

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**.

Reporting Information

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

Project Name: Elm Grove 2020 MS4 Annual Report- Due March 2021

County: Waukesha

Municipality: Elm Grove, Village

Permit Number: S065404

Facility Number: 31264

Reporting Year: 2020

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 (*S050075-03 General Permit and S058416-04 Madison Area Group Permit shall have a written storm water management program that describes in detail how the permittee intends to comply with the permit requirements for each minimum control measure. Updated programs are due to the department by March 31, 2021.*)
 - 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 (*S050075-03 General Permit and S058416-04 Madison Area Group Permit 2.6.1 - inventory due to the department by March 31, 2021.*)
 - Municipal Storm Water Management Facility (BMP) Inspection and Maintenance Plan (*S050075-03 General Permit and S058416-04 Madison Area Group Permit 2.6.2 – document due to the department by March 31, 2021.*)
 - 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: Elm Grove, Village

Facility ID # or (FIN): 31264

Updated Information: Check to update mailing address information

Mailing Address: 13600 Juneau Blvd

Mailing Address 2:

City: Elm Grove

State: Wisconsin

Zip Code: 53122 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: Richard

Last Name: Paul Jr

Select to **update** current contact information

Title: DPW

Mailing Address: 13600 Juneau Blvd

Mailing Address 2:

City: Elm Grove

State: WI

Zip Code: 53122 xxxxx or xxxxx-xxxx

Phone Number: 262-782-6700 Ext: xxx-xxx-xxxx

Email: rpauljr@elmgrovewi.org

Additional Contacts Information (Optional)

- I&E Program
- IDDE Program
- IDDE Response Procedure Manual

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

- 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:

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

Yes No

Public Education and Outreach Southeastern Wisconsin Watersheds Trust - Respect Our Waters

Public Involvement and Participation Southeastern Wisconsin Watersheds Trust - Respect Our Waters

Illicit Discharge Detection and Elimination _____

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

Minimum Control Measures- Section 1 : Complete**1. Public Education and Outreach**

a. Complete the following information on Public Education and Outreach Activities related to storm water. Select the Delivery Mechanism that best describes how the topics were conveyed to your population. Use the Add Event to add additional entries.

Event Start Date	1/1/2020		
Project/Event Name	Respect Our Waters Website		
Delivery Mechanism	Website		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input checked="" type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input checked="" type="checkbox"/> Pollution prevention <input checked="" type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input checked="" type="checkbox"/> General Public <input 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 type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

Event Start Date	1/1/2020		
Project/Event Name	Streamed & Televised Public Service Announcement		
Delivery Mechanism	Media offering		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input checked="" type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input checked="" type="checkbox"/> Other: <input type="text"/> General Watershed & Stormwater Edu...	<input checked="" type="checkbox"/> General Public <input 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 type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

Event Start Date	1/1/2020		
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Project/Event Name	Watershed Specific Email		
Delivery Mechanism	Media offering		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input checked="" type="checkbox"/> Other: General Watershed & Stormwater Edu...	<input checked="" type="checkbox"/> General Public <input 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 type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

Event Start Date	1/1/2020		
Project/Event Name	Targeted Social Media Advertisement & Post Campaigns		
Delivery Mechanism	Social media post		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input checked="" type="checkbox"/> Other: General Watershed & Stormwater Edu...	<input checked="" type="checkbox"/> General Public <input 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 type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

Event Start Date	10/1/2020		
Project/Event Name	Photo Contest		
Delivery Mechanism	Educational activity*		*Active
Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> Illicit discharge detection and elimination <input checked="" type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input checked="" type="checkbox"/> Yard waste management/pesticide and fertilizer application <input type="checkbox"/> Stream and shoreline management	<input checked="" type="checkbox"/> General Public <input type="checkbox"/> Public Employees <input checked="" type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

<input checked="" type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input checked="" type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<input type="checkbox"/> Developers <input type="checkbox"/> Industries <input type="checkbox"/> Other		
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Event Start Date	8/10/2020
Project/Event Name	Public Works/Utilities Committee Meeting
Delivery Mechanism	Government Event (Public Hearing, Council Meeting, etc)* *Active

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> Illicit discharge detection and elimination <input type="checkbox"/> Household hazardous waste disposal/pet waste management/vehicle washing <input type="checkbox"/> Yard waste management/pesticide and fertilizer application <input checked="" type="checkbox"/> Stream and shoreline management <input type="checkbox"/> Residential infiltration <input type="checkbox"/> Construction sites and post-construction storm water management <input type="checkbox"/> Pollution prevention <input type="checkbox"/> Green infrastructure/low impact development <input type="checkbox"/> Other: <input type="text"/>	<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 type="checkbox"/> Other	1 - 10	<input type="radio"/> Yes <input checked="" type="radio"/> No

b. Brief explanation on Public Education and Outreach reporting. *Limit response to 250 characters and/or attach supplemental information on the attachments page.*

For more information on above mechanisms and activities, please see the Respect Our Waters Attachments I & II.

Minimum Control Measures - Section 2 : Complete

2. Public Involvement and Participation

a. Permit Activities. Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how the permit activities were conveyed to your population. Use the Add Event to add additional entries.

Event Start Date	6/1/2020
Project/Event Name	Survey to develop list of Prioritized Education Needs
Delivery Mechanism	Other

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input checked="" type="checkbox"/> Other: <input type="text" value="Storm Water Education Needs"/>	<input checked="" type="checkbox"/> General Public <input 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 type="checkbox"/> Other	101 +	<input checked="" type="radio"/> Yes <input type="radio"/> No

Event Start Date	<input type="text" value="3/9/2020"/>
Project/Event Name	<input type="text" value="Village Board Meeting"/>
Delivery Mechanism	<input type="text" value="Government Event (Public Hearing, Council Meeting, etc)"/>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input checked="" type="checkbox"/> MS4 Annual Report <input type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<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 type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

Event Start Date	<input type="text" value="11/23/2020"/>
Project/Event Name	<input type="text" value="Village Board of Trustees Meeting, Presentation of SWMP"/>
Delivery Mechanism	<input type="text" value="Presentation of Storm Water Information"/>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
<input type="checkbox"/> MS4 Annual Report <input checked="" type="checkbox"/> Storm Water Management Program <input type="checkbox"/> Storm Water related ordinance <input type="checkbox"/> Other: <input type="text"/>	<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 type="checkbox"/> Other	11-50	<input type="radio"/> Yes <input checked="" type="radio"/> No

b. Volunteer Activities. Complete the following information on Public Involvement and Participation Activities related to storm water. Select the Delivery Mechanism that best describes how volunteer activities were conveyed to your population. Use the Add Event to add additional entries.

Event Start Date	<input type="text" value="1/1/2020"/>
Project/Event Name	<input type="text" value="Not Applicable"/>
Delivery Mechanism	<input type="text" value="Other hands-on event"/>

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
Volunteer Opportunity	<input type="checkbox"/> General Public	Select...	<input type="radio"/> Yes <input type="radio"/> No

<input type="checkbox"/> Public Employees <input type="checkbox"/> Residents <input type="checkbox"/> Businesses <input type="checkbox"/> Contractors <input type="checkbox"/> Developers <input type="checkbox"/> Industries <input checked="" type="checkbox"/> Other		
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c. Brief explanation on Public Involvement and Participation reporting. *Limit response to 250 characters and/or attach supplemental information on the attachments page.*

No Volunteer Activities occurred due to the pandemic. The form does not allow for NULL values, so Other was filled in. For more information on Section 2a., please see Attachment III.

Form 3400-224 (09/20)

Minimum Control Measures - Section 3 : Complete

3. Illicit Discharge Detection and Elimination

- a. How many total outfalls does the municipality have? Unsure
- b. How many outfalls did the municipality evaluate as part of their routine ongoing field screening program? Unsure
- c. From the municipality's routine screening, how many were confirmed illicit discharges? Unsure
-
- d. How many illicit discharge complaints did the municipality receive? Unsure
- e. From the complaints received, how many were confirmed illicit discharges? Unsure
-
- f. How many of the identified illicit discharges did the municipality eliminate in the reporting year (from both routine screening and complaints)? Unsure

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

- g. How many of the following enforcement mechanisms did the municipality use to enforce its illicit discharge ordinance? Check all that apply and enter the number of each used in the reporting year. Unsure

- | | |
|---|--------------------------------|
| <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 checked="" type="checkbox"/> Civil Penalty/ Citation | <input type="text" value="0"/> |

Additional Information: _____

- h. 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.*

The IDDE program was updated & submitted to DNR in January 2021. Summary inspection report attached for 2020 outfall testing.

Form 3400-224 (09/20)

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? Unsure
- 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? Unsure
- c. How many erosion control inspections did the municipality complete in the reporting year? Unsure
- d. 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. Unsure
- No Authority
 - Verbal Warning
 - Written Warning (including email)
 - Notice of Violation
 - Civil Penalty/ Citation
 - Stop Work Order
 - Forfeiture of Deposit
 - Other - Describe below
- 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.*

The Construction Site program was updated & submitted to DNR in January 2021. The Village continues to inspect active sites and enforce ordinances accordingly.

