stormwater management and SWPPP implementation for the site, along with their roles and responsibilities, are identified below in **Table 1**.

TABLE 1: SWPPP ROLES AND RESPONSIBILITIES

Title	Role/Responsibility
Operations Superintendent	<ul style="list-style-type: none"> • Overall SWPPP implementation and compliance • Ensure SWPPP is maintained and updated as needed • Maintain records • Conduct employee training
Director of Public Works	<ul style="list-style-type: none"> • WDNR Contact Person
City of Wauwatosa Engineering Department	<ul style="list-style-type: none"> • Review SWPPP and serve as technical support/resource • Perform and/or coordinate inspections • SWPPP implementation

Facility Site Description and Drainage Base Map

The facility has offices for the foreman and other public works personnel, along with storage for a diverse range of equipment and materials used by city staff for maintaining municipal infrastructure, both indoors and outdoors.

The site is approximately 41 acres in size and encompasses four primary drainage areas, as illustrated in **Figure 1** which also displays buildings, drainage structures, outdoor storage areas, structural control measures, and other pertinent features. Details on the drainage areas, including approximate permeable and impervious areas, are provided in **Table 2**.

TABLE 2: DRAINAGE AREAS AND IMPERVIOUS SURFACES

Area Number	Drainage Area (Acres)	% Impervious	Description of Drainage Area	Description of Activities and Materials
01	~17.9	~28%	The central and northern portions of the site which drain via surface flow and swales to the wetlands west of the site, then flowing to the south.	Fire Department training area; Covered salt dome and materials storage areas; Miscellaneous uncovered storage areas (spoils, vehicles, scrap metal, etc.).
02	~8.5	~51%	The main garage and office building has internal roof drains that are piped to a stormwater drainage ditch along the railroad tracks to the east of the property. Additionally, the eastern edge of the property flows to this ditch via surface flow.	The main DPW garage and office building for City DPW workers; Miscellaneous uncovered storage areas (vehicles and various materials).

03	~3.7	~77%	The southern portion of the property collects stormwater in storm inlets near the fueling island and the entrance to the main garage/office building area. The stormwater flows off the property to the south and then flows west to the wetland area southwest of the property.	Covered fuel and oil dump stations; Main employee parking lot.
04	~10.9	~12%	The western portion of the site which drains via surface flow to the wetlands west of the site, then flowing to the south	Mulch storage pile areas; Outdoor police shooting range.

The locations of the potential sources of storm water contamination and the structural best management practices are indicated on the site drainage map, Figure 1.

Summary of Existing Sampling Data or Observations

Sampling of storm water discharge has not been required or conducted at the facility.

Potential Sources of Storm Water Contamination

The primary potential pollutant sources are evaluated and described in the following paragraphs.

Fuel Island and Tanks

There is a 15,000-gallon underground storage tank for diesel fuel and a 15,000-gallon underground storage tank for unleaded fuel, both of which were upgraded in 2014. The tanks are double walled and are inspected on an annual basis. The fuel island pumps have automatic shutoffs and an emergency shutoff, located on the exterior of the Main Garage building which is approximately 50 feet away from the fuel pumps. There are also spill kits located in this area. An overflow or spill could potentially drain to the storm sewer if not rapidly contained.

Rooftops Contaminated by Industrial Activity, Vents, or Pollution Control Device

There are currently no vented industrial processes associated with the operations that would pose a storm water concern.

Industrial Plant Yards

Throughout the yard, various activities take place, such as the storage of various materials (soil, sand, stone, equipment, yard waste, spoils, compost, used oils, salt, etc.), fueling, residential drop-off of yard waste and used oil, shooting range for police department, training area for fire department. Public Works staff access the yard to drive in, pick up, and drop off materials or items for road and sewer maintenance. During regulated hours, residents with a permit have access to the Public Works Yard for the use of the recycling area, and the lawn and yard waste drop-off and composting pick-up areas. No other public activities are allowed within the Public Works Yard.

Storage and Maintenance Areas for Material Handling Equipment

Material handling equipment on-site consists solely of powered industrial vehicles (e.g. propane forklift, front end loader). All maintenance activities for the vehicles occur inside the building and/or offsite.

Immediate Access Roads and Rail Lines

There are no rail lines on the property. Immediate access drives are asphalt surfaced.

Material handling and Storage Areas Including Loading, Unloading, Transportation and/or Waste Areas

Material handling and storage activities include public loading/unloading areas as described elsewhere as well as various loading/unloading areas for staff of various city departments. These are identified on **Figure 1. Table 3** presents the location and method of storage of materials that are potential sources of stormwater contamination at the site.

TABLE 3: LOCATION AND STORAGE METHOD FOR MATERIALS

Material	Method of Storage	Location of Storage
General trash/waste	Covered dumpster	Northeast side of main garage/office building
Scrap metal	Open dumpster	Northeast side of main garage/office building
Compost	Outdoor piles/stacks	West side of the site
Salt (sodium chloride)	Dome	Northwest side of main garage/office building
Calcium chloride	Tank	South side of salt dome
Used Oil	Covered dump station and tank	Northwest side of the fuel island, southwest of the former transfer station
Yard waste from residents	Outside piles/stacks	Southwest side of the site
Backfill, gravel, spoils from Water Dept	Outdoor piles	Northeast corner of site, northeast of fire training area and central portion of site, south of salt dome
Trees, mulch, topsoil, etc. from Forestry Dept	Outdoor piles; topsoil piles are covered	Northeast portion of site, northeast of fire training area
Street sweepings	Outdoor piles - screened for organics vs waste (taken to landfill)	Northwest of main garage/office
Gasoline and Diesel fuel	Underground storage tanks (USTs)	Fuel island area on the central, south side of the main garage/office building
Oils and other maintenance fluids	Drums, totes, and smaller containers; stored indoors. Stormwater risk limited to shipping/receiving.	Small containers are inside main garage/office building

Disposal or Application of Wastewater

Wastewater is discharged to the sanitary sewer system.

Areas Containing Residual Pollutants from Past Industrial Activity

There are no known areas containing residual pollutants from past industrial activity.

Areas of Significant Soil Erosion

There are a number of areas subject to soil erosion, primarily on the northern and western portions of the property.

Refuse Sites

The general trash/refuse and recyclables generated from office and other daily operations are collected/stored in a covered waste dumpster.

Maintenance and Cleaning Areas for Vehicles, Equipment, and Containers

Maintenance and cleaning of facility vehicles occurs inside the building and/or offsite, where there are floor drains connected to the sanitary sewer system.

Shipping and Receiving Areas

The following shipping/receiving activities take place on-site:

- Shipping and receiving of totes, drums, and other containers of oils, etc. occurs inside the main garage.
- Salt (sodium chloride) is transferred to and from the dome via a front-end loader.
- There is a dump station and holding tank for residents to dispose of used oil. Used oil is pumped out by a vendor for off-site management.
- Diesel and gasoline are delivered to the USTs via a tanker truck approximately monthly.

Manufacturing Buildings

No manufacturing is performed on-site.

Residual Treatment, Storage, and Disposal Sites

There are no residual treatment, storage, or disposal sites at the site.

Status of Discharges

Non-storm Water Discharges

Non-storm water is any water that is not a direct result of a storm event. Examples of non-storm water discharges for which coverage under a different WPDES permit is required include non-contact cooling water and reverse osmosis concentrate. The site has no such non-storm water discharges. Other non-storm water discharges for which a WPDES permit is not required include landscape irrigation, lawn watering, uncontaminated groundwater infiltration, air conditioning condensation, and fire protection. As required, the facility will evaluate each outfall on a semi-annual basis during dry weather conditions to identify potential un-permitted or illicit discharges.

Discharges to ORW/ERW

The site's stormwater primarily infiltrates into the ground, flows east to a city storm sewer system, or flows south to a wetland area. The facility does not discharge storm water to an outstanding resource water (ORW) or to an exceptional resource water (ERW).

Discharges to Impaired Water Body or TMDL Water Body

The site's stormwater that flows east to the city storm sewer system likely flows to a section of the Underwood Creek which is impaired due to chloride, total phosphorus, and fecal coliform as well as an unknown pollutant. Underwood Creek is a part of the Milwaukee River Watershed Total Maximum Daily Load (TMDL) approved by the EPA in 2018 which covers waters impaired for total phosphorus, sediment/solids, and bacteria. The city will re-evaluate storm water discharges to impaired and TMDL water bodies annually by February 15 and if appropriate, will modify the SWPPP to specifically address the best management practices for pollutant(s) of concern.

Fish and Aquatic Life Waters

Based on a review of the WDNR's published information, Underwood Creek is a fish and aquatic life water. Therefore, the facility may not increase the discharge of pollutants if the increased discharge would result in a significant lowering of water quality.

Source Area Control Best Management Practices

As required, the Wauwatosa Department of Public Works is implementing 'minimum source area control requirements' to prevent storm water from becoming contaminated at the facility. The source area control requirements include the following:

- Minimizing the exposure of pollutants from the potential sources identified above.
- Using good housekeeping measures such as sweeping, appropriate storage, and proper management of waste materials and dumpsters.
- Maintaining both structural and non-structural control measures, instituting preventive maintenance for vehicles and equipment, and performing routine visual inspections.
- Minimizing the potential for leaks, spills, and other releases that may contaminate storm water, and instituting spill prevention and response measures, including spill reporting.
- Stabilizing areas of bare soil to control soil erosion.
- Enclosing salt storage.
- Training employees as appropriate on storm water pollution prevention, the requirements of the permit, and their specific responsibilities in implementing any of the requirements, practices, or activities of the permit or the SWPPP.
- Evaluating the facility for the presence of non-storm water discharges.
- Minimizing dust and off-site tracking of soil, raw materials, intermediate products, final products, or waste materials.
- Controlling SARA Section 313 "Water Priority Chemicals" potentially discharged through the action of storm water runoff, leaching, or wind.

Specific BMPs and discussion of how the above source area control measures are being met are presented below.

Structural Containment

The following containment measures are in place:

- Salt is stored in an enclosed dome

- The used oil dump station for residents is covered
- The fuel island is covered
- The waste/trash dumpster is kept closed
- A cover is maintained on some of the material piles

Good Housekeeping

The following good housekeeping measures are in place:

- Leaks/spills will be addressed immediately.
- Portions of the yard are swept with a street sweeper on a routine basis.
- Spill kits and oil dry materials are available to respond quickly to spills and leaks.
- Salt dome is inspected annually.

Preventive Maintenance

The following preventive maintenance measures are in place:

- Catch basins are inspected and cleaned as needed.
- The sediment traps are inspected and maintained as needed.
- The used oil dump station is routinely checked and pumped out as needed.
- Vehicles are inspected and maintained on a regular basis.
- Fuel tanks have cathodic protection and tank tightness testing is conducted weekly.
- Fuel lines are tested annually, and maintenance is conducted as needed.

Spill Prevention and Response

The following spill prevention and response measures are in place:

- Spill kits containing absorbents and spill response materials are maintained onsite for prompt spill response.
- WDNR Spills 24-hour Hotline phone number is 1-800-943-0003.

Inspections

Periodic inspections are conducted as follows:

- The sediment traps will be periodically inspected to ensure that they are functional and not in need of repair or maintenance.
- Good housekeeping inspections to ensure that potential sources of storm water contamination are addressed and BMPs are adequately implemented.
- The spill kits/absorbent material will be inspected to verify availability of resources.
- DPW Yard will be inspected quarterly in accordance with this Storm Water Pollution Prevention Plan.
- Salt dome will be inspected annually.

Employee Training

Training is conducted as shown below:

- Employees are trained in good housekeeping, spill prevention, and spill/incident response.

- Employees will receive annual training in accordance with their responsibilities related to stormwater management (e.g., conducting inspections).
- Employees will receive annual safety training.

Erosion Control

The following erosion control measures are in place:

- All stockpiled topsoil and sand are stored under cover.
- Vegetated areas on-site are left natural or are planted with native grasses where feasible.
- Sediment traps have been installed at two locations in the northwest portion of the site.
- As part of any new construction projects at the facility, the City of Wauwatosa will work with their contractor(s) to evaluate the need for erosion control measures. The City of Wauwatosa will require that contractors provide erosion control measures as necessary.

SARA 313 Water Priority Chemicals

There are no SARA 313 chemicals expected to be a potential source of storm water contamination. Therefore, no additional controls are necessary.

Residual Pollutants

Solids and sediment are the only residual pollutants anticipated to be present in storm water runoff. Best management practices are intended to minimize storm water contact and therefore minimize the presence of these and other pollutants in storm water run-off.

Storm Water Treatment Best Management Practices

The site's source area control best management practices and sediment traps are intended to control storm water pollution at the site. The city will continue to evaluate the effectiveness and will consider additional source area control and/or storm water treatment practices if deemed to be necessary/appropriate.

Facility Monitoring

Monitoring will be conducted in accordance with NR 216 and consists of the following:

- Comprehensive annual facility site compliance inspections.
- Quarterly visual inspections of storm water discharge quality.
- Semi-annual non-storm water discharge evaluations.
- Routine good housekeeping inspections.
- Annual evaluation of the discharge of pollutants of concern to impaired water body.
- Annual evaluation of the discharge of pollutants of concern to TMDL water body.

Inspection forms can be found in **Appendix A**.

Comprehensive Annual Facility Site Compliance Inspections

In order to monitor and evaluate the facility's storm water compliance, Annual Facility Site Compliance Inspections (AFSCIs) will be performed. Prior to conducting the site inspection, the SWPPP will be reviewed. Personnel will then conduct the site inspection, evaluating the sources of potential storm water contamination as well as the implementation and effectiveness of the BMPs. Documentation of the inspection, including date, personnel, scope, and major observations, will be made on the WDNR's AFSCI Report (Form 3400-176). The SWPPP will be modified and revised as necessary according to the results of the AFSCI. Records of the inspection are retained on file for a minimum of five years. Records of SWPPP revisions are recorded on the table in **Appendix B**.

Quarterly Visual Inspections of Storm Water Discharge Quality

Quarterly inspections at each of the storm water outfalls will be performed during storm events to document that storm water is not likely to be contaminated. Observations during the first thirty minutes of the storm event will be made when possible. Personnel will look for indicators of storm water pollution such as color, odor, turbidity, floating solids, foam, and oil sheen. Records of these inspections on the WDNR's Quarterly Visual Inspection Field Sheet (Form 3400-176A) are retained on file for a minimum of five years.

Semi-Annual Non-Storm Water Discharge Evaluations

Semi-annual inspections at each of the storm water outfalls will be performed during dry weather conditions. Each outfall is to be observed for flow and signs of contamination. Records of these inspections are retained on file for a minimum of five years.

Routine Good Housekeeping Inspections

Routine inspections are conducted of all outside material handling and/or storage areas. These inspections will serve to identify potential signs of storm water contamination. Records of these inspections are retained on file for a minimum of five years.

Annual Evaluation of the Discharge of Pollutants of Concern to Impaired Water Body

By February 15th of each calendar year, an annual check shall be performed to determine whether the facility discharges a pollutant of concern via storm water to an impaired water body listed in accordance with section 303(d)(1) of the Federal Clean Water Act, 33 USC §1313(d)(1)(c) and the implementing regulation of the U.S. Environmental Protection Agency (EPA), 40 CFR §130.7(c)(1). Impaired waters are those listed as not meeting applicable surface water quality standards. The Section 303(d) list of Wisconsin impaired surface water bodies may be obtained by contacting the Department or by searching for the section 303(d) list on the Department website. The Department updates the section 303(d) list approximately every two years. A pollutant of concern is a pollutant that is contributing to the impairment of a body of water. As stated earlier, the facility's stormwater infiltrates the ground to groundwater such that there are currently no offsite discharges of storm water. Should stormwater discharge to a surface water body in the future rather than to groundwater, Wauwatosa Department of Public Works will conduct the required annual evaluation.

Annual Evaluation of the Discharge of Pollutants of Concern to TMDL Water Body

By February 15th of each calendar year, an annual check shall be performed to determine whether the facility discharges a pollutant of concern via storm water to a water body that has an EPA or State

approved TMDL allocation. State and Federal approved TMDLs can be identified by contacting the Department or by searching for the State and Federal approved TMDL list on the Department website. As stated earlier, the facility’s stormwater infiltrates the ground to groundwater such that there are currently no offsite discharges of storm water. Should stormwater discharge to a surface water body in the future rather than to groundwater, Wauwatosa Department of Public Works will conduct the required annual evaluation.

Schedule

Table 4 summarizes the SWPPP implementation schedule

TABLE 4: IMPLEMENTATION TASKS AND FREQUENCY

Task	To Be Implemented/Performed
Train employees on storm water pollution prevention	As needed
Evaluate pollutant of concern discharge to impaired water body	Annually by February 15 (currently not required)
Evaluate pollutant of concern discharge to TMDL water body	Annually by February 15 (currently not required)
Inspect site utilizing good housekeeping checklist	Monthly
Visually inspect storm water discharge quality	Quarterly
Evaluate outfalls for non-storm water discharge	Semi-annually
Conduct Annual Facility Site Compliance Inspection (AFSCI)	Annually
Modify SWPPP according to inspection results	Annually following AFSCI (if needed)

Appendix A - Inspection Forms

- Annual Facility Site Compliance Inspection (AFSCI) Form (WNDR Form 3400-176)
- Quarterly Field Inspection (WNDR Form 3400-176A)
- Semi-Annual Non-Storm Water Discharge Evaluation form
- Good Housekeeping Inspection Checklist

Annual Facility Site Compliance Inspection Report (AFSCI)

Form 3400-176 (R 07/21)

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Section IV: Annual Facility Site Compliance Inspection

The Annual Facility Site Compliance Inspection shall be adequate to verify that: your Storm Water Pollution Prevention Plan (SWPPP) remains current; potential pollution sources at your facility are identified; the facility site map and drainage map remain accurate; and that the Best Management Practices prescribed in your SWPPP are being implemented, properly operated, and adequately maintained.

Name of Person Conducting Inspection	Inspection Date
Employer	Telephone Number

Your inspection should start with a review of your written SWPPP kept at your facility. The SWPPP should be amended if, through these inspections, you find that the provisions in your SWPPP are ineffective in controlling contaminated storm water from being discharged from your facility. Notify the department if amendments to your SWPPP have been made based on the results of this Annual Facility Site Compliance Inspection Report that address significant operational or source area changes at the facility.

1. Has your SWPPP been updated to include current Non-Storm Water Discharge Evaluation results (examples of non-storm water discharges include contact cooling water, non-contact cooling water, other process wastewaters, or illicit discharges identified during the evaluation period)? Yes No N/A
2. Has there been construction at your facility that affects the site map, drainage conditions, or exposed materials? Yes No N/A
3. Has your SWPPP been amended for any changes in facility operations that could be identified as new source areas for contamination of storm water? Yes No N/A
4. Are there any other areas capable of contaminating storm water runoff that have not been addressed in the SWPPP? Yes No N/A
5. Are there any materials at the facility that are handled, stored, or disposed of in a manner to allow exposure to storm water that are not currently addressed in your SWPPP? Yes No N/A
6. Are there any vehicle or equipment maintenance or material handling activities conducted outdoors that have not been addressed in your SWPPP? Yes No N/A
7. Are outside areas kept in a neat and orderly condition? Yes No N/A
8. Are regular housekeeping inspections conducted and observed issues addressed? Yes No N/A
9. Are there spots, pools, puddles, or other traces/residuals of oils, grease, or other chemicals on the ground? Yes No N/A
10. Are particulates on the ground from industrial operations or processes being controlled? Yes No N/A
11. Are there any leaking equipment, pipes or containers or heavy oxidation/rusting on containers? Yes No N/A
12. Do drips, spills, or leaks occur when materials are being transferred from one source to another? Yes No N/A
13. Are drips or leaks from vehicles or equipment being controlled (i.e. compactors, forklifts, semis, hydraulic loading docks, etc.)? Yes No N/A
14. Are cleanup procedures used for spilled solids? Yes No N/A
15. Are absorbent materials (floor dry, kitty litter, etc.) regularly used to absorb spills? Yes No N/A
16. Are ventilation systems and drain pipes free of discoloration, residue or corrosion? Yes No N/A
17. Are Best Management Practices implemented to reduce or eliminate contamination of storm water from source areas at the facility? Yes No N/A
18. Are Best Management Practices adequately maintained? Yes No N/A
19. Are changes to your SWPPP needed to correct plan inadequacies to effectively control a discharge of contaminated storm water from your facility? Yes No N/A
20. Are areas of soil erosion present at your facility that require amendments to the SWPPP to address? Yes No N/A
21. Are filtration or settling treatment practices evaluated, functioning, and adequately maintained? Yes No N/A

Comments/ Questions or Concerns:

Annual Facility Site Compliance Inspection Report (AFSCI)

Form 3400-176 (R 07/21)

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Instructions

Section I: Facility/Site Information

Provide the name of the facility as it appears on the permit application or permit cover letter and location address. If known, provide the Facility Identification (FID) and/or FIN Number assigned by the WDNR. Facility Identification (FID) and/or FIN Number can be found by a query at the following website: <https://dnr.wi.gov/topic/stormwater/data/industrial/index.asp>.

Section II: Facility/Site Contact Person

Provide the local contact person information for the facility. The mailing address should be given for the facility contact person if it is different from the facility site location address information.

Section III: Certification & Signature

State Statutes provide for severe penalties for submitting false information on this AFSCI form. State regulations require this form be signed by an Authorized Representative as follows:

- For a corporation, by a principal executive officer of at least the level of Vice President, or a duly authorized representative having overall responsibility for the operation covered by this permit.
- For a unit of government, a principal executive officer, a ranking elected official, or other duly authorized representative.
- For a partnership, by a general partner; for a sole proprietorship, by the proprietor.
- For a limited liability company, by member or manager.

If the Authorized Representative has changed, please complete the following form: <https://dnr.wi.gov/files/PDF/forms/3400/3400-220.pdf> and mail the completed form to the appropriate mailing address below. Updated forms can also be emailed directly to programmatic staff assigned for the county where the facility is located. Storm Water staff can be found by accessing the following weblink: <https://dnr.wisconsin.gov/topic/Stormwater/contacts.html>

Section IV: Annual Facility Site Compliance Inspection

Provide the name of the person conducting the inspection, inspection date, name of employer, and telephone number. Check the appropriate box for each of the listed questions and provide explanations in the comment box as needed.

Notify Storm Water Staff if SWPPP amendments in section IV of the Annual Facility Site Compliance Inspections address significant operational or source areas at the facility. Staff assignments by county are found at the following weblink: <https://dnr.wisconsin.gov/topic/Stormwater/contacts.html>

Section V: Quarterly Visual Inspection Reports

Provide the outfall number in the table and the dates of each quarterly visual inspection. Summarize the findings of your visual inspections in the space provided below the table. Attach additional sheets or Quarterly Visual Inspections if needed. The Quarterly Visual Inspection - Field Sheet can be accessed at the following weblink: <https://dnr.wisconsin.gov/topic/Stormwater/industrial/forms.html>.

Notify Storm Water Staff if SWPPP amendments in section V of the Annual Facility Site Compliance Inspections address significant operational or source areas at the facility. Staff assignments by county are found at the following weblink: <https://dnr.wisconsin.gov/topic/Stormwater/contacts.html>

Submittal of Electronic Information or Mailing Address

The Department utilizes an online e-permitting system that allows permittees to electronically submit information. This form may be submitted electronically at the following website: <https://dnr.wisconsin.gov/permits/water>. If directed to do so, mail this completed form to the Wisconsin Department of Natural Resources (WDNR) office associated with the county of the facility site location as follows:

NORTHERN REGION (NOR)

Ashland	Forest	Price	WDNR Eau Claire Service Center 1300 W Clairemont Ave Eau Claire, WI 54701 (715) 839-1636
Barron	Iron	Rusk	
Bayfield	Langlade	Sawyer	
Burnett	Lincoln	Taylor	
Douglas	Oneida	Vilas	
Florence	Polk	Washburn	

NORTHEAST REGION (NER)

Brown	Manitowoc	Shawano	WDNR Northeast Regional Headquarters 2984 Shawano Avenue Green Bay, WI 54313-6727 (920) 662-5100
Calumet	Marinette	Waupaca	
Door	Marquette	Waushara	
Fond du Lac	Menominee	Winnebago	
Green Lake	Oconto		
Kewaunee	Outagamie		

WEST CENTRAL REGION (WCR)

Adams	Jackson	Pierce	WDNR Eau Claire Service Center 1300 W Clairemont Ave Eau Claire, WI 54701 (715) 839-1636
Buffalo	Juneau	Portage	
Chippewa	La Crosse	St. Croix	
Clark	Marathon	Trempealeau	
Crawford	Monroe	Vernon	
Dunn	Pepin	Wood	
Eau Claire			

SOUTH CENTRAL REGION (SCR)

Columbia	Green	Richland	WDNR South Central Regional Headquarters 3911 Fish Hatchery Road Fitchburg, WI 53711 (608) 275-3266
Dane	Iowa	Rock	
Dodge	Jefferson	Sauk	
Grant	LaFayette		

SOUTHEAST REGION (SER)

Kenosha	Racine	Washington	WDNR SER Headquarters 940 W. St. Paul Ave. Milwaukee, WI 53233 (414) 477-1119
Milwaukee	Sheboygan	Waukesha	
Ozaukee	Walworth		

Notice: This form is for your own use and should be kept as part of your Storm Water Pollution Prevention Plan. It does not have to be submitted to the Department unless requested. This form is intended to assist you in meeting the requirements of s. NR 216.28 (3), Wis. Adm. Code. If false information from quarterly visual inspections is reported to the Department, you may be subject to penalties up to \$10,000 pursuant to s. 283.91(4), Wis. Stats.

Use one form per outfall.

Quarterly Visual Inspections at each storm water discharge outfall on your site can be a valuable assessment tool and are required by the Tier 1 and Tier 2 Industrial Storm Water General Permits. This inspection should be performed when sufficient runoff occurs during daylight hours. Try to make observations within the first 30 minutes after runoff begins discharging from the outfall, or as soon as practical, but no later than 60 minutes. If you find visible pollution, note the probable source and list any possible Best Management Practices that will be used to reduce or eliminate the problem. Make any necessary changes to your **Storm Water Pollution Prevention Plan** as needed. Notify the department if amendments to your SWPPP have been made based on the results of this Quarterly Visual Inspection that address significant operational or source area changes at the facility. Staff assignments by county are found at the following weblink: <https://dnr.wisconsin.gov/topic/Stormwater/contacts.html>

Facility Name				
Mailing Address (if different than site location address)		City	State	ZIP Code
Name of Person Conducting Inspection			Inspection Date	
Employer			Telephone (include area code)	
Outfall Number (make reference to site map)		Description of Outfall (e.g., ditch, concrete pipe, grassed swale, etc.)		
Time of Rainfall Event	Time of Visual Inspection	Optional: Amount of Rainfall at the Time of Observation (nearest tenth of an inch)		

Describe your observations. An easy way to conduct this inspection is to use a glass jar to collect a sample of the storm water being discharged from the facility and visually inspect the water. Include any observations of color, odor, turbidity, floating solids, foam, oil sheen or any other visual indicators of storm water pollution and the probable sources of any observed storm water contamination.

Color:	<input type="radio"/> Clear	<input type="radio"/> Red	<input type="radio"/> Yellow	<input type="radio"/> Brown	<input type="radio"/> Other: _____
Odor:	<input type="radio"/> None	<input type="radio"/> Musty	<input type="radio"/> Sewage	<input type="radio"/> Rotten Egg	<input type="radio"/> Other: _____
Clarity:	<input type="radio"/> Clear	<input type="radio"/> Cloudy	<input type="radio"/> Opaque	<input type="radio"/> Suspended Solids	<input type="radio"/> Other: _____
Floatables:	<input type="radio"/> None	<input type="radio"/> Foam	<input type="radio"/> Garbage	<input type="radio"/> Oily Film	<input type="radio"/> Other: _____
Deposits / Stains:	<input type="radio"/> None	<input type="radio"/> Oily	<input type="radio"/> Sludge	<input type="radio"/> Sediments	<input type="radio"/> Other: _____

Comments and a brief summary of observations. If you find visible pollution, note the probable source and list any possible Best Management Practices that will be used to reduce or eliminate the problem:

If an outfall was not evaluated during this quarter provide an explanation:

Quarterly Visual Inspection - Field Sheet

Form 3400-176A (R 07/21)

Page 2 of 2

Attach photos for visual depictions of outfalls. If observations include color, odor, turbidity, floating solids, foam, oil sheen or any other visual indicators of storm water pollution, include a photo of the observation and a description of the probable source(s). Attach additional photos as needed.

	Photo #:
	Date/Time of Photo:
	Date/Time of Photo:
	Photo Description:

	Photo #:
	Date/Time of Photo:
	Date/Time of Photo:
	Photo Description:

**NON-STORM WATER DISCHARGE EVALUATION
(SEMI-ANNUAL DRY WEATHER INSPECTION)**

Dry weather inspections are to be conducted twice per year. The documentation must be maintained on-site for at least three years.

Name of Person Conducting Inspection: _____

Date and Time of Inspection: _____

	<u>Yes</u>	<u>No</u>
Is flow observed anywhere within Outfall/Area 01?	<input type="checkbox"/>	<input type="checkbox"/>
Is flow observed anywhere within Outfall/Area 02?	<input type="checkbox"/>	<input type="checkbox"/>
Is flow observed anywhere within Outfall/Area 03?	<input type="checkbox"/>	<input type="checkbox"/>
Is flow observed anywhere within Outfall/Area 04?	<input type="checkbox"/>	<input type="checkbox"/>

If no flow was observed within the outfalls/areas, further evaluation of that outfalls is not required

If yes, describe observations of color, odor, turbidity, solids, foam, or oil sheen using the table below. Further evaluation is required to determine the source of the flow.

