City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final-revised

Utilities Committee

Tuesday, March 7, 2023 | **4:30 PM** | **Council Chambers, 6th Floor**

1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

23-0101 Approval of the January 10, 2023 Utilities Committee Meeting minutes.

Attachments: January 10, 2023 Utilities Committee Meeting minutes.pdf

4. Public Hearings/Appearances

5. Action Items

23-0216 Approve 2022 Annual Stormwater Report to DNR

Attachments: 2022 MS4 Annual report w attachments.pdf

23-0217 Award of Unit K-23 Native Landscape Management Contract to NES Ecological Services - A Division of Robert. Lee & Associates, in an amount not to exceed $215,000.

Attachments: K-23 Contract Award Util Memo FINAL 03-01-2023.pdf

6. Information Items

23-0200 Change Order #1 to Badger Specialty Coatings, LLC for the DAF Coatings Project in the amount of $5,600 resulting in a decrease of contingency from $5,900 to $300.

Attachments: Change Order 1 DAF Coatings Project 02-10-23doc.pdf

23-0199 Appleton Wastewater SARS-CoV-2 Report

Attachments: Appleton WWTF SARS CoV 2 Report 030223.pdf

23-0198 Polymer Incident Update

Attachments: Utilities Committee - AWWTP Polymer Incident Memo (2) 02-20-23.pdf
030723.pdf

23-0102 Monthly Reports for October, November, and December 2022:
- Wastewater Treatment Plant Synopsis and Receiving Station Revenue Report
- Water Treatment Facility Synopsis
- Water Distribution and Meter Team Monthly Report - December

Attachments: 2022 Q4 Wastewater Treatment Plant Synopsis.pdf
2022 Q4 Water Plant Synopsis.pdf
Water Main Breaks December 2022.pdf

23-0197 Monthly Report for January 2023:
- Water Distribution and Meter Team Monthly Report

Attachments: Water Main Breaks January 2023.pdf

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

**We are currently experiencing intermittent issues/outages with our audio/video equipment. Meeting live streams and recordings are operational but unreliable at times. This is due to delays in receiving necessary system hardware components. We continue to look for solutions in the interim and we hope to have these issues resolved soon.*

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Danielle Block at 920-832-6474.

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Meeting Minutes - Final
Utilities Committee

Tuesday, January 10, 2023 | **4:30 PM** | **Council Chambers, 6th Floor**

1. Call meeting to order

2. Roll call of membership

Present: 4 - Meltzer, Doran, Firkus and Schultz

Excused: 1 - Jones

3. Approval of minutes from previous meeting

23-0002 Approval of the December 13, 2022 Utilities Committee Meeting minutes.

Attachments: December 13, 2022 Utilities Committee Meeting Minutes.pdf

Schultz moved, seconded by Firkus, that the Minutes be approved. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Doran, Firkus and Schultz

Excused: 1 - Jones

4. Public Hearings/Appearances

5. Action Items

23-0003 Award sole source purchase of Goulds axial flow pump from Crane Engineering in the amount of $133,876.

Attachments: Utilities Committee Blended Sludge Pump 12-29-22.pdf

Schultz moved, seconded by Firkus, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Doran, Firkus and Schultz

Excused: 1 - Jones

23-0032 Award axial flow sludge blending pump impeller repair contract to August Winter and Sons in the amount of $23,000 with a 15% contingency of $3,450 for a total not to exceed $26,450.

Attachments: 230106_ Blended Sludge Pump Repair Contract Award Memo.pdf

Firkus moved, seconded by Schultz, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Doran, Firkus and Schultz

Excused: 1 - Jones

6. Information Items

23-0022 Appleton Wastewater Treatment Plant Update regarding the Polymer Incident of December 26, 2023.

Attachments: Polymer Incident Memo and Diagram 010523.pdf

The correct date of the event was December 26, 2022 not 2023 as noted on the agenda and attachment.
This item was discussed.

23-0004 Monthly Report for November 2022:
- Water Distribution and Meter Team Monthly Report

Attachments: Water Main Breaks - November 2022.pdf

The report was reviewed.

7. Adjournment

Firkus moved, seconded by Doran, that the Utilities Committee Meeting be adjourned at 5:05 p.m.. Roll Call. Motion carried by the following vote:

Aye: 4 - Meltzer, Doran, Firkus and Schultz

Excused: 1 - Jones

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.**

Form 3400-224(R8/2021)

Reporting Information :

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

Project Name:	2022 Annual Report
County:	Outagamie
Municipality:	Appleton City
Permit Number:	S050075
Facility Number:	31098
Reporting Year:	2022

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

Under s. 283.53(3)(a), a general MS4 permittee is required to reapply for permit coverage at least 180 days prior to the expiration date of the permit .

In order to acknowledge that you are reapplying for permit coverage, please check the following box: ☑

Required Attachments and Supplemental Information

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

Annual Report

- Review related web site and instructions for Municipal storm water permit eReporting [Exit Form]
- Complete all required fields on the annual report form and upload required attachments
- Attach the following other supporting documents as appropriate using the attachments tab above
  - Public Education and Outreach Annual Report Summary
  - Public Involvement and Participation Annual Report Summary

- Illicit Discharge Detection and Elimination Annual Report Summary
- Construction Site Pollution Control Annual Report Summary
- Post-Construction Storm Water Management Annual Report Summary
- Pollution Prevention Annual Report Summary
    - Leaf and Yard Waste Management
    - Municipal Facility (BMP) Inspection Report
    - Municipal Property SWPPP
    - Municipally Property Inspection Report
    - Winter Road Maintenance
- Storm Sewer Map Annual Report Attachment
- Storm Water Quality Management Annual Report Attachment
- TMDL Attachment
- Storm Water Consortium/Group Report
- Municipal Cooperation Attachment
- Other Annual Report Attachment

- Attach the following permit compliance documents as appropriate using the attachments tab above

    - Storm Water Management Program
        - Public Education and Outreach Program
        - Public Involvement and Participation Program
        - Illicit Discharge Detection and Elimination Program
        - Construction Site Pollutant Control Program
        - Post-Construction Storm Water Management Program
        - Pollution Prevention Program
            - Municipal Storm Water Management Facility (BMP) Inventory
            - Municipal Storm Water Management Facility (BMP) Inspection and Maintenance Plan
    - Total Maximum Daily Load documents *(*If applicable, see permit for due dates.)*
        - TMDL Mapping*
        - TMDL Modeling*
        - TMDL Implementation Plan*
        - Fecal Coliform Screening Parameter *
        - Fecal Coliform Inventory and Map *(S050075-03 general permittees Appendix B B.5.2 – document due to the department by March 31, 2022)*
        - Fecal Coliform Source Elimination Plan *(S050075-03 general permittees Appendix B - document due to the department by October 31,2023)*

- Sign and Submit form

Do not close your work until you SAVE.

Form 3400-224 (R8/2021)

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	Appleton City
Facility ID # or (FIN):	31098
Updated Information:	☐ Check to update mailing address information
Mailing Address:	100 North Appleton Street
Mailing Address 2:	
City:	Appleton City
State:	WI
Zip Code:	54911 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:	Danielle
Last Name:	Block

☐ Select to ***update*** current contact information

Title:	DPW Director
Mailing Address:	100 N. Appleton Street
Mailing Address 2:	
City:	Appleton
State:	WI
Zip Code:	54911 xxxxx or xxxxx-xxxx
Phone Number:	920-832-6474 Ext: xxx-xxx-xxxx
Email:	danielle.block@appleton.org

Additional Contacts Information (Optional)

Individual with responsibility for: (Check all that apply)

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

First Name:	Nathan
Last Name:	Loper
Title:	Dep Direc Operations
Mailing Address:	100 N. Appleton Street
Mailing Address 2:	
City:	Appleton
State:	WI
Zip Code:	54911 xxxxx or xxxxx-xxxx
Phone Number:	920-832-5580 Ext: xxx-xxx-xxxx
Email:	nathan.loper@appleton.org

Municipal Billing Contact Person (Authorized Representative for MS4 Permit)

☑ Select to ***create new*** Billing contact

First Name:	Danielle
Last Name:	Block

☑ Select to ***update*** current contact information

Title:	Director of Public Works
Mailing Address:	100 North Appleton Street
Mailing Address 2:	
City:	Appleton
State:	WI
Zip Code:	54911 xxxxx or xxxxx-xxxx
Phone Number:	920-832-6474 Ext: xxx-xxx-xxxx
Email:	danielle.block@appleton.org

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

◉ Yes ○ No

☑ Public Education and Outreach Fox-Wolf Watershed Alliance and Northeast Wisconsin Stormwater Consortium

☑ Public Involvement and Participation Fox-Wolf Watershed Alliance and Northeast Wisconsin Stormwater Consortium

☑ Illicit Discharge Detection and Elimination Westwood Professional Services

☐ Construction Site Pollutant Control

☑ Post-Construction Storm Water Management raSmith and Brown and Caldwell

☐ Pollution Prevention

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

○ Yes ◉ No

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures- Section 1 : Complete

1. Public Education and Outreach

a. Does MS4 conduct any educational efforts or events independently (not with a group) ◉ Yes ○ No

b. How many total educational events were held during the reporting year: 60

c. The permit requires that both passive and interactive mechanisms are utilized. How many interactive mechanisms were used during the reporting year? 7

Topics Covered	Target Audience
☑ Illicit discharge detection and elimination	☑ General Public
☑ Household hazardous waste disposal/pet waste management/vehicle washing	☑ Public Employees
☑ Yard waste management/pesticide and fertilizer application	☑ Residents
☑ Stream and shoreline management	☑ Businesses
☑ Residential infiltration	☑ Contractors
☑ Construction sites and post-construction storm water management	☑ Developers
☑ Pollution prevention	☐ Industries
☑ Green infrastructure/low impact development	☐ Public Officials
☐ Other:	☐ Other

d. Will additional information/summary of education events be attached to the annual report? ◉ Yes ○ No

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

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 2 : Complete

2. Public Involvement and Participation

a. Permit Activities. 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	2/18/2022
Project/Event Name	2021 Annual Report review by elected officials
Delivery Mechanism	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
☑ MS4 Annual Report ☐ Storm Water Management Program ☐ Storm Water related ordinance ☐ Other:	☑ General Public ☐ Public Employees ☐ Residents ☐ Businesses ☐ Contractors ☐ Developers ☐ Industries ☑ Public Officials ☐ Other	11-50	○ Yes ◉ No

Event Start Date	7/22/2022
Project/Event Name	Citywide SWMP update elected officials review
Delivery Mechanism	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
☐ MS4 Annual Report ☑ Storm Water Management Program ☐ Storm Water related ordinance ☐ Other:	☑ General Public ☐ Public Employees ☐ Residents ☐ Businesses ☐ Contractors ☐ Developers ☐ Industries ☑ Public Officials ☐ Other	11-50	○ Yes ◉ No

Event Start Date	2/18/2022
Project/Event Name	Post Construction Stormwater Ordinance update
Delivery Mechanism	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
☐ MS4 Annual Report ☐ Storm Water Management Program ☑ Storm Water related ordinance ☐ Other:	☑ General Public ☐ Public Employees ☐ Residents ☐ Businesses ☑ Contractors ☑ Developers ☐ Industries ☑ Public Officials ☐ Other	11-50	○ Yes ◉ No