Form 3400-224 (09/20)

Minimum Control Measures - Section 5 : Complete

5. Post-Construction Storm Water Management

- a. How many sites with new structural storm water management facilities* have received local approval ? Unsure

*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, catch basin sumps, etc.

b. Does the municipality utilize privately owned storm water management facilities in its pollutant reduction analysis? Yes No Unsure

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

d. 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. Unsure

- No Authority
- Verbal Warning
- Written Warning (including email)
- Notice of Violation
- Civil Penalty/ Citation
- Forfeiture of Deposit
- Complete Maintenance
- Bill Responsible Party
- Other - Describe below

e. 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.*

The Village continues to coordinate with and notify owners of privately owned facilities of the necessity for ongoing inspections and maintenance for effective pollutant reductions.

Minimum Control Measures - Section 6 : Complete

6. Pollution Prevention

Storm Water Management Facility Inspections Not Applicable

a. Enter the total number of municipally owned or operated structural storm water management facilities ? Unsure

b. How many new municipally owned storm water management facilities were installed in the reporting year ? Unsure

c. How many municipally owned storm water management facilities were inspected in the reporting year? Unsure

d. What elements are looked at during inspections (250 character limit)?

e. How many of these facilities required maintenance? Unsure

f.

Brief explanation on Storm Water Management Facility 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.*

Analysis completed in 2020 determined that there are no Village-owned storm water quality facilities.

Public Works Yards & Other Municipally Owned Properties (SWPPP Plan Review) Not Applicable

- g. How many municipal properties require a SWPPP? Unsure
- h. How many inspections of municipal properties have been conducted in the reporting year? Unsure
- i. Have amendments to the SWPPPs been made?
 Yes No Unsure
- j. If yes, describe what changes have been made. Limit response to 250 characters and/or attach supplemental information on the attachment page:

The updated DPW SWPPP was submitted to WDNR in January 2021.

- 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.*

The Village continues to follow the SWPPP and completes routine inspections and maintenance of the DPW yard.

Collection Services - Street Sweeping / Cleaning Program Not Applicable

- l. Did the municipality conduct street sweeping/cleaning during the reporting year?
 Yes No Unsure
- m. If known, how many tons of material was removed? Unsure
- n. Does the municipality have a low hazard exemption for this material? Yes No
- o. If street cleaning 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 Each spring.
 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 Unsure
- q. How many catch basin sumps were cleaned in the reporting year? Unsure
- r. If known, how many tons of material was collected? Unsure
- 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 _____
- No - Explain _____
- Not Applicable

Collection Services - *Leaf Collection Program* Not Applicable

- u. Does the municipality conduct curbside leaf collection? Yes No Unsure
- v. Does the municipality notify homeowners about pickup? Yes No Unsure
- w. Where are the residents directed to store the leaves for collection?
- Pile on terrace Pile in street Bags on terrace Unsure
- Other - Describe _____
- x. What is the frequency of collection?
- A private disposal company is contracted to pick up the bags weekly on trash pick up day from Sept to Nov.
- y. Is collection followed by street sweeping/cleaning? Yes No Unsure
- z. Brief explanation on Collection Services 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*

Residents are notified when leaf pickup is available.

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? Unsure
- 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
Salt	0	0	27	111	112	50

Liquids (gallons) (ex. brine)

	Oct	Nov	Dec	Jan	Feb	Mar
Brine	0	0	0	1350	1200	700

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

Training Date	Training Name	# Attendance
9/8/2020	Smart Salting of Roads	9

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*

The Village follows the Winter Road Management Plan submitted to DNR in January 2021.

Internal (Staff) Education & Communication

- af. Has training or education been held for municipal or other personnel involved in implementing each of the pollution prevention program elements? Yes No Unsure

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

Public Works staff are routinely trained throughout the year. A November meeting reviewed the full Storm Water Management Plan.

When: 11/23/2020

How many attended: 12

- ag. Describe how the municipality has kept the following local officials and municipal staff aware of the municipal storm water discharge permit programs and its requirements.

Elected Officials

Public Works/Utilities Committee Meetings, Village Board Meetings

Municipal Officials

Public Works/Utilities Committee Meetings, Village Board Meetings

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

Public Works/Utilities Committee Meetings, Village website postings and newsletters, and internal training.

- 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.*

The Village provides internal education and training frequently at committee meetings, board meetings, and informal staff meetings.

Form 3400-224 (09/20)

Minimum Control Measures - Section 7 : Complete

7. Storm Sewer System Map

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

Yes No Unsure

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.*

The updated map was provided in January 2021 to WDNR and is attached to this annual report.

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

450	377	100	<u>Storm water utility</u>
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Element: Public Involvement and Participation

1000	1000	1000	<u>Storm water utility</u>
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Element: Illicit Discharge Detection and Elimination

500	500	500	<u>Storm water utility</u>
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Element: Construction Site Pollutant Control

5000	5000	5000	<u>Storm water utility</u>
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Element: Post-Construction Storm Water Management

9000	9000	9000	<u>Storm water utility</u>
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Element: Pollution Prevention

500	500	500	<u>Storm water utility</u>
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Other (describe)

Storm Water Quality Management		
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57561	60000	60000	<u>Storm water utility</u>
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Please provide a justification for a "0" entered in the Fiscal Analysis. *Limit response to 250 characters.*

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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.*

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

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

[ElmGrove DPWSWPPP Dec2020.pdf](#)

Storm Sewer System Map

 File Attachment

[MS4Map-December2020.pdf](#)

Attach - Other Supporting Documents

AR IDDE

 File Attachment

[ElmGroveIDDESummaryReport-Final_2021-01-14.pdf](#)

AR EO

 File Attachment

[AttachmentI_VillageofElmGrove_SweetWaterEducation_OutreachActivities.docx](#)

AR EO

 File Attachment

[AttachmentII_SweetWaterEducation_OutreachMetrics.pdf](#)

AR Other

 File Attachment

[SupplementalInformationAttachment.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

EO Program

 File Attachment

[ElmGrove-Public-EO-Plan.pdf](#)

IP Program

 File Attachment

[ElmGrove-Public-IP-Plan.pdf](#)

SWQM TMDLBacParam

 File Attachment

[ElmGrove FecalColiformParameter IIIA4.pdf](#)

PP BMPInventory

 File Attachment

[ElmGrove UpdatedSWFacilityInventory.pdf](#)

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

Sign and Submit Your Application

Steps to Complete the signature process

1. Read and Accept the Terms and Conditions
2. Press the Submit and Send to the DNR button

NOTE: For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click [HERE](#).

Terms and Conditions

Certification: I hereby certify that I am an authorized representative of the municipality covered under Elm Grove, Village MS4 Permit for which this annual report or other compliance document is being submitted, and that the information contained in this submittal and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

Signee (must check current role prior to accepting terms and conditions)

- Authorized municipal contact using WAMS ID.
- Delegation of Signature Authority (Form 3400-220) for agent signing on the behalf of the authorized municipal contact.
- Agent seeking to share this item with authorized municipal contact (authorized municipal contact must get WAMS id and complete signature).

Delegation of Signature Authority

 File Attachment

[SignedDSA3-31-21.pdf](#)

Submission of this form constitutes notice by the authorized municipal contact that the person electronically signing the MS4 eReport is authorized to do so on behalf of the authorized municipal contact. [Please download form 3400-220](#) and sign and attach it above.

Name: Christy Poniewaz

Title: Biologist

Authorized Signature.

Signed by : i:0#.f|wamsmembership|cponiewaz on 2021-03-31T11:52:02

- I accept the above terms and conditions.

You have already signed and submitted this application to the DNR. Please [contact the Wisconsin DNR](#) for assistance.

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will include a copy to the final read only version of this application.

Attachment:
Supplemental Information for 2020 MS4 Annual Report

**Village of Elm Grove
2020 MS4 Annual Report
Supplemental Information**

Section 2

- Public Involvement & Participation:
 - MS4 Annual Report was presented to the Village Public Works/Utilities Committee on 3/9/2020 for comment and educational purposes.
 - Volunteer activities were cancelled in 2020 due to the pandemic.

Section 3

- Internal Education/Education of Elected Officials:
 - Additional Public Works/Utilities Committee meetings occurred on the below dates. Storm water management and construction site/post-construction storm water management is frequently discussed relative to proposed and ongoing projects within the Village.
 - 3/9/20
 - 5/4/20
 - 6/8/20
 - 7/13/20
 - 8/10/20
 - 9/21/20
 - 10/12/20
 - 11/9/20

Attachment:
Sweet Water Respect Our Waters
2020 Reporting Information

Attachment I: Public Education and Outreach Summary 2020

A. Summary:

The following document was prepared for the Village of Elm Grove to include in their 2020 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 Jake Fincher, Executive Director of Southeastern Wisconsin Watersheds Trust, Inc. (fincher@swwtwater.org).

B. Respect Our Waters Mechanisms

a. Respect Our Waters Website:

In 2020, two new education pages were added to the Respect Our Waters website to bolster the educational efforts already in progress covering ice and snow control and illicit discharges. These pages joined topics already covered on the website, including informational pages on watersheds and stormwater, the impacts of pet waste, vehicle fluids, and leaves on stormwater pollution, tips for residential green infrastructure such as rain gardens, rain barrels, and stormwater trees, and managing lawns and gardens to reduce their impact on stormwater pollution. New informational PDFs were also developed for each of these topics and posted on the website for easy downloading.