Observations	Outfall/Area 01	Outfall/Area 02	Outfall/Area 03	Outfall/Area 04
Color				
Odor				
Turbidity				
Solids				
Foam				
Oil Sheen				
Other				

Comments and Recommended Corrective Action: _____

GOOD HOUSEKEEPING INSPECTION CHECKLIST

Inspections are to be conducted quarterly (at a minimum). Completed inspection documentation is retained on file.

Yes

No

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any equipment or materials outside that should be covered? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any equipment or materials outside that should be moved indoors? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are waste dumpsters closed/covered? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are waste dumpsters showing any signs of leakage? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any signs of leaks from used oil tank or the calcium chloride tank? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any signs of potential storm water contamination or spills that should be addressed? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any signs of erosion that should be addressed? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are there any cracking or other signs of wear on the fuel island pump hoses? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is there sediment buildup in the catch basins that requires cleaning? (The sump should be no more than ~40% full) |
| <input type="checkbox"/> | <input type="checkbox"/> | Is there any floating oil in any of the catch basins? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are the sediment traps in good condition, not in need of repair? |
| <input type="checkbox"/> | <input type="checkbox"/> | Is the salt dome area clean of spillage? |
| <input type="checkbox"/> | <input type="checkbox"/> | Are outdoor stockpile areas showing potential of concerning erosion? |

Any other signs of contamination: _____

Additional Comments: _____

Name of Inspector / Signature

Date of Inspection / Time of Inspection

Appendix B - Record of SWPPP Revisions

Date of Review	Reviewers	Summary/Description of Revision
March 2009	City of Wauwatosa	<ul style="list-style-type: none"> • NA – original SWPPP
March 2026	Jessica Henderson and Jason Blasiola, City of Wauwatosa Kristi Linsmeier, P.E., CHMM of Sigma	<ul style="list-style-type: none"> • SWPPP was re-written • Updated names and description of site operations • Updated site drainage base map • Updated inspection forms • Included new WDNR forms (AFSCI & quarterly visual inspection form)

Note: The Wauwatosa Department of Public Works will review the SWPPP at least annually to ensure that it is accurate, current, and effective at minimizing storm water contamination.

Figure 1 - Facility Drainage Base Map

APPENDIX I through XVIII

2025 Sweet Water Public Education and Outreach Report

City of Wauwatosa



sweet water

SOUTHEASTERN WISCONSIN WATERSHEDS TRUST, INC.



Prepared by:

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February 2026

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1. Public Education and Outreach 2025 Programs Summary

The following document was prepared for the City of Wauwatosa to include in their 2025 annual MS4 eReport. It includes a summary of activities conducted to engage in effective public education as mandated by Wisconsin's administrative code - NR216. If you have any questions or would like more information, please contact Paige Orals, Watershed Program Manager of Southeastern Wisconsin Watersheds Trust, Inc. (orals@swwtwater.org).

The Respect Our Waters program identifies the target pollutants of concern, the target audiences, the delivery mechanism, and the entity responsible for implementation (*II.A.1.*). In 2025, the program focused on developing materials and implementing mechanisms to educate residents, business owners, public employees, developers, contractors, public officials, and designers in the City of Wauwatosa about nutrient pollution. Education and outreach mechanisms include but are not limited to the distribution of print materials, website development, a regional social media campaign, and attending in-person community events. The Respect Our Waters campaign addressed more than three permit topics in 2025 (*II.A.2.*) which are outlined in the Respect Our Waters 2025 completed plan. In addition, the program provided a mechanism to track and report the results of this cooperative program (*II.A.*).

The Technical Education Program focused on collaborating with municipalities to identify opportunities to make individual and group education and outreach programs more effective in the City of Wauwatosa. Opportunities to meet and discuss relevant topics were provided, including presentations and meetings. Access to training and additional materials for personalization were developed on an ongoing basis and provided for use. Sweet Water carried out a targeted education activity within the MS4 boundary for a target audience, and pollutant of concern (*II.B.2.a.b.*). Measurable goals were developed to evaluate the effectiveness of the activity. Results were submitted by September 30th, 2024 (*II.B.2.c.*).

In 2025, Sweet Water launched a new program, SE Wisconsin Big Plant, in partnership with the Milwaukee Metropolitan Sewerage District (MMSD). SE Wisconsin Big Plant is a regional tree gifting initiative that aims to transform the Milwaukee River Basin into a greener, healthier community by empowering residents to plant trees that enhance stormwater management. These native trees and corresponding educational materials are presented at workshops and gifted at community events. The program is promoted through a website and social media posts. The Big Plant program addressed multiple Public Education and Outreach Topics (*II.A.3.*) in 2025 including residential infiltration and yard waste management.

In addition to the above programs, Sweet Water hosted the 20th Annual Clean Rivers, Clean Lake Conference where members of the Milwaukee River Basin stormwater community gathered to learn and collaborate to address current and future needs across the region.

2. Respect Our Waters (Permit Section II.A.)

Table 1: 2025 Respect Our Waters Completed Plan

#	General Permit Topic	Audience	Activity Completed
1	Illicit Discharge Detection & Elimination	Residents	2.A. MS4 Permit Portal 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday 2.H. Wisconsin Stormwater Week 2. I. Events
2	Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Residents	2.E. Watershed Wednesday 2. I. Events 2. J. Discovery World Exhibit
3	Yard Waste Management/Pesticide and Fertilizer Application	Residents	2.A. MS4 Permit Portal 2.B. Website 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday 2.G. Media Coverage 2. I. Events 2. J. Discovery World Exhibit
4	Stream and Shoreline Management	Residents	2.E. Watershed Wednesday 2. I. Events
5	Residential Infiltration	Residents	2.A. MS4 Permit Portal 2.B. Website 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday 2. I. Events
6	Construction Sites and Post-Construction Storm Water Management	Residents	2.A. MS4 Permit Portal 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday
		Groups & individuals responsible for the maintenance of stormwater management facilities	2.B. Website 2.C. Print/Promotional Materials Developed 2.D. Fact Sheets

7	Pollution Prevention	Residents	2.A. MS4 Permit Portal 2.B. Website 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday 2.H. Wisconsin Stormwater Week
		Businesses and Industries	2.C. Print/Promotional Materials Developed
8	Green Infrastructure/Low Impact Development	Residents	2.A. MS4 Permit Portal 2.C. Print/Promotional Materials Developed 2.E. Watershed Wednesday 2. I. Events
		Developers and Designers	2.C. Print/Promotional Materials Developed 2.D. Fact Sheets 2.F. LinkedIn Campaign
9	Snow and Ice Control	Residents	2.E. Watershed Wednesday 2.H. Wisconsin Stormwater Week 2. I. Events
		Businesses and Industries	2.C. Print/Promotional Materials Developed 2.F. LinkedIn Campaign

2.A. MS4 Permit Compliance Portal

Sweet Water’s “MS4 Permit Compliance Portal” is a simple, interactive mechanism that provides a series of monthly prompts to help fulfill education and outreach permit compliance activities. The Portal is tailored to the City of Wauwatosa’s unique community needs and increases the strength of compliance programming.

The intention was to allow the City of Wauwatosa and other partners to use outreach mechanisms most utilized by their residents, such as municipal newsletters, social media accounts, and other platforms, to share educational materials. These topics included:

- Preventing Illicit Discharges
- Stormwater Pollution & Car Washes
- Pollution Prevention at Community Events
- Benefits of Green Roofs
- Organic Fertilizers
- The Problem with Pesticides

- How do Illicit Discharges Affect Water Quality?
- Rain Barrel Benefits
- How can you spot construction site pollution?
- How can you manage fallen leaves?
- How to Winterize Your Rain Barrel
- Caring for Permeable Pavers

The portal is created with a built-in tracking mechanism for MS4 partners to report when and how they used resources, as well as other activities that they performed to educate the public. See Appendix A for Wauwatosa’s reports submitted to Sweet Water through the 2025 MS4 Permit Compliance Portal and additional stormwater educational activities.

2.B. Website

In 2025, Sweet Water and Root-Pike Watershed Initiative Network (RPW) continued to collaborate on maintaining and updating the Respect Our Waters webpage. This involved adding educational materials tailored to municipality needs and updating links. The following educational materials were added to the website in 2025:

- Green Roofs Webpage
 - Benefits of Green Roofs
- The Role of Stormwater Trees
- Construction Fact Sheet

Existing web pages for residential and non-residential audiences include the following topics:

- Watersheds and Stormwater
- Yard Management
 - Fertilizer and Pesticide Use
 - Chemical Pollution Prevention Tips for Landscaping Companies
 - Mowing Properly
 - Leaf it Out of the Water
 - Watering Properly
 - Yard Maintenance- Planting with a Purpose
- Waterproof/Impervious Surfaces
 - Rain Barrels- They Make a Difference!
 - Pervious/Permeable/Porous Pavements
 - Stormwater Trees- Hardworking Trees
 - Native Rain Gardens
- Pet Waste is a Pollutant

- Ice and Snow Control- The Problem with Salting Freshwater
 - Snow and Ice Control Fact Sheet
- At-Home Construction
- Dangerous Dumping/Illicit Discharge
- Waterfront Properties
 - Shoreline Landscaping
 - Stream and Shoreline Management
 - Stormwater Ponds
- Agriculture
- Streambanks and Shorelines: Erosion

In 2025, the Respect Our Waters website had a total of 6,400 visitors¹, with 5,900 being unique², and 8,700 page views³. Analytical data shows that residents in the City of Wauwatosa were directed to Respect Our Waters directly from a municipal site and 13 members of their community visited the website.

2.C. Materials

In 2025, Sweet Water staff created flyers and graphics for in-person and virtual forms of outreach. In 2021, a webpage was created to store all of these materials so that the City of Wauwatosa and other partners could also access and use these materials. New materials that were developed in 2025 and are available on this page include:

- Preventing Illicit Discharges
- Stormwater Pollution & Car Washes
- Pollution Prevention at Community Events
- Benefits of Green Roofs
- Organic Fertilizers
- The Problem with Pesticides
- How do Illicit Discharges Affect Water Quality?
- Rain Barrel Benefits
- How can you spot construction site pollution?
- How can you manage fallen leaves?
- How to Winterize Your Rain Barrel
- Caring for Permeable Pavers

See examples of these graphics in Appendix B.

¹ Total visitors are tracked by visit with a browser cookie that expires after 30 minutes. Any hits within that 30-minute browsing session count as one visit.

² Unique visitors is an estimate of the total number of actual visitors that reached your site.

³ Page views is the total number of views (page requests) across all of your pages.

2.D. Fact Sheets

In 2025, Sweet Water staff created fact sheets to provide more detailed information on stormwater pollutants such as the causes, environmental impacts, human health implications, and best management practices for pollutant reduction. These fact sheets were shared with municipalities through the MS4 Permit Compliance Portal and through social media campaigns. The intention was to direct interested individuals to more in-depth information. Fact sheets addressed the following permit topics in 2025:

- Benefits of Green Roofs
- Construction Site and Post Construction Site Management

Fact pages are available at swtwater.org/request-support and respectourwaters.org. See examples of the fact sheets in Appendix C.

2.E. Facebook

The Respect Our Waters Facebook page serves as a repository of posts for the City of Wauwatosa and other partners to share directly with their residents. This page is used to directly reach the general public of Southeastern Wisconsin municipalities and counties.

These campaigns were developed to allow municipalities with Facebook accounts to seamlessly share valuable information with their residents. These posts were strategically synchronized with MS4 permit compliance portals and linked within municipal portals. It's important to highlight that the majority of these posts were not sponsored advertisements; rather, their reach and engagement were organically generated as municipalities actively shared the content with their residents.

Table 2: 2025 Respect Our Waters MS4 Permit Compliance Portal Campaign Metrics

Date	Subtopic	Link Number ⁴	Reach ⁵	Engagements ⁶
Yard Waste Management/Pesticide and Fertilizer Application				
April 18	Organic Fertilizers	1082650023892926	4,097	42
May 20	The Problem with Pesticides	1107163384774923	4,616	106
September 17	Leaf Management Tips	1205511804940080	4,025	72
Residential Infiltration				
October 17	Winterizing your Rain Barrel	1233180072173253	3,158	36
Pollution Prevention				

January 21	Stormwater Pollution and Car Washes	1013355994155663	9,375	67
February 17	Preventing Pollution at Community Events	1033222705502325	5,972	81
Green Infrastructure/Low Impact Development				
March 17	Green Roof Benefits	1055883263236269	2,531	30
November 17	Pervious Paver Maintenance and Upkeep	1261558636002063	4,431	38

The second Facebook campaign conducted in 2025 is our “Watershed Wednesday” campaign. This is a joint initiative between Sweet Water and the Root-Pike Watershed Initiative Network (RPW), where stormwater education information is published every Wednesday and is boosted to ensure the message is received in municipalities and counties throughout our service region.

Table 3: 2025 Respect Our Waters Watershed Wednesday Campaign Metrics

Date	Subtopic	Link Number ⁴	Reach ⁵	Engagements ⁶
Illicit Discharge Detection and Elimination				
June 18	Impacts on Lake Michigan and Other Waterways	1129768725847722	5,423	255
July 30	Household Hazardous Waste and Illicit Discharge Detection and Elimination	1164370315720896	4,434	120
Residential Infiltration				
July 9	Native Plants	1147406320750629	16,405	330
July 23	Rain Barrel Benefits	1158580962966498	4,991	225
Green Infrastructure/Low Impact Development				
August 6	Green Infrastructure Benefits	1170363408454920	8,034	232
Construction and Post-Construction Site Stormwater Management				
June 25	At-Home Construction Stormwater Tips	1135462031945058	7,515	64
August 20	Signs of Construction Site Pollution	1182064747284786	6,142	192
Snow and Ice Control				

⁴ Link Number: The unique post number. Access the post by typing www.facebook.com/RespectOurWaters/posts/ and then the unique post number after the back-slash.

⁵ Reach: The number of people who saw the post at least once. Reach is different from impressions, which may include multiple views of your post by the same people. This metric is estimated by Facebook.

⁶ Engagements: The number of reactions, comments, shares and clicks on your post.

August 27	Smart Salting Quick Facts	1188123426678918	713	27
Pet Waste Management				
August 13	Pet Waste	1176211011203493	3,504	244
General Watershed Education				
June 4	Stormwater Pollution Overview	1118894403601821	90	4
June 11	Separate VS Combined Sewer Systems	1124354733055788	4,097	132
Stream and Shoreline Management				
July 16	Sediment- Wave Erosion	1153051963519398	4,578	135
Yard Waste Management/Pesticide and Fertilizer Application				
July 2	Grass Clippings/Leaves/Fertilizers	1141246618033266	101	2

2.F. LinkedIn Campaign

In 2025, the Sweet Water staff initiated a strategic educational campaign targeting non-residential audiences through LinkedIn advertising. Educational materials were developed that were tailored to resonate with the unique needs of businesses, developers, contractors, and designers. Sweet Water utilized the advertisement software to reach these specific audiences within our municipal service area. This precision targeting ensured our educational messaging was delivered to the target audience.

Table 4: 2025 Sweet Water LinkedIn Campaign Metrics

Date	Topic	Target Audience	Impressions ⁷	Reach ⁸
January 14	Snow and Ice Control	Businesses, Contractors, Industries, Public Employees	210,051	75,769
March 24	Green Roof Benefits	Businesses, Contractors, Developers, Industries, Public Employees	206,295	97,564

⁷ Impressions are the total number of exposures to your content. This can include the same person seeing your content multiple times.

⁸ Reach: The number of people who saw the post at least once. Reach is different from impressions, which may include multiple views of your post by the same people. This metric is estimated by Facebook.

2.G. Media Coverage

2.G.1. Protecting Lake Michigan with Native Plants

Sweet Water collaborated with Johnson’s Nursery to create an educational video highlighting the importance of native plants and trees in managing stormwater.

Table 5: 2025 Protecting Lake Michigan with Native Plants Video

Date	Type of Media	Link
July 30	Youtube Video	https://youtu.be/9DedNe_oaPs

2.G.2. Leaf Management

In 2025, Sweet Water conducted multiple live, in-studio interviews at local television stations to share educational messages on how to properly manage fall leaves.

Table 6: 2025 Leaf Management Media Coverage

Date	Type of Media	Link
October 23	Live Studio Interview	https://www.cbs58.com/news/think-twice-about-raking-leaves-to-benefit-your-yard-plants-and-wildlife
October 24	Live Studio Interview	https://www.fox6now.com/news/raking-alternatives-from-sweet-water
November 10	Pre-Recorded Interview	https://www.tmj4.com/news/waukesha-county/menomonee-falls-neighborhood-tests-leaf-mulching-to-save-money-and-protect-lake-michigan
November 13	Pre-Recorded Interview	https://spectrumnews1.com/wi/milwaukee/news/2025/11/13/menomonee-falls--fall-leaf-study--leaf-collection--dpw
November 19	Article	https://www.gmtoday.com/the_freeman/news/reducing-phosphorus-menomonee-falls/article_ba327741-107f-5b57-a4f0-8175e6308dc3.html

2.G.3. Wisconsin Salt Wise Smart Salting Workshop

Media alerts were issued for the Wisconsin Salt Wise Workshops that occurred in Wauwatosa on October 15th, 2025 and in Oak Creek on October 29th, 2025.

Table 7: 2025 Road Salt Pollution Prevention Media Coverage

Date	Type of Media	Link
October 29	Pre-Recorded Interview	https://www.youtube.com/watch?v=AVV0tciz49s&feature=youtu.be

2.H. Wisconsin Stormwater Week

Sweet Water was a part of the third annual Wisconsin Stormwater Week in 2025. Stormwater Week, which the governor signed into proclamation, is a collaborative effort of organizations throughout the State that work to raise awareness about the sources of water pollution. In alignment with our campaign, Sweet Water published the following posts:

Table 8: 2025 Sweet Water Wisconsin Stormwater Week Campaign Metrics

Date	Topic	Platform	Reach ⁹	Impressions ¹⁰	Engagements ¹¹	Clicks ¹²
September 18	Stormwater Week Promotion	Facebook	93	-	1	-
		LinkedIn	76	151	12	6
September 22	Webinar 1 Information	Facebook	70	-	-	-
		LinkedIn	47	93	7	7
September 23	Webinar 2 Information	Facebook	61	-	-	-
		LinkedIn	54	103	6	4
September 24	Webinar 3 Information	Facebook	69	-	-	-
		LinkedIn	44	72	8	7
September 25	Webinar 4 Information	Facebook	77	-	-	-
		LinkedIn	46	88	8	8

In addition, Sweet Water developed a "Stormwater Week" Portal which listed ways to get involved in WI Stormwater Week such as sharing resources and attending the webinars. See additional 2025 Stormwater Week information in Appendix D.

⁹ Reach: The number of people who saw the post at least once. Reach is different from impressions, which may include multiple views of your post by the same people. This metric is estimated by Facebook.

¹⁰ Impressions: The total number of times content is displayed, regardless of whether it was clicked.

¹¹ Engagements: The number of reactions, comments, shares and clicks on your post.

¹² Clicks: The total number of clicks on the post.

2.1. Events

The Respect Our Waters program attended and hosted a variety of community events and workshops in 2025. See a detailed list of all events that Sweet Water's programs were a part of in 2025 including information about reach, topics covered, and more in Appendix E.

2.1.1. Community Events

In 2025, Respect Our Waters attended multiple regional and local community events. The program was present at 18 different tabling events spanning over 26 days reaching 2,551 booth visitors. We developed and used an interactive booth that included a stormwater plinko game, stormwater trivia, informational brochures, and various educational prizes such as stickers and magnets.

Community Event Locations and Dates

- Elm Grove Book Club - March 12
- Glen Hills Middle School World Water Day - March 20
- Rock the Green - April 26
- Green Day in the Bay - May 3
- West Allis DPW Day - May 17
- Lake Michigan Bird Observatory World Migratory Bird Day - May 17
- Sherman Park Earth Day - May 18
- myCrew Bayside - June 17
- Hops and Hounds - July 11
- South Milwaukee Market - July 17
- Washington County Fair - July 22 - 27
- Butler National Night Out - August 5
- Brookfield Farmers Market - August 9
- Green and Healthy Schools Conference - August 12
- Tosa Green Summit - September 20
- Treasures of Ozaukee County - September 27
- Harbor Fest - September 28
- Fish and Feathers Festival - October 11

2.1.2. Rain Barrel Workshops

Sweet Water staff facilitated two MMSD hosted rain barrel workshops and co-hosted a rain barrel workshop with Ozaukee County. Rain barrel workshops include an educational presentation on stormwater pollution prevention, residential green infrastructure, and how to properly install and maintain the rain barrel.

2.J. Discovery World Explore Our Waters Exhibit

From April 2025 to October 2025 various Respect Our Waters and Adopt Your Drain educational videos were shown at Discovery World as a part of their Explore Our Waters exhibit. This exhibit reached an estimated 101,427 visitors based on Discovery World guests. Educational videos covered the following stormwater topics:

- General Watershed Education
- Fertilizer Application
- Pet Waste Management
- Adopt Your Drain Program Information

3. Technical Education (*Permit Section II.B*)

3.A. Individual Activity Progress

The chosen activity commenced and was completed in 2023. All activity progress was tracked, with multiple points of contact throughout the year to ensure progress and provide updates. Metrics were assessed in 2024 and a full summary was provided in the 2024 annual report.

3.B. Additional MS4 Activities

3.B.1. Technical Education Meeting

Sweet Water hosted meetings for Technical Education to address relevant topics of concern.

Staff from the City of Wauwatosa attended the following meeting:

- I. MS4 Spring Quarterly Meeting - 6/12/25
 - Location: UWM School of Freshwater Sciences
 - Topics Included: Sweet Water Updates, MS4 Highlights and Updates, Wisconsin Urban Soil Health Tech Standard, Wisconsin Sea Grant Presentation

3.B.2. MS4 Trainings

As a technical education program member, the City has access to Sweet Water's "one-stop-shop". The one-stop-shop is a resource hub for MS4 staff training materials and materials to support public involvement activities. Permit topics covered on the hub include Illicit Discharge Detection and Elimination, Stormwater Pollution Prevention Planning, Winter Road Management/Salt Strategy, and Green Infrastructure. Sweet Water also provides specialized training materials upon request to municipal partners.

3.B.3. Wisconsin Salt Wise Smart Salting Workshops

Sweet Water partnered with Wisconsin Salt Wise to host multiple smart salting workshops in 2025. Staff from the City of Wauwatosa attended the following workshops:

- I. City of Wauwatosa Salt Wise Workshop - 10/15/2025

4. Big Plant SE Wisconsin

In 2025, Sweet Water launched a tree planting initiative called SE Wisconsin Big Plant (Big Plant) in partnership with the Milwaukee Metropolitan Sewerage District (MMSD). Big Plant aims to help educate about and promote residential stewardship through the gifting of Wisconsin native trees.

A total of 1,264 trees were gifted in 2025 at community tabling events, tree planting workshops, and a tree pickup event. 80 residents of the City of Wauwatosa received and planted a free tree in 2025 through the Big Plant program. The tree species present at each event depended on availability. The following species were gifted throughout 2025:

- American Elderberry (*Sambucus canadensis*)
- Bog Birch (*Betula pumila*)
- Ironwood (*Olneya tesota*)
- Pagoda Dogwood (*Cornus alternifolia*)
- Paper Birch (*Betula papyrifera*)
- Prairie Crabapple (*Malus ioensis*)
- Red Oak (*Olneya tesota*)
- Speckled Alder (*Alnus incana*)
- Tamarack (*Larix laricina*)

4. A. Materials

In 2025, Big Plant staff created and shared digital tools for in person and virtual forms of outreach. Each digital tool is attached to the resources section of the *SE Wisconsin Big Plant* webpage and includes the following:

- Native Tree Need to Knows
- How does BigPlant 'Respect Our Waters'
- Speckled Alder Info Sheet
- American Elderberry Info Sheet
- Paper Birch Info Sheet
- Speckled Alder Info Sheet
- Tamarack Info Sheet

See copies of these resources in Appendix F.

4. B. Events

The Big Plant program gifted free trees at a variety of events in 2025 including community tabling events, tree planting workshops, and a tree pickup event. See a detailed list of all events Sweet Water’s programs and program partners were a part of in 2025 including information about reach, topics covered, and more in Appendix E.

4.B.1. Community Tabling Events

SE Wisconsin Big Plant attended 19 community events in 2025 and gave out a total of 635 trees at these events.

Community Event Locations and Dates¹³

- Green Day in the Bay - May 3
- West Allis DPW Day - May 17
- Bayside myCrew* - June 17
- Bike & Play Fest* - June 28
- Menomonee Falls Sunset Concert Series* - July 10
- Hops and Hounds - July 11
- Museum of Wisconsin Art Community Free Day - July 12
- Washington County Fair - July 26
- Brown Deer Farmers Market* - July 30
- St. Francis Concerts in the Park* - August 6
- District Six National Night Out* - August 7
- Brookfield Farmers Market - August 9
- Jackson Park Farmers Market* - August 14
- Greenfield Nature & Forestry Fest* - August 24
- Fox Point Village Picnic - September 6
- Tosa Green Summit - September 20
- Harbor Fest - September 28
- Greenfield World Migratory Bird Day* - October 5
- Fish and Feathers Festival - October 11

4.B.2. Tree Planting Workshops

Southeastern Wisconsin Big Plant hosted four tree planting workshops in 2025 where residents of the Milwaukee River Basin could learn about the benefits of planting native trees and receive a free native tree.

¹³ Community tabling events with asterisks were staffed by the Milwaukee Metropolitan Sewerage District (MMSD). The Bayside myCrew event was staffed by both Sweet Water and MMSD staff members.

Workshop Locations and Event Dates

- Mequon Nature Preserve - September 10
- Mitchell Street Library - September 20
- Washington Park Library - October 14
- Mequon Nature Preserve - October 18

4 households from the City of Wauwatosa attended one of these workshops and received a free native tree.

4.B.3. Tree Pickup Event

The *SE Wisconsin Big Plant* program hosted a tree pickup event at Johnson’s Nursery during the week of November 10 - 15, 2025. A total of 604 households received a free tree including 37 households in the City of Wauwatosa specifically.

4. C. Website

In 2025, the *SE Wisconsin Big Plant* website had a total of 705 visitors, with 516 being unique, and 1,600 page views.

4. D. Instagram

A *SE Wisconsin Big Plant* Instagram serves as a function to communicate the program's attendance at events within the City of Wauwatosa to the general public with the ability to be shared directly with residents.

Additionally, the Big Plant Instagram serves as a function to share digital tools created by Big Plant staff that include but are not limited to best practices for tree stewardship. See examples of recent posts in Appendix G.

Table 9: *SE Wisconsin Big Plant Instagram Metrics*

Date	Topic	Link Number ¹⁴	Reach ¹⁵
May 5	Green Day in the Bay Event	DJR5ln6x5vh	-
May 5	Upcoming Events	DJR_PMQPM1L	-
May 13	West Allis DPW Day Promotion	DJmT2eAtYmM	-

¹⁴ Link Number: The unique post number. Access the post by typing www.instagram.com/p/ and then the unique post number after the back-slash.

¹⁵ Reach: The number of people who saw the post at least once. Reach is different from impressions, which may include multiple views of your post by the same people. This metric is estimated by Facebook.

May 19	West Allis DPW Day Event Recap	DJ1jzaPNKy2	135
May 28	Four Available Tree Species	DKNBdAvtDkh	13
July 1	Watering Tips	DLkUHyyMC4R	13
August 5	Museum of Wisconsin Art Event Recap	DM-se0dR5Ym	20
August 5	Deer Protection	DM-uFUSRp8E	14
August 12	Jackson Park Event Recap	DNQiK55Ncdu	19
August 14	Nature and Forestry Festival Promotion	DNV5OJNNIX3	19
August 14	Brookfield Farmers Market Recap	DNV9y80tkAf	64

4. E. Measurable Impacts

The *SE Wisconsin Big Plant* program has developed a database that captures measurable impact from our efforts by evaluating iTree and Tree canopy data for each tree planted.

Based on the data provided through iTree analysis; the impact of the 1,264 trees gifted in 2025 at an annual perspective is 1,571 pounds of carbon sequestered and 73,835 gallons of rainfall intercepted. Throughout the course of the 1,264 trees lifespans (average of 20 years) the impact is estimated to be well over 31,423 pounds of carbon sequestered and 1,476,706 gallons of rainfall intercepted.

Based on information provided through the American Forest™ Tree Equity Score report which aids in determining areas throughout Wisconsin that would benefit most from tree canopy restoration. The reporting scores are broken down into categories based on need; HIGHEST: 0-69, HIGH: 70-79, MODERATE: 80-89, LOW: 90-99, and NONE: 100.

In 2025, 2.45% of the trees gifted were given to community residents who live in an area with the HIGHEST Tree Equity Score. 4.74% of the trees gifted were given to community residents who live in an area with the HIGH Tree Equity Score. 26.45% of the trees gifted were given to community residents who live in an area with the MODERATE Tree Equity Score.