Event Start Date	10/7/2022

Project/Event Name	Erosion Control ordinance and program updates
Delivery Mechanism	Government Event (Public Hearing, Council Meeting, etc)

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
☐ MS4 Annual Report ☐ Storm Water Management Program ☑ Storm Water related ordinance ☐ Other:	☑ General Public ☐ Public Employees ☐ Residents ☐ Businesses ☑ Contractors ☐ Developers ☐ Industries ☑ Public Officials ☐ Other	11-50	○ Yes ◉ 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	5/7/2022 ☐ NA (Individual Permittee).
Project/Event Name	Fox River Cleanup
Delivery Mechanism	Clean up event

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
Volunteer Opportunity	☑ General Public ☐ Public Employees ☐ Residents ☐ Businesses ☐ Contractors ☐ Developers ☐ Industries ☐ Public Officials ☐ Other	101 +	◉ Yes ○ No

Event Start Date	11/10/2021 ☐ NA (Individual Permittee).
Project/Event Name	FWWA Chloride Monitoring
Delivery Mechanism	Stream monitoring

Topics Covered	Target Audience	Estimated People Reached (Optional)	Regional Effort (Optional)
Volunteer Opportunity	☑ General Public ☐ Public Employees ☑ Residents ☐ Businesses	1 - 10	◉ Yes ○ No

	☐ Contractors ☐ Developers ☐ Industries ☐ Public Officials ☐ Other		

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

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 3 : Complete

3. Illicit Discharge Detection and Elimination

a.	How many total outfalls does the municipality have?	347	☐ Unsure
b.	How many outfalls did the municipality evaluate as part of their routine ongoing field screening program?	82	☐ Unsure
c.	From the municipality's routine screening, how many were confirmed illicit discharges?	9	☐ Unsure
d.	How many illicit discharge complaints did the municipality receive?	17	☐ Unsure
e.	From the complaints received, how many were confirmed illicit discharges?	8	☐ Unsure
f.	How many of the identified illicit discharges did the municipality eliminate in the reporting year (from both routine screening and complaints)? (If the sum of 3.c. and 3.e. does not equal 3.f., please explain below.)	10	☐ Unsure

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

☑ Verbal Warning	9
☑ Written Warning (including email)	0
☑ Notice of Violation	8
☑ Civil Penalty/ Citation	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.

Program the same as previous years. Unresolved discharges are related to conductivity, which is difficult to track and remove.

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 4 : Complete

4. Construction Site Pollutant Control

a. How many total construction sites with one acre or more of land disturbing construction activity were active at any point in the reporting year? 31 ☐ 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? 16 ☐ Unsure

c. How many erosion control inspections did the municipality complete in the reporting year (at sites with one acre or more of land disturbing construction activity)? 191 ☐ 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	64
☑ Written Warning (including email)	25
☑ Notice of Violation	1
☑ Civil Penalty/ Citation	0
☑ Stop Work Order	0
☐ 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*.

A new Erosion Control Inspector started January 2022. Attended NEWSC and NASECA training. Due to staffing limits and large number of single family construction, revised ordinance and program to permit only sites disturbing one acre or more.

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 5 : Complete

5. Post-Construction Storm Water Management

a. How many sites with new structural storm water management Best Management Practice (BMP) have received local approval ?
*Engineered and constructed systems that are designed to provide storm water quality control such as wet detention ponds, constructed wetlands, infiltration basins, grassed swales, permeable pavement,
10 ☐ Unsure

b. Does the MS4 have procedures for inspecting and maintaining private storm water facilities?
◉ Yes ○ No ☐ Unsure

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

d. Does the municipality utilize privately owned storm water management BMP in its pollutant reduction analysis?
◉ Yes ○ No ☐ Unsure

e. If yes, does MS4 have maintenance authority on these privately owned BMPs?
1 ☐ Unsure

f. How many municipally owned storm water management BMPs were inspected in the reporting year?
228 ☐ Unsure

g. 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	10
☑ Written Warning (including email)	10
☑ Notice of Violation	39
☑ Civil Penalty/ Citation	1
☑ Forfeiture of Deposit	0
☑ Complete Maintenance	0
☑ Bill Responsible Party	0
☐ 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 verbal and written warnings are not tracked and the numbers reported are approximate.

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 6 : Complete

6. Pollution Prevention

Storm Water Management Best Management Practice Inspections ☐ Not Applicable

a. Enter the total number of municipally owned or operated structural storm water management best management practices. 233 ☐ Unsure

b. How many new municipally owned storm water management best management practices were installed in the reporting year ? 4 ☐ Unsure

c. How many municipally owned storm water management best management practices were inspected in the reporting year? 228 ☐ Unsure

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

sediment depth, trash, bank stability, inlet and outlet structures and vegetation

e. How many of these facilities required maintenance? 120 ☐ Unsure

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

Inspection and maintenance programs are generally on schedule.

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

g. How many municipal properties require a SWPPP? 7 ☐ Unsure

h. How many inspections of municipal properties have been conducted in the reporting year? 40 ☐ 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:

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.*

DPW provides inspection and plan updates for Facilities Department sites, including their main Operations site and Reid Golf Course Maintenance Area. Fire and Utilities Debts perform their own inspections and update their own plans.

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? 855 ☐ 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 3 wks, 6 wks if pond, arterial collector 2 wks

○ 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? 57 ☐ Unsure

r. If known, how many tons of material was collected? 107 ☐ 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 inspect measure sediment in all clean if needed

○ 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?

4 rounds every 2 weeks

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

Built new equipment and implemented first phase of vacuum leaf collection.

Winter Road Management ☐ Not Applicable

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

aa. How many lane-miles of roadway is the municipality responsible for doing snow and ice control? (*One mile of a two-way road equals two lane miles*.) 766 ☐ 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	56	659	660	942	269

Liquids (gallons) (ex. brine)

	Oct	Nov	Dec	Jan	Feb	Mar
Brine	0	761	14910	14303	18874	4241
Pre-wetting compound	0	0	236	424	73	0

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
11/3/2022	NEWSC Salt Training	3
8/3/2022	Salt Wise	2
3/23/2022	Salt Wise	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*

Salt use on downward trend.

Internal (Staff) Education & Communication

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

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

components of MS4 permit, dept/division roles in meeting permit requirements, individual responsibilities, good housekeeping and spill response

When: August - November 2022

How many attended: 86

ag. Describe how the municipality has kept the following local officials and municipal

staff aware of the municipal storm water discharge permit programs, procedures and pollution prevention program requirements.

Elected Officials

Presentations to Utilities Committee as needed throughout the year

Municipal Officials

same as elected officials

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

Monthly staff and workgroup meetings

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.*

Missing Information

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

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

Form 3400-224 (R8/2021)

Minimum Control Measures - Section 7 : Complete

7. Storm Sewer System Map

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

(●) Yes ( ) No ( ) Unsure

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

- [x] Storm water treatment facilities
- [x] Storm pipes
- [ ] Vegetated swales
- [x] Outfalls
- [ ] Other - Describe below

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

See attached list of updates per map.

Missing Information

Do not close your work until you SAVE.

Form 3400-224 (R8/2021)

Final Evaluation - Complete

Fiscal Analysis

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

Annual Expenditure Reporting Year	**Budget** Reporting Year	**Budget** Upcoming Year	**Source of Funds**
Element: Public Education and Outreach			
7,535	8,000	8,000	Storm water utility
Element: Public Involvement and Participation			
4,941	5,000	5,000	Storm water utility
Element: Illicit Discharge Detection and Elimination			
16,465	20,000	20,000	Storm water utility
Element: Construction Site Pollutant Control			
86,040	108,850	102,678	Storm water utility
Element: Post-Construction Storm Water Management			
135,175	100,000	125,000	Storm water utility
Element: Pollution Prevention			
1,569,212	1,564,840	1,774,608	Storm water utility
Other (describe)			
Mapping, Annual Report, DNR fee			
12,600	12,600	12,600	Storm water utility

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

Water Quality

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

municipality's storm sewer system directly discharges to?
◉ Yes ○ No ○ Unsure If Yes, explain below:

4 new sump structures installed in reconstruction area

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)

Status of Total Maximum Daily Loads (TMDLs) Implementation

The permittee Appleton City is subject to the following approved TMDLs: Lower Fox River Basin and Lower Green Bay; Upper Fox and Wolf River Basin

The permittee intends to comply with the following permit requirements to show progress towards meeting the TMDL:

[A.3.1] The Permittee is following the TMDL Compliance Plan, which received department concurrence prior to April 30, 2019.
The permittee is confirming that all planned efforts are on schedule.
◉ Agree ○ Disagree

[A.6.3] Final Documentation.
The permittee is confirming that all planned efforts are on schedule to submit the final documentation materials [updates to mapping, modeling, tabular summary, and Implementation Plan] under section A.6.3 by October 31, 2023.
◉ Agree ○ Disagree

[C.3-4] The Permittee is confirming that all planned efforts are on schedule to meet requirements due to the department.

- For an Adaptive Management project, a plan is required within 36 months of the TMDL approval date.
- For TMDL Implementation, updates to mapping, modeling, tabular summary, and Implementation Plan documents are required within 48 months of the TMDL approval date.)

◉ Agree ○ Disagree

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.*

Updated Citywide SWMP approved in September 2022 with most implementation beginning in 2023. Updated Post-construction ordinance requiring TSS and TP removal per the TMDL reachshed effective August 1, 2022.

Missing Information

Do not close your work until you SAVE.

Form 3400-224 (R8/2021)

Requests for Assistance on Understanding Permit Programs

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

Please select all that apply:

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

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

Form 3400-224(R8/2021)

Required Attachments and Supplemental Information

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

Upload Required Attachments (15 MB per file limit) - Help reduce file size and trouble shoot file uploads
*Required Item

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

Storm Sewer System Map

File Attachment — Mapchanges1.pdf

Attach - Other Supporting Documents

AR_Other

File Attachment — DNRMap1.pdf

AR_IDDE

File Attachment — AppletonSummaryReport2022Reduced.pdf

AR_EO

File Attachment — 2022CompletedIEActivitiesforannualreport.pdf

AR_SWGroupReport

File Attachment — 2022NEWSCAnnualReport1.pdf

AR_IP

File Attachment — 2022PublicParticipationcompletedactivities.pdf

AR_Other

File Attachment — DNRMap2.pdf

AR_Other

File Attachment — DNRMap3.pdf

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

Attach - Permit Compliance Documents

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

Missing Information

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

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

Draft and Share PDF Report

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

Form 3400-224(R8/2021)

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 Appleton City 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).

Name:	
Title:	

Authorized Signature.

☐ I accept the above terms and conditions.

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.