The public is directed to the educational resources on our website via many of the mechanisms defined below, including via targeted email, televised and streamed public service announcements, social media posts and advertisements, and through the outreach of municipal partners.

b. Contracted Media Campaign

For more information about any of the following education mechanisms, see Attachment II.

i. Televised Public Service Announcements

Four educational public service announcements were broadcast on CW18 & MY24, reaching residential audiences in the Greater Milwaukee Watersheds. These spots (plus public involvement spots) made a total of 1,426,500 household impressions. The topics of the educational PSAs included:

- Illicit Discharges
- Watershed Education
- Proper Use of Lawn Chemicals
- Rain Barrels

ii. Streamed Public Service Announcements

Four educational public service announcements were shared via streaming services with zip codes included in the Greater Milwaukee Watersheds, making a total of 97,047 impressions across all zip codes. The audience of these PSAs were homeowners over the age of 18 and covered the following topics:

- Illicit Discharges
- Watershed Education
- Proper Use of Lawn Chemicals
- Rain Barrels

iii. Targeted Email

A targeted email was sent to 25,000 inboxes within zip codes included in the Menomonee Group Permit area on October 26, 2020. A total of 4,628 of these emails were opened. Topics included in this email, appropriate for all residential email recipients, were as follows:

- Education about the Menomonee River watershed
- What to do if you spot illicit dumping or discharges in your community
- Invitation to participate in the Respect Our Waters Photo Contest
- The benefits of rain gardens and rain barrels

iv. Social Media Advertisements

Targeted Facebook advertisements were used to educate the public. In total, these advertisements made 356,440 impressions across the Greater Milwaukee Watersheds and were shared to educate audiences about watershed science and raise awareness about the Respect Our Waters educational activity (see section C.a of this attachment).

c. Social Media Posts

In addition to the Facebook advertisements, additional social media posts were made on the Respect Our Waters Facebook page. The Respect Our Waters page had 1,025 likes by the end of 2020. Topics of posts included the photo contest, watershed science, and ice and snow control.

C. Educational Activities

a. Photo Contest

Due to public health concerns, in-person education events were impossible in 2020. In an attempt to actively engage with the public with education on stormwater pollution prevention, Respect Our Waters held a photo contest to encourage residents to submit photos of themselves respecting water in their favorite way.

Residents of southeastern Wisconsin were directed to the page via targeted social media advertisement and targeted email; between these two mechanisms, the photo contest made more than 90,000 impressions across the Greater Milwaukee Watersheds (see Attachment II for more information). The page was visited by at least 576 individuals in southeastern Wisconsin, although it ultimately did not generate as much engagement as desired with few photo submissions being received. We believe that in person events are more successful than virtual mechanisms for actively engaging residents. However, if it continues to be necessary to do virtual active education in 2021, we will identify new approaches for successful photo contests and other active education strategies.

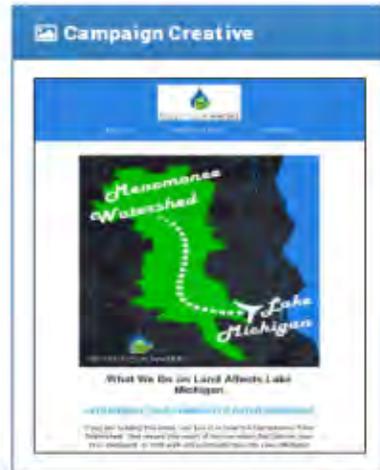


SWEET WATER 2020
EMAIL MARKETING

October 2020 Email Deployment

CAMPAIGN REPORT

Campaign Summary		
Name: 30168 Sweet Water		
From/Brand:	Sweet Water	
Headline:	Little Actions, BIG Results: Taking care of your community and your water!	
Broadcast Date:	10/26/2020	
Audience:	25,000	ID: 1339476
Views:	4,628	Clicks: 729
View %:	18.51%	Click %: 2.92%



CAMPAIGN STATS

Views | 18.51% Total Views 4,628

Clicks | 2.92% Total Clicks 729

CTVR | 15.75%

Highlights:

- ❑ 18.51% Open
- ❑ 2.92% CTR

Clicks by Device	
	Desktop 61.87% 451
	Mobile 38.13% 278

LINK SUMMARY

Index	Link URL	Clicks	%
1	https://www.swwater.org/?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater	42	5.76%
2	https://www.respectourwaters.org/campaign-swwt?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	20	2.74%
3	https://www.adoptyourdrain.com/?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	19	2.61%
4	https://www.respectourwaters.org/facts-swwt?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	19	2.61%
5	https://docs.google.com/forms/d/e/1FAIpQLSf-p0hkuS3tyGVjwsJGfasVH8hOx65zZVq0UmzyK8_80pKdg/viewform?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	345	47.33%
6	https://docs.google.com/forms/d/e/1FAIpQLSf-p0hkuS3tyGVjwsJGfasVH8hOx65zZVq0UmzyK8_80pKdg/viewform?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	23	3.16%
7	https://www.respectourwaters.org/what-is-storm-water-pollution-swwt?utm_content=	15	2.06%
8	https://docs.google.com/forms/d/e/1FAIpQLSf-p0hkuS3tyGVjwsJGfasVH8hOx65zZVq0UmzyK8_80pKdg/viewform?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	14	1.92%
9	https://www.respectourwaters.org/municipal-partners-swwt?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	65	8.92%
10	https://www.respectourwaters.org/municipal-partners-swwt?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	11	1.51%
11	https://www.respectourwaters.org/photocontest?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	52	7.13%
12	https://www.respectourwaters.org/photocontest?utm_source=Compulse&utm_medium=Email&utm_campaign=SweetWater&utm_content=	12	1.65%
		729	

SWEET WATER 2020

**COMPULSE OTT RECAP
& TV RECAP**

COMPULSE OTT



RESPECT OUR WATERS



Client
Sweet Water
Geo Target
Zipcode: 53221, ...

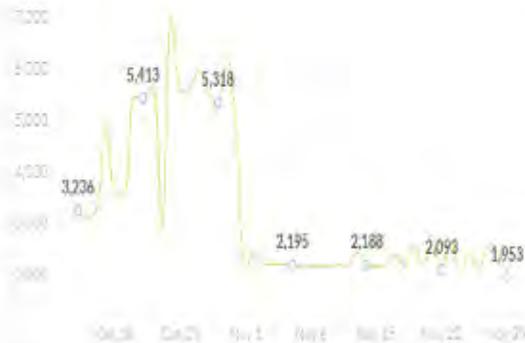
Overall Impression Goal
152,173
Flight Dates
2020-10-14 - 2020-11-29

Pacing

152,450

101.12% at Overall Impression Goal

Impressions Total 152,450



View Completion Rate VCR 97.8%



Hours Watched Total 1,250.3hr



SUCCESSSES

- ❑ 152,540 impressions (300+ impression over delivery)
- ❑ 97.8% Video Completion Rate (VCR)
- ❑ 1,200+ hours watched
- ❑ 99%+ CTV Device Type
- ❑ Impression delivery throughout all dayparts

COMPULSE OTT

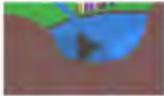


RESPECT OUR WATERS

Top Premium Publishers

slingshot	32,440 (1,123%)
MSNBC CNN	
philo	25,015 (1,641%)
PLUTO	18,008 (10,80%)
Discovery	13,429 (851%)
A&E	10,300 (6,80%)
kumo	6,445 (4,22%)
Netflix	
Amazon	
Hulu	
ESPN	
ESPN2	
ESPN3	
ESPN4	
ESPN5	
ESPN6	
ESPN7	
ESPN8	
ESPN9	
ESPN10	
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ESPN91	
ESPN92	
ESPN93	
ESPN94	
ESPN95	
ESPN96	
ESPN97	
ESPN98	
ESPN99	
ESPN100	
Others	37,850 (248%)

Creatives

Creative Details	Impressions	Valid Completion Rate
 <p>No_Dumping_Paint ID: 20003194 Advertiser: Sweet Water</p>	39,320	97.6%
 <p>Doug_30 ID: 20002718 Advertiser: Sweet Water</p>	39,317	97.5%
 <p>SWWT_Watershed_0920_30OTT ID: 20002703 Advertiser: Sweet Water</p>	25,951	98.2%
 <p>Sparkles_Lawn_Chemicals30 ID: 20003441 Advertiser: Sweet Water</p>	16,099	98.1%
 <p>AYD_Empty_Nesters ID: 20003440 Advertiser: Sweet Water</p>	16,086	97.95%
 <p>Roll_Out_The_Rain_Barrels30_1 ID: 20003444 Advertiser: Sweet Water</p>	15,677	97.95%

Creatives per page: 20



Showing 1 of 6 results

Statistics for Sweet Water Television Campaign

Campaign Ran September 25-December 31, 2020

347 Commercials – Six Different PSAs

- No Dumping Paint
- Millennial – Adopt Your Drain
- What is a Watershed?
- Lawn Chemicals
- Gen X/Baby Boomer – Adopt Your Drain
- Rain Barrels