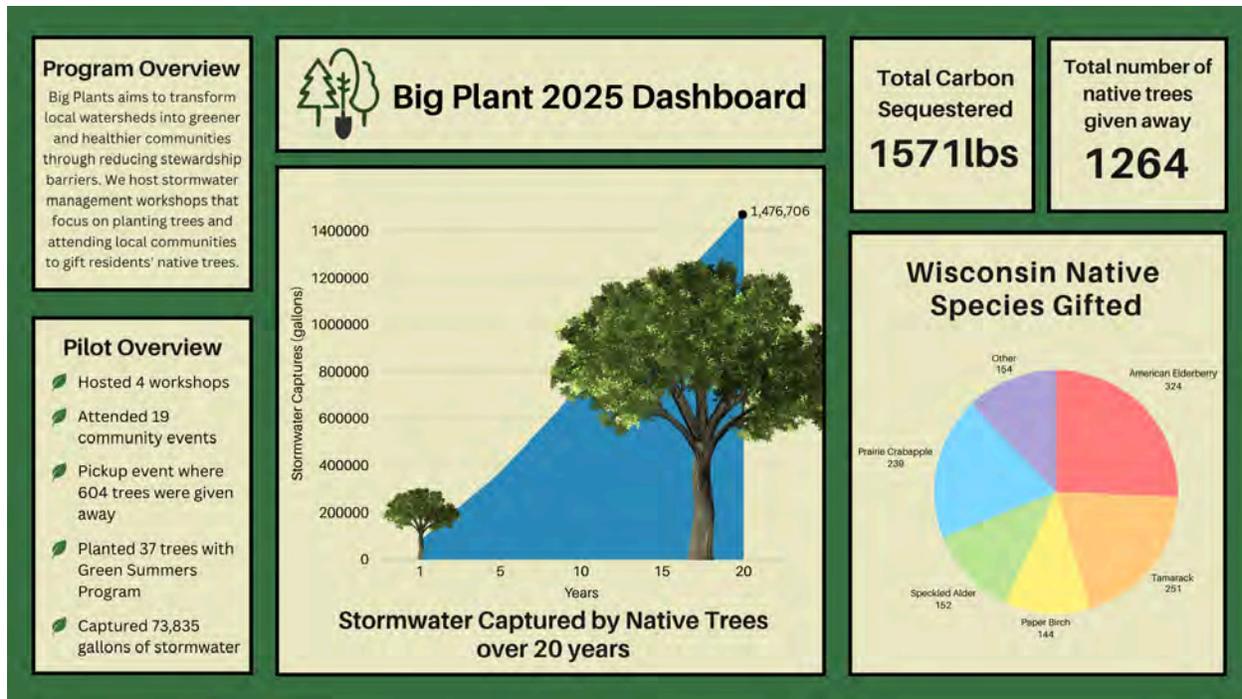


Figure 1: 2025 Big Plant Program Dashboard

5. Professional Events

5.A. Clean Rivers, Clean Lake Conference

On February 25th, 2025, Sweet Water hosted the 20th Annual Clean Rivers, Clean Lake Conference at Discovery World. Presentations and presenters included:

- *Milwaukee: A Region Built on Water*
 - John Gurda, Milwaukee Writer and Historian
- *Watertown Waterways Improvement Program: A Local Water Quality Trading Program*
 - Maureen McBroom, City of Watertown and Patricia Cicero, Jefferson County
- *Preparing for the 1,000-yr Flood: 2D Modeling for the Milwaukee Metropolitan Sewerage District*
 - Eric Thompson, MSA Professional Services, Inc.
- *Overview of the WDNR's MS4 Best Management Practices Menu: A useful resource for MS4 Permittees / Tips and Tricks: Waterways and Wetland Permitting*
 - Lexi Montes and Kiara Caldwell, Wisconsin DNR
- *Going Beyond Flow Path Mapping / Flooding Mitigation Efforts Through Public and Private Stakeholder Collaboration / Addressing Community Stormwater Issues, From Flooding to Water Quality Improvements*

- Anna Culcasi and Claire Randall, Hey and Associates, Inc. / Ashley Leisgang and Rick Eilertson, AECOM
- *Building the Ark: Neighborhood Stormwater Strategies for Grasslyn Manor / Making Green Infrastructure Fun and Functional - An Update to the Green and Healthy Schoolyard Redevelopment Projects*
 - Sydney VanKuren, Greenprint Partners and Steve O’Connell, Grasslyn Manor / Justin Hegarty, Reflo, Heather Dietzel, MPS and Kevin Rey, SmithGroup
- *Airport TMDL Study / Enhancing IDDE Inspections with Survery123 and GIS*
 - Christy M. Poniewaz and Tiffany M. Wagner, Ruekert & Mielke, Inc.
- *The Regional Chloride Impact Study for Southeastern Wisconsin*
 - Karin Hollister, Southeastern Wisconsin Regional Planning Commission
- *Granular or Liquid Chlorides*
 - Richard Neth, City of Glendale
- *Why Extreme Rainfall Events Appear to Happen Much More Often than Expected*
 - William Gonwa, MSOE
- *Seeing GI Benefits at the Meter*
 - Monica Vincent, Mead & Hunt
- *Covering Ground: Investigation of Cover Crops for Soil Health in the Great Lakes Region / Potential of Dissolved Phosphorus Delivery to Surface Water from Dead Vegetation vs Live, Green Vegetation*
 - Dennis Busch, Water Resources Monitoring Group, LLC / Steve Hoffman, InDepth Agronomy
- *Reforestation & Wetland Restoration - A strategy for stormwater management*
 - Jamie Ferschinger, MMSD
- *Improving Efficiency for Detecting and Eliminating Illicit Discharge in Stormwater Using DNA-based Methodology in Wisconsin Communities*
 - Melissa Schussman, University of Wisconsin - Milwaukee
- *Green Infrastructure at Scale: How small municipalities can achieve big results through a community-based partnership*
 - Mark O’Leary and Peter Zanghi, CIS
- *Closing Panel*
 - Kevin Shafer, Nancy Frank, and Peter Wood

Staff members from the City of Wauwatosa were present at the 2025 Clean Rivers, Clean Lake Conference. See Appendix H for the full Clean Rivers, Clean Lake Conference agenda.

Appendix A. MS4 Permit Compliance Portal and Additional Activities¹⁶

2025 MS4 Portal metrics were recorded on January 6th, 2026. Any information uploaded after this date is not included in this report.

Table 10: 2025 City of Wauwatosa MS4 Compliance Portal Responses and Additional Activities

Month	Topic	Mechanism	Details
March	Pollution Prevention - Community Events	TV Display	Shared graphic on a TV display with an estimated reach of 500.
April	Green Infrastructure - Stormwater Trees	Social Media	The City of Wauwatosa shared some sustainability wins this year including stormwater trees on Facebook.
April	Household Hazardous Waste	Social Media	The City of Wauwatosa promoted a Drug Takeback Day for medication disposal on April 26 on Facebook.
April	Stormwater Management	Government Event	At the State of the City event on April 25, the City discussed high-level sustainability topics, including the grant funds related to stormwater management that the City has received and how the features benefit the community. This event reached an estimated 200.
May	Stormwater Management	Event	An Artist Talk with Thomas Dambo and sustainability along with the Grand opening of the Firefly Grove Park occurred in 2025. Both events emphasized sustainable efforts, how Wauwatosa transformed a once city waste site into a shared community asset and have greatly improved the flow of water in the area. These events reached an estimated 500.

¹⁶ Additional Activities are stormwater education activities the City of Wauwatosa completed in addition to Sweet Water’s educational programming that align with the Public Education and Outreach Topics in the Menomonee Group MS4 Permit.

June	Green Infrastructure	Social Media	The City of Wauwatosa shared a post about the green infrastructure featured in Firefly Grove Park including permeable walking paths and native plants on Facebook and Instagram.
July	Illicit Discharge Detection and Elimination	Newsletter	Shared graphic in newsletter with an estimated reach of 4,000.
August	General Watershed Education	Social Media	The City of Wauwatosa shared a Water Drop Alert advising residents to reduce water usage during heavy rain events on Facebook.
September	Yard Management - Leaf Management	Social Media	The City shared social media posts encouraging residents to consider mulching leaves with an estimated reach of 15,000.
October	Green Infrastructure	Newsletter	The Fall Newsletter highlighted three Best Management Practices (BMP) in their “Stormwater Solutions in Firefly Grove Park” segment. The three BMPs included an engineered wetland, a biofiltration basin, and porous pavement walkways.
October	Household Hazardous Waste	Social Media	The City of Wauwatosa promoted a Drug Takeback Day for medication disposal on October 25 on Facebook.
October	Stormwater Management	Newsletter	Wauwatosa submitted a story to the MS4 Newsletter about the stormwater benefits of Firefly Grove Park.
November	Residential Infiltration	TV Display	Shared graphic on a TV display with an estimated reach of 500.
November	Yard Management - Leaf Management	Social Media	The City of Wauwatosa shared a post encouraging residents to mulch their leaves on Facebook and Instagram.
December	Stormwater Management	Event/Website/Email Blast	As part of the master plan between Irgens and the City, Wauwatosa is highlighting stormwater benefits as it relates to development within Research Park. Between the open house, online website, email to all Milwaukee County Research Park employees, an estimated 5,000 people were reached.

Preventing Illicit Discharges

Materials enter drain...



An illicit discharge is any substance other than water that enters storm drains, either purposefully or by accident. Examples include paint, motor oil or other motor fluids, pesticides, and cleaning chemicals. When these substances are dumped down drains, they are conveyed directly into public waters, threatening the health of the environment and humans that interact with it!

What can residents do?



Know how to identify illicit discharges

If you notice any unusual smells, suds, oil sheen, or colors around storm drains or storm water outfalls, report them to your municipality's Department of Public Works!



Properly dispose of hazardous materials

Hazardous household materials can be disposed of at designated hazardous drop-off areas or recycling centers provided by your municipality.

If one of these sites doesn't already exist in your area, ask your local DPW to create one.



Let your friends and family know about the harms of illicit discharges

Visit respectourwaters.org for more information

... and flow into waterways



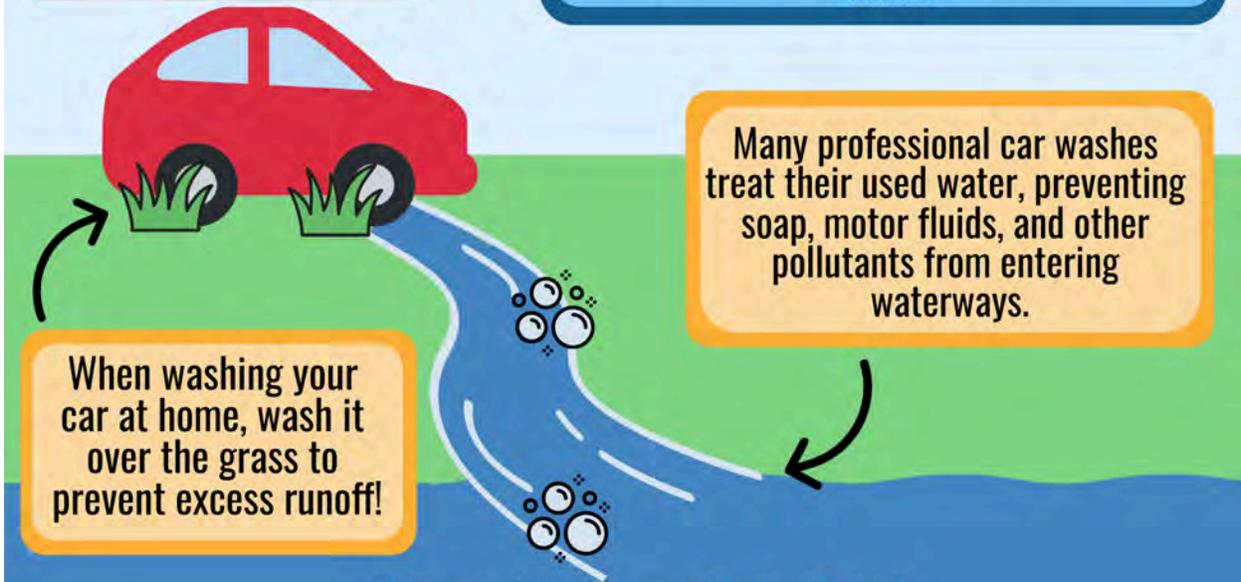
Waterways become dangerous to people and wildlife



STORM WATER POLLUTION & CAR WASHES

Professional car washes use less than half the amount of water as at-home car washes.

As your vehicle collects dirt, grime, and road salt, you may utilize a professional car wash service or wash your car at home. Below are some tips to help you prevent water pollution while keeping your vehicle clean!



When washing your car at home, wash it over the grass to prevent excess runoff!

Many professional car washes treat their used water, preventing soap, motor fluids, and other pollutants from entering waterways.

Visit respectourwaters.org for more information

Preventing Pollution at Community Events

1 IF IT ISN'T RAIN, IT DOESN'T BELONG IN THE DRAIN!

Follow applicable guidelines to ensure substances such as cleaning chemicals and cooking oils are disposed of properly. Consider keeping a spill kit on hand.



2 CONTAIN, DON'T DRAIN

Cover and store items left outside to prevent materials from being washed away with storm water.



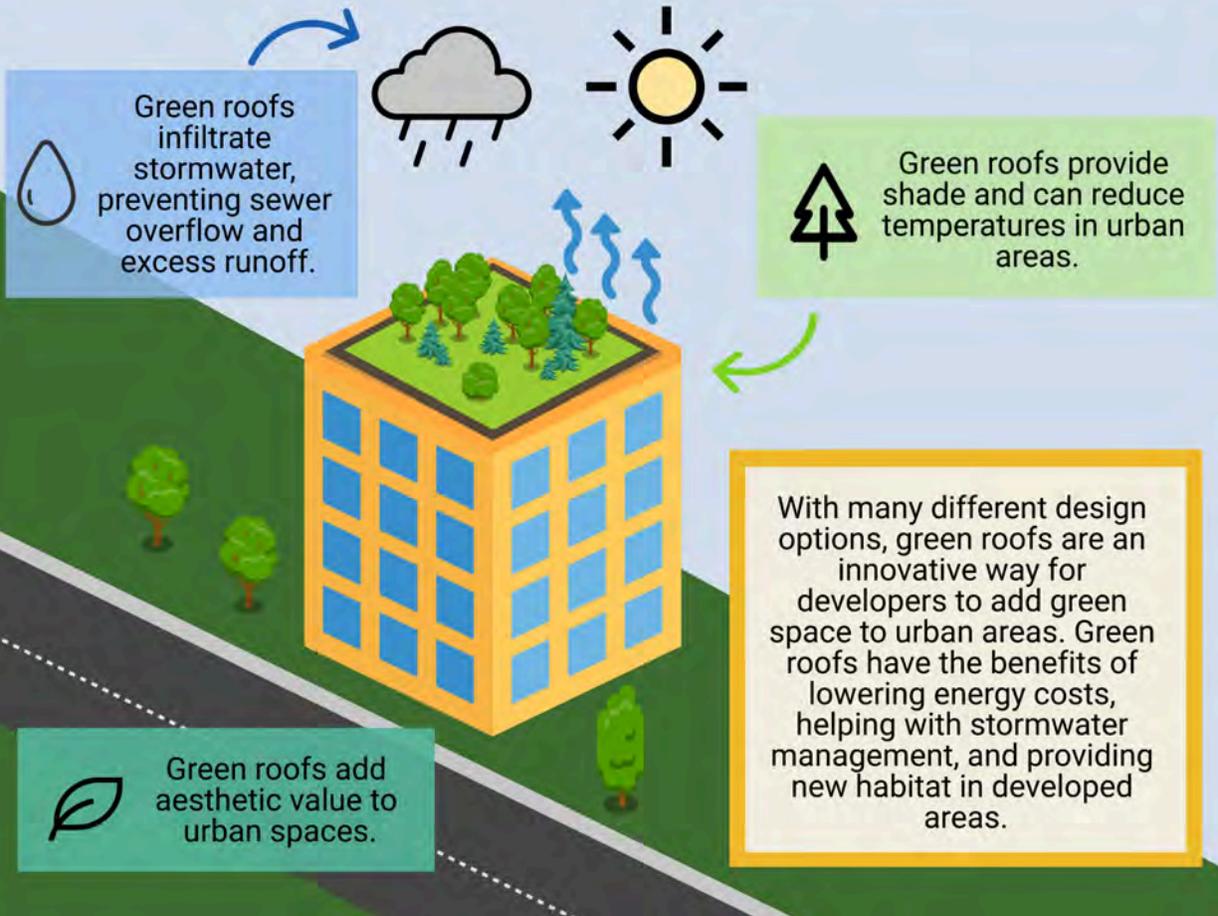
3 BE MINDFUL OF GARBAGE

Cover trash cans and dumpsters to prevent harmful bacteria from being washed into waterways. Monitor waste bins for any overflow.



Visit respectourwaters.org for more information

BENEFITS OF GREEN ROOFS



ORGANIC FERTILIZERS

Synthetic fertilizers can introduce excess nutrients into the environment that runoff into lakes, streams, and rivers when not absorbed by the soil. Take advantage of the nutrients released as organic materials such as leaves and grass clippings decompose. Use these materials to fertilize your yard while helping prevent water pollution.



Grass clippings can be left in place or added to your garden to serve as a natural fertilizer!



Fallen leaves may be shredded and added to gardens or mulched-in-place.



VISIT RESPECTOURWATERS.ORG FOR MORE INFORMATION

THE PROBLEM WITH PESTICIDES



Pesticides sprayed on your lawn...



...can end up in our water



Ways to prevent pesticide pollution

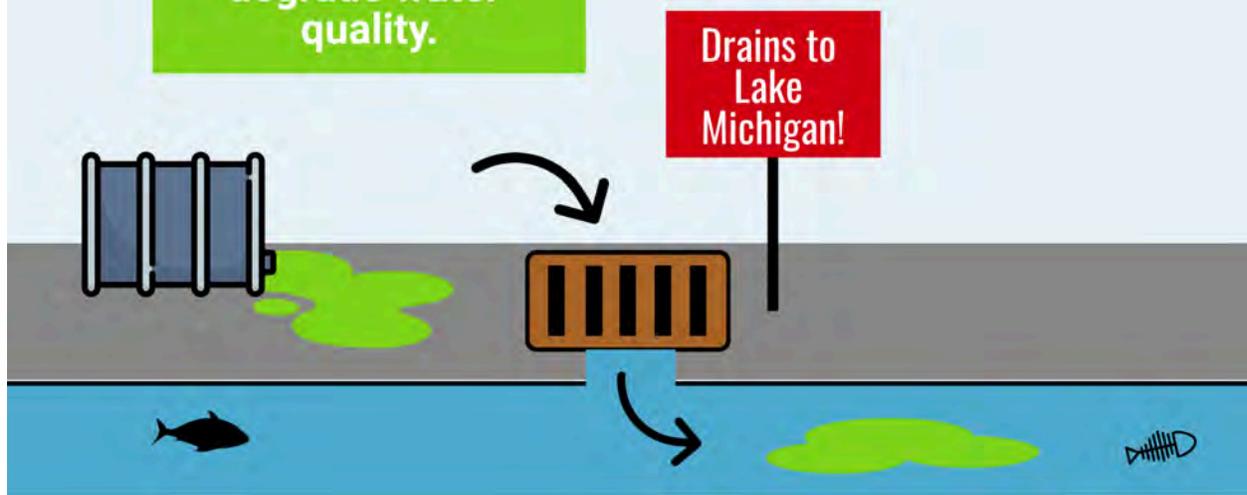
- 💧 Read the label to ensure you use the proper amount
- 💧 Never apply pesticides when rain is forecasted within 24 hours
- 💧 Don't use within 20 feet of a storm drain or water body
- 💧 Consider non-chemical pest control methods



Visit respectourwaters.org for more information

How do Illicit Discharges Affect Water Quality?

Dumping of chemicals, oil, and sewage, can harm aquatic life and degrade water quality.



Illegal dumping can make water unsuitable for wildlife, recreation, and drinking!

Please contact your local municipality immediately if you suspect an illicit discharge.

Visit respectourwaters.org for more information

Using Rain Barrels to Manage Stormwater in Your Backyard



Rain barrels are an excellent addition to any yard and provide many benefits including:

- Collecting stormwater where it falls and decreasing the amount of runoff.
- Decreasing the occurrence of backyard and basement flooding events.
- Saving you money on your water bill! Water collected in your rain barrel can be used to water gardens and lawns.

For more information, visit respectourwaters.org



HOW CAN YOU SPOT CONSTRUCTION-SITE POLLUTION?



SEDIMENT POLLUTION

Construction activities may disturb and displace sediment, which can be conveyed into local waterways through stormwater runoff



ABNORMAL ALGAE GROWTH

Sediment pollution may introduce excess nutrients into water bodies, causing harmful algal blooms



ABNORMAL TURBIDITY

Turbid waters can decrease the amount of available sunlight for aquatic plants and animals



If you suspect sediment pollution, contact the Wisconsin DNR and visit [respectourwaters.org](https://www.dnr.wisconsin.gov/respectourwaters.org) for more information

How can you manage fallen leaves?

Composting

Add leaves to a composter to collect excess nutrients and prevent them from entering waterways.

Or simply apply the mulched or whole leaves to your garden beds to break down and act as a natural fertilizer.



Mulching

Shred leaves by leaving them where they fall and then mowing your lawn as usual. Mow until the dime-sized leaf pieces settle between the grass.

The leaves will decay and release their stored nutrients that fertilize your lawn.



VISIT RESPECTOURWATERS.ORG FOR MORE INFORMATION

How to Winterize Your Rain Barrel



RESPECT OUR WATERS



Don't let your rain barrel get damaged this winter!

Rain barrels can function for over 15 years if properly stored and cared for in the winter months

-  Move the rain barrel and its parts inside when temperatures fall below 40°F to prevent cracking.
-  Empty any remaining water or debris from the rain barrel and, if necessary, disconnect it from the downspout.
-  Store the rain barrel upside down in a warm and dry place such as a garage or basement.

For more information, visit respectourwaters.org

Caring for Permeable Pavers



What are Permeable Pavers?

An alternative to traditional concrete/asphalt that allows stormwater to infiltrate through cracks between pavers and into the ground below

Don't let them get clogged!

Accumulated trash, sediment, or other debris can reduce drainage efficiency and lead to surface ponding



How to keep your permeable pavers clean:

Routine Maintenance:

Visually inspect the pavers **monthly** and use a broom to remove any surface debris

Periodic Maintenance:

Vacuum the pavers **twice a year** to remove built-up fine debris

*There are many different types of permeable pavers (some of which allow vegetation to grow between pavers). Check with your paver manufacturer for specific maintenance instructions.

BENEFITS OF GREEN ROOFS



RESPECT OUR WATERS

Implementation of green infrastructure and green spaces in urban landscapes is becoming increasingly popular. Green roofs in particular provide extensive benefits to urban communities, including lower energy costs, stormwater retention, and an increase in overall well-being for residents and visitors.

What is a Green Roof?

A green roof is the roof of a building or home that has been converted into a green space. Green roofs may contain any variety or number of plants and provide natural habitats in urban landscapes.

Types of Green Roofs

Extensive

- Consist of a thin soil layer and hardy plants such as succulents
- Extensive green roofs are typically cheaper to install, are lightweight, and require minimal maintenance

Intensive

- Consist of a thicker soil layer, heavier vegetation including trees and shrubs, and may require an irrigation system
- Intensive green roofs are typically more expensive to install, heavier, and require more maintenance than an extensive roof

Benefits of Green Roofs

Assist in infiltration of stormwater

Green roofs infiltrate stormwater before it can become runoff, mitigating pollution of nearby water sources and helping to prevent the overflow of sewer systems.

Reduce energy and maintenance costs

Green roofs lower energy costs by providing extra insulation and extend the lifespan of roofs by protecting against weather damage and wear-and-tear.

Provide green spaces in urban areas

Green roofs provide aesthetic value and green habitat to urban areas, improving community well-being.

GREEN ROOF QUICK FACTS

Green roofs are capable of retaining 70% - 90% of the storm water that falls on them



Research has shown that green roofs may reduce energy costs by up to 20%



The surface temperature of a green roof may be up to 56 degrees cooler than the surface temperature of a conventional roof



Green roofs can as much as double the lifespan of a conventional roof

For more information, visit epa.gov/heatislands/using-green-roofs-reduce-heat-islands

Construction Site and Post-Construction Site Management



RESPECT OUR WATERS

Construction sites can lead to extensive erosion and sediment pollution if not properly managed with stormwater in mind. To protect the integrity of public waterways, managers of construction or post-construction sites should implement stormwater Best Management Practices (BMPs).

Why does proper management of construction and post-construction sites matter?

Commercial construction projects typically require the disturbance of large amounts of sediment and the use of man-made materials and sediments. Without a proper mitigation strategy, these sediments can be washed into water bodies by stormwater runoff and snowmelt. Sediment pollution from construction and post-construction sites has the potential to significantly degrade water quality and harm aquatic life.

How to prevent erosion and sedimentation at construction and post-construction sites:

There are several pollution-prevention methods, known as Best Management Practices (BMPs), that may be implemented to reduce sediment pollution from construction and post-construction sites.

Construction site management methods aim to prevent pollution during construction activities. These methods include...



Vegetated buffers that serve to slow and infiltrate water that may run off of a construction site.



Sediment buffers or traps that aim to collect sediment-laden runoff before it enters waterways.

Post-construction site management methods should continue to manage sediment pollution and mitigate excess runoff that occurs as a result of construction. These methods include...



Stormwater infiltration basins and trenches that are capable of holding large amounts of stormwater to prevent excess runoff and flooding.



Rain gardens and vegetated bioswales that enhance stormwater infiltration and reduce the amount of pollutants leaving a post-construction site.

For more information on erosion and sediment pollution prevention methods, please visit the Wisconsin DNR website at dnr.wisconsin.gov

SEDIMENT POLLUTION QUICK FACTS

Sediments may settle at the bottom of water bodies or remain suspended in the water column; both have the potential to harm aquatic life



Man-made sediments, such as pavement, may contain heavy metals that are harmful to aquatic organisms



Sediments can increase the turbidity of water bodies, limiting the amount of sunlight available to aquatic plants and algae



Sediment pollution lowers water quality, increasing the cost of water treatment



Sediment buildup can impair the function of dams, reservoirs, and irrigation systems

Visit respectourwaters.org for more information

Appendix D. Stormwater Week Information

Table 11: 2025 Wisconsin Stormwater Week Social Media Posts

Date Posted	Topic	Webinar Link	Caption
September 18	Stormwater Week Promotion	-	<p>Did you know that WI Stormwater Week is almost here?!</p> <p>When: Sat., Sept. 20 - Sun., Sept 28</p> <p>What: Stormwater Week is an awareness campaign that aims to inform, educate, and engage Wisconsin residents on the topic of stormwater pollution prevention through shared, consistent messaging. This includes FREE educational webinars Monday, Sept. 22 - Friday, Sept. 26 (12 - 1 PM)! This year, we have a 'Call to Action' for WI residents to host or find a local cleanup!</p> <p>Join: Become a partner by signing up today!</p> <p>Learn more at: www.wistormwater.com</p>
September 22	Webinar 1 Information	https://wisconsinlandwater.org/conservation-training/cleanup-101-wi-stormwater-week-webinar	<p>Today is the first webinar of WI Stormwater Week!</p> <p>Monday, September 22 (12 - 1 PM): Cleanup 101</p> <p>Webinar Topic: Tune in to learn how to host a cleanup from Jessica Schultz, Executive Director with Fox-Wolf Watershed Alliance, and how to involve students in cleanups from Mike Aprill, a Science Teacher with Sheboygan South High School and the Wisconsin State Lead for SubjectToClimate.</p> <p>Registration: www.wistormwater.com</p>
September 23	Webinar 2 Information	https://wisconsinlandwater.org/conservation-training/cleanup-101-wi-stormwater-week-webinar	<p>Today is the second webinar of WI Stormwater Week!</p> <p>Tuesday, September 23 (12 - 1 PM): What are the benefits of shoreline restoration?</p>

		n-training/whats-are-the-benefits-of-shoreline-restoration-wi-stormwater-week-webinar	<p>Webinar Topic: Speakers Keir Peckham with Natural Landscapes and CW Purpero, and Katie Reed with Fox-Wolf Watershed Alliance, will discuss the benefits of shoreline restoration, programming related to their organizations, and tips for WI residents.</p> <p>Registration: wistormwater.com</p>
September 24	Webinar 3 Information	https://wisconsinlandwater.org/conservation-training/whats-an-illicit-discharge-wi-stormwater-week-webinar	<p>Today is the third webinar of WI Stormwater Week!</p> <p>Wednesday, September 24 (12 - 1 PM): What's an illicit discharge?</p> <p>Topic: Speakers Adelle Keppers, City of Superior, and Maureen McBroom, City of Watertown, will define an Illicit discharge vs. large spill, best practices for dry weather screening at outfalls, and steps WI residents can take when they see an illicit discharge.</p> <p>Registration: wistormwater.com</p>
September 25	Webinar 4 Information	https://wisconsinlandwater.org/conservation-training/how-to-engage-the-community-in-stormwater-education-wi-stormwater-week-webinar	<p>Today is the last webinar of WI Stormwater Week!</p> <p>Thursday, September 26 (12 - 1 PM): How to engage the community in stormwater education?</p> <p>Webinar Topic: Speakers Paul Mech, Director of Education with Discovery World, & Darius Jordan, Manager of School & Community Outreach with Discovery World, & Adam Bechle, Coastal Engineering Specialist with WI Sea Grant, & Lisa Neeb, Green & Healthy Schools Program Manager with Reflo will discuss their stormwater outreach & education programming & how they engage their communities.</p> <p>Registration: wistormwater.com</p>

Appendix E. 2025 Events

Table 12: 2025 Community Tabling Events¹⁷

 Symbol indicates the Respect Our Waters program was present at event.