2022 CITY OF APPLETON PUBLIC EDUCATION AND OUTREACH PLAN

	TOPIC	TARGET AUDIENCE	PLANNED ACTIVITY	MECHANISM		PRIMARY LEAD		COMPLETED ACTIVITY
				ACTIVE	PASSIVE	CITY	NEWSC	
1								
2		1. Residents	2. DPW Newsletter		X	X		Mailed March 2022
3			10. One-on-one communication	X		X		Throughout the year by Inspections Division
4			11. NEWSC Exhibiting	X			X	See NEWSC Report
5			6. Credit Policy Pledge Supporter		X	X		10 Pledge Supporters
6	1. Promote detection and elimination of illicit discharges		14. Citizens Academy Presentation					Citizens Academy no longer held
	and water quality impacts associated with such							
7	discharges from municipal separate storm sewer system.	2. City staff - Facilities/Park&Rec	13. Group Training					
8								
		3. Businesses	10. One-on-One communication	X		X		Throughout the year by Inspections Division
9		4. Students	14. NEWSC school presentations	X			X	See NEWSC Report
10								1
1								
2		1. Residents	2. DPW Newsletter		X	X		Mailed March 2022
3			11. NEWSC Exhibiting	X			X	Throughout the year by Inspections Division
4	2. Inform and educate the public about the proper		3. NEWSC Posters		X	X		Located in various park bathrooms and on park fences
5	management of materials that may cause stormwater		6. Credit Policy Pledge Supporter		X	X		10 Pledge Supporters
6	pollution from sources including automobiles, pet							
7	waste, household hazardous waste and household	2. Students	14. NEWSC school presentations	X			X	See NEWSC Report
8	practices.							
9			15. Summer Camp					Summer Camp is no longer part of programming
10								1
1								
2		1. Residents	2. City DPW newsletter		X	X		Mailed March 2022
3			3. NEWSC posters		X	X		Located in various park bathrooms and on park fences
4			6. Stormwater Credit Policy Pledge Supporter		X	X		10 Pledge Supporters
5	3. Promote beneficial onsite reuse of leaves and grass		11. NEWSC Exhibiting	X			X	See NEWSC report
6	clippings and proper use use of lawn and garden							
7	fertilizers and pesticides.	2. Students	15. Summer Camp					Summer Camp is no longer part of programming
8			14. NEWSC school presentations	X			X	See NEWSC Report
9								
10								1
1								
2		1. Residents	16. River cleanup	X			X	Sponsored at $2,500 See NEWSC report
3								
4	4. Promote the management of streambanks and	2. Students	14. NEWSC school presentation	X			X	See NEWSC report
5	shorelines by riparian landowners to minimize erosion		15. Summer Camp					Summer Camp is no longer part of programming
6	and restore and enhance the ecological value of							
7	waterways.							
8								
9								
10								1
1								
2		1. Residents	6. Stormwater Credit Policy Pledge Supporter		X	X		10 Pledge Supporters
3								
4			14. Citizens Academy Presentation					Citizens Academy no longer held
5	5. Promote infiltration of residential stormwater runoff							
6	from rooftop downspouts, driveways, and sidewalks.	2. Students	14. NEWSC school presentation	X			X	See NEWSC report
7								
8								
9								
10								1

1													
2			1. Design consultants		10. One-on-one communication		X			X			Througout the year
3													
4	6. Inform and educate those responsible for the design,		2. Contractors		12. Pre-submittal and		X			X			Througout the year
5	installation, and maintenance of construction site				Pre-construction meetings								
6	practices and stormwater management facilities on how		3. City staff										
7	to design, install, and maintain the practices.				18. FWWA Watershed Conference		X			X			Sponsored and on planning committee
8													Several staff attended the conference
9					19. Plan review		X			X			ESC and SWM plan review verbal and written discussion
10												1	by City staff and City's consultants
1													
2			1. Restaurants		10. One on One communication with standard		X			X			Throughout the year and especially with annual
3					inspections by Plumbing and Health Depts								license renewal
4	7. Identify businesses and activities that may pose a												
5	stormwater contamination concern, and educate those		2. Pool and spa owners		1. Mailing			X		X			September 2022 mailing for ppols and spas
6	specific audiences on methods of stormwater pollution							X		X			Conrete Truck Washout mailing March 2022
7	prevention.												
8													
9													
10												1	
1													
2			1. Owners/Developers		10. One-on-one communication		X			X			Discuss individual projects during the year
3													
4	8. Promote environmentally sensitive land development		2. Designers		10. One-on-one communication		X			X			Discuss individual projects throughout theyear
5	designs by developers and designers, including green				18. Sponsor FWWA Watershed Conference		X			X			Sponsored and on planning committee
6	infrastructre and low impact development.												
7													
8													
9													
10												1	

												8	Completed topics
	Passive Mechanisms				Active Mechanisms								
	1. Mailing	1			10. One-on-One communication	1						6	Number of topics required
	2. Newsletter	1			11. NEWSC Exhibiting	1							
	3. NEWSC Posters	1			12. Meetings	1				ANNUAL REPORT QUESTION 1.b Total Number of educational events (interactive)			
	4. Website	1			13. Group Training	0			5	One on One communication - Illicit Discharge - estimated not tracked			
	5. Signage	1			14. Presentations	1			20	One on One communication - erosion control - estimated not tracked			
	6. Stormwater Credit Policy Pledge Supporter	1			15. Summer Camp	0			10	One on one communication - post construction -estimated not tracked			
					16. River Cleanup	1			1	FWWA Conference			
	Total Passive Mechansims Used	6			17. Utilities Committee Meeting	0			1	FWWA River Cleanup			
					18. Workshops/Conferences	1			2	NEWSC ESC Training			
					19. Plan review	1			9	NEWSC School Presentations			
	Key:								12	NEWSC Exhibiting			
	1= used during the year				Total Active Mechanisms Used	7			60	Total			
	0= not used during the year												
					Required Active Mechanisms	2							

January 2023

City of Appleton Education and Outreach Plan 2019-2023 Summary of completed activities

Topics		Year											
		2019			2020			2021			2022			2023	
		Active	Passive		Active	Passive		Active	Passive		Active	Passive		Active	Passive
1. IDDE		4	2		2	2		5	2		4	2			
2. HHH, Pets, Vehicles, etc		3	3		2	3		3	3		2	3			
3. Yard Waste, Pesticide, Ferilizer		3	3		1	3		2	3		2	3			
4. Stream and Shoreline		3	0		2	0		2	0		2	0			
5. Residential Infiltration		0	1		0	1		0	1		1	1			
6. ESC and Post Construction		4	0		4	0		4	0		4	0			
7. Pollution Prevention		0	1		0	0		0	1		1	2			
8. Green Infrastructure/Low Impact		3	0		3	0		3	0		3	0			
Totals		20	10		14	9		19	10		19	11		0	0

SECTION 2.2 PUBLIC INVOLVEMENT AND PARTICIPATION

ACTIVITY	2022	2022 Completed		
Annual Report	Target Participants:			
	General Public			
Due to WDNR March 31	Elected Officials			
each year				
	Delivery Mechanism:			
	Committee agenda on website	February 18, 2022		
	Utilities Committee meeting	Februrary 22, 2022		
	Common Council meeting	March 1, 2022		
	Date: March			
Stormwater Management Program	Target Participants:			
	General Public			
Proprosed City-wide Plan	Elected Officials			
Update in 2020-2021				
	Delivery Mechanism:			
	Committee agenda on website	July 22, 2022		
	Utilities Committee Presentation	July 26, 2022 (by consultant)		
	Utilities Committee Action Item	August 23, 2022		
	Common Council meeting	August 3 and September 7, 2022		
	Date: once per year			
Ordinance Updates	Target Participants:			
	General Public			
Erosion and Sediment Control	Elected Officials			
	Design Consultants			
Illicit Discharges	Developers			
	Contractors			
Post-Construccttion Stormwater		Post-construction ordinance added TMDL	Erosion Control Program and Ordinance	
Management	Delivery Mechanism:			
	Committee agenda on website	February 18, 2022	October 7, 2022	
	Utilities Committee Action Item	Februrary 22, 2022	October 11, 2022	
	Common Council meeting	March 1, 2022 and March 16, 2021	October 19 and November 2, 2022	
	Date: As needed			
Volunteer Activity	Target Participants:			
	General Public			
	City Staff			
	Delivery Mechanism:			
	Sponsor FWWA Cleanup	Sponsored at $2500 level		
	Post Sign-up for City staff			
	Date: Spring	May 7, 2022		

Northeast Wisconsin Stormwater Consortium
PO Box 1861
Appleton, WI 54912

2022 Annual Report

NEWSC Mission:
To facilitate efficient implementation of stormwater programs locally and regionally that will meet DNR and EPA regulatory requirements and maximize the benefit of stormwater activities to the watershed by:

- **Fostering partnerships**
- **Sharing Information**
- **Seeking Administrative Efficiency**
- **Pooling Financial Resources**

The Northeast Wisconsin Stormwater Consortium was formed in 2005 as a subsidiary of the Fox-Wolf Watershed Alliance. The consortium is a collaborative of members with leadership elected annually from within its membership.

2022 NEWSC Members:

Brown County
Calumet County
Fond du Lac County
Outagamie County
Winnebago County
City of Appleton
City of De Pere
City of Fond du Lac
City of Green Bay
City of Kaukauna
City of Manitowoc
City of Marinette
City of Menasha
City of Neenah
City of Oshkosh
City of Two Rivers
Town of Algoma
Town of Black Wolf
Town of Buchanan
Town of Clayton
Town of Fond du Lac
Town of Friendship
Town of Grand Chute
Town of Lawrence
Town of Ledgeview
Town of Neenah
Town of Omro
Town of Scott
Town of Taycheedah
Town of Vinland
University of WI – Oshkosh
Village of Allouez
Village of Ashwaubenon
Village of Bellevue
Village of Combined Locks
Village of Eden
Village of Fox Crossing
Village of Greenville
Village of Harrison
Village of Hobart
Village of Howard
Village of Kimberly
Village of Little Chute
Village of N. Fond du Lac
Village of Sherwood
Village of Suamico
AECOM
Ayres Associates
Brown & Caldwell
Cedar Corporation
Contech Construction
County Materials
Davel Engineering
Graef, USA
Mach IV Engineering & Surveying
Martenson & Eisele
Mau & Associates
McMAHON Group
Mead & Hunt
MSA Professional Services
raSmith
Robert E. Lee Associates
Ruekert & Mielke
Westwood Professional Services

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NEWSC Resources Available to Members:
*If Members utilized these resources to provide education to their residents, elected officials or staff, members should include details of how they were used in their individual annual reports.

*For outreach efforts conducted by NEWSC that members can enter directly into their individual annual report, look for your community name in each section.

MCM #2 Public Education & Outreach
Topic #1: Illicit Discharge Detection & Elimination
The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.
If used in the in the manner above: Delivery Mechanism would be passive.

Carpet Cleaning Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Professional-Carpet-Cleaning.pdf
Greenhouses, Garden Centers & Nurseries Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Garden-Centers.pdf
Professional Power Washing Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Power-washing-for-the-professional-washer.pdf
Concrete Washout Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Concrete-Washout.pdf
Construction Site Erosion & Sediment Control	http://www.renewourwaters.org/wp-content/uploads/2019/07/Construction-BMPs-Erosion-Sediment-Control.pdf
Dumpster Management Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Dumpster-Management-bilingual-pamphlet.pdf
Dumpster Management Poster	https://drive.google.com/file/d/1736Sg155_XWFND0kH4nHq1MQowgiuD8_/view?usp=sharing
Parking Lot Maintenance Flyer	http://www.renewourwaters.org/wp-content/uploads/2015/04/Parking-Lot-BMP.pdf
Winter Parking Lot Maintenance Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/11/Parking-Lot-Maintenance-Winter-BMPs.pdf

***Did you have inspectors in your community stop by businesses this year? Did they do illicit discharge inspections and meet with area businesses about illicit discharge? If so, you can record those interactions as active outreach.**

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NEWSC Active Delivery on Behalf of Members: Volunteer Event - Annual Watershed Cleanup

Fox-Wolf Watershed Alliance continues to add sites every year. If your community would like a site added for 2023, contact Kelly (Kelly@fwwa.org). Sites should have public access. Communities are asked to provide a site leader for the 1st year.