721,400 Impressions Adults 18-49

1,426,500 Household Impressions

Thursday Night Lights Adopt Your Drain Interviews – TV Broadcast

- 31,000 Household Impressions (Estimated)
- Dates: October 9, 16, 23, & 28



Social Networks

SWEET WATER 2020

SOCIAL MEDIA RECAP



SOCIAL MEDIA



RESPECT OUR WATERS

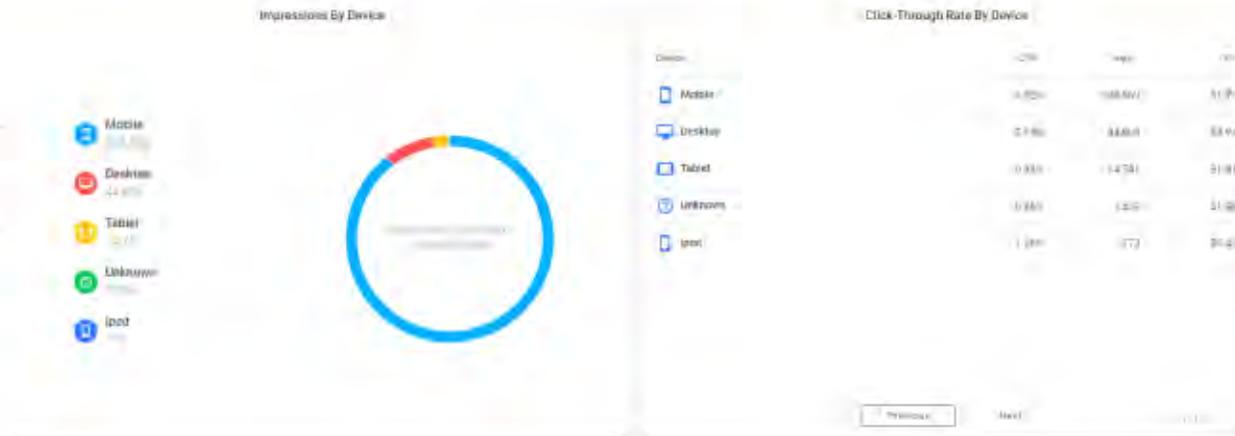
589,828
Imps

1,812
Clicks

0.31%
CTR

25,557
Convs

4.33%
Conv rate



SUCCESSSES

- 589,000+ impressions
- 1,800+ clicks
- 4%+ Conversion Rate

Creative	Imps	CTR	CPC
<p>SWWT-Watershed-0920-30 OTT.mp4 ID: 23846032198130733CampaignId23846032172150733</p>	277,747	0.3%	
<p>Social Media - Survey.jpg ID: 23846032206570733CampaignId23846032172150733</p>	219,566	0.32%	
<p>Photo Contest - Image.png ID: 23846032172230733CampaignId23846032172150733</p>	78,693	0.29%	
<p>Sweet Water Social -- AYD Image.jpg ID: 23846191663090733CampaignId23846032172150733</p>	13,622	0.32%	

Attachment III: Public Involvement and Participation Summary 2020

A. Summary:

The following document was prepared for the Village of Elm Grove to include in their 2020 annual MS4 eReport. It includes a summary of activities conducted to engage in effective public involvement as mandated by Wisconsin's administrative code - NR216. If you have any questions or would like more information, please contact Jake Fincher, Executive Director of Southeastern Wisconsin Watersheds Trust, Inc. (fincher@swwtwater.org).

For more information about the mechanisms used to share these projects and activities, please see Attachment II.

B. Permit Activities - Public Education Survey

In the summer of 2020, Sweet Water developed a survey to help municipalities evaluate the storm water education needs of their individual community. By participating in the survey, residents of the Village of Elm Grove were given the opportunity to participate in the development of the permittee's stormwater management program, as the results of the survey are meant to guide the messages, strategies, and priorities of the Village of Elm Grove's public education program.

The survey was administered to residents of the municipality in a variety of ways, listed below. In total, three residents responded to the survey between August 7, 2020 and December 31, 2020. Despite a low participation rate, this was still a crucial first step to identifying the priorities of the public education program, and future efforts can be built on this first attempt.

a. Targeted Email

An email was sent to 25,000 inboxes within zip codes included in the Menomonee watershed. In addition to the education topics listed in Attachment I, the email included a link to the digital survey.

b. Social Media Advertisement

A Facebook advertisement that redirected viewers to the digital survey made 219,566 impressions within the Greater Milwaukee Watersheds.

c. Social Media Post

A link to the survey was posted on the Respect Our Waters Facebook account on August 7, 2020.

d. Respect Our Waters Website

A link to the survey was included on the Respect Our Waters Website beginning on August 7, 2020.

Attachment:
2020 IDDE Inspection Summary

Illicit Discharge Detection & Elimination

2020 Inspection Summary



Inspection Summary Report *January 2021*

PREPARED FOR:

Village of Elm Grove
13600 Juneau Boulevard
Elm Grove, WI 53122

PREPARED BY:

Ruekert & Mielke, Inc.
W233 N2080 Ridgeway Parkway
Suite 300
Waukesha, WI 53188

INTRODUCTION

The Wisconsin Department of Natural Resources (WDNR) has issued the Village of Elm Grove a Wisconsin Pollutant Discharge Elimination System (WPDES) permit (Permit No. WI-S065404-2) to regulate storm water discharge throughout the Village. Certain requirements must be met by the WPDES permittee to remain in compliance.

One requirement of the permit is that the Village of Elm Grove must implement an Illicit Discharge Detection and Elimination (IDDE) program designed to identify and eliminate illicit connections to the Village's municipal storm sewer system.

Ruekert & Mielke, Inc. (R/M) was asked to perform illicit discharge field screenings as part of the Village's compliance with their WPDES permit. The evaluation methods and results are described below.

FIELD INSPECTION METHODOLOGY

To qualify as a "dry weather" inspection, the WDNR suggests waiting for a period of at least 72 hours without a measurable rainfall prior to the inspections. The Village of Elm Grove inspections were completed on October 16, 2020. Inspections were performed for areas in which there was no measurable rainfall for a minimum of 48 hours leading up to the inspections. Each outfall that was inspected was physically examined and evaluated using an illicit discharge field screening form as a guide for detecting and documenting illicit and non-illicit discharges. The same form was also used to document outfall characteristics such as material, shape, and dimensions. When discharge was identified within an inspected outfall, a 250-milliliter grab sample was taken and evaluated for pH (digital pH meter), temperature (digital thermometer), ammonia (salicylate method), detergent (methylene blue method), phenol (4-aminoantipyrine method), soluble copper (bathocuproine method) free/total chlorine (DPD method), total coliform bacteria (3M Petri film plate method), as well as any other characteristics identified by sight and smell. The sample results were compared to WDNR March 2012 program guidance 3800-2012-01 regarding indicator parameter action levels for illicit discharge sampling. Photographs for all outfalls were taken, labeled with an individual outfall identifier number, and attached to the corresponding illicit discharge field screening form.

The total coliform test is a presence - absence test, which does not identify the specific type of bacteria, it simply alerts the tester that there is a presence of coliform within the sample. In the event of a presence of total coliform, follow-up testing is performed during a period of dry weather. The follow-up sample is collected and delivered to the University of Wisconsin at Milwaukee School of Freshwater Sciences (UWM SFS) for *E. coli* plate count testing.

All completed field screening forms and corresponding photographs are included with this summary report.

IDDE EVALUATION RESULTS

There are 12 outfalls identified on the Village of Elm Grove inspection location exhibit (attached), all of which were evaluated under this effort.

The result of these evaluations identified 6 outfalls that were observed to dry with no sampling necessary and 6 outfalls that were flowing, which prompted samples to be taken. Test results for all outfalls are provided in Table 1.

Priority Outfall 1 consists of two 36-inch diameter pipes which were evaluated separately as Outfall 1A (North) and Outfall 1B (South). Both pipes were flowing at the time of inspection which prompted samples to be taken.

Of the two pipes tested, the test results for Outfall 1A (North) were negative or neutral in all instances. The test results for Outfall 1B (South) were positive for ammonia, copper, detergent and a presence of total coliform. The ammonia, copper, and detergent results were outside of the WDNR action limits. Due to the

presence of total coliform, an additional sample was collected on November 3, 2020 and delivered to the UWM School of Freshwater Sciences for *E. coli* plate count testing (Table 2).

Of the five remaining flowing outfalls, all five tested positive for the presence of either total coliform or detergents. Four of the remaining five outfalls tested positive for the presence of total coliform (Major 3, and Outfalls 3, 5 and 7). Due to the presence of total coliform, additional samples were collected from Outfalls 3, 5, 7, and Major 3 on November 3, 2020 and delivered to the UWM SFS for *E. coli* plate count testing. Test results are identified on Table 2 below.

Three outfalls tested positive for detergents (Outfalls 5, 7, and 8) with reported results of 0.25 mg/L, below the WDNR action limit of 0.50 mg/L.