 Symbol indicates the Big Plant program was present at event.

 Symbol indicates the Adopt Your Drain program was present at event.

Event	Date	Topics Covered	Materials Provided	Metrics	Other Details
Elm Grove Book Club 	March 12	<ul style="list-style-type: none"> - Watershed Education - Infiltration Practices - Household Hazardous Waste - Stormwater Management - Adopt Your Drain - Pharmaceutical Waste 	<ul style="list-style-type: none"> - Adopt Your Drain Brochures - Adopt Your Drain Magnets - Household Hazardous Waste Brochures - Sparkles Clean Water Tips Flyers 	25 Visitors	-
Rock the Green 	April 26	<ul style="list-style-type: none"> - Watershed Education - Stormwater Management - Adopt Your Drain - Yard Maintenance - Illicit Discharges 	<ul style="list-style-type: none"> - Respect Our Waters Informational Brochures - Adopt Your Drain Informational Brochures - Adopt Your Drain Magnets - Sparkles Clean Water Tips Flyers - Sweet Water Stickers - Respect Our Waters Stickers 	52 Visitors	-
Bike & Play* 	June 28	<ul style="list-style-type: none"> - Watershed Education - Infiltration Practices - Yard Maintenance 	<ul style="list-style-type: none"> - Big Plant Informational Flyers - Big Plant Stickers - Free Native Trees 	~16 Visitors	The Big Plant program attended this event and gave out 16 free native

¹⁷ Sweet Water attended a variety of community events across the Milwaukee River Basin. *Table 12* **only** includes events pertinent to the City of Wauwatosa in specific. Events were deemed pertinent if they occurred in the City of Wauwatosa or if residents from the City of Wauwatosa visited Sweet Water’s educational booth.

					trees.
Washington County Fair 	July 22 - 27	<ul style="list-style-type: none"> - Illicit Discharge Detection & Prevention - Residential Infiltration - Household Hazardous Waste - Local Municipal Information - No wipes down the pipes - Pet Waste Management - Green Infrastructure - Stream and Shoreline - Salt Reduction Strategies - General Education about Stormwater Management & Watersheds - Yard Maintenance - Stormwater Basin Maintenance <i>(when applicable)</i> 	<ul style="list-style-type: none"> - Bioretention Basins: Guidelines for Maintenance booklet - Infiltration Basins: Guidelines for Maintenance booklet - Stormwater Ponds: Guidelines for Maintenance booklet - Jackson Sewer Utility “No Wipes Down the Pipes” can koozies - Sparkles Clean Water Tips flyers - Pet waste disposal bags - Town of West Bend informational brochures - Participating municipalities banner with logos - Milwaukee River Basin map with water cycle - Detailed water cycle diagram poster - Pet Waste informational brochures - “Clean Ways for Waterways” brochures - Car Care: Tips and best practice - Doggie Dooley Pet Waste Disposal System informational flyers - Think Blue: You’re the solution to storm drain pollution flyers - Respect Our Waters sign with link to website - An Invitation to a Healthy Country Home booklet - Washington County Used Tire Collection 	1,158 Visitors	The Big Plant program attended this event and gave out 81 free native trees.

			<ul style="list-style-type: none"> informational poster - Washington County 2025 Clean Sweep Hazardous Waste Collection informational poster - Big Plant native tree informational flyers - “The Lorax” poster - Educational prizes such as candy and Respect Our Waters stickers 		
<p>Brookfield Farmers Market </p>	August 9	<ul style="list-style-type: none"> - Infiltration Practices - Pet Waste Management - Stormwater Management - Yard Maintenance - Big Plant 	<ul style="list-style-type: none"> - Stormwater Plinko - Respect Our Waters Brochures - Sparkles Stickers - Household Hazardous Waste Brochures - Pet Waste Management Brochures - Sparkles Clean Water Tips Flyers 	104 Visitors	The Big Plant program attended this event and gave out 20 free native trees.
<p>Tosa Green Summit </p>	September 20	<ul style="list-style-type: none"> - Infiltration Practices - Pet Waste - Non-Point Source Pollution - Watershed Education - Yard Maintenance - Stormwater Management 	<ul style="list-style-type: none"> - Respect Our Waters Brochures - Adopt Your Drain Brochures - Stormwater Trivia - Adopt Your Drain Gloves - Adopt Your Drain Magnets - Respect Our Waters Informational Sign - Sweet Water Stickers - Sparkles Clean Water Tips Flyers - Sparkles Fall Clean Water Tips Flyers - Sparkles Stickers - Household Hazardous Waste Brochures - Pet Waste Management Brochures - Respect Our Waters Informational Sign 	65 Visitors	The Big Plant program attended this event and gave out 40 free native trees.

			- Adopt Your Drain Informational Sign		
Harbor Fest 💧🌳🍂	September 28	<ul style="list-style-type: none"> - Infiltration Practices - Pet Waste - Non-Point Source Pollution - Watershed Education - Yard Maintenance - Stormwater Management - Household Hazardous Waste - Salt Reduction Strategies - Adopt Your Drain 	<ul style="list-style-type: none"> - Respect Our Waters Brochures - Adopt Your Drain Brochures - Adopt Your Drain Magnets - Respect Our Waters Informational Sign - Sparkles Clean Water Tips Flyers - Sparkles Fall Clean Water Tips Flyers - Sparkles Stickers - Household Hazardous Waste Brochures - Pet Waste Management Brochures - Respect Our Waters Informational Sign - Adopt Your Drain Informational Sign - Stormwater Plinko 	264 Visitors	The Big Plant program attended this event and gave out 100 free native trees.
Greenfield World Migratory Bird Day* 🌳	October 5	<ul style="list-style-type: none"> - Watershed Education - Infiltration Practices - Yard Maintenance 	<ul style="list-style-type: none"> - Big Plant Informational Flyers - Big Plant Stickers - Free Native Trees 	30 Visitors	The Big Plant program attended this event and gave out 30 free native trees.

Appendix F. Big Plant Educational Materials



Big Plant wants you to know how to...

Respect Our Waters



What is polluted runoff?

Stormwater or runoff pollution is a process that occurs as rain falls or snow melts. The water rushes across impermeable surfaces, washing a variety of pollutants into local lakes and streams. In the city, storm drains often catch a majority of these pollutants, however our storm drains discharge directly into those same lakes and streams.

Why is polluted runoff a serious problem?

Erosion produces **sediments** that get washed into our lakes and streams which cause big problems. This sediment among other factors such as improper disposal of manure, animal waste, leaves and grass clippings lead to an increase of the **nutrients**, phosphorus and nitrogen in our lakes and streams. This turns our prized bodies of water green due to an overproduction of algae.

How does polluted runoff affect the community?

- **Poor fishing** -
Sediment makes lakes and streambeds shallower, increasing water temperature and harming fish habitats for anglers.
- **Muddy Waterways** -
A muddy waterway not only sounds miserable to swim in, but they can also be dangerous for swimmers and make it hard for fish to see, breathe, eat, and lay their eggs.
- **Fish consumption advisories and kills** -
Sediment and runoff can store toxins materials that contaminate small animals, a buildup of these toxics can lead to illnesses, birth defects, and even death for fish and waterfowl. An increase of decaying debris can decrease oxygen levels, increase the presence of ammonia, and increase water temperature which can lead to the mortality fish and other aquatic life.
- **Beach closings** -
Excess phosphorus contributes to the over-fertilization of lakes. This increases the abundance of undesirable weeds and algae which can impact participation in water activities.
- **Habitat Loss** -
Increased algae production blocks sunlight for bottom-rooted plants leading to a loss of habitat.

How individuals can make a difference?

- Manage yard waste and fertilize properly
- Contribute to erosion control
- Redirect downspouts away from sidewalks and driveways

To learn more about how you can be a part of the solution visit...
respectourwaters.org

Best Practices for Yard Maintenance Applications

LABELS ARE LAWS

Always read and use lawn chemicals according to its attached label.

Test your soil

Best practices suggest having your soil tested to determine nutrient content, this can determine what nutrients need to be added to your soil and narrow down a proper fertilizer

Timing of applications

Late spring around May-June and mid fall are the best times of year to fertilize. Summer applications can lead to overfertilization of plants and chemical burns due to high temperatures.

Hazards of overfertilization

Overfertilization can cause broadleaf plants to wilt and slow in growth. Browning of foliage even in needled plants and brown/dead patches in yard grass are also common signs of overfertilization. Overfertilization damage is often more consistent compared to disease and insect damage.

Alternatives to traditional fertilizers and pesticides

Organic fertilizers are either plant-based, animal-based, and or mineral-based. Reduced risk pesticides are analyzed for human health, environmental, and other hazards by the EPA who produces an approved list annually.



Best Practices for Yard Waste Management

Mulch your lawn or garden

Use your lawn mower to shred your leaves, it will provide protective coverage that can mitigate soil erosion, suppress weeds, and insulate your garden perennials.

Compost your leaves and grass cuttings

You can control where your yard waste decomposition occurs and captures those extra nutrients for future use by adding them to your compost pile.

Bag your leaves

First, check with your municipality to see if our local disposal services accept bagged leaves. If they do, bag them up but keep them out of the streets until pick up time.

Adopt a Drain

Register to keep your storm drain clean for free at www.adoptyourdrain.com



BIG plant Native Tree Need to Knows

SE WISCONSIN

How do we call Diggers Hotline?

It's simple, call (800) 242-8511 or 811 or you are looking for more information, you can visit Diggers website at www.diggershotline.com

When do we call Diggers Hotline?

A minimum of 3 days before you put a shovel in the ground, on average dig tickets are good for 10 days

What will Diggers Hotline do?

Survey and mark important utilities lines that are underground throughout a given property, this may not include private lines.



Why do we have to call Diggers Hotline at (800)242-8511 or 811?

It is Wisconsin State Law to contact Diggers Hotline, Wisconsin Statute 182.0775

It is a free service provided to you to prevent extremely hazardous and costly damages to underground structures.

Comparing the marked lines of Diggers Hotline and mature size of our gifted tree can help you determine a proper and sustainable planting location.

Diggers would still be called even if you are only using hand tools for your project.

Tree Care Tips

Transportation:

- Never leave tree in hot car/trunk or in direct sunlight without water
- use tarp if transporting tree in "open cab" to protect leaves

Storage:

- plant tree asap (3 days after pick up)
- maintain moisture of soil in container before planting

Planting prep:

- What kind of light does location have?
- What kind of soil does location have?
- How much open space does location have, above and below ground?
- How will I manage tree maintenance?

Stakes/guards:

- Stake your tree as it matures can help prevent wind/storm damage
- Tree guards are a great way to protect your tree from hungry wildlife

Maintenance:

- Follow our guides for proper mulching, pruning, and watering practices
- Hire a professional maintenance



Native Trees Impact on watersheds

Captures stormwater runoff and reduce erosion

The large canopies of native trees intercept stormwater, slowing it down which minimizes erosion and maximizes soil infiltration. Large root systems also aid in improving soil infiltration, as they uptake water reducing overall moisture of soil which increases stormwater storage capacity.

Removes gaseous and particulate air pollution

The leaf stomata of the native trees help aid in the removal of gaseous air pollution through the intake and conversion of SO2, NO2, and CO and ozone.

Native trees have large plant surfaces that help aid in the removal of particulate matter as their leaves and stems provide optimal catchability.

Sequesters carbon dioxide

Native trees pull carbon dioxide from the air and bind them to sugars during the process of photosynthesis. The trees use these sugars to develop new wood and roots, which stores the carbon until decomposition occurs at time of tree death.

Fun Facts:

- The powerful stem and root systems of native specimens make up around 70-80% of their overall biomass.
- iTreeTools.org is a free public tool that can be used to calculate impact for single tree installation and even massive restoration projects.

Congratulations on your new tree!

Thank you for planting a tree to help keep rainwater out of the storm sewers & reduce flooding. Every drop counts.

PLANTING INSTRUCTIONS

1. Choose a site suitable for the tree based on sunlight requirements
2. Dig a hole 1 ½ - 2 times wider than the container
3. Set the tree in the hole with the top of the root ball 1-3" above ground level
4. Backfill the soil gently pressing it down as you go to remove air spaces. Keep the root crown/flare exposed—don't bury it
5. Apply mulch 2-3" deep around the tree and 6" away from the stem in the shape of a donut
6. Water thoroughly after planting

WATERING INSTRUCTIONS

Watering is extremely important for newly planted trees. Too much or too little water is harmful to a tree, so here are some simple watering guidelines.

- Water your newly planted tree immediately for 30 secs - 1min, or until the area around the tree is fully saturated
- Water every 3-5 days for the first month
- Water weekly for the remainder of the year
- Check soil moisture to determine if it needs watering or for signs of moisture stress



25-004

Speckled Adler (*Alnus incana*)



Full Sun to Part Shade Blooms in March, April 	Height 15-25 ft	Spread 6-15 ft	Soil Moist to wet, well-drained soil. Tolerates clay, occasional flooding, and wet sites.
Flower: Catkin 	Fall Color: None 	Wildlife: Butterflies, Mammals 	

Tamarack (*Larix laricina*)



Full Sun 	Height 35-50 ft	Spread 10-15 ft	Soil Prefers moist to wet, well-drained soil. Adaptable to many soils, but drought <u>intolerant</u> .
Blooms in April, May 	Flower: Reddish-purple or yellow cones 	Fall Color: Gold 	Wildlife: Birds

Paper Birch (*Betula papyrifera*)



Full Sun to Part Shade  		Height  50 ft	Spread  35 ft	Soil  Grows best in medium to wet well-draining soils
Blooms in April, May 	Flower: Catkins 	Fall Color: Bright Yellow 	Wildlife: Birds, Mammals  	

American Elderberry (*Sambucus canadensis*)



Full Sun to Part Shade  		Height  6-12 ft	Spread  6-12 ft	Soil  Prefers moist, well-drained sites
Blooms in June, July 	Flower: White, Fragrant, Clusters 	Fall Color: Yellow-Gold 	Wildlife: Birds, Mammals  	

Appendix G. Big Plant Social Media Posts



How do you care for trees? Watering New Plants



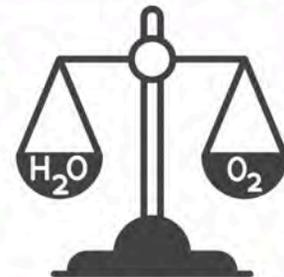
- Maintain the soil moisture surrounding fresh plantings
 - Avoid letting the soil dry out completely
 - Avoid letting the soil get too wet
- For the **first 30 days** water every 5th day
- For the **first year** continue watering every week



Evidence of insufficient watering

- Wilting (curling or drooping of leaves)
- Stunted or dull looking new growth
- Browning or burning of leaf edges (scorch)

Although water and oxygen have an inverse relationship; both are needed for healthy root development and it's essential to maintain a balance.



How do you care for trees? Deer Protection



All trees, especially new plantings, are susceptible to deer-related damage. This makes deer protection extremely important, particularly in Wisconsin.

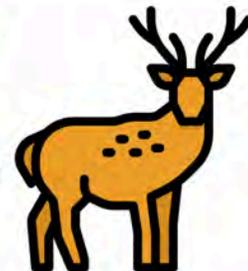


Buck Rub and deer food

- In late summer and early fall, male deer rub trees to remove velvet from new antlers. This behavior causes **visible scratches** that can result in **bark peeling** or **trunk damage**.
- Deer eat foliage, twigs, fruits, and nuts. While they favor soft **new growth**, they will consume any available plant, including those typically considered **deer resistant**.

Different types of deer protection

- Vinyl or mesh tree guards
 - Chicken wire
- Sprayed applications; small scale option
 - Granular applications
- Heavy duty metal tree guards



Big Plant is excited to be attending...



Greenfield's 2025
Nature and Forestry Festival

Look for Big Plant @



**Jackson Park
Farmers Market**

Stormwater infiltration



One tree at a time



Appendix H. Clean Rivers, Clean Lake Conference Agenda



3 simultaneous breakout sessions will be offered throughout the day:

"A" sessions will be in the **Pavilion**
 "B" sessions will be held in the **Pilot House**
 "C" sessions will be held in the **Theater Room**

8:00 AM	Registration	Breakfast served in Vendor Hall
8:35 AM	Welcome (Pavilion)	Cassandra Hoppe, Ferguson Waterworks - Geo & Stormwater Solutions, Conference Emcee John Emmerich, CEO, Discovery World
8:45 AM	Keynote Address	<i>Milwaukee: A Region Built on Water</i> - John Gurda, Milwaukee writer and historian
9:30 AM	Group Session 1	Sweet Water Organizational Updates
9:45 AM	B R E A K	
10:00 AM	Pavilion 1A:	<i>Watertown Waterways Improvement Program: A Local Water Quality Trading Program</i> - Maureen McBroom, City of Watertown and Patricia Cicero, Jefferson County
	Pilot House 1B:	<i>Preparing for the 1,000-yr Flood: 2D Modeling for the Milwaukee Metropolitan Sewerage District</i> - Eric Thompson, MSA Professional Services, Inc.
	Theater 1C:	<i>Overview of the WDNR's MS4 Best Management Practices Menu: A useful resource for MS4 Permittees / Tips and Tricks: Waterways and Wetland Permitting</i> - Lexi Montes and Kiara Caldwell, Wisconsin DNR
10:45 AM	B R E A K	
11:00 AM	Pavilion 2A:	<i>Going Beyond Flow Path Mapping / Flooding Mitigation Efforts Through Public and Private Stakeholder Collaboration / Addressing Community Stormwater Issues, From Flooding to Water Quality Improvements</i> - Anna Culcasi and Claire Randall, Hey and Associates, Inc. / Ashley Leisgang and Rick Eilertson, AECOM
	Pilot House 2B:	<i>Building the Ark: Neighborhood Stormwater Strategies for Grasslyn Manor / Making Green Infrastructure Fun and Functional - An Update to the Green and Healthy Schoolyard Redevelopment Projects</i> - Sydney VanKuren, Greenprint Partners and Steve O'Connell, Grasslyn Manor / Justin Hegarty, Reflo, Heather Dietzel, MPS and Kevin Rey, SmithGroup
	Theater 2C:	<i>Airport TMDL Study / Enhancing IDDE Inspections with Survey123 and GIS</i> - Christy M. Poniewaz and Tiffany M. Wagner, Ruekert & Mielke, Inc.
11:45 AM	L U N C H	
12:00 PM	Pavilion	<i>The Regional Chloride Impact Study for Southeastern Wisconsin</i> - Karin Hollister, Southeastern Wisconsin Regional Planning Commission
12:40 PM	Pavilion	<i>Granular or Liquid Chlorides</i> - Richard Neth, City of Glendale
1:00 PM	N E T W O R K I N G T I M E	
1:15 PM	Pavilion 3A:	<i>Why Extreme Rainfall Events Appear to Happen Much More Often than Expected</i> - William Gonwa, MSOE
	Pilot House 3B:	<i>Seeing GI Benefits at the Meter</i> - Monica Vincent, Mead & Hunt
	Theater 3C:	<i>Covering Ground: Investigation of Cover Crops for Soil Health in the Great Lakes Region / Potential of Dissolved Phosphorus Delivery to Surface Water from Dead Vegetation vs Live, Green Vegetation</i> - Dennis Busch, Water Resources Monitoring Group, LLC / Steve Hoffman, InDepth Agronomy
2:00 PM	B R E A K	
2:15 PM	Pavilion 4A:	<i>Reforestation & Wetland Restoration - A strategy for stormwater management</i> - Jamie Fersching, MMSD
	Pilot House 4B:	<i>Improving Efficiency for Detecting and Eliminating Illicit Discharge in Stormwater Using DNA-based Methodology in Wisconsin Communities</i> - Melissa Schussman, University of Wisconsin - Milwaukee
	Theater 4C:	<i>Green Infrastructure at Scale: How small municipalities can achieve big results through a community-based partnership</i> - Mark O'Leary and Peter Zanghi, CIS
3:00 PM	B R E A K	
3:15 PM	Group Session 2 (Pilot House)	Closing Panel Kevin Shafer, Nancy Frank, and Peter Wood Award Ceremony <i>The Legacy Award, 20 years of Impact in Southeastern Wisconsin</i> Closing Remarks Jake Fincher, Executive Director of Sweet Water
4:30 PM	Pilot House	H A P P Y H O U R <i>Please join us for refreshments, appetizers, and networking in the Pilot House, generously sponsored by Molson Coors!</i>

City of Wauwatosa Stormwater Education and Public Involvement Efforts

In 2025, we shared stormwater education in several formats. Here are several examples:

- Sustainability in Spring social post ([April 2025](#)); Promoted participation in Milwaukee Riverkeeper Spring Cleanup on Saturday, April 26, 2025

City of Wauwatosa, Wisconsin Government's Post

City of Wauwatosa, Wisconsin Government •
April 24, 2025 · 🌐

Do you know these three sustainability wins in Wauwatosa? 🌍

Wauwatosa is doubling the amount of renewable solar energy generated on public facilities this year by installing solar panels on the Muellner Building, Police Department, Potter Road pumping station, and Firefly Grove Park. 🌞

Trees help the environment in many ways, not to mention the beauty they add to our neighborhoods. 🌳 Learn how much pollution, stormwater runoff, and carbon emissions your favorite tree is preventing on our tree inventory map: <https://gis.wauwatosa.net/arbor/public.html>

Wauwatosa owns about 6,300 street lights, and 90% have been converted to LED fixtures. 💡 Switching to LED streetlights saves money and energy while increasing safety and visibility. LED lights last four times longer than current streetlights, meaning fewer outages and repair trips. Bonus: the LED light components are recyclable. ♻️

There are ways you can make a difference in the community. Join community members from across Milwaukee County for the 30th Milwaukee Riverkeeper Spring Cleanup on Saturday, April 26, 2025. Learn more: <https://milwaukeekeeper.org/event/spring-cleanup/>



👍❤️ 89

3 shares

👍 Like 💬 Comment

- Within Firefly Grove Park opening remarks (estimated attendance of 200), leaders discussed the stormwater improvements made possible by grant funds (May 2025)

City of Wauwatosa, WI Search

Discover Tosa Explore, Events, Recreation | **Get Involved** Volunteer, Report, Help | **Services** Pay, Find, Learn | **Public Safety** Volunteer, Report, Help | **Government** Departments, City Council | **How Do I...** Apply, Get, Pay

Advertise in Wauwatosa

- + About Wauwatosa
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News List

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Wauwatosa to Unveil Firefly Grove Park and Wisconsin's First Thomas Dambo Troll

Community Invited to Artist Talk and Grand Opening Celebration in Late May

Post Date: 04/29/2025 1:31 PM

Wauwatosa is set to open its newest destination on May 28, 2025: Firefly Grove Park, located at 116th Street and Gilbert Avenue. The park will officially open with two public events, offering residents and visitors a first look at its unique amenities - and the chance to meet the artist behind a remarkable new sculpture.

The city partnered with internationally renowned Danish artist Thomas Dambo to bring one of his iconic large-scale troll sculptures to Wisconsin for the first time. Known for creating whimsical, sustainable public art from recycled materials, Dambo has installed trolls around the world as part of a global storytelling series aimed at inspiring environmental stewardship. His newest creation will be built in Firefly Grove Park.

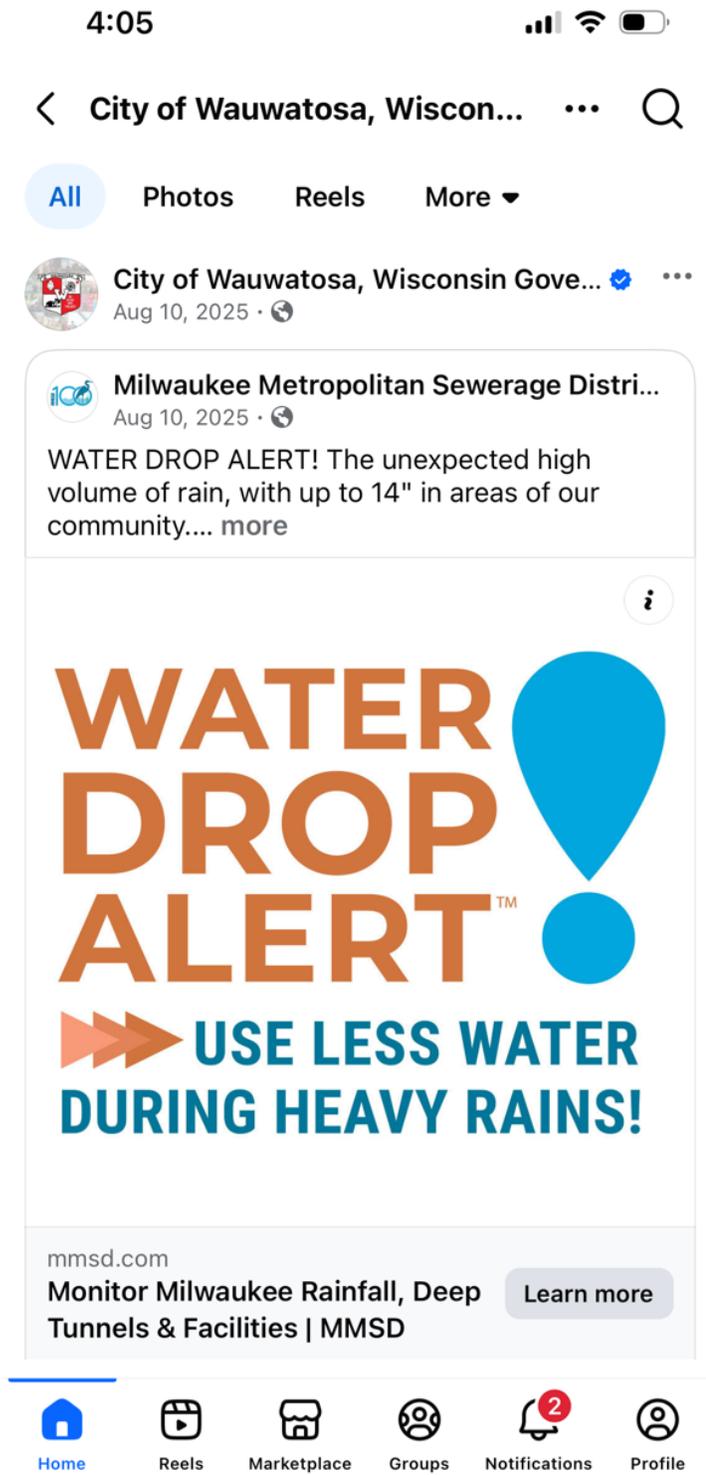
The park is closed to the public until May 28, 2025.