Totals:
Volunteers: 1,617 | Trash Bags: 958 | Tires: 66 | Electronics: 35
Plastic bags: 2,701 | Syringes: 105 | Straws: 1,051 | Recycle bags: 224
Total Weight: 8,429 pounds

Municipality	Number of Volunteers
Allouez	48
Appleton	206
Bellevue	6
Brown County	80
Calumet County	38
Combined Locks	32
De Pere	39
Fond du Lac	70
Grand Chute	13
Green Bay	110
Hortonville	35
Howard	13
Kaukauna	82
Kimberly	48
Ledgeview	17
Little Chute	31
Menasha	179
Neenah	33
Municipality	**Number of Volunteers**

Northeast Wisconsin Stormwater Consortium
PO Box 1861
Appleton, WI 54912

New London	62
Oshkosh	307
Outagamie County	15
Sherwood	39
Vinland	30
Winnebago County	57
Winneconne	27

2.1.1

Topic #2: Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing

The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.

If used in the in the manner above: Delivery Mechanism would be passive.

Household Hazardous Waste Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Household-Hazardous-Waste.pdf
Carpet Cleaning Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/carpet-cleaning.pdf
Kids Can Help Too Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Kids-can-help-too.pdf
Good Dog, Good Owner Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Good-Dog-Good-Owner.pdf
Power Washing Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Power-Washing-Home.pdf
Fish Don't Swim in Chlorine Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Pool-Spa-Discharge.pdf
Vehicle Maintenance Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Vehicle-Maintenance.pdf
Vehicle Maintenance Webpage	http://www.renewourwaters.org/vehicle-maintenance-2/
Kids Can Help Too Webpage	http://www.renewourwaters.org/kids-can-help-too-3/
Household Hazardous Waste Webpage	http://www.renewourwaters.org/household-hazardous-waste-3/
Power Washing Webpage	http://www.renewourwaters.org/power-washing/
Fish Don't Swim in Chlorine Webpage	http://www.renewourwaters.org/pools-and-spas/
Carpet Cleaning Webpage	http://www.renewourwaters.org/carpet-cleaning-2/
Good Dog, Good Owner Webpage	http://www.renewourwaters.com/our-pets-our-waters/

Good Dog, Good Owner Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/Good-Dog-Good-Owner-Web-Ready.png
Car Washing Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/Car-on-GrassSM.jpg

***Did you exhibit or do any community presentations that hit on these topics? If so, you can record those interactions as active outreach.**
NEWSC Passive and Active Delivery for this topic can be found at the end of the report.

2.1.1

Topic #3: Yard Waste Management/Pesticide and Fertilizer Application

The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.
If used in the in the manner above: Delivery Mechanism would be passive.

Leave Your Leaves on Land Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Leave-Your-Leaves-on-Land.pdf
The Perfect Lawn Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/The-Perfect-Lawn.pdf
Perfect Landscape Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/The-Pefect-Landscape-7.9.19.pdf
Ice & Snow Control flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Leave-Your-Leaves-on-Land.pdf
Kids Can Help Too Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/Kids-can-help-too.pdf
Leave Your Leaves on Land Webpage	http://www.renewourwaters.org/leave-your-leaves-on-land/
The Perfect Lawn Webpage	http://www.renewourwaters.org/the-perfect-lawn-3/
Perfect Landscape Webpage	http://www.renewourwaters.org/the-perfect-landscape/
Ice & Snow Control Webpage	http://www.renewourwaters.org/ice-and-snow-control-3/
Kids Can Help Too Webpage	http://www.renewourwaters.org/kids-can-help-too-3/
Ice & Snow Control Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/Ice-and-snow-removal-photo.jpg
Leave Your Leaves on Land Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/leaf-collection.jpg
Sweep Grass Clippings Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/grassclippingsROW.jpg

***Did you exhibit or do any community presentations that hit on these topics? If so, you can record those interactions as active outreach.**
NEWSC Passive and Active Delivery for this topic can be found at the end of this report.

Northeast Wisconsin Stormwater Consortium
PO Box 1861
Appleton, WI 54912

2.1.1

Topic #4: Stream and Shoreline Management

The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.

If used in the in the manner above: Delivery Mechanism would be passive.

Restore Your Shore Flyer	https://drive.google.com/file/d/1Qcel0qumtuyfu204Qg9kMFa1BSZjb4DA/view?usp=sharing

***Did you meet with homeowners to educate them on streambank erosion and BMPs to reduce erosion? You can record these discussions as active outreach.**

2.1.1

Topic #5: Residential Infiltration

The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.

If used in the in the manner above: Delivery Mechanism would be passive.

Rain Barrel Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/04/Rain-Barrels-Handout.pdf
The Perfect Landscape Flyer	http://www.renewourwaters.org/wp-content/uploads/2019/07/The-Pefect-Landscape-7.9.19.pdf
The Perfect Landscape Webpage	http://www.renewourwaters.org/the-perfect-landscape/
Rain Barrel Webpage	http://www.renewourwaters.org/rain-barrels/
Grass Clippings Infographic	http://www.renewourwaters.org/wp-content/uploads/2019/07/grassclippingsROW.jpg

***Did you host a rain barrel workshop? If so, claim active outreach for this topic.**

2.1.1

Topic #6: Construction Sites/Post Construction Stormwater Management

The resources below were created by NEWSC and are available for NEWSC members to print and mail out to local businesses, share on social media or have available to residents by printing and displayed at the office or other public venue.

If used in the manner above: Delivery Mechanism would be passive.

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Stormwater & the Construction Industry Poster	http://www.renewourwaters.org/wp-content/uploads/2019/07/Construction-BMPs-Erosion-Sediment-Control.pdf
Erosion & Sediment Control Pocket Field Guide	https://drive.google.com/file/d/1TBtgl61znizXDZyLoDRVRVNhxThD40kH/view?usp=sharing

***Did you have active discussions regarding construction site erosion control? If you used these materials or other educational materials and had meetings/trainings (even 1 on 1 meetings with builders/contractors/inspectors) then you can record that interaction as an active outreach. These training may have included the NEWSC Excal Video below.**

Excal Visual Videos on Pollution Prevention available for member checkout in 2022:

"Ground Control" – Stormwater for Construction BMPs
This employee training kit is designed to show employees how erosion, sediments and other potential surface water pollutants are controlled at construction sites. The program focuses on Best Management Practices (BMPs) that are widely used at most construction sites including: silt fence, stabilized entrances/exits, drop inlet protectors and others. The program illustrates how these BMPs work and how they can fail. (14 minutes)
Click here to preview from Excal Visual's site:
https://www.excalvisual.com/ground-control-extended-preview

BMP Master List

The purpose of the Stormwater Quality Management BMP master list is to allow MS4 and Public Works managers to easily search available stormwater and erosion control BMPs based on target pollutants, WDNR Technical Standards, and keywords. The master list provides insight into the benefits and limitations of each BMP, allowing the user to have a brief understanding of each device to help guide decision making when implementing or reviewing projects. The spreadsheet can be found on the NEWSC member resources page on newsc.org and HERE.

Model Ordinance Reference Guides

NEWSC's Construction Site Erosion Control Reference Guide and Post-Construction Pollution Control Reference Guide – the companion documents to NEWSC's model ordinances – have been updated and are available for member use. The documents can be found on the NEWSC member resources page on newsc.org.

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2.1.1

Topic #7: Pollution Prevention

The resources below were created by NEWSC and are available for NEWSC members to print and post by time clocks for training municipal staff.
If used in the in the manner above: Delivery Mechanism would be passive.

Fleet Maintenance	https://drive.google.com/file/d/1fIRY40S5nhHZU_7cIwGTHtDfwgLt7wbu/view?usp=sharing
Land Disturbances	https://drive.google.com/file/d/1VujZccTojAWZhjVcp4e6A9HytWjVAkGu/view?usp=sharing
Materials Storage and Spill Cleanup	https://drive.google.com/file/d/1J_2_SuMYXwmOsqdpsdIlNR_0klJ3qKMu/view?usp=sharing
Parks and Ground Maintenance	https://drive.google.com/file/d/14r436EKrJM44x_iPgioWXFrspmqbTVAq/view?usp=sharing
Solid Waste Operations	https://drive.google.com/file/d/1r2gimtAsRanIpxSCevFntWMJwI5Z5tMS/view?usp=sharing
Streets and Drainage Maintenance	https://drive.google.com/file/d/1KtikoiyMCIPVBhv5VOhYERUlrH52NFXo/view?usp=sharing

***Did you have active pollution prevention trainings? If you used these materials or other educational materials and had meetings/trainings, then you can record that interaction as an active outreach. These training may have included the NEWSC Excal Videos below.**

Excal Visual Videos on Pollution Prevention available for member checkout in 2022:

"Rain Check" - Stormwater Pollution Prevention for MS4s Regulated municipalities and other municipal separate storm sewer system (MS4) operators must prevent pollutants from entering their storm drainage systems. One element of this requirement is preventing stormwater pollution by municipal facilities such as fleet maintenance shops, bus barns, sanitation facilities, parks and street sweeping operations. This program shows employees how to practice good housekeeping, spill response, materials management, vehicle fueling and washing and the other BMPs profiled in the "National Menu". {Program versions run between: 19 -and up to- 31 minutes)	**"Storm Warnings" - Stormwater Pollution Prevention** This training kit is designed to provide general awareness training to employees and contractors about stormwater pollution prevention. It describes Best Management Practices (BMPs) that are useful and important at a wide range of regulated facilities. It covers good housekeeping and other BMPs that help protect stormwater run-off. The kit includes a template to guide the trainer through creating site specific training to use in addition to the general training in the video. (18 minutes) Click here to preview from Excal Visual's site:

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Click here to preview from Excal Visual's site: https://www.excalvisual.com/swrc-extended-preview	https://www.excalvisual.com/storm-warning-extended-preview

2.1.1

Topic #8: Green Infrastructure/Low Impact Development

NEWSC will be gathering resources for members to use going forward in 2023.

***Did you have active discussions with elected officials or developers about low impact residential design? If you had meetings/trainings or provided presentations on the topic, then you can record that interaction as an active outreach.**

2022 Workshops, Trainings, and Presentations

IDDE Webinar & Outfall Inspection Training

NEWSC presented a webinar to provide background and examples of illicit discharge detection and elimination programs. It also featured a training video meant to familiarize MS4 inspectors with several different types of outfalls and the data collection and sampling procedures used during field screening. A recording of the full training webinar can be found on the NEWSC member resources page and HERE. The outfall inspection training video can also be found on the member resources page and on YouTube.

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Erosion Control Training

NEWSC hosted an erosion control training to teach environmental impacts and regulatory requirements for erosion and sediment control; proper techniques to install, inspect, and BMP maintenance; and site plan examples. The audience included contractors, homebuilders, municipal inspectors, and others associated with land disturbing construction activity. The workshop presentation can be found HERE.
on the member resources page and on YouTube.