The Village was notified of the test results in all instances. Additional follow up information may be included as part of the Village's MS4 Annual Report.

Table 1. IDDE Test Results								
Structure ID	Ammonia (mg/L)	Phenols (mg/L)	Chlorine (mg/L)	Copper (mg/L)	Detergent (mg/L)	Coliform (+/-)	Temperature (°F)	pH
WDNR Action Limit	0.10	(+)	(+)	0.10	0.50	N/A	N/A	<6, >9
1A (North)	0.00	0.00	0.00	0.00	0.00	(-)	73.0	7.9
1B (South)	0.50	0.00	0.00	0.40	0.50	(+)	72.4	7.6
2	-	-	-	-	-	-	-	-
3	0.00	0.00	0.00	0.00	0.00	(+)	52.0	8.8
4	-	-	-	-	-	-	-	-
5	0.00	0.00	0.00	0.00	0.25	(+)	61.0	8.4
6	-	-	-	-	-	-	-	-
7	0.00	0.00	0.00	0.00	0.25	(+)	61.0	7.4
8	0.00	0.00	0.00	0.00	0.25	(-)	53.0	8.7
9	-	-	-	-	-	-	-	-
Major 1	-	-	-	-	-	-	-	-
Major 2	-	-	-	-	-	-	-	-
Major 3	0.00	0.00	0.00	0.00	0.00	(+)	62.0	8.3

Highlighted cells indicate results that exceeded the WDNR action limit.

Table 2. UWM SFS Plate Count Results	
Structure ID	<i>E. coli</i> Plate Count (CFU/100 mL)
1B (South)	50
3	2,160
5	1,830
7	1,710
Major 3	780

Potential sources for the elevated ammonia readings include sanitary sewage, industrial cleaners, or commercial wash water. Elevated detergent readings may indicate the presence of soap or surfactants in the water, which may be from industrial facilities or household cleaners. Potential sources for the elevated copper readings include engine oil, lubricants, roof/gutter runoff, building siding corrosion, fertilizers, and pesticides. Potential sources of coliform include sanitary sewage and wildlife or pet waste.

ATTACHMENTS

Village of Elm Grove Outfall Inspection Location Map (prepared by Ruekert & Mielke, Inc.)

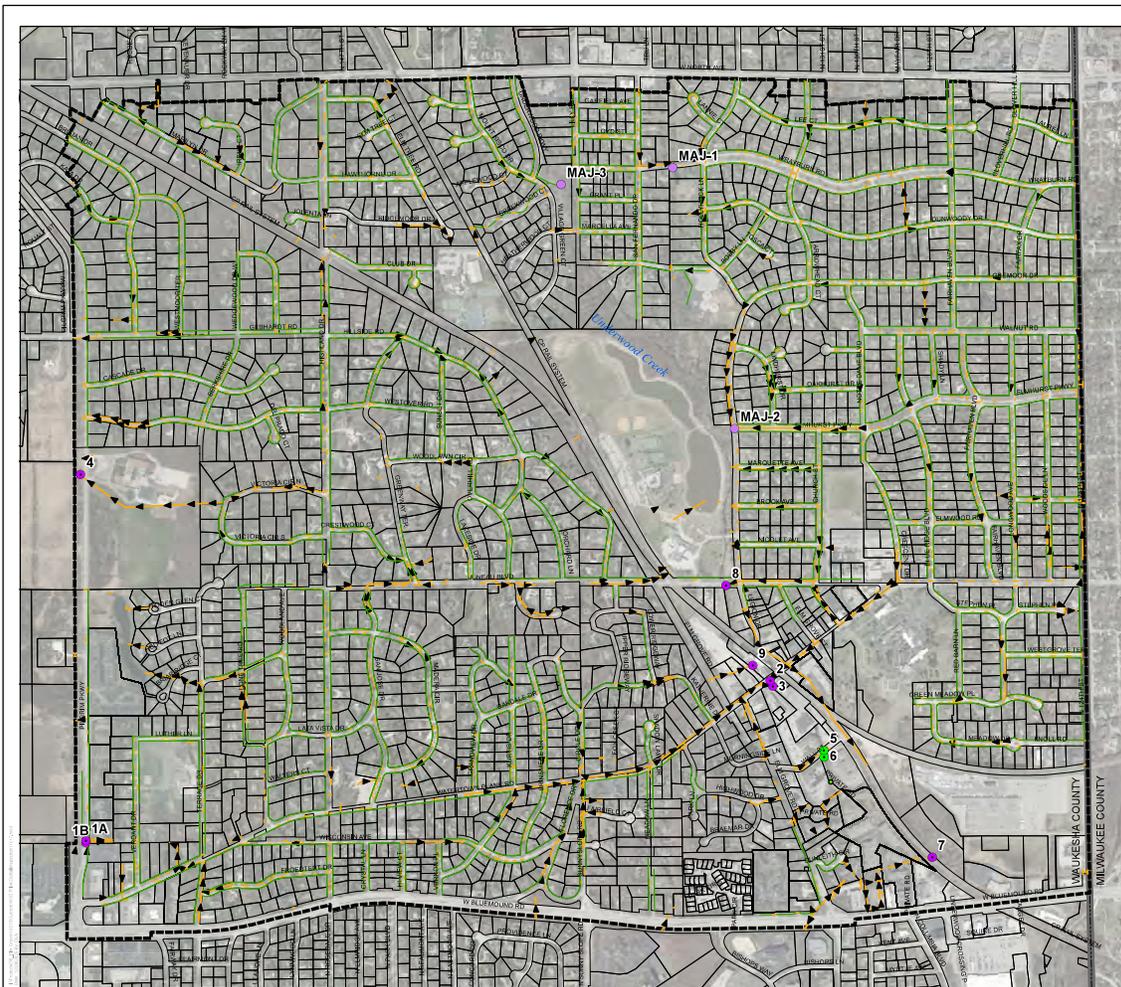
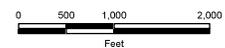
IDDE Outfall Inspection Reports with Photos



Outfall Inspection Map

Village of Elm Grove
Waukesha County, WI
December, 2020

-  Priority Major Outfall
-  Priority Minor Outfall
-  Major Outfall
-  Storm Pipe
-  Grass Swale
-  Village Limits
-  County Line



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 1A (North)	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 12:50PM
Investigators: Mark Bruns	Form Completed By: Mark Bruns
Temperature (°F): 45.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: West side of Pilgrim Parkway, Northwest of Elliots Ace Hardware	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known): Middle pipe of three	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Round	46x72	No	0.0
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.2	0.5	1.0		1.0	

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: <u>Sediment in flowline</u>
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 73.0 pH: 7.9 Total Coliform: Negative	
Copper (mg/l): 0.00 Phenols (mg/l): 0.00 Surfactants (mg/l):	
Ammonia (mg/l): 0.00 Chlorine (mg/l): 0.00 Detergents (mg/l): 0.00	

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 1B (South)	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 01:00PM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 46.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: West side of Pilgrim Parkway, North of Elliot Ace Hardware	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known): South pipe	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Elliptical	72	No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.2	1.0				

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input checked="" type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input checked="" type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input checked="" type="checkbox"/> Other: <u>Sediment accumulated</u>
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input checked="" type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input checked="" type="checkbox"/> Inhibited
<input checked="" type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input checked="" type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 72.0 pH: 7.6 Total Coliform: Positive	
Copper (mg/l): 0.40	Phenols (mg/l): 0.00 Surfactants (mg/l):
Ammonia (mg/l): 0.50	Chlorine (mg/l): 0.00 Detergents (mg/l): 0.50

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

The flow has an orange colored oily deposit on the surface throughout. Flow is very slow. TA grab sample was taken from the flow and tested positive for coliform.





ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 2	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 01:50PM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 50.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: North of Watertown Plank Road, between railroad tracks and parking lot	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)	
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Round	18	No		
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial					
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)		Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall discharges into the box culvert crossing below Watertown Plank Road. Access to the end of the outfall is limited therefore, the closest upstream manhole was checked. There wasn't any flow inside the manhole nor any apparent indicators of an illicit discharge.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 3	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 02:00PM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 52.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: South of Watertown Plank Road between the railroad and Elm Grove Road, center of road at (Zisters)	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Elliptical	192x82	No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.2	2.0	1.0		5.0	

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input checked="" type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 62.0 pH: 8.8 Total Coliform: Positive	
Copper (mg/l): 0.00	Phenols (mg/l): 0.00 Surfactants (mg/l):
Ammonia (mg/l): 0.00	Chlorine (mg/l): 0.00 Detergents (mg/l): 0.00

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall discharges into the box culvert crossing below Watertown Plank Road. Access to the end of the outfall is limited therefore, the closest upstream manhole was checked. Flow was present inside the manhole and a grab sample was taken. This sample tested positive for coliform.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 4	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 12:20PM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 46.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Pilgrim Parkway, across from Pilgrim Park Middle School	
Land use in drainage area: Institutional	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Corrugated Metal	Elliptical	30x42	Yes	0.8
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall has a backflow preventer. Due to higher creek levels, this outfall was submerged by approximately 0.75'. The backflow preventer plate was open at approximately 4". There was no apparent flow.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 5	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 10:05AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Southwest side of Wall Street at Underwood Creek	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Round	18	No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.1	2.0	1.0		5.0	