- Wauwatosa’s Sustainability Committee attended a handful of community events, including the Tosa Farmers Market and a family movie screening at the Wauwatosa Public Library where they demonstrated to residents how to use the “Waste Wizard” tool

- Shared a social media post about green infrastructure featured in recently constructed Firefly Grove Park including permeable walking paths and native plants:



- The City shared a MMSD Water Drop Alert post on social media encouraging residents to reduce water usage during the recent heavy rain events:

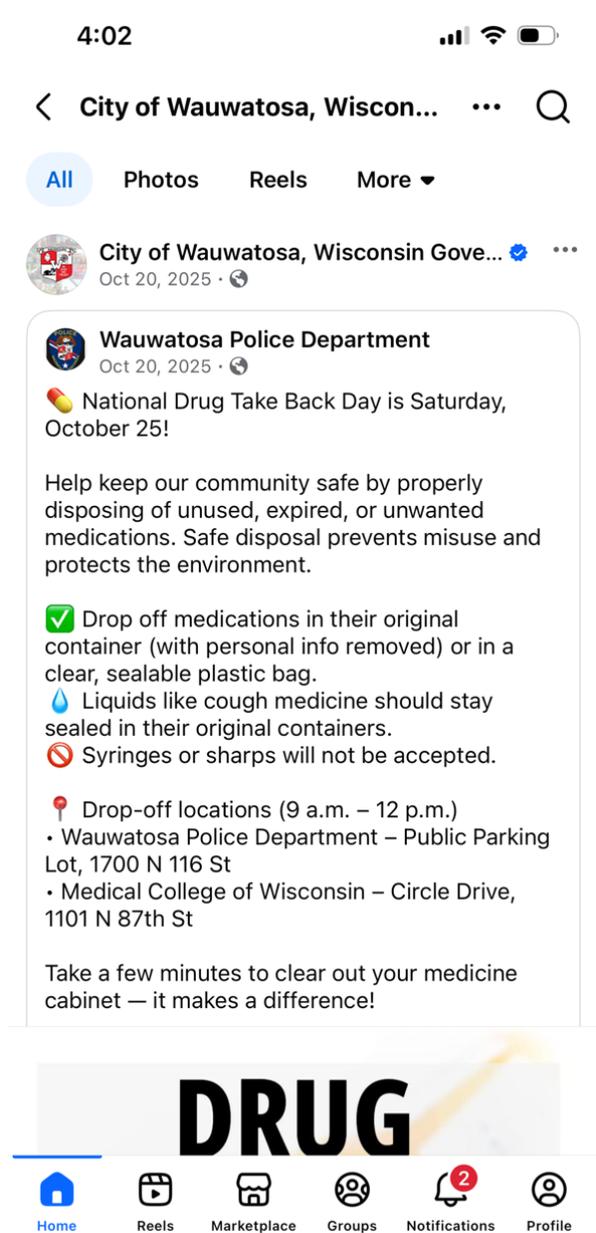
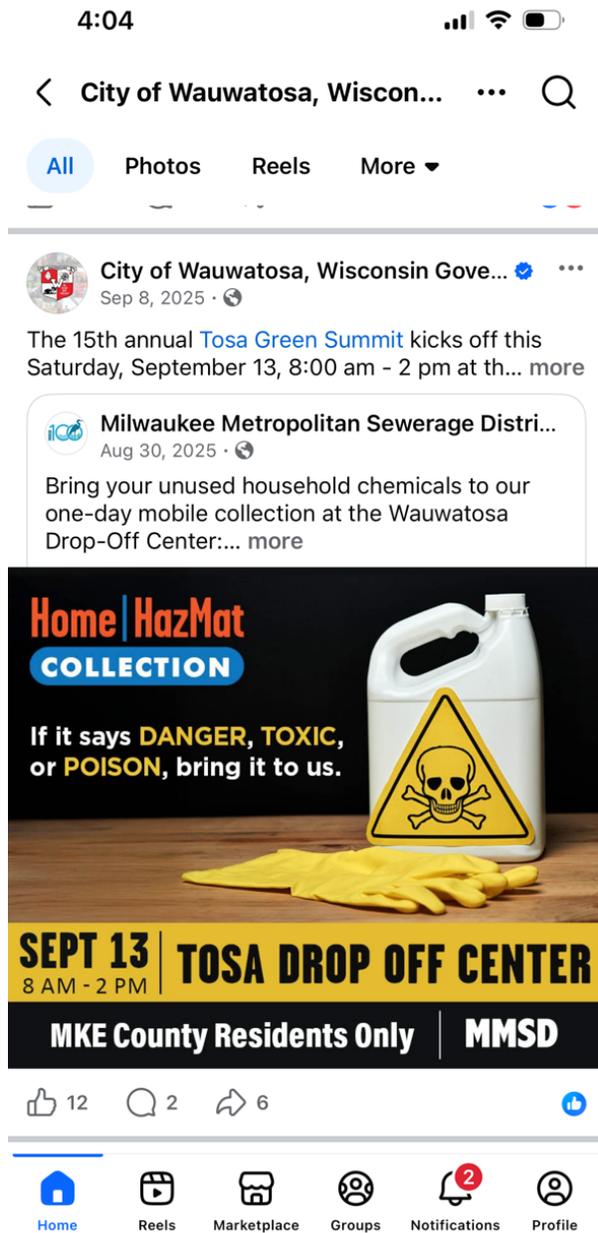


- Tosa Green Summit shares results of 2025 event, some of which is related to stormwater management:
 - 46,759 lbs of hazardous waste
 - 233 lbs of medicine
 - 4676 lbs of textiles
 - 40 bikes
 - 6000 lbs of paper shredding
 - 2000 lbs of scrap metal
- Distributed information about Firefly Grove Park stormwater solutions via city news ([October 2025](#))

The screenshot shows the City of Wauwatosa website. The header includes the city logo and a search bar. A navigation menu contains: Discover Tosa, Get Involved, Services, Public Safety, Government, and How Do I... A sidebar on the left lists various city services like About Wauwatosa, Bike Walk Tosa, Community Events, City News, Construction News, Jobs in Wauwatosa, Neighborhood Greenways, Library, Tosa Cemetery, Parking in the Village, Parking in Wauwatosa, Parks, Public Art, Recreation, Resident Guide, Rental Facilities, School District, Senior Center, and The Village in Wauwatosa. The main content area is titled 'News List' and features an article titled 'Wauwatosa's Stormwater Solutions in Firefly Grove Park'. The article includes a sub-headline, a post date of 10/10/2025 8:34 AM, and an aerial photograph of the park. The text describes the park's transformation from a landfill to a park with stormwater best management practices (BMPs) such as an engineered wetland, a biofiltration basin, and porous pavement walkways. It also mentions the funding sources for these features.

- Sustainability Manager worked with the commission to adopt sustainability goals, including stormwater management (<https://www.wauwatosa.net/discover-tosa/sustainability>)

- Social media posts in the fall promoting a Drug Takeback Day and a Household Hazardous Waste Collection



- Leaf Management in your Yard social media campaign – social media post encouraging residents to mulch their leaves on Instagram and Facebook.

7:23

< City of Wauwatosa, Wisconsin Government'...

 City of Wauwatosa, Wisconsin Government ✓
23m · 🌐

Raking this weekend?

Instead of raking and bagging, simply run a mulching mower over dry leaves until they're finely shredded. The goal is to break the leaves down into small pieces that settle into the grass, where they decompose and feed the soil. The result is a natural layer of leaf mulch that blends into the lawn.

Other composting resources: <https://www.wauwatosa.net/government/departments/public-works/collection-services/composting>

👍 3

👍 Like 💬 Comment ➦ Share



BEFORE

7:23

< City of Wauwatosa, Wisconsin Government'...



👍 Like 💬 Comment ➦ Share



AFTER

👍 Like 💬 Comment ➦ Share

- Featured in the MS4 Statewide Newsletter Fall 2025 Edition on the city's stormwater management plan in Firefly Grove Park.

City of Wauwatosa's Storm Water Solutions in Firefly Grove Park

Some might associate Firefly Grove Park with Mama Rosa (the giant troll art sculpture), the looping pump track, or the whimsical living willow hut. But for those who look closer, the park also tells another story - one about water and sustainability. The City's newest park, located at 1900 N. 116th Street, is centered around storm water best management practices (BMPs).

Prior to the 1970's, this area was a landfill. After it was filled, it was just long grass up to your knees with water that wasn't optimal for runoff.

After a major transformation, the park now features three major storm water best management practices (BMPs): an engineered wetland, a biofiltration basin, and porous pavement walkways. Together, these systems capture, store, and filter nearly 580,000 gallons of storm water before it flows into the existing wetlands nestled along the park's east side.

The engineered wetland alone holds more than 218,000 gallons using native plants and soils to slow and treat the water.

The biofiltration basin provides another 205,000 gallons of storage, allowing storm water to soak naturally into the ground. Porous pavement paths add over 155,000 gallons of storage by letting rain filter through slowly rather than run off hard surfaces.

The City leveraged local partnerships to ensure that every storm water element was fully funded through Fresh Coast Green Communities and the MMSD Green Solutions Funding program. These storm water features help protect the neighborhood from flooding, improve water quality, and revitalize a once-overlooked property.



Photo Credit: City of Wauwatosa. Engineered wetland.

Summary of 2025 Outfall Testing Results

Outfalls Inspected: 17
Outfalls Tested: 8
No Flow Present: 8

Testing Variable	Action Level	Range of Samples	# Samples at or above limit	Percentage above limit
Ammonia	0.1 mg/L	0 - 2.07	5	62.50%
Detergents	0.5 mg/L	0 - 0.5	1	12.50%
pH	< 6, > 9	5 - 7	2	25.00%
Total Chlorine	Detection	0	0	0.00%
Total Copper	0.1 mg/L	0 - 0.14	1	12.50%
Phenol	Detection	0 - 0.5	2	25.00%
E. coli	1000 CFU/100mL	30 - 35,800	4	50.00%

City of Wauwatosa 2025 Outfall Testing

STRUCTURE ID	DATE INSPECTED	RAINFALL IN LAST 24 HRS	RAINFALL IN LAST 72 HRS	SUBMERGED IN WATER	SUBMERGED IN SEDIMENT	FLOW PRESENT	FLOW DESCRIPTION	FILL TIME (SEC)	TEMPERATURE (F)	pH	COPPER (mg/L)	CHLORINE (mg/L)	AMMONIA (mg/L)	DETERGENT (mg/L)	PHENOLS (mg/L)	FLOW COLOR	COLOR SEVERITY	SURFACE COVER	FLOW ODOR	DEBRIS NEAR OUTFALL	TURBIDITY	DEBRIS IN PIPE	VEGETATION	OUTFALL DAMAGE	Bacteria (CFU/100mL)
ST40-116	2025-09-16 14:34:00	0	0	NO	PARTIALLY	NO		-	-	-	-	-	-	-	-	CLEAR			NONE	RIPRAP			EXCESS GROWTH		
ST41-007	9/16/2025 AND 10/09/2025	0	0	PARTIALLY	NO	NO		10	65	7	0	0	0.00	0.25	0	CLEAR	CLEARLY VISIBLE IN CLEARLY VISIBLE IN BOTTLE		NONE				NORMAL	NONE	870
ST37-001 / ST37-031	9/16/2025 AND 10/09/2025	0	0	PARTIALLY	PARTIALLY	NO		30	66.4	5	0.07	0	0.19	0.25	0	CLEAR	CLEARLY VISIBLE IN CLEARLY VISIBLE IN BOTTLE	NONE	NONE				NORMAL	NONE	230
ST43-300	2025-09-16 15:42:00	0	0	NO	PARTIALLY	NO	NONE	-	-	-	-	-	-	-	-	-	-	-	-	SEDIMENT			EXCESS GROWTH		
ST36-109	2025-09-16 16:17:00	0	0	NO	NO	YES	LOW	60	65	6	0.14	0	2.07	0.5	0.5	CLEAR		NONE	SEWAGE	OTHER			EXCESS GROWTH	CHIPPING	High (35,800), Non-human
ST36-109 / ST36-112	2025-10-28 15:41:00	0	0	NO	NO	YES	MODERATE	90	62	5	0	0	0.05	0	0	CLEAR	CLEARLY VISIBLE IN	NONE	NONE		CLEAR				250
ST36-001	2025-09-16 16:40:00	0	0	PARTIALLY	NO	NO		-	-	-	-	-	-	-	-	-	-	-	-	NONE		NONE	NORMAL	NONE	
ST27-010	9/16/2025 AND 10/9/2025	0	0	PARTIALLY	NO	NO										CLEAR	CLEARLY VISIBLE IN OUTFALL FLOW	NONE	NONE	OTHER			EXCESS GROWTH		
ST26-304	2025-09-16 17:15:00	0	0	NO	NO	NO	NONE	-	-	-	-	-	-	-	-	-	-	-	-	NONE	-	NONE		NONE	
ST10-091	9/18/2025 AND 10/28/2025	0	0	PARTIALLY	NO	YES	LOW		61	7	0	0	0.25	0.25	0	CLEAR	CLEARLY VISIBLE IN BOTTLE	FOAM	NONE	NONE	LIGHTLY CLOUD	NONE	NORMAL		High (5,730), Human detection
ST11-009	9/18/2025 AND 10/28/2025	0	0	NO	NO	NO	INTERMITTENT	-	-	-	-	-	-	-	-	-	-	-	-	OTHER			EXCESS GROWTH		
ST14-031	9/18/2025 AND 10/28/2025	0	0	NO	NO	YES	LOW	720	53	6	0	0	0.04	0.25	0	GRAY	CLEARLY VISIBLE IN	NONE	NONE	OTHER	CLEAR	NONE	EXCESS GROWTH		30
ST7A-399	9/18/2025 AND 10/30/2025	0	0	PARTIALLY	PARTIALLY	YES	LOW	-	-	-	-	-	-	-	-	-	-	-	NONE	NONE	SEDIMENT	CLEAR	TRASH	EXCESS GROWTH	
ST34-300 / ST34-021	9/18/2025 AND 10/9/2025	0	0	NO	NO	YES	INTERMITTENT	-	-	-	-	-	-	-	-	CLEAR	-	FOAM	NONE	NONE	-	NONE	EXCESS GROWTH		
ST39-011	2025-10-09 13:56:00	0	0	NO	NO	YES	LOW			7	0.02	0	0.02	0	0	CLEAR		NONE	NONE	NONE		OTHER	NORMAL		
ST38-024	2025-10-30 14:30:00	0	0	PARTIALLY	NO	YES	LOW								0	BROWN	CLEARLY VISIBLE IN OUTFALL FLOW	NONE	NONE	OTHER	CLEAR	SEDIMENT	NORMAL		
ST38-010	2025-10-30 15:05:00	0	0	NO	NO	YES	LOW	40	58	7	0.08	0	0.12	0.35	0.1	CLEAR	CLEARLY VISIBLE IN	FOAM	NONE	SEDIMENT	CLEAR	OTHER	NORMAL	NONE	High (4,950), Non-human
ST5-001	2025-10-30 16:18:00	0	0	NO	NO	YES	MODERATE	7	57	6	0	0	0.21	0.25	0	CLEAR	CLEARLY VISIBLE IN BOTTLE	FOAM	NONE	NONE	CLEAR		NORMAL	NONE	High (3,330), Human detection

GREEN ALLEY MAINTENANCE

The key maintenance objective for permeable pavement systems is to prevent void spaces from becoming clogged or requiring sediment removal. Infiltration issues can be identified when runoff ponds on the surface or is no longer infiltrating into the surface rapidly. Regular vacuum cleaning of the paver joints will help prevent clogging and extend the longevity of the system. Over the course of use, the paver aggregate may also need replenishment for proper use.

1. Preventative Maintenance: Generally recommended at least two times per year, in the spring and fall, using appropriate equipment. Regenerative air vacuums are effective if regular preventive maintenance is performed. Pure air vacuums are most effective for regular maintenance, but are more expensive to operate. Two times per year is recommended for typical applications
2. Restorative Maintenance: For heavily clogged areas where water ponds longer than 30 minutes after a storm, extra effort, such as pressure washing and/or use of higher end (pure air vacuum) equipment, may be required. Restorative maintenance usually first relies upon an initial vacuum sweeper to remove as much surface debris as possible.
3. Visual inspection for porous pavements will be beneficial after rainfall to observe if clogging is occurring. The appropriate inspection frequency will be site specific and may adjust with the age of the systems. The City should regularly observe porous pavement areas that receive runoff from adjacent areas as these areas are more prone to clogging.

Vacuum Sweeper Technologies

1. "Pure Air" Vacuum. Pure air vacuums are the most effective at loosening and removing sediment from the openings in porous pavement. Fine particles are vacuumed out of the pavement matrix in a concentrated vacuum column and are collected in the sweeper hopper.
2. Regenerative Air. Regenerative air sweepers contain a blower system that generates a high velocity air column, forcing it against the pavement at an angle, and creating a peeling or knifing effect. The high volume air blast loosens the debris from the pavement surface, then transports it across the width of the sweeping head and lifts it into the containment hopper via a suction tube. Regenerative air sweepers are generally not recommended for heavily clogged areas because the technology may not be effective at all.
3. Both pure air vacuum and regenerative air systems need to be used carefully on paver block systems so as to prevent aggregate removal between pavers if required by the paver specification. Alternatively, some of the aggregate between the pavers can be sacrificed and replaced periodically to maintain a highly permeable system.
4. Some paver types recommend compressed air cleaning between pavers instead of vacuuming.
5. The term sweeper is a partial misnomer, since the vacuum function is not actually providing mechanical sweeping; however, sweeper is the common noun used to describe the unit.
6. Using the existing Elgin Pelican fleet is not recommended for porous pavement maintenance, since they rely upon mechanical sweeping

OPERATION AND MAINTENANCE CONSIDERATIONS

Regular maintenance and key maintenance considerations and procedures consist of the following:

Documentation

A log must be kept with the following information:

- Date, time and alley location of inspection

- Work performed: vacuumed, swept, debris removal, weed control, replacement of infill

Inspection

- Performance inspections, general observations (spalling, cracking, missing paver blocks, etc.) pavement condition and verification of infiltration should be performed at least annually, either during a rain event or after a major storm (within 48 hours): to ensure that water infiltrates into the surface.
- Check for standing water at or below the surface of the permeable pavers.
- Check surface stability. Repair subgrade if pavers are loose or wobbly.
- If ponding or poor infiltration persists, remove and replace the subgrade drainage
- Fill joints between pavers with specified granular material.

Debris removal

- Keep surfaces clean and free of trash, debris, and sediment accumulation.
- Debris should be removed routinely as a source control measure.
- Replacement of the Pavement or Infill Material If surface is completely clogged and rendering a minimal surface infiltration rate, restoration of surface infiltration can be achieved by removing the first ½ to 1 inch of soiled aggregate infill

Sweeping

- Sweep surfaces regularly
- Sweeping with a regenerative air sweeper (not a broom sweeper) should be performed approximately two times per year.

Vacuuming

- Sweeping with a vacuum sweeper has shown to be effective for removing solids and debris from the void space of permeable pavement.

Weed control

- Do control weeds when they are small – if killed when large, dead weed biomass can clog pavement
- Weed control applications should be used on any weeds that grow in permeable pavement.
- Weeds should not be pulled, as doing so can damage the fill media and pull up pavers.
- Grass growth is a sign of Sediment Accumulation

Snow removal

- Plowing is a recommended snow removal process.
- Conventional liquid treatments (deicers) will not stay at the surface of a permeable pavement as needed to be effective.
- Sand should never be applied to a permeable pavement, as it will reduce infiltration.

Construction Site Pollutant Control

Supplemental Information

There were 12 active private development construction sites, and 1 public construction sites with a disturbance of 1 acre or more in the City of Wauwatosa during the 2025 permit year. City Engineering Department staff completed 68 erosion control inspections at the private development sites, along with weekly and post rainfall inspections at the City's 116th Street Park construction site during the 2025 permit year. The erosion control inspections were conducted on all active construction sites at a minimum of every 45 days as required.

Attached is the inspection tracking list of all active erosion control permits in the 2025 permit year, as well as an example of an inspection in which a written warning and notice of violation with daily fines was issued for a private development site at 1401 N Mayfair Rd. The inspection form, photos, and email correspondence between the City and the contractor and owner has been included for reference and as an example of City enforcement actions at a construction site of non-compliance.

2025 Erosion Control Inspection Tracking - Active Construction Greater than 1 Acre

Site Plan Permit	Permit Number	Permit Type	Address	Contractor Name	Project Name	Initial Inspection Date	Active Construction Inspection Frequency - every 45 days (60 days if inactive)								Final Inspection Date
							Date	Date	Date	Date	Date	Date	Date	Date	
-	BC2022-0225 and BC2022-0224	EROSION	9455 Watertown Plank Rd	Payne & Dolan	MPMC West-Pavement Pulverizing and Stockpiling	12/19/2022	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	10/17/2025	11/24/2025	
19-03	BC2022-0109	EROSION	1401 N Mayfair Rd		Staybridge Suites	4/18/2023	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	9/5/2025	10/20/2025	12/4/2025	
SP2022-0008	BC2022-0225	EROSION	9250 W Doyme Ave		Froedtert Parking Structure	6/7/2023	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	-	-	8/27/2025
SP2023-0018	BC2022-0235	EROSION	MCW Cancer Research Bldg			10/9/2023	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	-	-	8/27/2025
SP2023-0004	BC2023-0281	EROSION	Irgens - Research Drive		850 and 800 N Mayfair Rd	10/9/2023	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	10/17/2025	12/4/2025	
SP2023-0027	BC2023-0272	EROSION	4545 N 92nd St.	CG Schmidt	Luther Manor	1/30/2024	1/13/2025	3/7/2025	4/21/2025	-	-	-	-	-	4/21/2025
SP2023-0040	BC2024-0140	EROSION	10201 W Watertown Plank Rd.	Mortenson	Vel R Phillip's Juvenile Justice Center	8/20/2024	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	10/20/2025	12/4/2025	10/20/2025
SP2023-0030		EROSION	11100 Walnut Rd.		116th St. Park										6/5/2025
SP2024-0022	BC2025-0011	EROSION	7474 Harwood Ave	Catalyst Construction	Three Leaf Multi-Family Development	3/7/2025	-	3/7/2025	4/21/2025	5/19/2025	7/16/2025	8/27/2025	10/17/2025	11/24/2025	
SP2024-0026	BC2025-0126	EROSION	10602 Underwood Parkway	Payne & Dolan	Underwood Creek Parkway Reconstruction	7/16/2025	-	-	-	-	7/16/2025	9/5/2025	10/20/2025	12/4/2025	12/4/2025
SP2024-0014	BC2024-0253	EROSION	8733 Watertown Plank Rd	Mortenson	Versiti Blood Research Institute	11/12/2024	1/13/2025	3/7/2025	4/21/2025	5/28/2025	7/16/2025	8/27/2025	10/17/2025	11/24/2025	
SP2025-0007	BC2022-0225	EROSION	Connell Court	Payne & Dolan	Tector 225 Parking Lot Improvements	10/17/2025	-	-	-	-	-	-	10/17/2025	11/24/2025	

Table 2: Construction Site Inspection Frequency

Site	Inspection Frequency
(1) All sites one acre or more in size	* New projects shall be inspected within the first two weeks of commencement of land disturbing activity * All active sites shall be inspected at least once every 45 days
(2) Follow up inspection	* Follow up inspections are required within 7 days of any sediment discharge or inadequate control measure, unless corrections were made and observed by the inspector during initial inspection or corrections
(3) Final inspection	* Confirm that all graded areas have reached final stabilization and that all temporary control measures are removed, and permanent storm



Notice: Use of this specific form is voluntary, but the information contained on this form must be collected and kept by the permittee under s. NR 216.48(4), Wis. Adm. Code, for a construction site covered under the General WPDES Construction Site Storm Water Discharge Permit, Permit No. WI-0067831-2. This form is provided for the convenience of the permittee to meet the requirements of s. NR 216.48(4), Wis. Adm. Code. Multiple copies of this form may be made to compile the inspection report.

Inspections of implemented erosion and sediment control best management practices must be performed weekly and within 24 hours after a precipitation event 0.5 inches or greater which results in runoff.

Weekly written reports of all inspections conducted by or for the permittee must be maintained throughout the period of general permit coverage.

The information maintained in accordance with s. NR 216.48 (4) must be submitted to the Department upon request.

Name of Permittee:	
Construction Site Name (Project):	Construction Site ID No.:
Location:	County:
Contractor:	Field Office Phone:

Note: Weekly inspection reports, along with erosion control and stormwater management plans, are required to be maintained on site and made available upon request.

Date of inspection (mm/dd/yy): _____ Time of inspection: Start: _____ a.m./p.m. End: _____ a.m./p.m.	Type of inspection: <input type="checkbox"/> Weekly <input type="checkbox"/> Precipitation Event Other (specify) _____ Name(s) of individual(s) performing inspection:
--	---

Weather:

Description of present phase of construction:

Modifications Required	Yes	No	Not Applicable	Comments/Recommendations about the overall effectiveness of the erosion and sediment control measures. Note: For each item checked "Yes", complete the follow-up information on page 2.
Ditch Checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion Control Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion Mat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Grading Practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mulch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Offsite Sediment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Permanent Seeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Schedule / Phasing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Silt Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Silt Screen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sod	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stabilized Outlet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temp. Diversion Channel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temp. Settling Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Temporary Seeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tracking Pads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Turbidity Barrier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other (specify) <u>see below</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

CONSTRUCTION SITE INSPECTION REPORT

Form 3400-187 (rev. 9/04)

Page 2 of 2

Name of Permittee:

Construction Site Name (Project):

Construction Site ID No.:

Use the space below for detailed follow-up action items.

Exact place of erosion/sediment control inspected	Type of erosion/sediment control and its observed condition	Description of any necessary maintenance or repair to erosion/sediment control, including anticipated date of completion





Jessica Henderson

From: Jennifer Stilling
Sent: Friday, June 20, 2025 1:52 PM
To: Andy Gonzalez
Cc: staybridgewauwatosawi@gmail.com; jasonsingh@aol.com; Stefanie Escobedo; Jessica Henderson; Michael Niedermann
Subject: RE: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control
Attachments: 1401 N. Mayfair Erosion Control non-compliance billing 06-17-25.pdf

Hello Andy,

As discussed earlier this week, the City inspected the site on Monday June 16th. Engineering has stopped the daily fines as of Tuesday June 17th. **The total amount due to the City is \$1,900.** The daily fines were \$100 per day for the time period starting on May 28th and ending on June 16th.

You can pay in-person during normal City Hall Business hours or anytime online. Please note that the Engineering/Building Department is closed today. If you want to pay in-person this afternoon, you will need to pay at the Welcome Desk over by the Clerk's Office on the second floor of City Hall.

In order to pay online, please follow the steps below:

1. Go to the City's website, Wauwatosa.net
2. In the Middle boxes on the City's home page- click "Pay a Bill"
3. Scroll down and choose "General Billing"
4. Either "Pay as Guest" or "Log in or register"
5. You will need the invoice number and/or your Customer Number, possibly more information, depending on your choice above.

The invoice number is the same as the bill number noted on the attached document.

Please continue to inspect the Erosion Control best management practices within twenty-four hours after each rain of 0.5 inches or more which results in runoff during active construction periods, and at least once each week. Make needed repairs and document the findings of the inspections in a site erosion control log with the date of inspection, the name of the person conducting the inspection, and a description of the present phase of the construction at the site.

Thank you,

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

jstilling@wauwatosa.net

[Wauwatosa Self Serve Portal: Online Permitting](#)



ONLINE LICENSES AND PERMITS

No more paper. Submit plans from wherever you are.
Access updates and easily communicate with staff.

From: Andy Gonzalez <info@firstwestconstruction.com>

Sent: Monday, June 16, 2025 1:14 PM

To: Jennifer Stilling <jstilling@wauwatosana.net>

Cc: staybridgewauwatosana@gmail.com; jasonsingh@aol.com; Stefanie Escobedo <sescobedo@wauwatosana.net>; Jessica Henderson <jhenderson@wauwatosana.net>; Michael Niedermann <mniedermann@wauwatosana.net>; Nate Peksa <npeksa@wauwatosana.net>

Subject: Re: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control

Good afternoon,

Can an inspector review the erosion control? We have installed the updated erosion control plan. I appreciate your time in advance.

Thank you,

On Wed, Jun 4, 2025 at 10:21 AM Jennifer Stilling <jstilling@wauwatosana.net> wrote:

Hello Andy,

Engineering approves the Erosion Control plan dated 6-2-25. The proposed No. 70A Native Seed Mix will be acceptable for permanent stabilization as long as the slope is prepped properly as noted on the approved erosion control plan per WisDOT standards (removing debris and brush, raking, and adding topsoil as needed).

Please work with the Building Department on any remaining items needed for this permit (BC2025-0113) to be approved and issued.

The daily fines will continue until the erosion control practices as noted in the approved plan are installed and the City has verified that they were installed correctly. Please let us know when the property line staking and erosion control installation is complete.

Thank you,

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

jstilling@wauwatosa.net

Wauwatosa Self Serve Portal: Online Permitting



ONLINE LICENSES AND PERMITS

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From: Andy Gonzalez <info@firstwestconstruction.com>

Sent: Monday, June 2, 2025 12:09 PM

To: Nate Peksa <npeksa@wauwatosa.net>

Cc: staybridgewauwatosawi@gmail.com; jasonsingh@aol.com; Stefanie Escobedo <sescobedo@wauwatosa.net>; Jessica Henderson <jhenderson@wauwatosa.net>; Michael Niedermann <mniedermann@wauwatosa.net>; Jennifer Stilling <jstilling@wauwatosa.net>

Subject: Re: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control

Good morning,

Our goal is to stabilize and ensure complete germination of the seed to utilize the lower class mat, as per the FDM 10-5 attachment 25.1 Erosion Control Prevention document. I have updated the Erosion control plan with additional products/methods. The slope is less than 15°. I appreciate your time in advance and will make any further changes as requested.

On Mon, Jun 2, 2025 at 11:00 AM Nate Peksa <npeksa@wauwatosa.net> wrote:

Hi Andy,

I reviewed the proposed product to be used for slope stabilization and have a couple of notes. The KEP-C100 Natural matting is acceptable for the given slope, however is classified as a Class II erosion matting which is not a permitted product for permanent slope stabilization. On the erosion control plan, please note what permanent slope stabilization action will be taken following construction, including any slope prep work and intended materials or products to be used. Also, as your email below states, please keep us informed with any updates regarding the surveyor.

Let me know if there are any questions.

Thank you,

Nate

Nathan Peksa

Civil Engineer

City of Wauwatosa

7725 W. North Avenue

Wauwatosa, WI 53213

262.202.1632

npeksa@wauwatosa.net

[Wauwatosa Self Service Online Permitting Portal](#)

From: Andy Gonzalez <info@firstwestconstruction.com>

Sent: Monday, June 2, 2025 8:26 AM

To: Jennifer Stilling <jstilling@wauwatosa.net>

Cc: staybridgewauwatosawi@gmail.com; jasonsingh@aol.com; Stefanie Escobedo <sescobedo@wauwatosa.net>; Jessica Henderson <jhenderson@wauwatosa.net>; Nate Peksa <npeksa@wauwatosa.net>; Michael Niedermann <mniedermann@wauwatosa.net>

Subject: Re: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control

Jennifer,

Please see the updated erosion control plan, which shows the product to be used for stabilizing the slope based on the current conditions on the East elevation. Please note that we are reinstalling the standard silt fence in accordance with the manufacturer's guidelines. We are not using the sock that was previously installed. The surveyor has been requested and I will update once completed. Once approved, we will order the product to stabilize the slope.

On Fri, May 30, 2025 at 3:44 PM Jennifer Stilling <jstilling@wauwatosa.net> wrote:

Hello Andy,

I have received the \$5,000 check to pay for the Engineering site plan review escrow balance.

We have also received the online application for the erosion control permit renewal. However, you **cannot** use the previously approved erosion control plan for this permit, as I had indicated below. The site conditions have changed. You must address how the eastern slope will be stabilized because the limits of disturbance do not match what was shown on the previously approved plan:

- Has the eastern property line been staked as requested below?
- Based on the slope of the eastern edge you will need to determine how this must be restored. You can use the attached Wisconsin Department of Transportation slope erosion control matrix as a guide. It is also recommend that you consult with an engineer or other design professional as to the best method of restoration for this slope.
- The type of erosion control for the eastern slope can then be shown on the revised plans.