Erosion Control Workshop - Full Day	**Course ID: 22520**	**March 29, 2022**	**Attendees**
Calaway, Alex	Grefe, Rich	Lopez, Jasmine	Schneider, DJ
DeBruin, Tyler	Hammen, ethan	Malzahn, Adam	Sehrbrock, Richard W.
Drzewiecki, Jack	Hartjes, Brad	Masiarchin, Erich	Seidler, Jaymes
Dyb, Austin	Jalonen, Brent	Mayhew, Carol	Seymour, Scott
Ebben, Claire	Jandrey, Dennis	Meddaugh, Ethan	St Juliana, Leno
Faust, Dan	Keen, Justin	Morman, Michael	Stone, Riley
Feiner, Jack	Kerkman, Randy	Myers, Chelsea	Sweat, Aaron
Fetters, Peter	Kiesow, Kevin	Omernik, Scott	Woida, Taylor

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Gerbers, Robert	Klaske, Curt	Racine, Elisabeth	Yoder, Devin
Gerbers, Todd	Krug, Eric	Sanders, Brian	

Erosion Control Workshop - Half Day Attendees	**Course ID: 22521**	**November 3, 2022**
Buhrow Jr, Jerry	Hebert, William	Miller, Mike
Busko, David	Hoerth, Doug	Myers, Chelsea
Davister, Robbie	Humski, Alison	Nate, Cary
Davister, Robbie	Jensen, Chris	Nichols, Bill
Drager G., Jane	Jensen, Tryg	Omernik, Scott
Fetters, Peter	Krahn, Nicole	Prickett, Andrew
Fulcer, Lori	Lepinski, Travis	Racine, Elisabeth
Geiger S., Ryan	Lima, Katie	Schneider, DJ
Grefe, Richard Daniel	Malzahn, Adam	Seidler, Jaymes
Hahn, Paul	Meissner, David	Zarate, John

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2022 NEWSC SCHOOL PRESENTATIONS

The following presentations were provided in classrooms or virtually in NEWSC communities throughout the Fox-Wolf River Basin in 2022. These lessons covered watershed basics, how we use water, water quality, stormwater runoff pollution, floodplains, water quantity issues, green infrastructure, and tips for students and parents for reducing and preventing polluted stormwater runoff. Tools used for providing this education include: EnviroScape model, Ward's Floodplain model, stormwater find-it jars, stormwater runoff plinko, and templates for designing storm drain murals.

Stormwater Topic:	Discussed?	Stormwater Topic:	Discussed?
Illicit Discharge Detection & Elimination	YES	Residential Infiltration	YES
Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	YES	Construction sites and Post Construction Stormwater Management	YES
Yard Waste Management/Pesticide and Fertilizer Application	YES	Pollution Prevention	YES
Stream and Shoreline Management	YES	Green Infrastructure/Low Impact Development	NO

***If your community had school presentations in 2022, we recommend tying the school presentation in your annual report to a topic identified as discussed in the table above that you did not conduct outreach on in another way. These presentations are considered active outreach.**

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NEWSC provides school presentation upon request by teachers. If your school dist o present in your community, please reach out to your school district and share the School P https://drive.google.com/file/d/1fgeOMD2Zqd5yASOiPU7GdvD6lbMhgXo7/view?

Ashwaubenon

- 4/05/2022 Ashwaubenon High School presentation; approx. reach 80

Oshkosh

- 4/21/22 Emmeline Cook Elementary School; approx. reach 26

Appleton

- 5/23/22 Berry Elementary School; approx. reach 30

Green Bay

- 5/26/22 Eisenhower Elementary School; approx. reach 80

Outagamie County

- Outagamie County Conservation Field Days
  - 9/27/2022; approx. reach 280
  - 9/28/2022; approx. reach 191
  - 9/29/2022; approx. reach 304
    - Total approx. reach 775

Name of School	Total Number of Attendance
Johnston Elementary, Appleton	110
Highlands Elementary, Appleton	84
Xavier Middle School, Appleton	80
Mount Olive Lutheran, Appleton	28

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River View Middle School, Kaukauna	304
Columbus, Appleton	12
Horizons Elementary School , Appleton	46

Marinette

- 11/23/22 Marinette Recreation Center; approx. reach 15
- 12/27/22 Marinette Recreation Center; approx. reach 30

2022 NEWSC EXHIBITING

The following exhibits were coordinated at events in NEWSC communities throughout the Fox-Wolf River Basin. These educational exhibits provided information on watershed basics, water quality, stormwater runoff pollution, floodplains, water quantity issues, green infrastructure, and tips and advice for area residents for reducing and preventing polluted stormwater runoff. Tools used for providing this education include: Ward's Floodplain model, wheel of pollution, stormwater find-it jars, stormwater runoff plinko, the digital and paper watershed pledge, and educational flyers.

Stormwater Topic:	Discussed?	Stormwater Topic:	Discussed?
Illicit Discharge Detection & Elimination	YES	Residential Infiltration	YES
Household Hazardous Waste Disposal/Pet Waste Management/Vehicle Washing	YES	Construction sites and Post Construction Stormwater Management	NO
Yard Waste Management/Pesticide and Fertilizer Application	YES	Pollution Prevention	YES

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Stream and Shoreline Management	YES	Green Infrastructure/Low Impact Development	NO

***If your community had exhibitions in 2022, we recommend tying the exhibiting event in your annual report to a topic identified as discussed in the table above that you did not conduct outreach on in another way. Exhibiting is considered <u>active outreach</u>.**

Oshkosh
- 2/25/22 – 2/26/22 RV & Boat Main Sales Event at EAA grounds; approx. reach 22

Menasha
- 4/20/2022 Menasha Public Library presentation, part of watershed presentation series; reach 6

Allouez
- 6/12/2022 AllouezFest car show; reach 31

Greenville
- 7/08/2022 Catfish Races & Community Night; approx. reach 75

Buchanan
- 9/24/2022 Town of Buchanan Fire Department Safety Days; approx. reach 29

Kaukauna
- 9/24/2022 Focus on the Fox event at 1000 Islands Environmental Center; approx. reach 225

Community Presentations (Active Participation):

Pulaski
- 2/10/2022 Cub Scouts presentation; approx. reach 45

Appleton
- 4/10/2022 Girl Scouts presentation in Appleton; reach 12

Winnebago County
- 5/05/2022 Winnebago County Land Conservation Committee presentation; approx. reach 10

Menasha
- 4/20/2022 Menasha Library watershed presentation; reach 6

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- 6/22/2022 Menasha Library Trash Free Waters program presentation; reach 3

Other

- 02/24/2022 Presentation at Wisconsin Parks and Recreation Association Annual Conference in Wisconsin Dells; reach 3

Litterati Cleanup Challenges (Active Participation)

In spring of 2022, we had 10 active participants in the Litterati Cleanup Challenge and they collected a total of 1,449 pieces of garbage. The Litterati app has changed and can longer see the collection locations. It is a GIS based app and we are looking into how to get access to this information for 2023.

Chloride Monitoring (Active Participation, with Documentation):

Fall 2021/Winter 2022 Chloride Monitoring Season: Data and photos can be found on the Google Map

Municipality	Location	# of Readings
Neenah	Neenah Slough	4
	Adams St. Bridge	2
Green Bay	Baird Creek	3
Municipality	**Location**	**# of Readings**
Green Bay	East River	1
Hobart	Duck Creek	2
Menasha	Rebecca Creek	3
	Firelane 4	2
	Oneida St. trib.	2
Grand Chute	Mud Creek @ Fox River Mall	2
	Stormwater Pond 1	2
	Stormwater Pond 2	2
Appleton	Apple Creek	2
	Kensington Drainage	1
	Telulah Park	3
Calumet County	Irish Creek	1
	Manitowoc River	1
Oshkosh	Riverside Cemetery	1
	Sawyer Creek	1
Municipality	**Location**	**# of Readings**

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Oshkosh	Campbell Creek	1
Winnebago County	Coughlin Park	4
Fox Crossing	Arrowhead Park	2
	Mud Creek	1
Algoma	Honey Creek	4
Outagamie County	Black Otter Creek	2
	Mackville Creek	3
	Wolf River	2

Fond du Lac County	Sheboygan River trib.	3
Kaukauna	Konkapot Creek	2
Brown County	Plum Creek	3
Fond du Lac	DeNeveu Creek	2
Combined Locks	Garner Creek	1
Allouez	Green Isle Park	1
	East River	1
Ashwaubenon	Ashwaubenon Creek	3

NEWSC 2023-2024 Exhibiting Lists

Each year NEWSC will commit to exhibiting at an event on behalf of 20% of our membership, ensuring we exhibit in each member community once during a 5 year permit cycle. *The communities assigned in a given year will be guaranteed a NEWSC presence at a community event during that year, given that the NEWSC member work with the Outreach Coordinator to get the event on the exhibiting calendar by March 30 and work to coordinate with the event host.*

2023	2024
City of Marinette	City of Fond du Lac
Brown County	City of Two Rivers
Village of Ashwaubenon	Outagamie County
Village of Fox Crossing	City of De Pere
Village of Kimberly	City of Manitowoc
Village of Suamico	City of Neenah
Town of Clayton	Town of Vinland
Town of Grand Chute	Town of Omro
Town of Ledgeview	

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Village of Combined Locks	
Village of Little Chute	
UW Oshkosh	

To ensure your space is reserved NEWSC members must:

1. **Contact the Outreach Coordinator by March 30** of the year you are scheduled with the name of event, date of the event and contact information for the event organizer that you would like the Outreach Coordinator to be a part of.
2. Work with the Outreach Coordinator and the event organizer to ensure acceptance of NEWSC participation at the event. Pay any exhibiting fees (if any) for the event. For most community events, NEWSC members are able to coordinate with event host free exhibit space, if the event chosen does not waive exhibit fees for the community, those fees are the responsibility of the NEWSC member.

If communities do not schedule the Outreach Coordinator to participate by March 30, invitations to the Outreach Coordinator from other communities for events will be entertained and all invites will be accepted as time is available on a first come first serve basis. If the Outreach Coordinator is unable to exhibit in your community due to workload or date of event, NEWSC members may check out exhibiting materials from NEWSC. Promotional materials will be provided as part of the exhibiting display if NEWSC has promotional items to hand out.

Media:

Facebook: _354__ likes, _303__ shares, _4640_ followers
Instagram: _215__likes, _955__ followers

- 1/10/22 Sweep the Salt/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=230390909275744&set=pb.100069145091944.-2207520000..&type=3
- 1/11/22 The Cost of Salt/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=230870392561129&set=pb.100069145091944.-2207520000..&type=3
- 1/17/22 Stormwater Education https://www.facebook.com/photo.php?fbid=234666145514887&set=pb.100069145091944.-2207520000..&type=3
- 1/18/22 Shovel Before Salting/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=235173055464196&set=pb.100069145091944.-2207520000..&type=3
- 1/25/22 Switch to Sand/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=239430191705149&set=pb.100069145091944.-2207520000..&type=3
- 1/25/22 Scatter Salt/WI Salt Awareness Week https://www.facebook.com/photo/?fbid=239456525035849&set=pb.100069145091944.-2207520000..