SECTION 3: Physical Indicators Present at Outfall

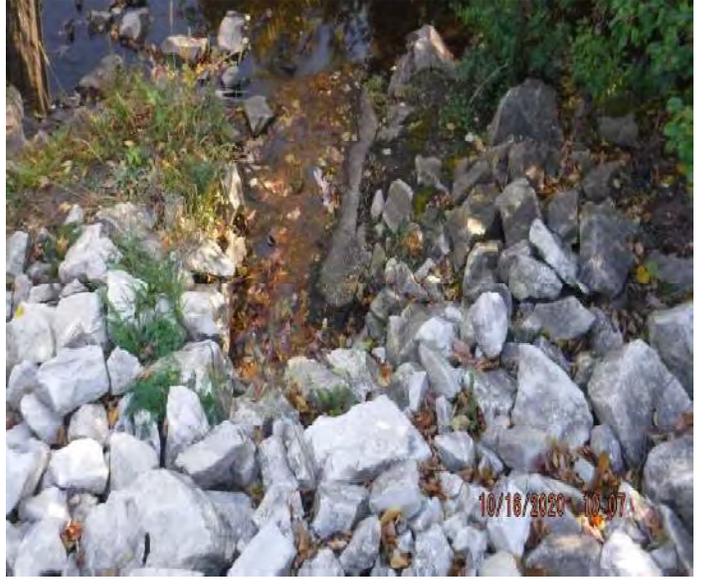
Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 61.0 pH: 8.4 Total Coliform: Positive	
Copper (mg/l): 0.00 Phenols (mg/l): 0.00 Surfactants (mg/l):	
Ammonia (mg/l): 0.00 Chlorine (mg/l): 0.00 Detergents (mg/l): 0.25	

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

Minor erosion near the end section. A grab sample was taken and tested positive for coliform.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 6	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 10:00AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Southeast side of Wall Street at Underwood Creek	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Concrete	Round	18	No	
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input checked="" type="checkbox"/> Outfall Damage	<input checked="" type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

Erosion occurring downstream of the outfall along the riprap. Chipping at the outfall.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 7	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 09:50AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Behind Autumn Grove Plaza at railroad tracks	
Land use in drainage area: Residential	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input type="checkbox"/> Closed Pipe <input checked="" type="checkbox"/> Open Drainage	Corrugated Metal	Elliptical	72x96	No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.04	0.8	1.0		4.0	

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input checked="" type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input checked="" type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input checked="" type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input checked="" type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 61.0 pH: 8.4 Total Coliform: Positive	
Copper (mg/l): 0.00 Phenols (mg/l): 0.00 Surfactants (mg/l):	
Ammonia (mg/l): 0.00 Chlorine (mg/l): 0.00 Detergents (mg/l): 0.25	

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

Corrosion is occurring at the pipe invert. A swing is attached to the pipe. This outfall was flowing therefore, a grab sample was taken. This sample tested positive for coliform.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 8	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 10:50AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: South side of Juneau Blvd. at Underwood Creek, North of Village infiltration basin	
Land use in drainage area: Park	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Corrugated Metal	Round	48	No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.02	1.0	1.0		5.0	

SECTION 3: Physical Indicators Present at Outfall

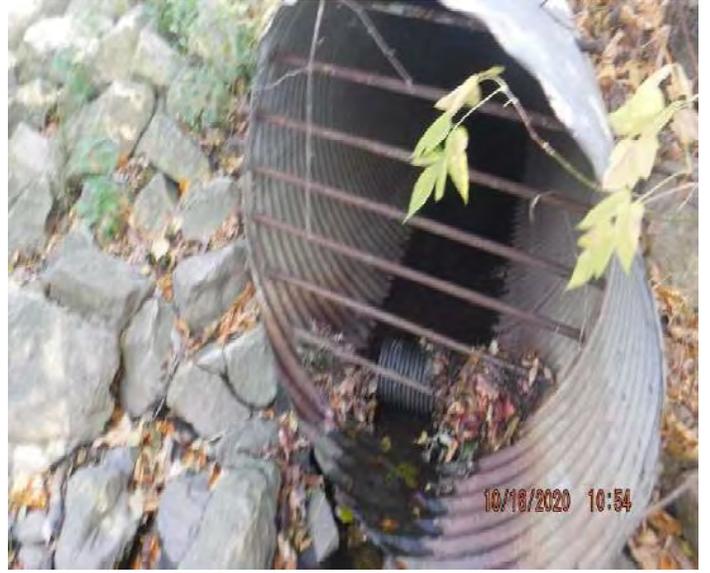
Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input checked="" type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input checked="" type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F): 53.0	pH: 8.7 Total Coliform: Negative
Copper (mg/l): 0.00	Phenols (mg/l): 0.00 Surfactants (mg/l):
Ammonia (mg/l): 0.00	Chlorine (mg/l): 0.00 Detergents (mg/l): 0.25

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

Corrosion is occurring at the pipe invert. This outfall was flowing therefore, a grab sample was taken. This sample tested negative for coliform.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: 9	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 10:35AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: West side of Underwood Creek, in the Village Shopping Center parking lot	
Land use in drainage area: Commercial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Corrugated Metal	Round	48	No	
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input checked="" type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input checked="" type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

The end of the outfall pipe is undermined and has rust. The upstream manhole was inspected. Standing water was present as the pipe may be flat or back pitched. No sample was taken.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: Major 1	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 11:45AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 45.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: West side of 13605 Wraybrun Road	
Land use in drainage area: Residential	
Notes (e.g., origin of outfall, if known): Outfall Major 1 has vegetation in front of the west pipe.	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Corrugated Metal	Elliptical	52x34	No	
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input checked="" type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall was not flowing and in good condition.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: Major 2	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 11:20AM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 43.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Main Street	
Land use in drainage area: Industrial	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input checked="" type="checkbox"/> Closed Pipe <input type="checkbox"/> Open Drainage	Corrugated Metal	Elliptical	54x38	No	
Flow Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Flow Description:	<input type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input checked="" type="checkbox"/> Outfall Damage	<input checked="" type="checkbox"/> Spalling, Cracking or Chipping <input checked="" type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input checked="" type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	2. If yes, collected from: <input type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform:
Copper (mg/l):	Phenols (mg/l): Surfactants (mg/l):
Ammonia (mg/l):	Chlorine (mg/l): Detergents (mg/l):

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall pipe is rusted, corroded, and the sides of the pipe appears to be crushed. Gravel and sediment deposits present inside the pipe. This outfall was dry therefore, a sample was not taken. This outfall discharges directly on disturbed soils as riprap is not installed.



ILLICIT DISCHARGE DETECTION & ELIMINATION (IDDE) INSPECTION REPORT

SECTION 1: Inspection Data

Outfall ID: Major 3	Subwatershed:
Inspection Date: 10/16/2020	Inspection Time: 12:05PM
Investigators: Mark Bruns	Form Completed By: Elizabeth Brown
Temperature (°F): 45.0	Rainfall In Last: 24 hours (in.): 0.00 48 hours (in.): 0.00
Nearest Intersection / Location: Swale at east side of Creekwood Court and Village Green Court	
Land use in drainage area: Residential	
Notes (e.g., origin of outfall, if known):	

SECTION 2: Outfall Description

Location Description	Material	Shape	Dimensions (in. by in.)	Submerged?	Submerged Depth (ft.)
<input type="checkbox"/> Closed Pipe <input checked="" type="checkbox"/> Open Drainage				No	
Flow Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Flow Description:	<input checked="" type="checkbox"/> Trickle <input type="checkbox"/> Moderate <input type="checkbox"/> Substantial				
Depth (ft.)	Width (ft.)	Length (ft.)	Volume (cu. ft.)	Time of Travel (sec.)	Time To Fill (sec.)
0.3	2.0	1.0		15.0	

SECTION 3: Physical Indicators Present at Outfall

Indicator	Description	Indicator	Description
<input type="checkbox"/> Odor	<input type="checkbox"/> Sewage <input type="checkbox"/> Rancid/Sour <input type="checkbox"/> Petroleum/Gas <input type="checkbox"/> Sulfide <input type="checkbox"/> Other : _____	<input type="checkbox"/> Outfall Damage	<input type="checkbox"/> Spalling, Cracking or Chipping <input type="checkbox"/> Corrosion <input type="checkbox"/> Peeling Paint
<input type="checkbox"/> Color	<input type="checkbox"/> Clear <input type="checkbox"/> Brown <input type="checkbox"/> Gray <input type="checkbox"/> Yellow <input type="checkbox"/> Green <input type="checkbox"/> Orange <input type="checkbox"/> Red <input type="checkbox"/> Other: _____	<input type="checkbox"/> Deposits/Stains	<input type="checkbox"/> Oily <input type="checkbox"/> Flow Line <input type="checkbox"/> Paint <input type="checkbox"/> Other: _____
<input type="checkbox"/> Turbidity	<input type="checkbox"/> 1 - Slight Cloudiness <input type="checkbox"/> 2 - Cloudy <input type="checkbox"/> 3 - Opaque	<input type="checkbox"/> Abnormal Vegetation	<input type="checkbox"/> Excessive <input type="checkbox"/> Inhibited
<input type="checkbox"/> Floatables	<input type="checkbox"/> Sewage <input type="checkbox"/> Suds <input type="checkbox"/> Petroleum (Oil Sheen) <input type="checkbox"/> Other : _____	<input type="checkbox"/> Poor Pool Quality	<input type="checkbox"/> Odors <input type="checkbox"/> Suds <input type="checkbox"/> Floatables <input type="checkbox"/> Yellow <input type="checkbox"/> Oil Sheen <input type="checkbox"/> Excessive Algae <input type="checkbox"/> Other: _____

SECTION 4: Lab Analysis

1. Sample for the lab? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2. If yes, collected from: <input checked="" type="checkbox"/> Flow <input type="checkbox"/> Pool
3. Measurements: Sample Temperature (°F):	pH: Total Coliform: Positive
Copper (mg/l): 0.00	Phenols (mg/l): 0.00
Ammonia (mg/l): 0.00	Chlorine (mg/l): 0.00
	Surfactants (mg/l): 0.00
	Detergents (mg/l): 0.00

Comments or Other Concerns (e.g., trash or needed infrastructure repairs)?