A new erosion control plan can be uploaded to the permit that was applied for this morning (BC2025-0113). Staff will not process this permit until a new erosion control plan is submitted.

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

Wauwatosa Self Serve Portal: Online Permitting



ONLINE LICENSES AND PERMITS

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From: Jennifer Stilling

Sent: Wednesday, May 28, 2025 3:36 PM

To: 'Andy Gonzalez' <info@firstwestconstruction.com>

Cc: staybridgewauwatosawi@gmail.com; 'jasonsingh@aol.com' <jasonsingh@aol.com>; Stefanie Escobedo <sescobedo@wauwatosa.net>; Jessica Henderson <jhenderson@wauwatosa.net>; Nate Peksa <npeksa@wauwatosa.net>

Subject: RE: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control

Andy,

We have received the pictures but have not received an application for a new Erosion Control permit.

City staff visited the site again today and the same issues listed in the attached inspection report from last week are still there. The inspection report from last week is attached. In summary,

- The tracking pad is not in compliance with [DNR Technical Standard 1057](#)
- The silt fence is not in compliance with [DNR Technical Standard 1056](#)
- The silt sock is not an appropriate erosion control device based on site conditions.
- The eastern slope is not stabilized.

Because the site is not in compliance, a fine of \$100 per day will be applied to the property starting today and until the site is back in compliance.

The following must be completed :

- The property owner must hire a contractor who is familiar with erosion control installation and maintenance.
- The contractor must apply for a new erosion control permit through the [City's permitting portal](#).
- A new erosion control plan must be submitted with the application. The previously approved plan cannot be used because the site conditions have changed.
- The contractor must stabilize the site as soon as possible in accordance with DNR Technical standards and the new erosion control plan.
- The property lines must be clearly staked by a professional surveyor.

As stated below, the Engineering Review escrow for this project has a current negative balance of \$2,302.50. As a reminder, Engineering staff charges to the escrow at a rate of \$90 per hour to address issues that arise during construction. Because of the ongoing site construction issues, **the owner must submit a \$5,000 check to the Engineering Department as soon as possible.**

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

jstilling@wauwatosa.net

Wauwatosa Self Serve Portal: Online Permitting



ONLINE LICENSES AND PERMITS

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From: Andy Gonzalez <info@firstwestconstruction.com>

Sent: Wednesday, May 28, 2025 9:28 AM

To: Jennifer Stilling <jstilling@wauwatosa.net>

Cc: staybridgewauwatosawi@gmail.com

Subject: [External] Fwd: Fw: Staybridge 1401 N Mayfair: Erosion Control

Jennifer,

Can you confirm that you received the updated application and photos, which show the areas where corrections were made? Please advise if you need anything further to resolve this issue. I appreciate your time in advance. I can be reached at 414-410-9938 with any questions you may have.

Thank you,

----- Forwarded message -----

From: jasonsingh@aol.com <jasonsingh@aol.com>

Date: Wed, May 28, 2025 at 8:56 AM

Subject: Fw: Staybridge 1401 N Mayfair: Erosion Control

To: Firstwestconstruction Info <info@firstwestconstruction.com>

Hi! Andy call me. Jay 414-588-0554

----- Forwarded Message -----

From: Jennifer Stilling <jstilling@wauwatosana.net>

To: jasonsingh@aol.com <jasonsingh@aol.com>

Cc: Stefanie Escobedo <sescobedo@wauwatosana.net>; Michael Niedermann <mniedermann@wauwatosana.net>; Jessica Henderson <jhenderson@wauwatosana.net>; Nate Peksa <npeksa@wauwatosana.net>

Sent: Tuesday, May 27, 2025 at 09:32:03 AM CDT

Subject: FW: Staybridge 1401 N Mayfair: Erosion Control

Jay:

As a reminder, please see the message below. We have not received any responses or an application for a new erosion control permit.

If no corrective action has been completed by the end of the day today, we will start issuing daily fines of \$100 starting tomorrow until the proper corrective action has been completed, per City Code Section 24.13.030.K.6.

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

jstilling@wauwatosa.net

Wauwatosa Self Serve Portal: Online Permitting



ONLINE LICENSES AND PERMITS

No more paper. Submit plans from wherever you are.
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From: Jennifer Stilling

Sent: Friday, May 16, 2025 4:09 PM

To: 'jasonsingh@aol.com' <jasonsingh@aol.com>

Cc: Michael Niedermann <mniedermann@wauwatosa.net>; Jessica Henderson <jhenderson@wauwatosa.net>;

Stefanie Escobedo <sescobedo@wauwatosa.net>; Nate Peksa <npeksa@wauwatosa.net>

Subject: Staybridge 1401 N Mayfair: Erosion Control

Importance: High

Jay:

I did not get your photos from last night but I did get your email today.

Engineering was at the site today to check on the erosion control. **The erosion control installed is not compliant with Wisconsin Department of Natural Resources (WDNR) Construction Site Erosion and Sediment Control Standards and you are in violation of City Code Chapter 24.13.030.** Today's inspection report is attached.

A summary list of the observed issues is below:

- Silt fence/silt sock surrounding the perimeter of the site is not properly trenched, overlapped, or pulled taught per WDNR tech standards leading to undermining of both the silt fence and silt sock deeming it nonfunctional. See attached pictures of example points of failure where runoff is going under the silt sock and creating eroded channel down the slope in the railroad right-of-way.
- Tracking pad has compacted sediment within the construction entrance leading to the possibility of debris and sediment trackout onto the Mayfair frontage road once construction picks back up. The tracking pad must be refreshed in accordance with WDNR standards.
- Eastern site edge has a noticeably unstabilized slope that could lead to shearing of the soil or landslides when subjected to heavy rain or loads from construction equipment. **This slope extends beyond your property line and encroaches in the railroad right-of-way.**
- Stockpile situated on northern edge of site has no erosion control measures to prevent runoff from entering pond.
- No designated concrete washout area on site that follows EPA requirements of being more than 50' from any storm drains, open ditches, or waterbodies.

You were informed last night that you must apply for a new Erosion Control Permit:

- A new erosion control plan must be included in the permit application because the previous erosion control plan is no longer applicable to current site conditions. An Engineer or Erosion control contractor must go out to the site, evaluate current conditions, and prepare a plan in accordance with City Code Chapter 24.13.030 that includes appropriate erosion and stabilization practices. The revised plan must address the actual disturbed area.
- The person responsible for preparing the plan must be aware of the existing onsite contamination locations. This will have an impact on how the soil should be stabilized.
- The contractor listed on the erosion control permit must know how to install and maintain the erosion control stabilization practices in accordance with WDNR standards. The permittee is also required to inspect the erosion and stabilization practices within twenty-four hours after each rain of 0.5 inches or more which results in runoff during active construction periods, and at least once each week make needed repairs and document the findings of the inspections in a site erosion control log with the date of inspection, the name of the person conducting the inspection, and a description of the present phase of the construction at the site.
- For the slope stabilization that is needed in the railroad right-of-way, you must obtain permission from the railroad to do work on their property.

You must stabilize the inactive ground and address the outstanding erosion control issues by May 27th. If no corrective action has been completed by Tuesday May 27th, we will start issuing daily fines of \$100 until the proper corrective action has been completed, per City Code Section 24.13.030.K.6.

Engineering will not authorize any release on any permits until the outstanding erosion control issues are resolved and a new erosion control permit is approved.

Also be aware that the Engineering Review escrow has a current negative balance of \$2,302.50. As a reminder, Engineering staff charges to the escrow at a rate of \$90 per hour to address issues that arise during construction. Because of the ongoing site construction issues, **you must submit a \$5,000 check to the Engineering Department as soon as possible.** This check will not cover the additional funds will necessary to cover public inspection and the City's Environmental consultant. The total dollar amount for construction inspection and environmental consultation is yet to be determined.

Jennifer Stilling, PE (she/her)

Senior Civil Engineer

City of Wauwatosa

7725 W. North Ave

Wauwatosa, WI 53213

Phone: 414.479.8934

jstilling@wauwatosa.net

Wauwatosa Self Serve Portal: Online Permitting



ONLINE LICENSES AND PERMITS

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From: jasonsingh@aol.com <jasonsingh@aol.com>

Sent: Friday, May 16, 2025 10:45 AM

To: Jennifer Stilling <jstilling@wauwatosa.net>; Michael Niedermann <mniedermann@wauwatosa.net>; Jessica Henderson <jhenderson@wauwatosa.net>; Stefanie Escobedo <sescobedo@wauwatosa.net>; Nate Peksa <npeksa@wauwatosa.net>; Tyler Weber <tweb7256@icloud.com>; Justin Leszczynski <justin@mjconstruction.us>

Subject: [External] Fw: Staybridge 1401 n Mayfair erosion control

Hi! I tried to email you from my cell phone, but I don't know if you received that email. I'm forwarding you the pics here again to make sure. If anything else needs to be done, please let me know. We will take care of it right away. Thank you for your help and guidance. Jay Walia 414-588-0554

Post-Construction Storm Water Management

Supplemental Information

The City's ordinance requires that a Maintenance Agreement be created for all BMP's required for storm water management. The City sends out a letter to all Maintenance Agreement owners to request maintenance and inspection records on an annual basis. See attached letter template and informational BMP inspection and maintenance flyer sent out in November 2025 and the list of BMP owners this was sent to.

Three additional sites were approved to construct storm water management facilities to meet the City's stormwater requirements in 2025. However, the request letter for maintenance and inspection records is only sent to properties with BMP's that have been fully constructed for at least 1 year.

2025 Private BMP Inspection and Maintenance Record Requests

Parking Permit #	LTMA?	LTMA Recorded Date	Date Constructed	PROJECT NAME	PROJECT ADDRESS	OWNER NAME_1	OWNER NAME_2	OWNER COMPANY	OWNER ADDRESS	CITY	STAT	ZIP	PHONE	Email	BMP(s)
	Yes	N/A	2004	Froedtert Memorial Lutheran Hospital	92ND St. & Wisconsin Avenue	Ryan Marks	Vice President	Facility and Planning Development	9200 W Wisconsin Ave	Milwaukee	WI	53226	414-805-3000	ryan.marks@froedtert.com	Sumped CB's(4);Oil/sand interceptor
3-26	Yes	N/A	2004	VNA Hospice	1155 Honey Creek Parkway	Liana M Wayda		Visiting Nurse Assoc of Wisconsin	11333 W National Ave	Milwaukee	WI	53227	(414) 327-2295		Detention Pond (2,798 s.f.); Sumped CB's and Diversion Swale
4-02	Yes	N/A	2004	Wisconsin Lutheran College	8800 W. Bluemound Road	Diane Hoehnke	Vice President of Finance	Wisc Lutheran College	8800 W Bluemound Rd	Milwaukee	WI	53226	414-443-8627	Diane.Hoehnke@wlc.edu	Underground Detention and Dry Retention
3-05	Yes	N/A	2004	Wisconsin Lutheran College Athletic Fields	10200 Watertown Plank Road	Diane Hoehnke	Vice President of Finance	Wisc Lutheran College	8800 W Bluemound Rd	Milwaukee	WI	53226	414-443-8627	Diane.Hoehnke@wlc.edu	Detention Pond
	Yes	02.24.2023	2005	Milwaukee Regional Medical Center (MRMC)	95TH St. & Watertown Plank Road	Mark Geronime	Vice President of Operations	MRMC	8700 Watertown Plank Rd (Mail stop 5)	Milwaukee	WI	53226		mgeronime@mrmcfl.org	
10-05	Yes	10.22.2020	2007	Bryant & Stratton College	10950 W. Potter Road	Paula Armato		F Street 10950 LLC	1134 N 9th Street, Suite 200	Milwaukee	WI	53233	(262) 348-6986	paula@fstreetgroup.com	Bio-retention basin (5,148 s.f.); Sumped CB's (12); Vortsentry Unit and Tricon CB inserts for filtration
7-17	Yes	N/A	2009	Mayfair Medical	2999 N. Mayfair Road	Natalie Brooks	Environmental Compliance Manager	St. Luke's Medical Center	2900 W. Oklahoma Ave.	Milwaukee	WI	53215	(920)-312-2851	natalie.brooks@aaah.org	Sumped CB's (with filters) and a Vortsentry Unit for underground detention
8-12	Yes	N/A	2009	Renner Kia Redevelopment (Pick n Save)	1717 N. Mayfair Road	TCB Pick Owner, LLC	Alex Smith	Newport Capital Partners	353 N. Clark Street, Suite 3625	Chicago	IL	60654	(312) 724-7045	alex@newportcapitalptrs.com	Sumped CB's (10), Porous Pavement (2,400 SY), Biofiltration Islands (3)
	Yes	N/A	2010	Learning Gardens at Kradwell School	1220 Dewey Avenue	Natalie Brooks	Environmental Compliance Manager	St. Luke's Medical Center	2900 W. Oklahoma Ave.	Milwaukee	WI	53215	(920)-312-2851	natalie.brooks@aaah.org	3 Biofiltration basins: E of school (1,255sf); W of school (539sf); N of hospital - by Alumni House (1,788sf)
10-09	Yes	N/A	08.21.2012	Cedar Glen Apartments (Mt. Tosa)	1661 Rivers Bend Lane	Elizabeth Sili	Regional Manager	Horizon Management Services, Inc.	3900 S Prairie Hill Lane	Greenfield	WI	53228	(414) 727-2621	e.sili@horizondbm.com	Det. Pond 1 (2,550 s.f.); Det. Pond 2 (1,400 s.f.); Bioswale (73,082 s.f.)
12-08	Yes	N/A	2014	Aurora Psych Presidents House	1220 Dewey Avenue	Natalie Brooks	Environmental Compliance Manager	St. Luke's Medical Center	2900 W. Oklahoma Ave.	Milwaukee	WI	53215	(920)-312-2851	natalie.brooks@aaah.org	Dry Pond (~3,500sf)
13-11	Yes	N/A	2014	UWM Innovation Park	1225 Discovery Parkway	Andrea Mullins	Innovation Campus Owners Association Inc.	Innovation Campus Owners Association	1401 Discovery Parkway, Suite 100	Milwaukee	WI	53226	414-443-0700	AMullins@irgens.com	22 biofiltration basin and permeable pavement within ABB parking lot
13-03	Yes	N/A	2014	Mayfair Mall	2500 N. Mayfair Road	Chris Jaeger	Senior General Manager	Mayfair Retail	2500 N Mayfair Road	Wauwatosa	WI	53226	(414) 207-5830	chrisjaeger@bpretail.com	
12-10	Yes	N/A	2014	Mayfair Collection	11500 W. Burleigh Street	Claudette Zoch		HSA Commercial Inc	16955 West Wisconsin Ave	Brookfield	WI	53005	(262) 938-0911	czoch@hsacommercial.com	Wet Detention Basin (NW corner of site); 2 underground detention vaults, porous asphalt, sumped CB's.
14-04	Yes	N/A	05.07.2014	Meijer-277	11123 W. Burleigh Street	Dan Gezon		Miejer	2350 3 Mile Rd NW	Grand Rapids	MI	49544	(616) 735-8142	Daniel.Gezon@meijer.com	StormTrap (or equal), Water quality swale, sumped CB's
14-03	Yes	N/A	06.13.2014	Apartments at 1215 (The Reef)	1215 N. 62ND Street	Wayne Wiertzema		Wangard Investment	1200 N Mayfair Rd Suite 220	Milwaukee	WI	53202	(414) 777-1200	wwiertzema@wangard.com	
14-08	Yes	N/A	12..01.2014	La Z Boy	10830 W. Burleigh Street	Sheri Carlisle		La-Z-Boy Retail	10830 W Burleigh St	Wauwatosa	WI	53222	(732) 966-2293	sheri.amf@outlook.com	Underground Detention; Sumped CB's; Grass Swales
14-09	Yes	N/A	06.26.2014	Whitman Athletic Fields	11100 W. Center Street	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	(414) 773-1053	heuske@wauwatosa.k12.wi.us	
14-21	Yes	02.06.2020	2016	Russ Darrow Kia	1901 N. Mayfair Road	George Salomon	Compliance Manager	Russ Darrow Wauwatosa Real Estate LLC	W133 N8569 Executive Pkwy	Menomonee Falls	WI	53051	847-612-6214	georgesalomon@ymail.com	Underground Detention
15-01	Yes	N/A	03.23.2015	UW Credit Union	6510 W. State Street	Todd Peterson	Building & Grounds Manager	UW Credit Union	3500 University Ave	Madison	WI	53507	(608) 206-5033	tpeterson@uwcu.org	
15-06	Yes	N/A	05.08.2015	Wauwatosa West Athletic Fields	11400 W. Center Street	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	(414) 773-1053	heuske@wauwatosa.k12.wi.us	Outlet Controls Structure for turf drainage system
15-07	Yes	02.20.2018	02.20.2018	2100 Mayfair	2100 N. Mayfair Road	Sheila Baker	Vice President	Hoffman Mangement Company	150 N Sunny Slope Rd #240	Brookfield	WI	53005	(262) 814-9877	sbaker@hoffmanmgt.com	Sumped CB's
15-10	Yes	07.31.2015	07.31.2015	Tosa Center	1155 N. Mayfair Road	Current Owner		HPO Milwaukee, LLC	1400 N. Water Street #500	Milwaukee	WI	53202	(414) 443-2598		Biofiltration basin; Sumped CB's
15-15	Yes	12.05.2024	03.17.2017	The Reserve at Mayfair	11011 W. North Avenue	Kevin Villont	SVP, Asset Management	JVM Mayfair Apartments LLC	903 Commerce Drive #250	Oak Brook	IL	60523	630-242-1028	kvillont@jvmrealty.com	Sumped CB's
15-20	Yes	N/A	06.09.2017	Stamp Factory	11415 W. Burleigh Street	Claudette Zoch		HSA Commercial Inc	16955 West Wisconsin Ave	Brookfield	WI	53005	(262) 938-0911	czoch@hsacommercial.com	Biofiltration islands (6), biofiltration basin, dry pond, underground detention
15-22	Yes	N/A	09.05.2017	St. Camillus	10101 W. Wisconsin Avenue	Dave Sinkula	Director of Plant Operations	St Camillus	10101 W Wisconsin Ave	Wauwatosa	WI	53226	(414) 259-3751	dsinkula@stcam.com	2 underground detention systems, 3 up-flow filters and 2 dry detention basins
16-05	Yes	05.12.2017	2019	Synergy at the District (District Lofts)	11220 and 11240 District Drive	Mallory Saltness	District Manager	New Earth Residential	999 18th Street #11205	Denver	CO	80202	(206) 984-8085	synergymaint@newearthres.com	Underground detention, underground WQ unit, sumped CB's
16-06	Yes	02.10.2017	02.10.2017	Wauwatosa West Softball Field MRMC-Thermal Permanent Plant Upgrades	11400 W. Center Street	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Underground detention, sumped CB's
16-19	Yes	09.18.2020	2019		9250 Watertown Plank Road	Mark Geronime	Vice President of Operations	MRMC	8700 Watertown Plank Rd (Mail stop 5)	Milwaukee	WI	53226		mgeronime@mrmcfl.org	Biofiltration basin, underground detention, sumped CB's
17-01	Yes	N/A	11.30.2018	Aurora Psych - Dewey House	1220 Dewey Avenue	Natalie Brooks	Environmental Compliance Manager	St. Luke's Medical Center	2900 W. Oklahoma Ave.	Milwaukee	WI	53215	(920)-312-2851	natalie.brooks@aaah.org	Bioretention Basin
17-05	Yes	10.31.2017	10.31.2017	Longfellow Middle School Softball Field	7600 W. North Avenue	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Underground detention, sumped CB's
17-07	Yes	10.31.2017	10.31.2017	Wauwatosa West Parking Lot	11400 W. Center Street	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Porous asphalt pavement, bioretention basins
17-15	Yes	12.16.2021	12.16.2021	U-Haul	11700 W. Capital Drive	Jim Christianson	U-Haul	U-Haul	17000 W. Capital Drive	Wauwatosa	WI	53226	262-343-6730	jim_christianson@uhaul.com	2 biofiltration basins, sumped CB's
18-04	Yes	12.03.2018	12.03.2018	Longfellow Middle School Paving Improvements	7600 W. North Avenue	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Porous asphalt pavement, sumped CB's
18-14	Yes	12.06.2019	06.30.2020	Lutheran Home Memory Care	7500 W. North Avenue	Mark Rose		The Lutheran Home	7500 W. North Ave	Wauwatosa	WI	53213	414-258-6171 ext. 309	mark.rose@thelutheranhome.org	2 Underground detention systems, 2 up-flow filters, sumped CB's
18-22	Yes	12.18.2019	03.19.2021	Renaissance Hotel	2300 N. Mayfair Road	Don Kramer	Chief Engineer of Plant Operations	Mayfair Hotel Holdings LLC	172 N Broadway	Milwaukee	WI	53203	414-520-3953	Chantal.Boncher@concordhotels.com	Controlled Rooftop Detention and 10 sumped CB's
19-07	Yes	01.10.2020	01.10.2020	St Camillus Tower	10100 W. Blue Mound Road	David Sinkula		St. Camillus Health System, Inc.	10101 W. Wisconsin Ave	Wauwatosa	WI	53226	414-259-3751	dsinkula@stcam.com	Bioretention Basin
19-09	Yes	10.22.2019	10.22.2019	Underwood Elementary School	11132 W. Potter Road	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Dry Pond, Permeable Pavement, Synthetic Turf-Underdrain system, Sumped CB's (12)
19-12	Yes	03.31.2021	03.31.2021	Wauwatosa East H.S. Site Improvements	7500 Milwaukee Avenue	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Biofiltration basins, porous pavement, sumped CB's
19-14	Yes	03.31.2021	03.31.2021	Lincoln Elementary School	1741 Wauwatosa Avenue	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	2 Biofiltration basins, Turf-Underdrain system, permeable pavers, 15 sumped CB's
19-24	Yes	07.14.2021	07.14.2021	Wilson/WSTEM Elementary School	1060 Glenview Avenue	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	2 Biofiltration basins, Turf-Underdrain system
19-25	Yes	07.14.2021	07.14.2021	McKinley Elementary School	2435 N 89th Street	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Biofiltration basin, Turf-underdrain system, permeable pavers
19-30	Yes	N/A	09.29.2021	Mayfair Collection Phase 4											2 Underground detention systems
19-31	Yes	12.08.2021	12.08.2021	River Parkway	6400-6442 River Parkway	Milo Pinkerton	President	MSP Real Estate, Inc	7901 W National Ave	West Allis	WI	53214	414-310-7530		Underground detention system
20-07	Yes	12.29.2021	12.29.2021	Amazon	11800 W Burleigh St	Beth Rummel	Property Manager	Phoenix Investors, LLC	401 E Kilbourn Ave, Suite 201	Milwaukee	WI	53202	414-719-6779	brummel@phoenixinvestors.com	Underground Stormtrap Detention
20-18	Yes	10.01.2021	10.01.2021	Ronald McDonald House	8984 W Watertown Plank Rd	Kelsey Stoltz	Assistant Facilities Manager	Ronald McDonald House Charities of Eastern WI	8948 W. Watertown Plank Rd	Wauwatosa	WI	53226	P:414-475-5333 D:414-935-6525	kstoltz@rmhc-easternwi.org	2 Dry Detention Basins
21-01	Yes	11.01.2022	11.01.2022	Watertown Apartments	9150 W Watertown Plank Rd	Ryan Maurer	Assistant Property Manager	Watertown Apartments, LLC	9150 Watertown Plank Rd	Wauwatosa	WI	53226	414-386-2500	rmaurer@oakbrookcorp.com	2 biofiltration basins, permeable pavement draining to an underground storage layer
21-07	Yes	08.03.2023	08.03.2023	Campbell Apartments	2929 N Mayfair Rd	Tony Rossi Sr		M&R Mayfair Venture, LLC	1 North Franklin, Suite 700	Chicago	IL	60606	312-407-6702	tony@rmk.com	Underground detention system
21-11	Yes	01.26.2022	01.26.2022	Roosevelt Elementary	2535 N 73rd St	Kevin Heus	Director of Buildings and Grounds	Wauwatosa School District	12121 W North Ave	Wauwatosa	WI	53226	414-773-1053	heuske@wauwatosa.k12.wi.us	Turf-underdrain system
21-08	Yes	07.12.2023	07.12.2023	Irgen's UWM Innovation Campus	1301-1425 Discovery Parkway	Andrea Mullins	Innovation Campus Owners Association Inc.	Innovation Campus Owners Association Inc. c/o Irgens Partners, LLC	1401 Discovery Parkway, Suite 100	Milwaukee	WI	53226	414-443-0700	AMullins@irgens.com	Green Roof above parking structure; Bioretention Basins (B, C and D series)
22-02	Yes	12.13.2023	12.13.2023	Uptown Quick Lane Service Center	1501 N Mayfair Rd	John Pentler		Sonshine 1501 LLC	2111 N Mayfair Rd	Wauwatosa	WI	53226	262-93-5709	jpentler@uptownmotors.com	Wet Detention Basin

22-11	Yes	11.22.2024	09.28.2023	St Joseph's Parking Lot Reconstruction	12130 W Center Street	Matt Adams	Director of Maintenance	St. Joseph Congregation	12130 W Center St.	Wauwatosa	WI	532222	414-479-9506	adamsm@stjoetosa.com	Wet Detention Basin (NW corner of parking lot)
22-15	Yes	01.18.2024	01.18.2024	Target	3900 N 124th St.	James Tucker		Target Corporation	PO Box 9456	Minneapolis	MN	55440	612-304-7383	wendi.smith@target.com	Underground detention basin, catch basins
23-03	Yes	04.24.2025	04.24.2025	MSP at Mayfair	3325 Foundry Way	Milo Pinkerton	President	MSP Real Estate, Inc	7901 W National Ave	West Allis	WI	53214	414-310-7530		Storm sewer system, permeable pavers, bio-retention basin
23-26	Yes	09.11.2024	09.11.2024	Dollar Tree & Nothing Bundt Cakes	12140 Burleigh	Robert Coleman Jr.	Manager	CPG Wauwatosa LLC	8513 S. Country Club Drive	Franklin	WI	53132		rcoleman@thecolemanpropertygroup.com	Rain garden behind building and parking lot rain gardens
23-27	Yes	05.31.2024	05.31.2024	Luther Manor	4545 92nd St.	Kendall Champion	Maintenance Supervisor	Luther Manor	4545 N 92nd St.	Wauwatosa	WI	53225	414-831-8957	KChampion@luthermanor.org	Sumped catch basins
23-39	Yes	02.18.2026	12.1.2023	Parking Lot Resurfacing	1401 Discovery Parkway	Mark Irgens	CEO/Manager	Innovation One Development Partners, LLC c/o Irgens Partners, LLC	1401 Discovery Parkway, Suite 100	Milwaukee	WI	53226	414-443-0700	MIrgens@irgens.com	Permeable Pavement



November 6, 2025

Ryan Marks Vice President
Facility and Planning Development
9200 W Wisconsin Ave
Milwaukee WI 53226

RE: Stormwater Management Maintenance Agreement - Froedtert Memorial Lutheran Hospital

Dear Ryan Marks:

As the owner of a property with a Stormwater Management Maintenance Agreement, you are required to perform certain inspection and maintenance actions to ensure that your Stormwater Best Management Practices (BMP's) continue to function as they were designed. These actions are outlined in your maintenance plan and include such things as regularly scheduled inspections and the completion of any needed repairs. Our records show a stormwater maintenance agreement for the Froedtert Memorial Lutheran Hospital located at 92ND St. & Wisconsin Avenue.

Please submit copies of your inspection reports and inspection photos, as outlined in your maintenance plan by December 30, 2025. It is strongly recommended that you have a qualified, engineering professional complete your annual BMP inspection with your facilities manager. By doing so, your facilities manager can be educated as to what to look for during routine inspections. Please send us an electronic PDF copy of any inspections completed in 2025 via email to jhenderson@wauwatosa.net.

If you need a copy of your maintenance plan or agreement, please contact me at 414-479-8978 or jhenderson@wauwatosa.net.

Sincerely,

Jessica Henderson, PE
Civil Engineer II



Routine Inspection and BMP Maintenance

May 2023

The Importance of Routine Maintenance

BMPs require on-going inspection and maintenance by property owners to ensure that they are achieving their desired treatment goals. Inspections also reduce the risk of damages such as flooding. Even when a BMP appears as if it is working, it's possible that it is not functioning as designed. Therefore, regular inspection and maintenance is required.

Connect With Us



City of Wauwatosa
7725 W. North Avenue
Wauwatosa, WI 53213



(414) 479-8978



www.wauwatosa.net

Stormwater Maintenance Best Management Practices (BMPs)

What is a stormwater? Why do we have Stormwater BMPs?

Stormwater runoff is water that “runs off” the land after precipitation occurs. Developed land As development increases the area of impervious surfaces, reducing the ability of stormwater to infiltrate (or soak) into the ground. The result is an increase in runoff. Runoff picks up fertilizer, oil, pesticides, dirt, bacteria and other pollutants as it travels over land and through storm drains and ditches, untreated, to our streams, rivers, and lakes. This is one of the leading causes of water quality pollution in Wisconsin.

Stormwater BMPs offer a variety of benefits. They improve water quality, protect downstream water bodies, reduce flooding, and can be aesthetically pleasing. Stormwater BMPs can be designed to meet a variety of management goals. Many are designed primarily to provide volume control to reduce flooding, while others are designed to help meet water quality goals, or both.

Who is legally responsible for maintenance?