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- 1/26/22 Salt and Pet Paws/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=240023608312474&set=pb.100069145091944.-2207520000..&type=3
- 1/27/22 Salt Alternative for Traction/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=240634438251391&set=pb.100069145091944.-2207520000..&type=3
- 1/28/22 Chloride Pollution/WI Salt Awareness Week https://www.facebook.com/photo.php?fbid=241323064849195&set=pb.100069145091944.-2207520000..&type=3
- 2/8/22 Residential Carpet Cleaning https://www.facebook.com/photo.php?fbid=248092087505626&set=pb.100069145091944.-2207520000..&type=3
- 3/8/22 Good Dog, Good Owner https://www.facebook.com/photo.php?fbid=266746465640188&set=pb.100069145091944.-2207520000..&type=3
- 4/12/22 Household Hazardous Waste https://www.facebook.com/photo.php?fbid=288731013441733&set=pb.100069145091944.-2207520000..&type=3
- 5/10/22 Grass Clippings https://www.facebook.com/photo/?fbid=306961101618724&set=a.189201083394727
- 6/14/22 Grass Swale https://www.facebook.com/photo?fbid=330867759228058&set=a.189201083394727
- 6/29/22 Rain Barrel raffle https://www.facebook.com/photo/?fbid=341309721517195&set=a.189201083394727
- 7/7/22 Sweeping Grass Clippings https://www.facebook.com/photo/?fbid=346518240996343&set=a.189201083394727
- 9/13/22 Drain Your Pool and Spa (Fish Don't Swim in Chlorine) https://www.facebook.com/photo?fbid=392743306373836&set=a.189201083394727
- 10/3/22 Winter Workshop https://www.facebook.com/photo/?fbid=416662953981871&set=a.189201083394727
- 10/17/22 Salt Watch Volunteer Opportunity https://www.facebook.com/photo/?fbid=420082713639895&set=a.189201083394727

Media:
Facebook: _354__ likes, _303__ shares, _4640_ followers
Instagram: _215__likes, _955__ followers

- 10/24/22 Salt Watch Volunteer Opportunity reminder https://www.facebook.com/photo/?fbid=425760229738810&set=a.189201083394727
- 11/3/22 Leaf Infographic https://www.facebook.com/photo/?fbid=433095445671955&set=a.189201083394727
- 11/3/22 Fertilizer Infographic https://www.facebook.com/photo/?fbid=437561555225344&set=a.189201083394727
- 11/29 School Event https://www.facebook.com/foxwolfriver/posts/pfbid036dHjR6E4BgoAXYZ1eVe1fcdXDK6MfDzGCpz3oBRcroyhnJJhNpNDDdBrrBKCm1SFl
- 12/11/22 Salt Awareness Week https://www.facebook.com/photo/?fbid=461316586183174&set=a.189201083394727

NEWSC also started utilizing twitter at the end of 2022 and will continue to do so to share information using all of our resource

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Thank You, 2022 Leadership Council Members!

CHAIR Heath Kummerow **(2022-2023)** City of Neenah	**VICE-CHAIR** Brent Jalonen **(2022 - 2023)** Calumet County	**SECRETARY/TREASURER** Rich Heath **(2022 - 2023)** Town of Algoma	**PAST-CHAIR** Eric Rakers **(2022-2023)** City of DePere
MUNICIPAL COMMITTEE James Rabe **(2022 - 2024)** City of Oshkosh	**GENERAL PUBLIC COMMITTEE** Andy Maracini **(2022-2024)** Winnebago County	**BUILDING & DEVELOPMENT COMMITTEE** Brad Hartjes **(2021-2023)** raSmith	**STORMWATER QUALITY MANAGEMENT COMMITTEE** Chris Murawski **(2020-2022)** Village of Little Chute
MEMBER-AT-LARGE John Neumeier **(2020-2022)** City of Kaukauna	**MEMBER-AT-LARGE** George Dearborn **(2020-2022)** Village of Fox-Crossing	**MEMBER-AT-LARGE** Danielle Santry **(2022-2024)** Calumet County	

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Thank You, 2022 Committee Members!

General Public Committee	**Municipal Committee**	**Stormwater Quality Management Committee**	**Building & Development Committee**
Andy Maracini – Winnebago County	James Rabe – City of Oshkosh	Chris Murawski – Village of Little Chute	Brad Hartjes – raSmith
Dani Santry – Calumet County	Jeff Mazanec – raSmith	George Dearborn – Village of Fox Crossing	Nick Waldschmidt – City of Fond du Lac
George Dearborn – Village of Fox Crossing	Scott Ahl – Town of Two Rivers	Paul Willis – Mead & Hunt	Brent Jalonen – Calumet County
Brian Wayner – Westwood Professional Services	John Neumeier – City of Kaukauna	Abby Maslanka – Martenson & Eisele	Patrick Kuehl – Robert E. Lee
	Sue Olson – City of Appleton	Justin Keen – Cedar Corporation	Claire Ebben – Outagamie County
	Casey Canady – City of Oshkosh	Rich Heath – Town of Algoma	Katie Buchalski – Ruekert-Mielke
		Heather Zaunmueller – AECOM	

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Danielle Block, Director of Public Works
Ross Buetow, City Engineer
Pete Neuberger, Staff Engineer

SUBJECT: Award of Unit K-23 Native Landscape Management Contract to NES Ecological Services – A Division of Robert E. Lee & Associates, in an amount not to exceed $215,000.

DATE: March 1, 2023

The Department of Public Works is requesting approval of the Unit K-23 Native Landscape Management Contract to NES Ecological Services – A Division of Robert E. Lee & Associates, in an amount not to exceed $215,000. The 2023 combined capital and maintenance native landscaping budget is $215,000.

CONTRACT SCOPE

The Department of Public Works maintains an inventory of 77 stormwater ponds and biofilters, along with several miles of drainage channels that have native landscaping. The proposed maintenance activities included in this contract are mowing, cutting, controlled burns, invasive species and algae control, and adding vegetation to sparsely established and eroding areas at stormwater practices operated by both DPW and Facilities. Proposed new installation activities include preparation, seeding and planting in emergent, shoreline, and upland zones on new stormwater facilities.

CONTRACTOR SELECTION

In January 2022 the Department of Public Works issued a Request for Proposals (RFP) from three firms with significant native landscape management experience in Wisconsin. Three proposals were received. The review team initially evaluated each proposal based on the following Technical Scoring criteria:

Technical Scoring (100 Total Possible Points):

A. Relevant Experience of Firm (Max 35 Points)
B. Project Team Members (Max 20 Points)
C. Project Understanding and Approach (Max 35 Points)
D. Project Schedule (Max 15 Points)

The RFP also encouraged respondents to offer alternative approaches and prices to proposed tasks. Where appropriate, incorporated select alternative tasks and prices into the evaluations to maximize cost-effectiveness.

After technical scoring was completed, the review team calculated the Overall Score for each proposal by taking the total bid price of each firm's Cost Proposal and dividing it by its respective Technical Score:

Overall Score (Price Per Point) = Cost Proposal ÷ Technical Score

Rank	Firm	Technical Score	Cost Proposal	Price Per Point
1.	RES	97.5	$172,052	$1,765
2.	NES	96.0	$171,414	$1,786
3.	Merjent	80.0	$169,973	$2,125

As indicated above, RES submitted the highest ranked proposal with the best Price Per Point and was selected for 2022 contracted services under unit K-22. NES was ranked a close second.

Since 2012, DPW's practice has been to issue Unit K RFP's every five years, awarding the first year's contract based on the competitive proposal and with annual contracts for the subsequent four years being negotiated using single-source contracts with the highest ranked contractor, subject to staff recommendation and approvals by Utilities Committee and Council each year. The K-22 award memo dated February 15, 2022 also identified that for 2023 through 2026, DPW staff intended to use the same approach, negotiating a single-source contract for Unit K with the selected contractor each year, subject to committee and council approvals at the appropriate times.

However, in February 2023, RES, which is headquartered in Texas and whose main Midwest office is in Brodhead, WI, notified DPW staff that they are shutting down their northeast Wisconsin office in Brillion, and would no longer be able to service the City's Unit K contracts, effective immediately.

Given the late notification from RES, the need to begin K-23 work as soon as possible, and the excellent proposal submitted previously by NES, DPW staff approached NES to determine their willingness to negotiate a single source contract based on their 2022 proposal.

NES agreed and has provided DPW an updated proposal for 2023 that includes a 5% price increase versus their proposed 2022 unit prices. Given the current inflationary environment, DPW staff consider this a reasonable price increase and look forward to the opportunity to work with this local contractor if approval is granted.

"…meeting community needs…enhancing quality of life."

Department of Utilities
Wastewater Treatment Plant
2006 E Newberry Street
Appleton, WI 54915-3128
920-832-5945 tel.
920-832-5949 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Utilities Director Chris Shaw

DATE: Friday, February 10, 2023

RE: ***Information Item: Change Order #1 to Badger Specialty Coatings, LLC for the DAF Coatings Project in the amount of $5,600 resulting in a decrease of contingency from $5,900 to $300***

BACKGROUND

The Appleton Wastewater Treatment Plant (AWWTP) staff identified four carbon steel tanks that were in need of exterior maintenance. The tanks were installed in 1978 and each has a volume of 35,000 gallons. The resulting coatings project is meant to provide a coatings system that will prevent corrosion on the exterior of the tanks.

CHANGE ORDER #1

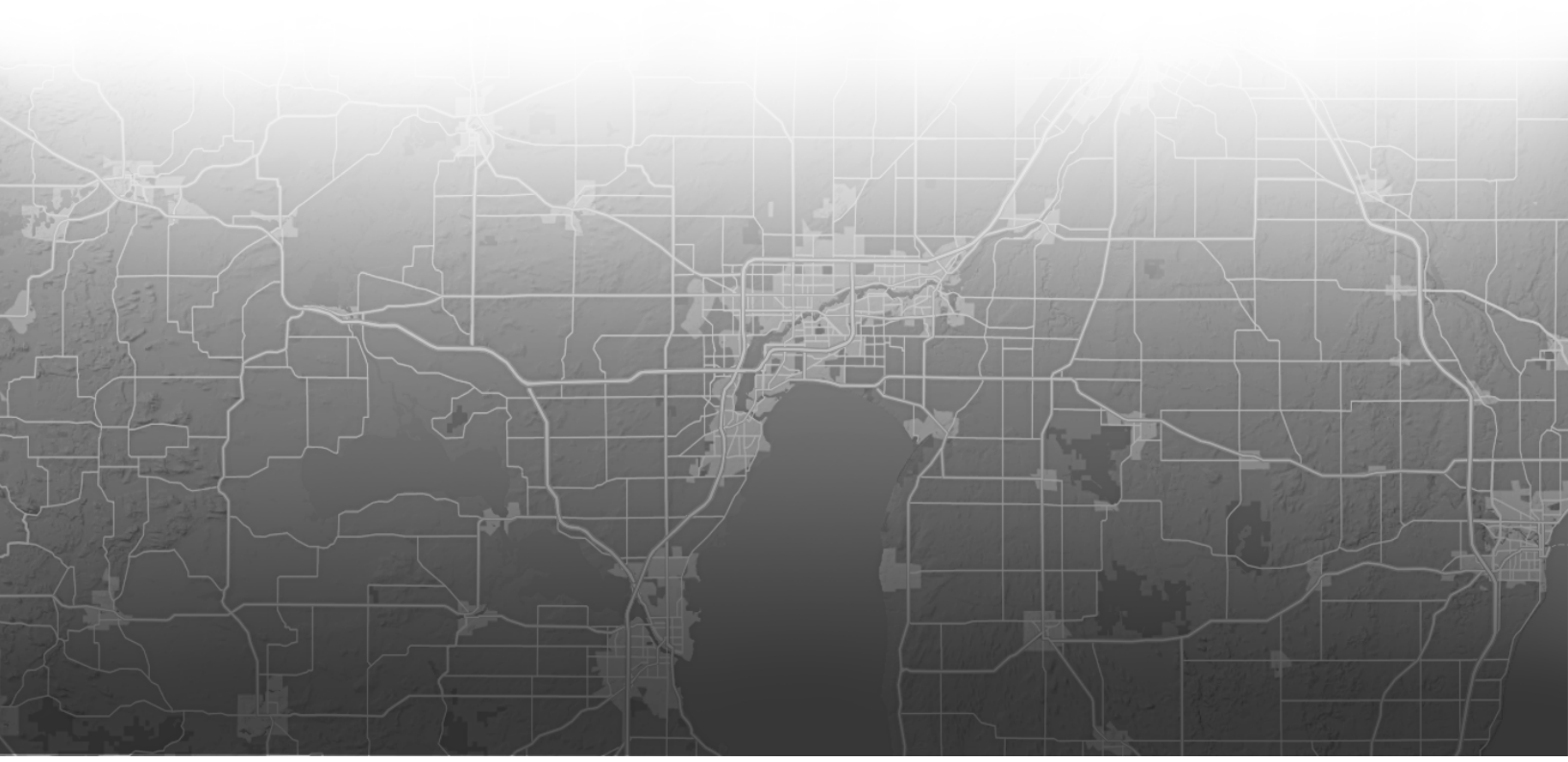
Change Order #1 is to provide concrete repairs and a coating system on concrete surfaces at the tank bases. Additional work includes pump pad and surface preparation of steel pump bases on #1 and #2 Receiving Stations. In terms of funding, the Badger Specialty Coatings contract bid and contract amount is $59,000 with an approved contingency of $5,900.