This outfall is an open channel. The depths and widths of the flow in the swale varies. The north side slope measured 19' from the slope to the flowline. The south side slope measured 25' from the top of the slope to the flowline. The flowline measured 3.5' across. This outfall was flowing therefore, a grab sample was taken. The sample tested positive for coliform.



Attachment:
Public Education & Outreach Program

**Village of Elm Grove
II.A. Group Public Education and Outreach
2021-2024**

Program Description: The Village maintains membership with the Southeastern Wisconsin Watershed Trust (SWWT) Respect Our Waters (ROW) program. It is through this partnership that many Public Education and Outreach targets are achieved. The below table is to be referenced in conjunction with the materials provided by SWWT ROW.

Topic No.	Topic	Targeted Pollutant(s) of Concern	Delivery Mechanism	Target Audience	Responsible Party	Target Date/Frequency
1	Illicit Discharge Detection & Elimination					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
2	Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
3	Yard Waste Management/Pesticide and Fertilizer Application					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
4	Stream and Shoreline Management					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
5	Residential Infiltration					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
6	Construction Site and Post-Construction Storm Water Management					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
7	Pollution Prevention					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
8	Green Infrastructure/Low-Impact Development					
	Respect Our Waters Activities	Various	Various	Various	Respect Our Waters, Village of Elm Grove	Various
9	Snow & Ice Control					
	Notices on Village website, newsletters, etc.	Chloride	Various	Residents, Businesses, Public Employees	Village of Elm Grove	Various

Requirements of Section II.A. Menomonee Group MS4 Permit WI-S065404-2:

The Menomonee River Watershed Permittees intend to collaborate and satisfy these conditions collectively. This does not prohibit the Menomonee River Watershed Permittees from continuing to develop and implement unique programs within their respective jurisdictional municipal boundaries.

1. For each topic in Table 1, identify targeted pollutants of concern, the targeted audience, delivery mechanism and the entity responsible for implementation.
2. Address all topics at least once during the permit term with a minimum of 3 topics being addressed, either collectively or individually, each year. Topics may be repeated as necessary.

Respect Our Waters Education Plan 2021-2024

Sweet Water has prioritized the education topics from the general permit that we will cover from the years 2021-2024 by identifying what different stakeholders within the region can do to reduce MS4 contributions of pollutants identified within the Milwaukee River Basin TMDL.

- 2021: Education of appropriate audiences about the need and actions to reduce nutrient loading;
- 2022: Education of appropriate audiences about the need and actions to reduce sediment loading;
- 2023: Education of appropriate audiences about the need and actions to reduce bacteria loading; and
- 2024: Education of appropriate audiences about the need and actions to reduce pollutants not covered by the TMDL (ie. certain chemicals & chlorides)

All education topics within the general permit and all stakeholders within an MS4 could address multiple pollutants to an extent. However, some topics and stakeholders are especially suited to address a certain subset of the pollutant categories mentioned above. If it has been identified that one of the topics can lead a certain stakeholder group to address multiple pollutant categories, that permit topic and matching audience will be covered during multiple years.

Although yearly themes guide the choice of education topics prioritized each year, they do not preclude the addition of other activities and topics as opportunities arise. Mechanisms such as the Respect Our Waters website, print offerings, and social media offerings will continue to offer education on other topics in addition to those prioritized by the theme.

Upon working with municipal and county partners each year, the targeted audiences and educational messages from the broad categories in this table will be refined. This will help define specific measurable goals for activities implemented each year. At the end of each year when the progress on the measurable goals is assessed, activities in this table may be amended, supplemented, or replaced if merited by the assessment. Each year Sweet Water will attempt to form new partnerships and increase the breadth and depth of the reach of the mechanisms listed.

Mechanisms

Watershed Wednesdays - Social Media Post & Advertisement Campaign: A social media campaign that is developed for and delivered through Respect Our Waters social media platforms that includes posts and advertisements delivering education topics on the priority residential topics for that year.

Respect Our Waters Website & Topic Webpages: An educational website with topic pages developed from NR216 education requirements. Each year, pages are added/updated to address new aspects of priority education topics, with all pages being maintained every year.

Outreach Templates & Print/Promotional Materials: Customizable articles, social media posts, and other materials that Respect Our Waters develops for municipalities to use in their own outreach. Some of these are sent to partners at regular intervals, some are available upon request.

Streamed & Broadcasted Public Service Announcements: Pre-recorded and live public service announcements that are shared by media contractors using broadcast, streaming, or digital mechanisms chosen each year.

Community Event Tabling: Promotional, educational, and tabling tools provided by Sweet Water by request to partners to use at community events not supported by the Mini-Grant Program. Sweet Water staff may also be able to attend events on a limited basis.

2021 Theme: Nutrient Pollution Prevention

Audience	General Permit Topic	Passive Mechanisms	Municipal Role	Active Mechanisms	Municipal Role
Residents	1 Illicit Discharge Detection & Elimination	Watershed Wednesdays - Social Media Post & Advertisement Campaign	Share social media posts (<i>Recommended activity</i>)	Community Event Tabling	Request and use tabling materials and handbook from Sweet Water to use at community events
	3 Yard Waste Management/Pesticide and Fertilizer Application	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)		
		Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> Use outreach templates to include educational articles and posts in municipal outreach (<i>Required Activity</i>) Print and place materials in relevant places in municipal building or at community event (<i>Recommended Activity</i>) 		
	5 Residential Infiltration	Streamed & Broadcasted Public Service Announcements	No Role		
Groups & individuals responsible for the maintenance of stormwater management facilities	6 Construction Sites and Post-Construction Storm Water Management	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)	Nothing currently planned	
Lawn care companies, golf courses, and other appropriate businesses	7 Pollution Prevention		<ul style="list-style-type: none"> Use outreach templates to send appropriate education to appropriate contact lists (<i>Required Activity</i>) Print and place materials in relevant places in municipal building (<i>Recommended Activity</i>) 		
Developers & designers	8 Green Infrastructure/Low Impact Development	Outreach Templates & Print/Promotional Materials			

2022 Theme: Sediment Pollution Prevention

Audience	General Permit Topic	Passive Mechanisms	Municipal Role	Active Mechanisms	Municipal Role
Residents	1 Illicit Discharge Detection & Elimination	Streamed & Broadcasted Public Service Announcements	No Role	Community Event Tabling	Request and use tabling materials and handbook from Sweet Water to use at community events
		Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)		
Riparian Landowners	5 Residential Infiltration	Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to include educational articles and posts in municipal outreach (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building or at community event (<i>Recommended Activity</i>) 		
		4 Stream and Shoreline Management	Watershed Wednesdays - Social Media Post & Advertisement Campaign		
Groups & individuals responsible for the design & installation of construction site erosion control practices & stormwater management facilities	6 Construction Sites and Post-Construction Storm Water Management		Respect Our Waters Website & Topic Webpages		
Developers & designers	8 Green Infrastructure/Low Impact Development	Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to send appropriate education to appropriate contact lists (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building (<i>Recommended Activity</i>) 		

2023 Theme: Bacteria Pollution Prevention

Audience	General Permit Topic	Passive Mechanisms	Municipal Role	Active Mechanisms	Municipal Role
Residents	1 Illicit Discharge Detection & Elimination	Watershed Wednesdays - Social Media Post & Advertisement Campaign	Share social media posts (<i>Recommended activity</i>)	Community Event Tabling	Request and use tabling materials and handbook from Sweet Water to use at community events
	2 Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)		
		Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to include educational articles and posts in municipal outreach (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building or at community event (<i>Recommended Activity</i>) 		
	5 Residential Infiltration	Streamed & Broadcasted Public Service Announcements	No Role		
Restaurants, grocery stores, & other appropriate businesses	7 Pollution Prevention	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)	<i>Nothing currently planned</i>	
Developers & Designers	8 Green Infrastructure/Low Impact Development	Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to send appropriate education to appropriate contact lists (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building (<i>Recommended Activity</i>) 		