When a property is developed or re-developed, the developer must incorporate stormwater BMPs and provide a plan for these BMPs to be properly maintained over time. When the developer finishes the project, ownership of the stormwater BMPs is turned over to the Homeowners' Association (HOA) or property owner.

Property owners are legally responsible for ensuring that stormwater BMPs on their sites are properly inspected and maintained. See Section 24.13.040 Wauwatosa Municipal Code.

Resources on BMP Types

To better understand your BMP, see the WDNR's technical standards for constructing various types of BMPs. Ongoing maintenance requirements will vary depending on the BMP.

https://dnr.wisconsin.gov/topic/Stormwater/standards/postconst_standards.html

Common Stormwater BMPs in Wauwatosa: Maintenance and Inspection Tips

Porous Pavement

- Porous pavement must be vacuumed swept on schedule
- Biannually, after storms make sure that rainwater properly drains through the material
- Follow guidelines for ice and snow



Underground Detention Systems

- Annual inspections are best practice for all underground systems
- Inspection and maintenance efforts help ensure underground pipe systems used for stormwater storage continue to function as intended
- When an inspection reveals accumulated sediment or trash, detention systems should be cleaned thoroughly

Wet Detention Ponds

- Mowing, trimming, and keeping vegetation under control
- Keep pond clear of trash and debris
- Remove excess sediment from the basin, outflow and inflow pipes





Biofiltration Basins

- Check for erosion near inflow points
- Inspect plants for signs of disease and pest infection
- Inspect for sediment accumulation and clogging
- Identify and remove weeds
- Remove litter to ensure flow paths are not hindered

Catch Basins

- Sweep pavement regularly to reduce the need for catch basin cleaning
- Inspect for debris build up in sump and blocked outlets
- Inspect structural integrity



Proprietary Systems

- Maintenance varies depending on the specific model
- Always follow the manufacturer's operation and maintenance guide
- Proprietary systems should be inspected yearly

Public Works Yard Quarterly Site Inspection Checklist

Quarterly site inspections are performed to evaluate the effectiveness of controlling stormwater contamination and to identify any additional measures that can be feasibly implemented. The Public Works Yard Storm Water Pollution Prevention Plan identified the following areas for inspection:

1. Drainage conditions.

-Inspect site for possible erosion problems.

Debris surrounding storm inlet near fire training tower. Should be cleaned of any mud and debris build up.

-Determine if drainage off the Property has changed.

Drainage has not changed

-Are there any new areas of ponding or streaming?

None

2. Potential Pollution Sources

-Is there any indication of oils or greases in the outdoor material storage areas?

No

-Is there any standing water with sheens, sludge, foam, etc.?

No

-Are there any signs of erosion or sediment transport into inlets or off site from storage areas?

No - Ensure daily clean up of spilled soil/gravel from covered storage areas

-Is there any litter or debris not associated with normal operations (such as snow removal)?

No

-Are there any signs of spills or other contaminants on the Property?

No

-Is there any cracking or other signs of wear on the fuel island pump hoses?

No

3. Catch Basins

-Is there sediment buildup that requires cleaning (sump should be no more than 40% full).

No

-Is there any floating oils or greases in catch basins?

No

4. Other Observations:

- Take note of anything else at the Property that may be of significance to the Storm Water Pollution Prevention Plan.

Signed: _____ Nate Peksa _____ Printed Name: Nate Peksa

Title: Civil Engineer Date: 06/11/2025

Public Works Yard Quarterly Site Inspection Checklist

Quarterly site inspections are performed to evaluate the effectiveness of controlling stormwater contamination and to identify any additional measures that can be feasibly implemented. The Public Works Yard Storm Water Pollution Prevention Plan identified the following areas for inspection:

1. Drainage conditions.

-Inspect site for possible erosion problems.

Debris surrounding storm inlet near fire training tower. Should be cleaned of any mud and debris build up.

-Determine if drainage off the Property has changed.

Drainage has not changed

-Are there any new areas of ponding or streaming?

None

2. Potential Pollution Sources

-Is there any indication of oils or greases in the outdoor material storage areas?

No

-Is there any standing water with sheens, sludge, foam, etc.?

No

-Are there any signs of erosion or sediment transport into inlets or off site from storage areas?

No - Ensure daily clean up of spilled soil/gravel from covered storage areas

-Is there any litter or debris not associated with normal operations (such as snow removal)?

No

-Are there any signs of spills or other contaminants on the Property?

No

-Is there any cracking or other signs of wear on the fuel island pump hoses?

No

3. Catch Basins

-Is there sediment buildup that requires cleaning (sump should be no more than 40% full).

No

-Is there any floating oils or greases in catch basins?

No

4. Other Observations:

- Take note of anything else at the Property that may be of significance to the Storm Water Pollution Prevention Plan.

Heavy vegetation growth around catch basins on south side of the DPW Parking - Trim down for better flow; remove any debris at bee-hive grates.

Signed: _____ Jessica Henderson _____

Printed Name: Jessica Henderson

Title: Civil Engineer

Date: 07/16/2025

Public Works Yard Quarterly Site Inspection Checklist

Quarterly site inspections are performed to evaluate the effectiveness of controlling stormwater contamination and to identify any additional measures that can be feasibly implemented. The Public Works Yard Storm Water Pollution Prevention Plan identified the following areas for inspection:

1. Drainage conditions.

-Inspect site for possible erosion problems.

Debris surrounding storm inlet near fire training tower. Should be cleaned of any mud and debris build up.

-Determine if drainage off the Property has changed.

Drainage has not changed

-Are there any new areas of ponding or streaming?

None

2. Potential Pollution Sources

-Is there any indication of oils or greases in the outdoor material storage areas?

No

-Is there any standing water with sheens, sludge, foam, etc.?

No

-Are there any signs of erosion or sediment transport into inlets or off site from storage areas?

No

-Is there any litter or debris not associated with normal operations (such as snow removal)?

No

-Are there any signs of spills or other contaminants on the Property?

No

-Is there any cracking or other signs of wear on the fuel island pump hoses?

No

3. Catch Basins

-Is there sediment buildup that requires cleaning (sump should be no more than 40% full).

No

-Is there any floating oils or greases in catch basins?

No

4. Other Observations:

- Take note of anything else at the Property that may be of significance to the Storm Water Pollution Prevention Plan.

Remove debris at beehive grate/catch basin on the south side of the DPW parking lot.

Signed: _____ Jessica Henderson _____

Printed Name: Jessica Henderson

Title: Civil Engineer

Date: 09/05/2025



SANITARY SEWER & STORM WATER MANAGEMENT SERVICES



BUDGET SNAPSHOT

	2025	2026	Change
Exp	\$ 14,282,459	\$ 16,491,058	\$ 2,208,598
Rev	\$ 18,183,643	\$ 20,008,482	\$ 1,824,839
Net Cost	\$ (3,901,184)	\$ (3,517,425)	\$ 383,759
FTE's			

MAJOR CHANGES

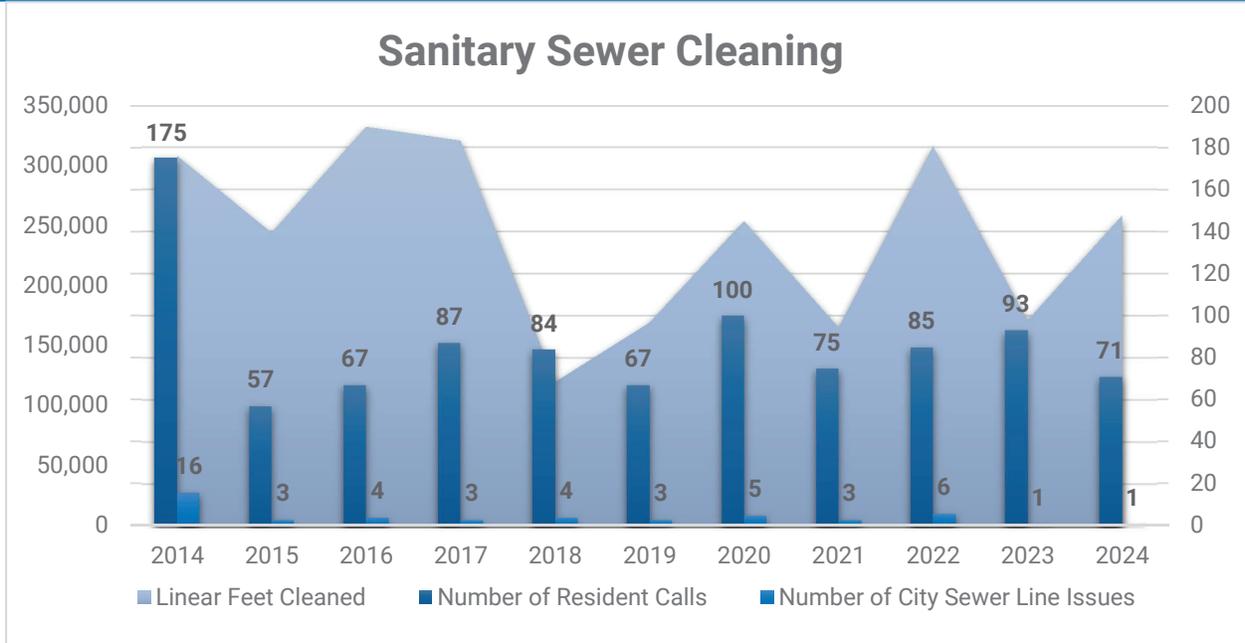
- Increase in Storm salary expenses reflects additional maintenance to be completed by staff that will become available due to reduced yard waste collection frequency.
- Reduction in the Storm budget for storm sewer televising utilizing in-house and/or CIP funded televising for larger projects. This will offset the additional salary expense.

CORE RESPONSIBILITIES

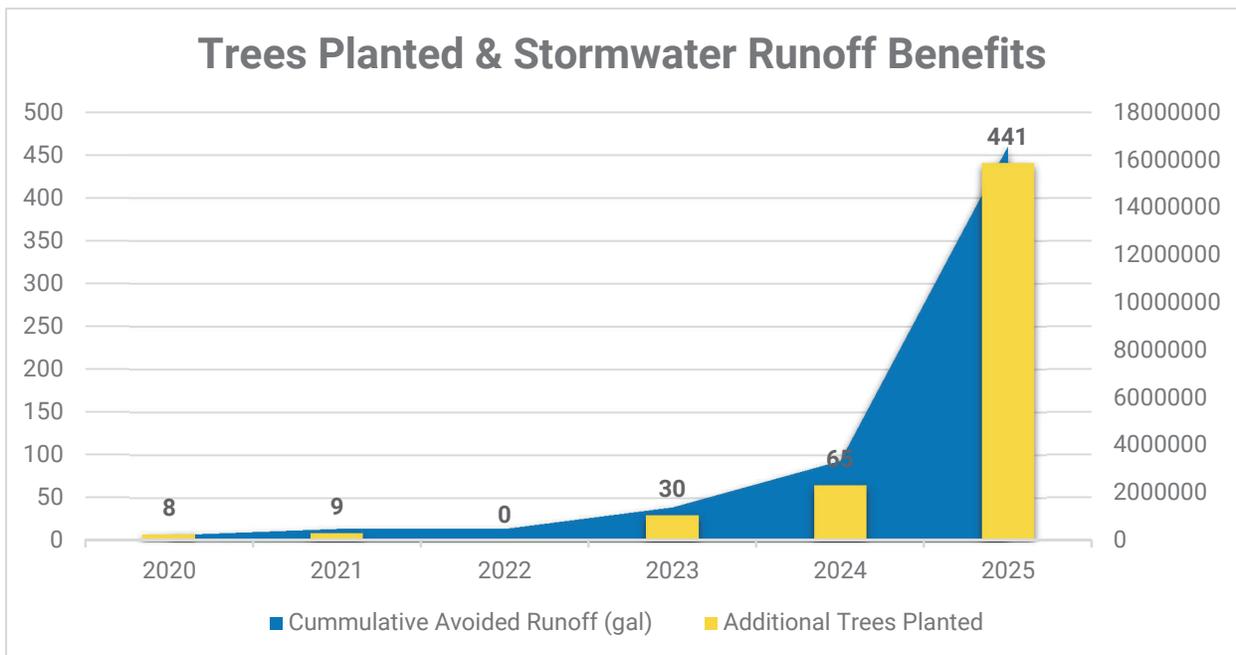
- Manage and/or complete inspections, cleaning, and repair of the City's 800,000 linear feet of sanitary sewers, 4,230 sanitary manholes, 540,000 linear feet of storm sewers and 7,247 storm inlets and catch basins.
- Responsible for responding to flooding and other emergencies related to blocked inlets or waterways.
- Respond to emergencies related to water in basement complaints caused by sanitary sewer issues.



PERFORMANCE MEASURES



This chart compares the total length of sewer line cleaned annually with the number of residential sewer backups and City-identified sewer issues, illustrating the relationship between proactive maintenance and system performance. As you can see we have only had one City Sewer Line issue in each of the past two years.

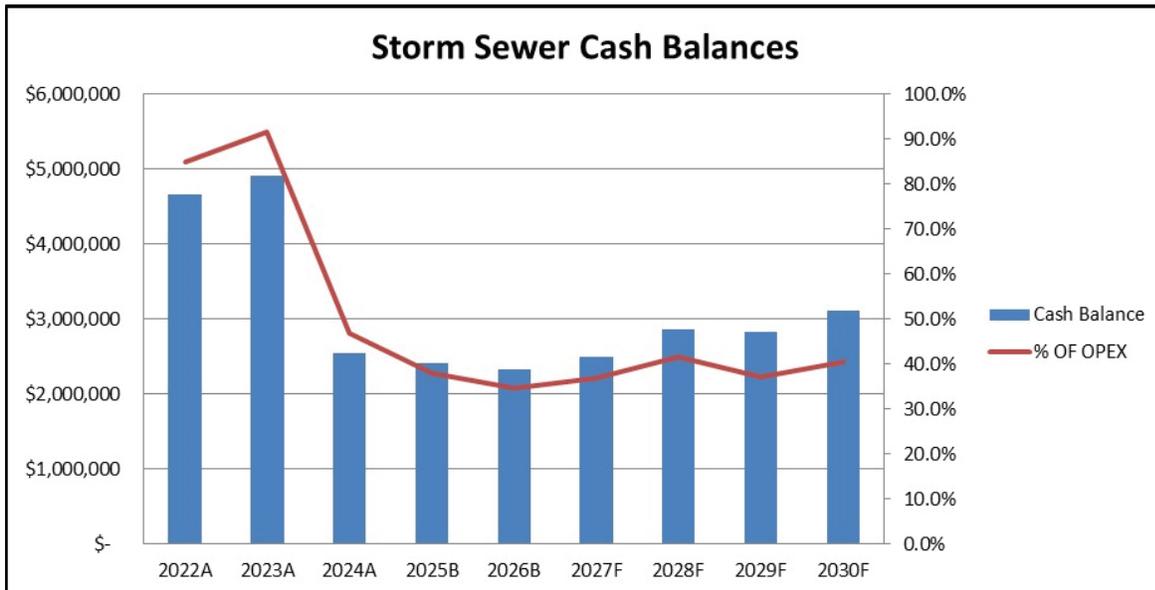
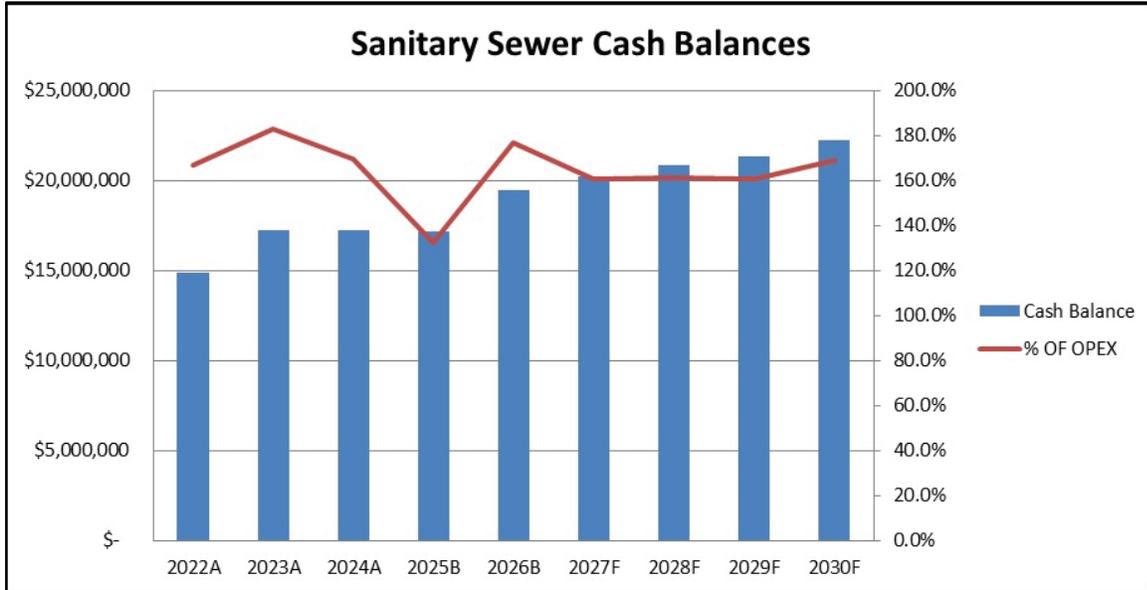


The above chart shows the gallons of storm water runoff that will be avoided over the life span of additional trees planted by the City beyond the standard 1:1 tree replacements completed each year.



2025 includes all new trees planted at Firefly Grove Park. This data was produced with the i-Tree Planting Calculator.

The next two charts show cash balances for the Sanitary and Storm Utilities. The City maintains a policy of having a minimum of 25% cash on hand as a percentage of operating expenditures. The City has been purposefully growing cash balances above this benchmark in preparation for the East Tosa Sewershed project which will require tens of millions of dollars.





NEXT YEAR'S GOALS

- Expand the in-house televising program to include televising CIP sanitary sewer & storm sewer projects and proactive condition assessments of a portion of the city's sanitary sewer system each year.
- Work with Common Council Committee/s to establish policy and budget parameters for the Schoonmaker Watershed and Sewershed project following the conclusion of the alternatives analysis study and preliminary engineering in mid-2026. This study will result in preferred alternatives for the project, preliminary phasing of construction packages, and updated budgetary estimates to aid in future CIP planning.

BUGETARY CHANGES – SANITARY SEWER RESERVE

CURRENT YEAR BUDGET REESTIMATE

GENERAL SERVICES DECREASE	\$180,000
---------------------------	-----------

Funds carried over to 2025 for televising of the Schoonmaker Creek watershed will not be utilized.

EQUIPMENT REPAIRS DECREASE	\$70,000
----------------------------	----------

Funds carried over to 2025 for payment on gate valve will not be utilized.

NEXT YEAR BUDGET REQUEST

MMSD GRANT FUND INCREASE	\$40,000
--------------------------	----------

MMSD PPII funding anticipated to be used for dye-water testing area that have previously grouted laterals, but grant funds likely not to cover all costs.

BUILDING & INFRASTRUCTURE REPAIR DECREASE	\$250,000
---	-----------

Manhole rehab project based on the needs identified in the last few years of manhole inspections is planned for 2026 with carryover funds. New budget is not being requested.

NON-CITY ASSET (GROUTING) DECREASE	\$420,000
------------------------------------	-----------

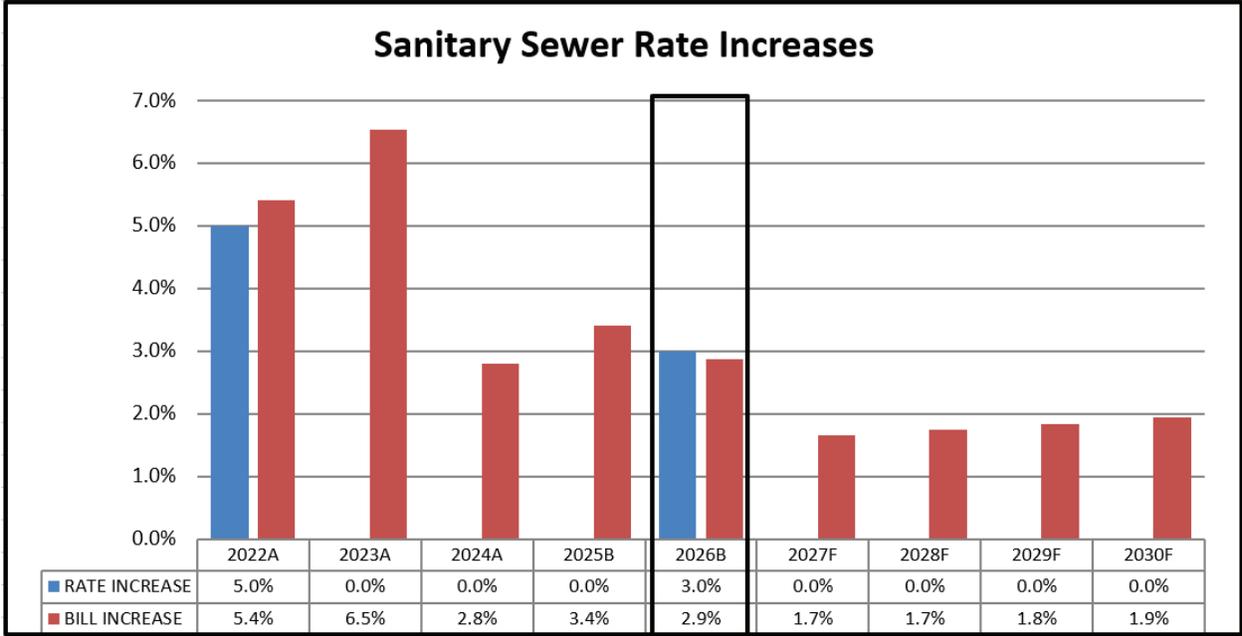
One project expected in 2026, grouting sanitary laterals for the Perry Ct. project for a total of \$40,000. Previous budget and expenditures for 2025 included two large projects, Watertown Plank Road and the Wisconsin Avenue Project.

PUBLIC CHARGES INCREASE	\$1,127,300
-------------------------	-------------

Public charge revenue is budgeted to increase 10.0% from \$11,231,100 to \$12,358,400. This is the result of an expected increase in residential winter quarter and residential multi-family sewer usage as well as an assumed Milwaukee Metropolitan Sewer District rate increase that is passed on to the rate payer.



The budget includes a 3% increase in the local sanitary flow charge which would increase from 3.3115 to 3.41 per CCF for the first 50 CCF utilized based on the winter quarter average. The chart below shows historical and forecasted local rate and total bill changes. The bill change is different from the local rate change because the bill change includes both the local rate change as well as the Milwaukee Metropolitan Sewerage District rate change.



BUDGETARY CHANGES – STORM WATER MANAGEMENT

CURRENT YEAR BUDGET REESTIMATE

GENERAL SERVICES DECREASE \$274,440

Funds carried over to 2025 for televising of the Schoonmaker Creek watershed and additional televising services will not be utilized. Work to be performed by internal forces.

NEXT YEAR BUDGET REQUEST

MMSD GRANT FUND INCREASE \$100,000

Firefly Grove Wetland project.

SALARY INCREASE \$20,000

As part of the 2026 levy reduction strategy, the yard waste collection program will be reduced from 13 to 11 collection cycles. This change results in projected salary savings of \$20,000.00 in the General Fund which will be reallocated to the Stormwater budget to support the in-house sewer televising program, street sweeping, green alley maintenance, and catch basin maintenance. The adjustment is budget neutral, as the related televising expenses will be shifted out of the General Services budget.

TELEVISIONING CAMERA EXPENSE DECREASE \$67,440



With the purchase of an in-house sewer televising truck, storm sewer lines are now also being televised in addition to the sanitary sewers. Funds previously budgeted to contract with outside vendors to perform televising will be removed. This will offset the salary increase that was moved from the Solid Waste budget as part of the 2026 levy reduction. Large scale televising project may occasionally need to be contracted, however, that would be budgeted with the relevant capital project.

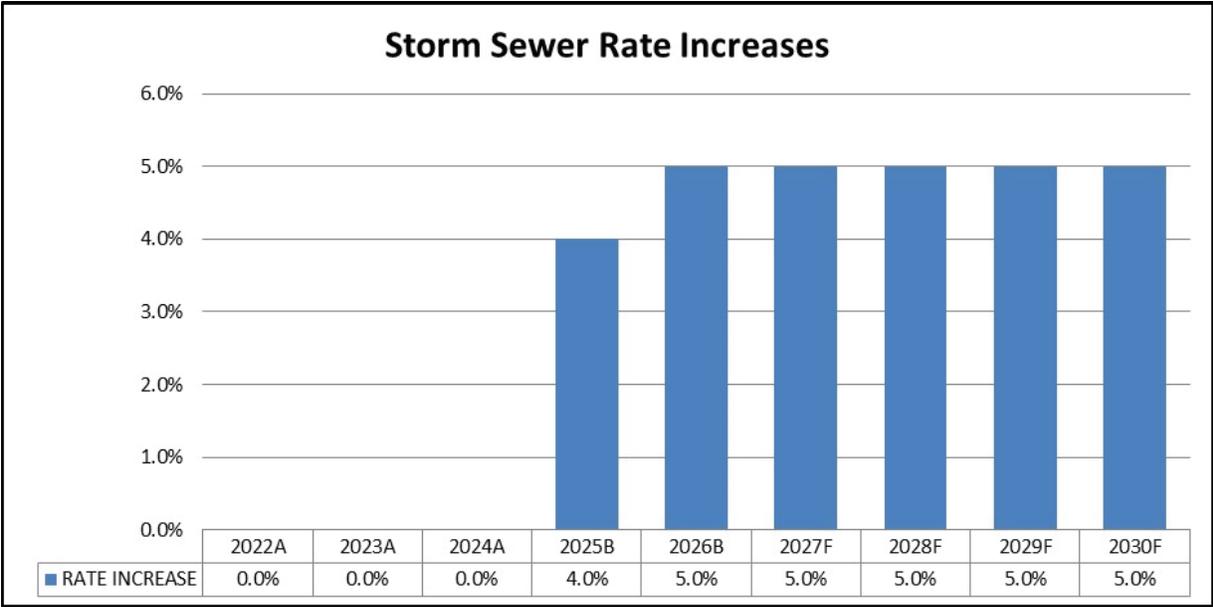
STORMWATER PERMITTING FEE INCREASE \$7,500

In addition to the storm water MS4 compliance program fees from Southeastern Wisconsin Watersheds Trust, Inc. (Sweet Water), the Wisconsin Department of Natural Resources also charges a separate municipal storm water permit fee in the amount of \$7,500.00. This state-imposed fee had not been previously included in the budget and is now being accounted for.

PUBLIC CHARGE REVENUE INCREASE \$346,984

Storm Sewer public charge revenue increases as additional impervious surface has been added to the City resulting in Equivalent Residential Unit revenue increasing by 5.8% from \$5,976,116 to \$6,323,100.

The budget includes a 5% increase in the storm sewer rate which would increase from 33.94 to 35.63 per ERU. The chart below shows historical and forecasted local rate and total bill changes.





BUDGET SUMMARY TABLE

Sanitary Fund #51						
Expenditures						
	2025				2026 / 2025	2026 / 2025
2024	Adopted	2025		2026	Dollar	% of
Actual	Budget	Revised		Budget	Change	Change
353,436	540,813	540,813	Wages	511,811	(29,002)	-5.4%
9,211	14,000	14,000	Overtime	14,000	-	0.0%
155,693	251,688	251,688	Benefits	219,707	(31,981)	-12.7%
655	302	302	Other Compensation	602	300	99.4%
10,551	21,200	21,200	Operating	21,200	-	0.0%
-	10,000	10,000	Commodities	10,000	-	0.0%
5,143,857	4,994,479	6,509,588	Services	5,755,942	761,463	15.2%
7,297	11,184	11,184	Utilities	11,598	415	3.7%
1,444,739	1,494,826	1,475,786	Fixed Charges	1,514,048	19,222	1.3%
632,062	631,976	635,876	Internal Charges	840,006	208,030	32.9%
115,371	-	-	Other Expenses	-	-	0.0%
2,503,887	4,850,525	7,719,127	Capital Outlay	3,409,560	(1,440,965)	-29.7%
(1,395,129)	(3,140,525)	(6,529,107)	Asset Purchase	(869,560)	2,270,965	-72.3%
8,981,630	9,680,468	10,660,456	TOTAL	11,438,915	1,758,447	18.2%
Revenues						
	2025				2026 / 2025	2026 / 2025
2024	Adopted	2025		2026	Dollar	% of
Actual	Budget	Revised		Budget	Change	Change
93,059	97,500	95,000	Fines and Penalties	99,800	2,300	2.4%
1,117,930	150,000	150,000	Intergovt Revenues	190,000	40,000	26.7%
632,727	435,000	630,900	Miscellaneous	614,300	179,300	41.2%
46,690	46,196	44,013	Other Sources	34,827	(11,369)	-24.6%
11,396,381	11,231,100	12,014,200	Public Charges	12,358,400	1,127,300	10.0%
13,286,787	11,959,796	12,934,113	TOTAL	13,297,327	1,337,531	11.2%
Net Cost						
(4,305,157)	(2,279,328)	(2,273,657)	TOTAL	(1,858,413)	420,915	-18.5%



Storm Sewer Fund #52						
Expenditures						
	2025				2026 / 2025	2026 / 2025
2024	Adopted	2025		2026	Dollar	% of
Actual	Budget	Revised		Budget	Change	Change
490,705	535,475	535,475	Wages	628,514	93,039	17.4%
38,641	30,000	30,000	Overtime	38,000	8,000	26.7%
216,376	240,363	240,363	Benefits	269,513	29,150	12.1%
868	302	302	Other Compensation	602	300	99.4%
17,241	42,800	42,800	Operating	47,325	4,525	10.6%
99,398	138,350	138,350	Commodities	138,350	-	0.0%
371,335	465,234	614,440	Services	450,749	(14,485)	-3.1%
2,248	5,789	5,789	Utilities	5,996	208	3.6%
1,509,939	1,979,464	1,908,263	Fixed Charges	2,352,442	372,978	18.8%
480,433	464,215	464,215	Internal Charges	450,651	(13,564)	-2.9%
108,452	-	7,500	Other Expenses	-	-	0.0%
8,072,421	16,142,384	14,606,766	Capital Outlay	2,086,312	(14,056,072)	-87.1%
(8,067,843)	(15,442,384)	(17,738,003)	Asset Purchase	(1,416,312)	14,026,072	-90.8%
3,340,214	4,601,992	856,260	TOTAL	5,052,143	450,151	9.8%
Revenues						
	2025				2026 / 2025	2026 / 2025
2024	Adopted	2025		2026	Dollar	% of
Actual	Budget	Revised		Budget	Change	Change
44,842	45,700	41,500	Fines and Penalties	43,600	(2,100)	-4.6%
773,208	-	-	Intergovt Revenues	100,000	100,000	0.0%
150,002	137,700	143,000	Miscellaneous	150,700	13,000	9.4%
84,885	64,331	101,443	Other Sources	93,755	29,424	45.7%
5,837,471	5,976,116	6,024,343	Public Charges	6,323,100	346,984	5.8%
6,890,409	6,223,847	6,310,286	TOTAL	6,711,155	487,308	7.8%
Net Cost						
(3,550,195)	(1,621,855)	(5,454,026)	TOTAL	(1,659,012)	(37,157)	2.3%

Sensible Salting Program

The Sensible Salt Programs goal is to reduce salt usage by 30% and keep the environment cleaner. Under this program, Wauwatosa will limit salting on secondary roads; limit overnight salting; focus application at hills, intersections, curves, and bridges; and implement spot salting, or salting at 150 ft. intervals on main roads.