SUMMARY

Change Order #1 to Badger Specialty Coatings, LLC for the DAF Coatings Project in the amount of $5,600 resulting in a decrease of contingency from $5,900 to $300.

Appleton Wastewater SARS–CoV–2 Report

March 2, 2023



WISCONSIN DEPARTMENT of HEALTH SERVICES

UNIVERSITY of WISCONSIN UWMILWAUKEE

Wisconsin State Laboratory of Hygiene
UNIVERSITY OF WISCONSIN–MADISON

Samples to Date: 252

Current Concentration: Low

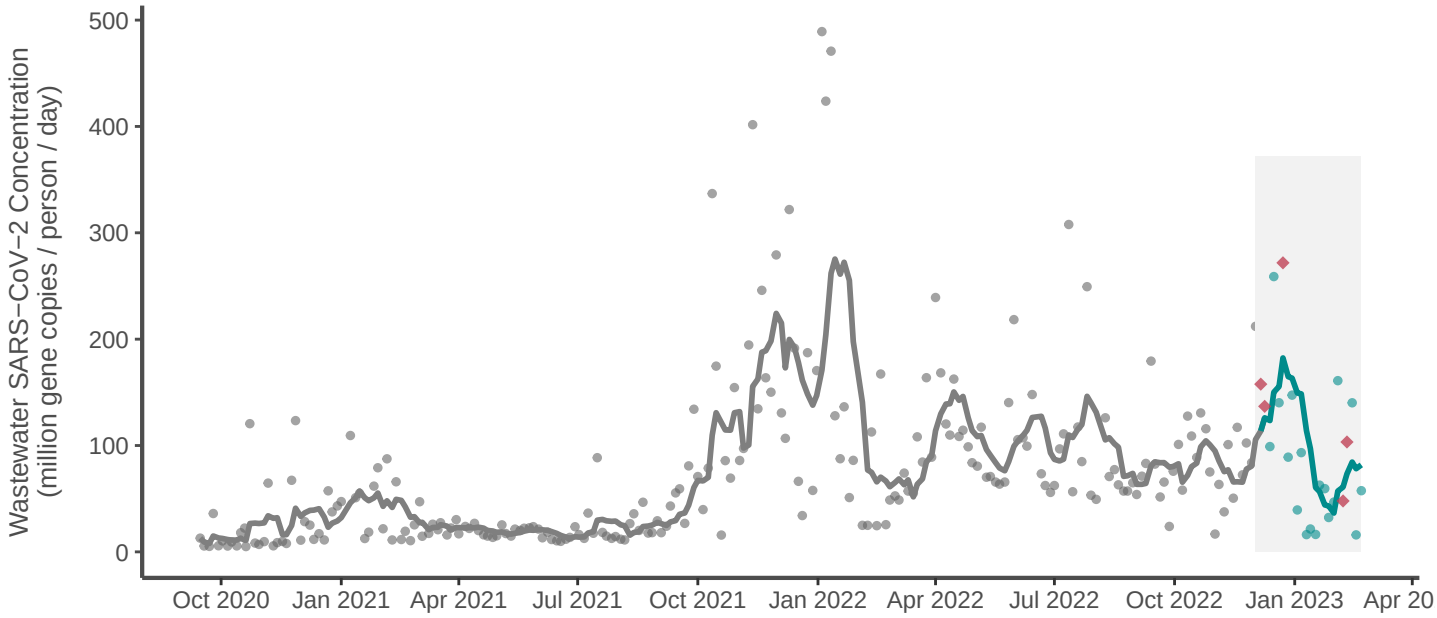
Virus levels have been adjusted (normalized) for the flow rate and number of people served by Appleton WWTF. The average of the three most recent SARS-CoV-2 measurements is 71 million gene copies per person per day, which is low compared to the past six months of data.

Concentration categories compare the average of the three most recent data points to the last 6 months of data, and assign levels based on percentile:

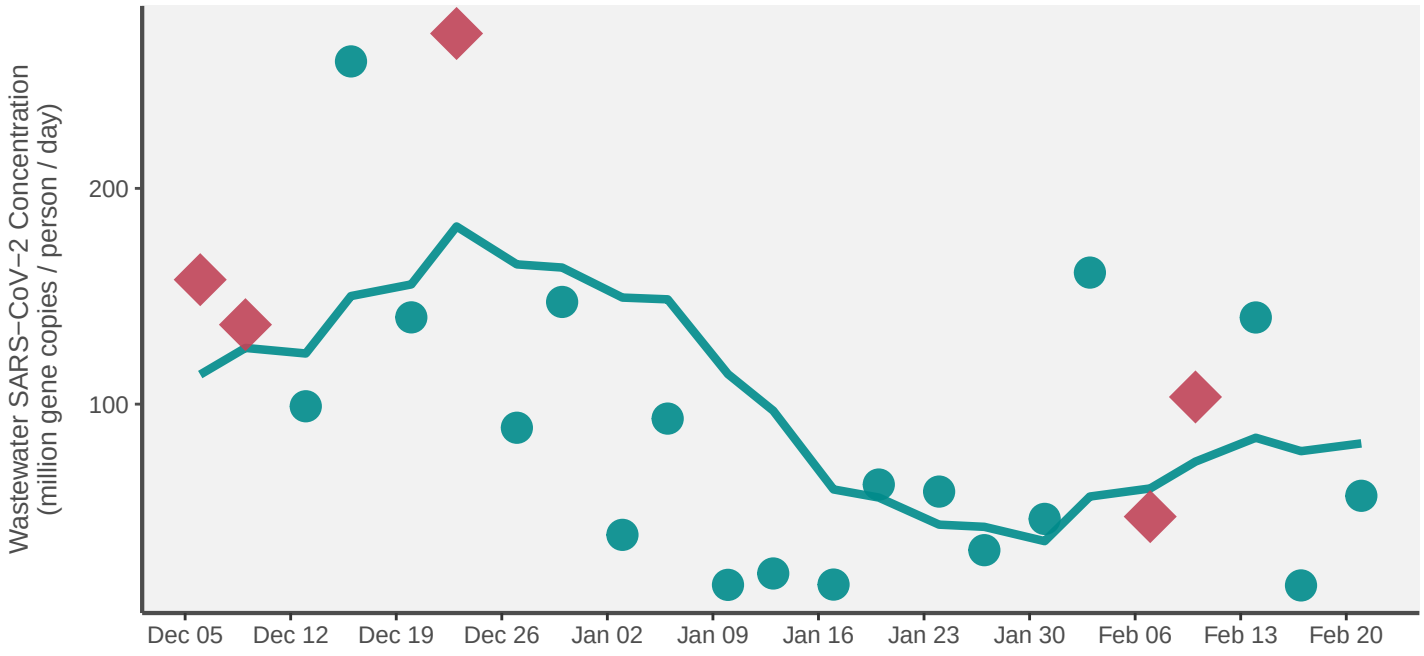
Very High	Highest 20%
High	60th-80th percentile
Moderate	40th-60th percentile
Low	20th-40th percentile
Very Low	Lowest 20%

Wastewater trends for Wisconsin can be found on our Wastewater Surveillance Dashboard.

All Time Wastewater Trend for Appleton (Sep 15, 2020–Mar 2, 2023)



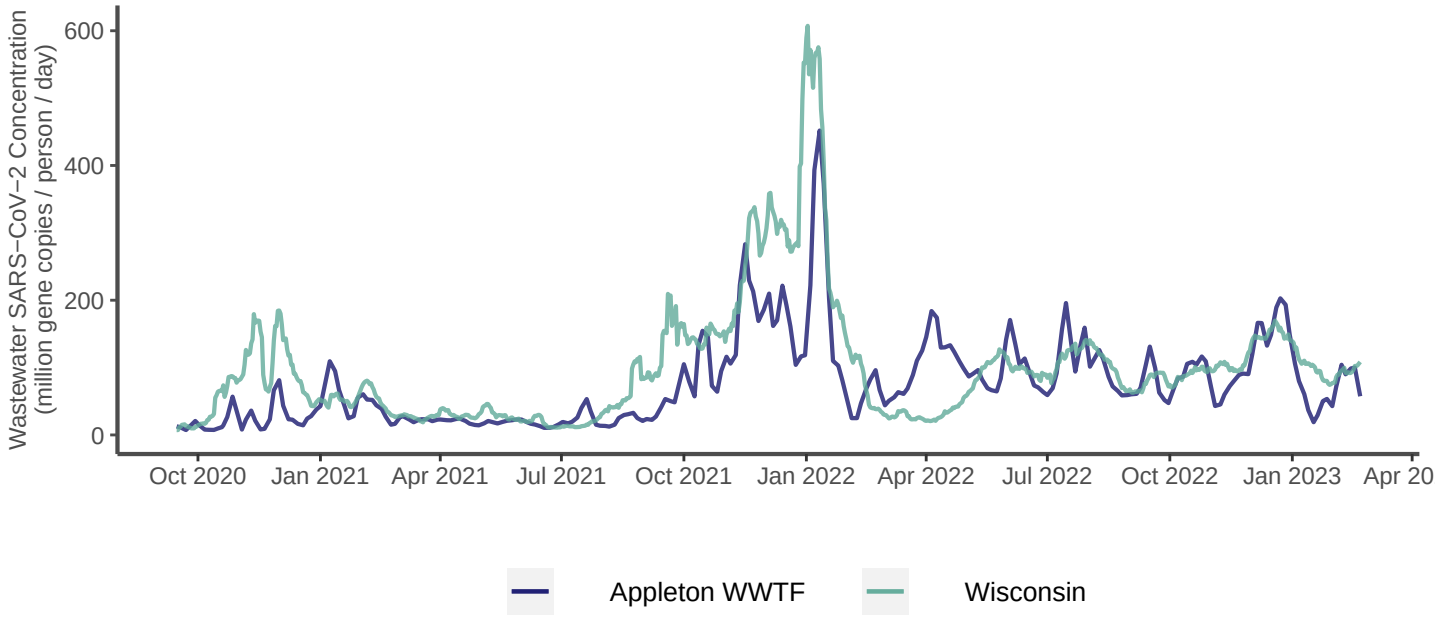
90-Day Wastewater Trend for Appleton (Dec 2, 2022–Mar 2, 2023)