Audience	General Permit Topic	Passive Mechanisms	Municipal Role	Active Mechanisms	Municipal Role
Residents	1 Illicit Discharge Detection & Elimination	Watershed Wednesdays - Social Media Post & Advertisement Campaign	Share social media posts (<i>Recommended activity</i>)	Community Event Tabling	Request and use tabling materials and handbook from Sweet Water to use at community events
	2 Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)		
	3 Yard Waste Management/Pesticide and Fertilizer Application	Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to include educational articles and posts in municipal outreach (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building or at community event (<i>Recommended Activity</i>) 		
	5 Residential Infiltration	Streamed & Broadcasted Public Service Announcements	No Role		
Appropriate Businesses	7 Pollution Prevention	Respect Our Waters Website & Topic Webpages	Link to Respect Our Waters Website on Municipality Website (<i>Required Activity</i>)	<i>Nothing currently planned</i>	
Developers & Designers	8 Green Infrastructure/Low Impact Development	Outreach Templates & Print/Promotional Materials	<ul style="list-style-type: none"> • Use outreach templates to send appropriate education to appropriate contact lists (<i>Required Activity</i>) • Print and place materials in relevant places in municipal building (<i>Recommended Activity</i>) 		

Attachment:
Public Involvement & Participation Program

Village of Elm Grove
II.C. Public Involvement & Participation
2021-2024

Topic	Delivery Mechanism	Target Participant	Responsible Party	Target Dates/Frequency
MS4 Annual Report	Website Notice, Board Meeting	General public, public employees, residents	Village of Elm Grove	Annual
Storm Water Management Program Revisions	Website Notice, Board Meeting	General public, public employees, residents	Village of Elm Grove	When updates occur
Storm Water Management Program Revisions	Public Works/Utilities Committee Meeting	Public employees, residents	Village of Elm Grove	Monthly
Storm Water Ordinance Updates/Development	Website Notice, Board Meeting	General public, public employees, residents, businesses, contractors, developers	Village of Elm Grove	When updates occur
TMDL Pollutant Load Benchmark Development	Website Notice, Board Meeting	General public, public employees, residents	Village of Elm Grove	When updates occur

Requirements of Section II.C. Menomonee Group MS4 Permit WI-S065404-2:

C. PUBLIC INVOLVEMENT AND PARTICIPATION

The permittee shall implement a public involvement and participation program that provides opportunities for the public to effectively participate in the development, implementation, and modification of the permittee's storm water management program.

The approach must include provisions for receiving and considering public comments on the following permit activities:

Annual reports, SWMP revisions, adoption of storm water related ordinances, and TMDL pollutant load reduction benchmark development.

The permittee shall also identify delivery mechanism and target participants associated with each permit activity.

Delivery mechanisms may include:

Public workshop, presentation of storm water information, government event (public hearing, council meeting, etc.), citizen committee meeting, or website.

Attachment:
Fecal Coliform Screening Parameter

Village of Elm Grove
Fecal Coliform Screening Parameter
MS4 Permit No. WI-S065404-2
March 2021

The Village of Elm Grove has implemented an updated Illicit Discharge Detection and Elimination Program (IDDE Program, October 2020). The program includes the screening parameters and action limits for annual illicit discharge detection screening of storm water outfalls within the Village. The program also includes field screening procedures and the enforcement response plan for results outside the action limits.

Per the IDDE Program, the below parameter and action limit have been adopted by the Village for routine IDDE outfall screening. This information is being supplied per Section III.A.4 of the Menomonee Group Permit WI-S065404-2.

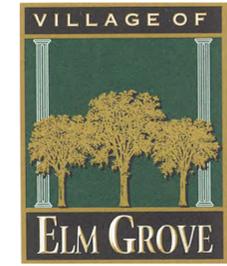
Parameter: *E. coli*

Action Limit: 10,000 MPN/100mL

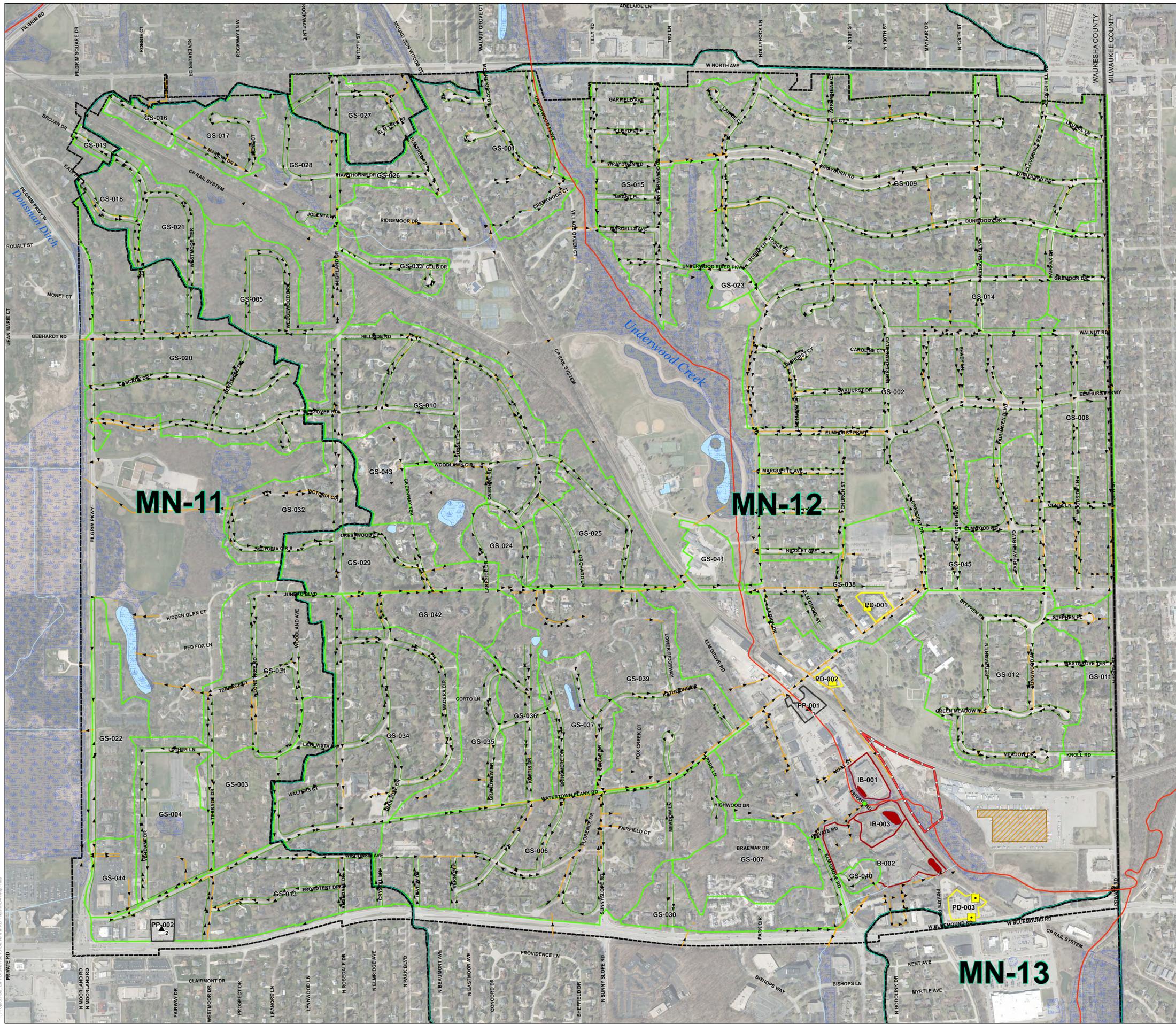
Attachment:
Updated Storm Water Facility Inventory

Storm Water Facility Inventory			
Private Storm Water Facilities with Long-Term Maintenance Agreements			
Type	Facility ID	Location	Year Constructed
Infiltration Device	IB-001	Intersection of Juneau Blvd & Legion Dr.	2003
Proprietary Device	PD-001	Intersection of Juneau Blvd & Watertown Plank Rd.	2005
	PD-003A	Intersection of W Bluemound Rd & Private Dr.	2004
	PD-003B	Intersection of W Bluemound Rd & Private Dr.	2004

Attachment:
MS4 Map

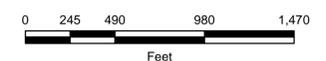


**Exhibit 1: MS4 Map
Village of Elm Grove
Waukesha County, WI
December, 2020**



Legend

- Priority Major Outfall
- Priority Minor Outfall
- Major Outfall
- Minor Outfall
- ▲ Permeable Pavement
- Proprietary Device
- Storm Pipe
- Grass Swale
- Infiltration Basin
- Grass Swale Basin
- Infiltration Basin
- Proprietary Device Basin
- Permeable Pavement Basin
- Rivers, Streams, Creeks
- Impaired Waterway
- DNR Wetlands
- Surface Water
- TMDL Reachshed Boundary
- WPDES Permit Holders
- DPW Boundary
- Village Limits
- County Line



*Underwood Creek is listed as an Impaired Waterway.