Sensible Salting: “the right amount in the right place at the right time.”

Sensible salting requires, among other things, careful application of salt, good spreading equipment, calibration of spreaders, automatic controls, adequate covered storage, proper maintenance around storage areas and an awareness by all who use salt of the need to protect the environment.

Sensible Salting Practices lead to a 30% reduction in salt usage and help to keep our environment clean.

Sensible Salting Practices include the following policies used by the City of Wauwatosa Department of Public Works:

- Limited Salting During the Late Evening/Early Morning Hours: From 11:00 p.m. - 4:00 a.m. very limited salting will take place, as salting is not effective due to low traffic volumes. The goal of the DPW during this time is to ensure passable roads, which means only intersections, hills, curves, and bridges will be salted. Beginning at 4:00 a.m., DPW prepares the roads for rush hour. There may be some snow pack in the middle of the block until sun, traffic and salt tracking melts snow.
- Salting During Snow Events: During periods of 1’ inch per hour snowfall or greater, main roads will be plowed as frequently as possible. These roads will also be salted at intersections, hills, curves, bridges, and school zones. “Spot Salting” will also be utilized which means roads will be salted at 150 ft. intervals to allow the salt to be effectively spread around.
- Limited Salting on Secondary Roads: Secondary Roads (side streets) will be plowed as often as possible, but will only be salted at intersections, bridges, hills, curves, and school zones for 200 ft. intervals. Spot Salting will also be used when necessary.
- Proper Training of Employees and Communication of this Policy: The Director of Public Works is responsible for ensuring all employees understand and follow the City’s Sensible Salting Practices.
- Proper Calibration of Equipment: All equipment will be calibrated to ensure the Sensible Salting Practices are implemented correctly.
- Investigation of Alternative Products: The Department of Public works will continue to investigate, purchase, and utilize other alternative products such as brine and other enhanced deicers.

When conditions warrant, such as those found during and after an ice storm, the City has the ability to salt as necessary, as safety of the residents and visitors of the City of Wauwatosa remains our main priority.

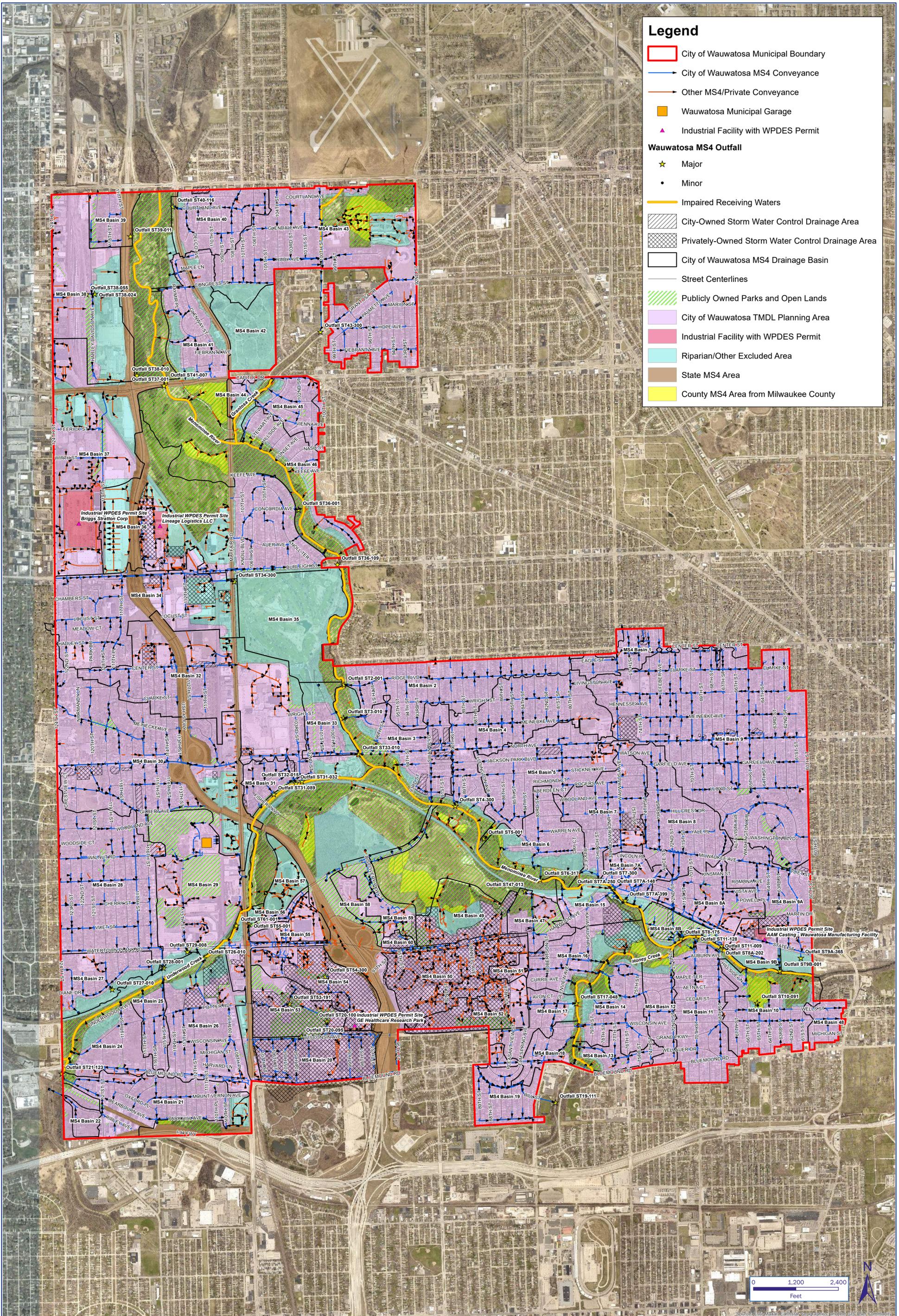


Figure 5-1
MS4 Storm Sewer System Map
City of Wauwatosa
Stormwater Quality Management Plan

ponds) associated with Federal Aviation Administration requirements due to the proximity of Timmerman field.

Potential future regional practices that are being considered by the City include the new 116th Street Park, which is currently in the planning stages by the City and has secured a consultant to assist with evaluating options for the drainage areas tributary to the new park project, and an area near the western limits of Chippewa Park on the City's south side. Options for stormwater treatment associated with the 116th Street Park will be further evaluated by a consultant in 2023, but the Chippewa Park area was evaluated as part of this project. The project in consideration would divert the storm sewer on W. Mt Vernon Avenue to the south along 116th Street along with the W. Park Hill Avenue storm sewer, discharging at Chippewa Park, creating a 39-acre drainage area. WinSLAMM modeling suggests that a wet detention pond with a surface area of 0.5 acres situated in the western limits of Chippewa Park would remove 63.3 percent TSS (2.46 tons) and 46.4 percent TP (18.5 lbs). The pond footprint includes a 20-foot buffer from roadways.

Challenges with implementing this alternative include the presence of potential wetlands in the identified wet pond area based on a review of the WDNR Surface Water Data Viewer. An endangered resources preliminary assessment was conducted and indicated that an Endangered Resources (ER) Review by the WDNR would be necessary to comply with Wisconsin's Endangered Species Law and the Federal Endangered Species Act. A wetland delineation would be required as well as discussion with the WDNR on permitting the project and the potential increased cost to purchase wetland mitigation credits if wetlands are impacted. The cost of this potential project was not estimated at this time due to uncertainty related to features that would impact the cost effectiveness such as wetland mitigation measures.

While the City has not given up on the potential to implement regional practices, it is recognized that they will be more challenging and/or expensive. The City will look to potential projects to partner with other Menomonee River Watershed permittees as well as developers if opportunities arise and can also consider alternatives to traditional wet pond surface detention, such as underground wet detention facilities. Additionally, the WDNR is in the process of developing a guidance document (anticipated to be completed in 2023) to using sand filters based on research conducted by the University of Minnesota. These practices would typically contain a sediment forebay or chamber to trap heavier particles, a dry detention basin to temporarily store water and allow it to run through a sand filter area that can have additives incorporated into the sand such as iron filings or slag to improve total phosphorus removal. The facility would be designed to drain down within approximately a 48-hour period so would not contain long-standing ponded water and are anticipated to have high TSS and TP removals when constructed according to the guidance document.

4.5 Leaf Management

The City of Wauwatosa operates a bulk leaf collection program as a service to the public. The WDNR has recognized that there may be beneficial changes in municipal leaf management programs that can reduce phosphorus discharges to waters of the state. Based on research conducted by the WDNR and USGS, the WDNR developed guidance ("Municipal Phosphorus Reduction Credit for Leaf Management Programs", effective February 17, 2022) to provide criteria for numeric credit for leaf collection programs outside of the WinSLAMM modeling tool. The existing City of Wauwatosa bulk leaf management program was evaluated and compared against the WDNR guidance as summarized in the following sections.

4.5.1 Existing City Bulk Leaf Management Program

The existing City leaf collection program currently starts in early October and goes until late November. Specific information on the City's annual program (schedule and interactive map) are posted on the City's website. Leaves are collected throughout the City up to four times during the season (three passes and one final collection after the final posted rake out deadline). Currently, like many communities, the City asks residents to rake their leaves in the fall into the gutter of the roadway for pickup by the City.

The City utilizes several pieces of equipment in this operation including:

- 7 – Mt Trackless Units
- 5 – Rear Loader Refuse Trucks
- 1 – Freightliner FL80 Buncher Truck
- 1 – John Deer Loader
- 1 – Leaf Vacuum Trailer
- 1 – Freightliner, Elgin Megawind (street cleaner)
- 1 – Elgin Pelican NP (street cleaner)

City DPW Operations Staff push the leaves together, bunches them to reduce the leaf volume and then take them to the public works yard for composting. The streets are swept following the bulk pickup operation. On average the City collected about 4,000 tons of leaves annually however the total tonnage is quite variable, ranging from 3,205 tons in 2021 to 5,436 tons in 2019 (information based on “2011-2021 Fall Leaf Collection Comparison” document provided by the City).

The City currently receives no specific stormwater quality credit or reduction for their leaf collection program. The WDNR has developed a guidance document that allows a municipality to take credit for a bulk leaf collection program that meets the criteria in residential land use areas as outlined in their 2022 guidance. Future research may allow credit in additional land use areas or applications but are not considered in the current guidance document. The City can only take credit for increased numeric stormwater pollution reduction as allowed under WDNR guidance when the conditions outlined in the guidance are met by the City. Non-numeric credit can be taken for other land uses that are not currently outlined for numeric credit and can be a component of the City's implementation plan and evidence of working towards TMDL pollutant reduction goals. The current and potential WDNR leaf collection program modification options and the City's evaluation of potential changes are discussed in the following sections.

4.5.2 Eligible Areas for Numeric Credit from Leaf Management

Under WDNR guidance, there are conditions that define the area that is eligible for leaf management credit. To be eligible, the area must have a residential land use, curb and gutter streets, a high level of tree canopy, and not be treated by a downstream structural SMP (such as a pond).

To determine whether there is a high level of tree canopy, there are two options provided by the WDNR as follows:

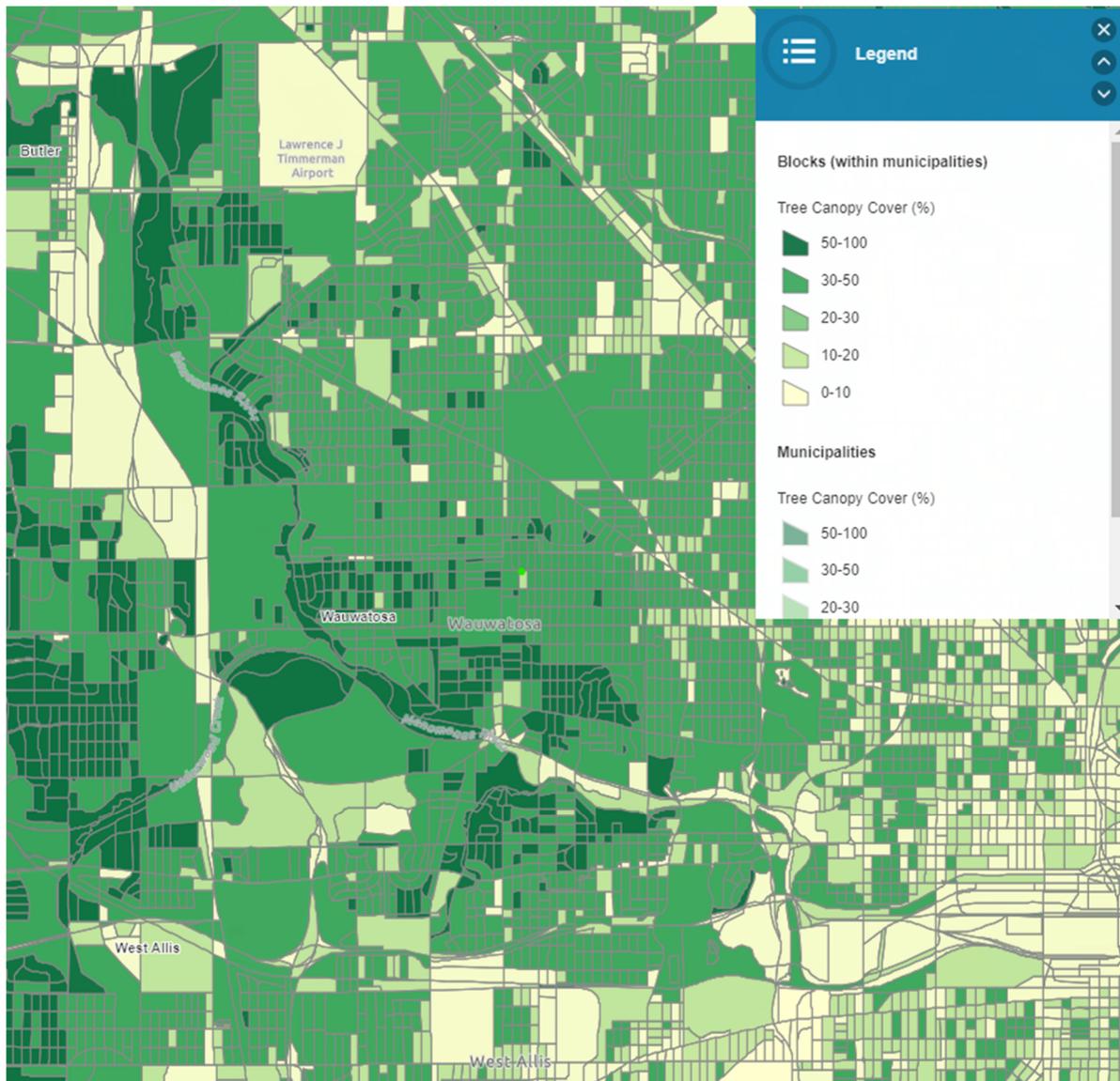
- Option A: An average of one or more medium to large canopy trees located between the sidewalk and the curb for every 80 linear feet of curb.
- Option B: An average of 40 percent or greater leaf canopy over the pavement, or 45 percent tree canopy or greater over the right-of-way determined using leaf-on aerial photography.

The analysis was conducted using Option A, utilizing the City of Wauwatosa GIS tree dataset. This dataset represents trees within City property which includes the right-of-way and parks. The dataset includes various attributes regarding trees, including the tree diameter. It was assumed that a

diameter at breast height of 12-inches or greater equated to a medium to large trees. In conjunction with the tree data, the City's street centerline GIS file was utilized. The street centerline file was clipped to areas meeting the land use and street section criteria. The number of medium or large trees along each segment (intersection to intersection) was then counted. The length of the street segment was then multiplied by two to account for curb and gutter on both sides of the street. This length was divided by the count of trees along each segment to calculate the average medium or large tree spacing. If the tree spacing was less than 80-feet the segment was identified as eligible. Figure 4-2 shows the areas within the City that meet these criteria.

The resulting areas were compared to other available sources to see if the identified areas were reasonable. The following items were considered:

1. Google street view was utilized to spot check residential areas throughout the City. It was generally observed that the images in street view correlated with the tree dataset.
2. The WDNR community tree canopy mapping application (<https://dnr.wisconsin.gov/topic/urbanforests/ufia/plan-treecanopy>) was reviewed. This mapping data showed a city-wide tree canopy of 37.9 percent. The data could be further reviewed at a detailed level. At the "Block" level (see tree canopy image), most blocks in the City are in the upper two tree canopy designations (between 30 and 100 percent tree coverage).



City of Wauwatosa Tree Canopy

Image Courtesy of WDNR Tree Canopy Mapping Application

4.5.3 Existing Leaf Management Program and WDNR Guidance Criteria

In addition to the criteria regarding areas that are eligible for leaf management credit, the WDNR guidance document established leaf management programmatic criteria. The following section describes the requirements of the WDNR guidance document and how the City’s program compares:

1. WDNR Criteria #1: The municipality has an ordinance prohibiting residents from placement of leaves in the street.
 - a. The City’s Municipal Code currently does not include a provision that prohibit the placement of leaves in the street.
 - b. To comply with this criteria, the City would need to make a code change.
2. WDNR Criteria #2: The municipality has a policy that leaves are placed by residents on the street terrace and collected at a specified frequency and timing. As part of the collection, the leaves are collected by loading them into an enclosed vehicle without being left in the street overnight.

- a. Per the “Fall Leaf Collection” guidance on the City’s website, residents are directed to place leaves in the gutter of the street for City pickup.
- b. To comply with this criteria, the City would need to change their leaf collection operation and guidance. Further complicating this potential practice is the narrow terraces in many areas of the City.
3. WDNR Criteria #3: If on street parking densities are greater than “light”, there is an ordinance or enforceable policy to restrict parking during leaf collection and street cleaning.
 - a. Within residential areas of the City, the parking densities are light.
4. WDNR Criteria #4: The leaf collection program starts no later than October 7 each year. The guidance document should be consulted for further information regarding when street cleaning and bulk collection activities associated with street cleaning begins.
 - a. The “Fall Leaf Collection” guidance on the City’s website identifies a start date of October 10, 2022, for the leaf collection program.
 - b. This date is close to the October 7 date indicated by WDNR and no major program change is anticipated; however, based on the WDNR guidance, the leaf accumulation conditions in the street will need to be monitored, and collection and street cleaning activities may need to begin earlier.
5. WDNR Criteria #5: The leaf collection program occurs three to four times throughout October and November.
 - a. Per the “Fall Leaf Collection” guidance on the City’s website, the City generally makes three passes through the City with one final collection occurring after the final rake out deadline (November 20, 2022).
 - b. It is believed that the City complies with this criteria as the adequate number of collection cycles is completed. It is possible that the City’s program may need to be extended to the end of November to meet the requirements. The WDNR should be consulted to verify how long collection activities should occur.

With meeting the criteria above, there are two levels of TP reduction that can be achieved by leaf management activities under the current guidance document. These levels are described below:

1. Numeric Credit Option #1: Within 24-hours of leaf collection the streets within the collection area are cleaned with either a mechanical or high-efficiency street cleaner. A 17 percent TP reduction credit is achieved under this option.
 - a. Currently the City is not believed to be complying with this requirement due to resource limitations.
2. Numeric Credit Option #2: Weekly street cleaning occurs with high efficiency street cleaners in addition to the loose-leaf collection. A 25 percent TP reduction credit is achieved under this option.
 - a. Currently, the City does not feel it has the resources to implement a weekly street cleaning program and therefore would not be eligible for Credit Option #2 at this time.

4.5.4 Leaf Management Program Potential Modification Considerations and Costs

Based on Section 4.5.3, the City’s current leaf management program would not qualify for any additional leaf management credit. However, the City has explored the possibility of modifying its program and conducted a small leaf collection pilot study in 2019. For this project, an analysis of the potential phosphorus reduction and cost associated with modifying the City’s program to meet the WDNR Credit Option #1 was calculated. The “with controls” database was utilized to calculate the TP

pollutant loads from eligible areas and the associated numeric credit was applied for the identified eligible land use areas as summarized in Table 4-10.

TMDL Reachshed	Total Potential Eligible Area (ac)	No Controls TP Load (lbs/year)	With Controls TP Load (lbs/year)	With Controls TP Reduction % (compared to no-controls total load)	Potential TP Reduction Increase Due to Leaf Collection (lbs/year)	Potential TP Reduction % Increase Due to Leaf Collection
MN-10	74.5	66.4	61.0	8.1%	5.9	8.9%
MN-12	143.3	130.9	122.4	6.5%	13.7	10.5%
MN-13	22.6	21.9	20.6	5.5%	2.5	11.5%
MN-14	141.2	135.4	120.0	11.4%	7.6	5.6%
MN-15	52.6	51.2	48.4	5.6%	5.9	11.4%
MN-16	901.3	900.1	832.0	7.6%	84.9	9.4%
Totals	1,335.5	1,306.0	1,204.5		120.5	

The impact of a potential leaf management program to reduce TP on a Citywide basis is shown in Table 4-11. There is no credit for TSS in this program, so TSS loads and reductions would remain unchanged.

TMDL Reachshed	Analyzed Area (ac)	With Controls TP Load Reduction (lbs/year)	Potential TP Load Reduction (lbs/year)	Potential TP Load Reduction %
MN-10	1,046	72	78	8.3%
MN-12	1,775	217	230	14.8%
MN-13	152	8	11	7.5%
MN-14	509	47	56	11.6%
MN-15	133	8	14	10.5%
MN-16	2,307	301	390	17.4%
Totals	5,921	654	780	14.2%

As noted previously, the City conducted a pilot test in 2019 to compare the effort and cost of modifying the City's leaf collection activities to be more aligned with the WDNR's criteria in order to be eligible to obtain the additional phosphorus reductions. The pilot consisted of modifying the leaf collection process for a portion of the leaf collection operation that year. Table 4-9 summarizes a comparison of the two programs based on this relatively small pilot project.

Comparative Element	Current Leaf Collection Method	Modified Leaf Collection Program
Leaves Collected (tons)	5,572	149
Labor Cost	127,842	8,272
Labor Cost Per Ton	23	56
Equipment Cost	57,859	8,411
Equipment Cost Per Ton	10	56
Total Cost	185,701	16,683
Total Cost Per Ton	33	112

Based on the pilot, the results suggest that a modified leaf collection program sufficient to meet the WDNR's criteria could be almost 3.4 times the cost of the current program. However, it could be suggested that the staff's limited experience with this approach of leaf management resulted in inefficiencies and over time the program could increase in efficiency. It was also initially assumed that the City has the staff resources and equipment to be able to implement a program change.

In 2021, labor and equipment costs over the 49 days of the leaf management operation, were \$131,301 and \$93,444.90 respectively for a total of \$224,745.90. Total program costs have generally risen and estimating an inflation of 5 percent from 2021 costs, the current program costs are estimated at approximately \$235,000. If one were to assume that a modified leaf management program cost increase was only 3 times that of the current program, then using the estimated 2022 program cost, the incremental increase in cost for the program would be approximately \$470,000.

Applying this cost to the potential phosphorus reduction credit of 120.5 lbs/year under Alternative 1 would result in a cost of over \$3,900/lb of TP. To implement Alternative 2 would require adding in the annual street cleaning Alternative 2 costs of approximately \$380,000/yr (for incremental staff needs only), resulting in a much higher annual program increase but a slightly better cost effectiveness of \$3,800/lb of TP. However, based on feedback from the City on the feasibility of implementing a weekly street cleaning program, this alternative is also not considered feasible at this time.

Additionally, in discussion with the City as part of the alternatives evaluation workshop, there was a consensus that additional costs and challenges exist to implementing the program. The City has not conducted an equipment needs evaluation but anticipates additional equipment would be needed to collect leaves based on the pilot program and also to meet the street cleaning requirements. Additionally, as discussed as part of the street cleaning alternatives evaluation, additional staff time would be needed for the program but in a very focused timeframe during the year. It is possible, and reasonable, that staff could be shared between the leaf management and street cleaning program efforts. Finally, the City is concerned with the physical constraint that exist to implement a program of this nature. Terraces on the majority of City streets are very narrow and with the density of trees in the City, are likely unable to contain the leaf matter. This could result in overflow into the street (a violation of program credit requirements) or into sidewalks (a safety concern).

The City does have some areas of wider terraces on the west side and will continue to look into the potential to create a focused implementation of a leaf management program change in the future, especially if these areas are in reachsheds with higher TP reduction goals. In the meantime, the City will make an effort to limit the amount of time that leaves are in the street and in addition to

evaluating terrace sizes in areas of the City, will also utilize their extensive GIS tree inventory to see if, based on tree type, other modifications to their leaf management program may be possible to make incremental progress to improve stormwater quality.

4.6 Impacts of Redevelopment

As part of this Citywide water quality plan, it was desired to understand the impacts that future redevelopment of existing areas will have on water quality pollutant loadings. As the City redevelops, there will be an incremental positive impact on the City's overall level of pollutant reduction. A few Wisconsin municipalities are changing their ordinances to require higher levels of pollution control/reduction to place more of the burden on new development and redevelopment sites, such as in the Fox Valley area, but as of the time of this report, no municipalities in the Menomonee River Permit group have done so. These changes can provide increased incremental improvements in water quality but are also impactful to developers and can be challenging to convince development stakeholders (internal and external) to accept such a change.

4.6.1 Redevelopment Impact Potential

The impact of future redevelopment areas on the City's ability to make progress towards meeting the various TMDL reachshed goals was evaluated under two scenarios. The first scenario considered the impact of redevelopment under the City's current ordinance and the second scenario considered the impact of modifying the City's ordinance to require development to achieve the various TMDL reduction targets.

The City's current post-construction stormwater management ordinance requires sites of one acre and larger to reduce TSS by 40 percent for parking lot and road/driveway source areas. This would have an approximate impact of 27 percent reduction in TP following a common rule of thumb used by the WDNR.

Because different land uses and developments have differing source areas and sizes, for the first scenario analysis it was assumed that the resulting impact on a parcel wide basis of the ordinance was a TSS reduction of 30 percent and a TP reduction of 20 percent. From data provided by the City for permit requests, the average number of redevelopment acres per year from 2014 to 2021 was approximately 30 acres. Estimating the impact of redevelopment over 10-, 20-, and 30-years would mean that a corresponding total land area of 300, 600, and 900 acres would redevelop.

To understand the impact this would have on a reachshed basis, the amount of land available to be redeveloped first needs to be estimated. This was accomplished by identifying parcels of one acre or larger in the City that had land uses corresponding to commercial, industrial, institutional, parks, open space, and multifamily residential. The current no-controls for each parcel was then checked based on the evaluations conducted in Section 3 of this report. Those areas that are already achieving a parcel based TSS reduction of 40 percent or greater were removed from consideration as those parcels would need to provide TSS reduction equal to or greater than the current parcel wide performance. Parcels with less than a 40 percent TSS reduction were aggregated on a reachshed basis and the no controls and with controls loads were summed. Potential reachshed loads were then calculated for the available areas by assuming a 30 percent reduction for TSS and 20 percent reduction for TP were achieved. Based on the nearly 2,000 acres of available redevelopment acreage, the percentage of available land area estimated to redevelop over the 10-, 20-, and 30-year time periods is approximately 15, 30, and 45 percent. These reductions were then compared to the reachshed existing reductions with controls, to calculate the potential incremental TSS and TP reductions. The redevelopment acreage was then prorated equally among all reachsheds for 10-, 20-, and 30-year increments to estimate the TSS and TP reductions for each of the