◆ - Significant Increase

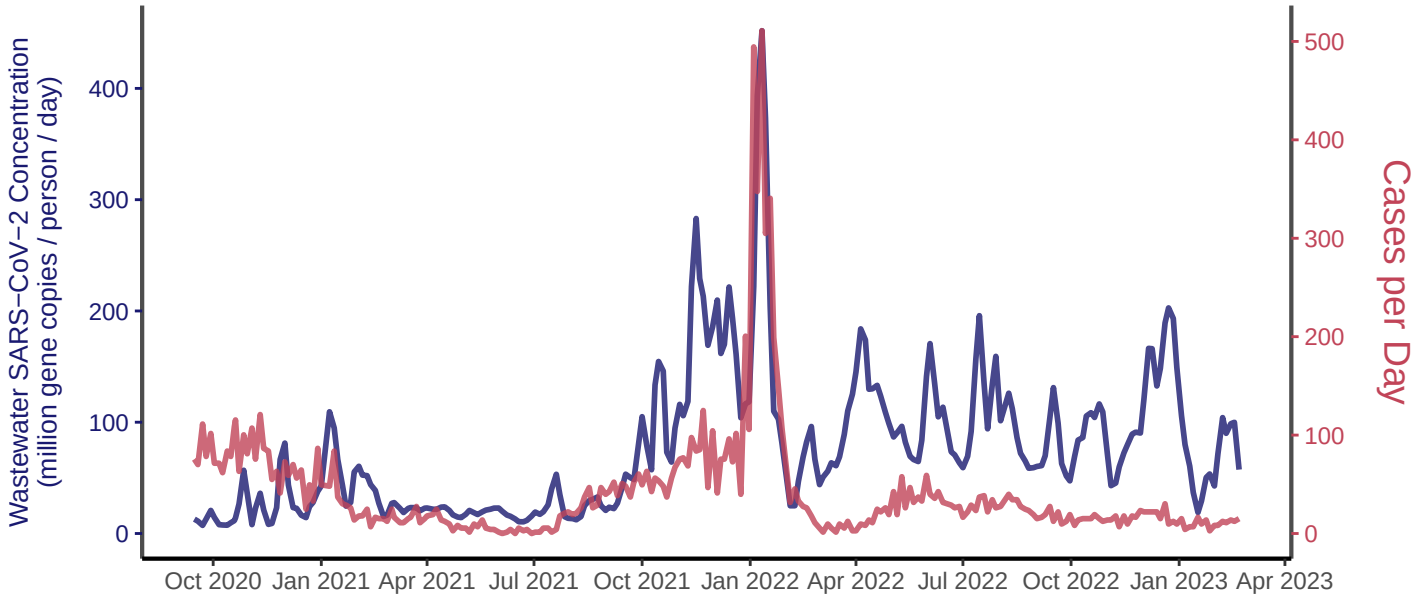
A datapoint is defined as a **significant increase** if a linear regression for the past five measurements is significantly increasing ($p < 0.3$) and if the average of the most recent three datapoints is greater than 80% of the measurements from the last 30 days.

Comparison of Appleton Wastewater Trends with Statewide Average



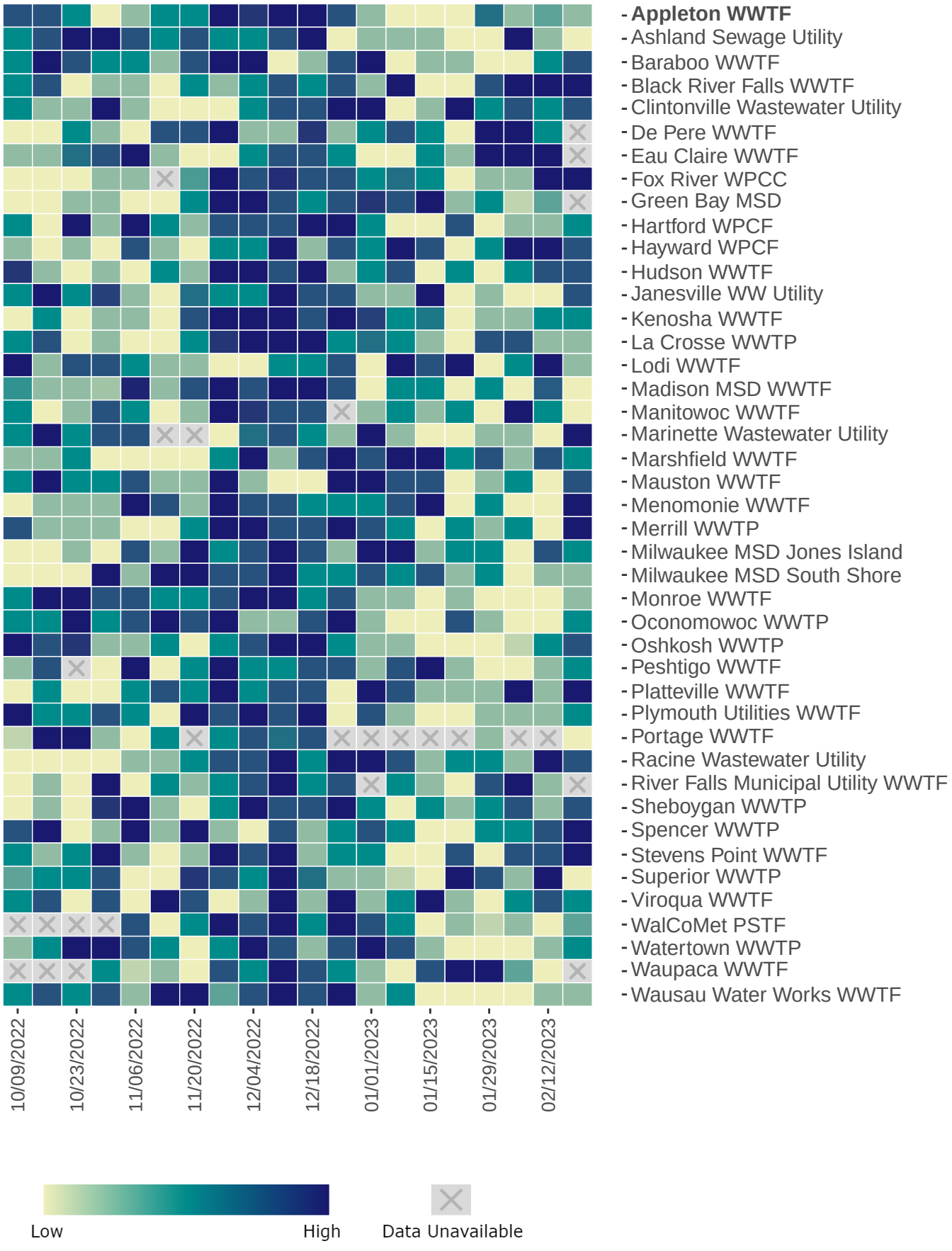
The statewide average is based on the 7-day rolling average SARS-CoV-2 concentration for all participating wastewater treatment facilities combined.

Comparison Between Appleton SARS-CoV-2 Concentrations and COVID-19 Cases



The number of cases is based on the 7-day rolling average number of cases in the location served by Appleton WWTF.

Comparison of Wastewater SARS-CoV-2 Concentrations Between Facilities



"…meeting community needs…enhancing quality of life."

Department of Utilities
Wastewater Treatment Plant
2006 E Newberry Street
Appleton, WI 54915
920-832-5945 tel.
920-832-5949 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Chris Shaw, Utilities Director

DATE: February 20, 2023

RE: ***Appleton Wastewater Treatment Plant Follow Up regarding the Polymer Incident of December 26, 2023***

BACKGROUND:

On Monday, December 26, 2022 a bulk load of polymer, which is a chemical used for dewatering, was unloaded into the plant's Hauled Waste Station. The polymer was mixed with hauled waste and the comingled material entered all three hauled waste tanks. Approximately half of the comingled polymer was forward fed to the primary digestion process. This resulted in pipes and equipment becoming plugged or inoperable. Anaerobic digestion equipment was impacted the greatest with loss of feed, gas mix, gas collection, heating, and circulation.

Early on December 27, Mayor Woodford established an Emergency Operations Center (EOC) as part an Incident Command Structure (ICS). The EOC supported the on-scene activities with assistance, communication efforts, and resources. The wastewater plant staff paused all solids treatment to the digesters. The plant staff received regulatory approval and returned to functional treatment operations without the anaerobic digesters.

Initial impacts of this process change were loss of methane production for heating the digesters and 17 campus buildings, pause of the Hauled Waste Program, and an undigested blended sludge production without digestion.

Staff had immediately implemented an environmental plan that ensured the comingled polymer did not reach either the sanitary or storm sewer systems. The plan proved successful and the plant effluent, which is discharged to the Fox River, was not impacted from the process changes.

Polymer incident efforts to date include inventorying, isolating, and removing the product from process equipment. In total, 75,000 gallons was removed as comingled high strength waste and polymer. Storage of the contaminated polymer has been relegated to the Lime Slurry Thickener Tank 2. Treatment assessments and repairs occurred with staff and contractors. Support operations have come from other city departments, contractors, and McMahon Associates.

CURRENT PLANT SAFETY STATUS:

The contaminated polymer affected the anaerobic digesters by concentrating approximately 1,000,000 pounds of solids in the lower and upper sections of the digesters. This separation made digester feeding, withdrawal, circulation mixing, gas mix and gas withdrawal unachievable. The solids that buoyed to the top of the digester vessels constricted gas movement until uncontrollable gas releases occurred. Additionally, an access door to the gas system was opened on #2 Primary Digester and released gas to atmosphere until remedied by staff with assistance from the Appleton Fire Department.

In terms of the digesters, staff deployed a series of operational changes to resuspend solids and release gas to return the digesters to engineered design conditions. In doing so, staff were able to restart pumping, circulation, mixing, and sludge and gas withdrawal systems. Currently, the anaerobic digesters are operating within design conditions and safely producing 200,000 gallons of anaerobically digested sludge and processing 500,000 cubic feet of digester gas per day.

CURRENT TREATMENT CAPABILTIES:

The anaerobic digesters were returned to service on January 10, 2023. On January 17, 2023, the Hauled Waste Program to the plant headworks returned. Headworks hauled waste accounts for approximately 20% of the total revenue from the Hauled Waste Program. From January 10 through January 22, two of the three contaminated hauled waste tanks that contained fats were converted to emulsifying tanks. After the materials in the hauled waste tanks were treated the contents were pumped out and the tanks were cleaned. The tanks were now available for hauled waste to the primary digesters. The hauled waste program to the digesters returned on January 23, 2023. The WDNR was also notified that the Appleton hauled waste program was open for permitted wastes.

REGULATORY COMPLIANCE STATUS:

I previously reported that a return to anaerobic digestion would be needed to meet the Wisconsin Pollution Discharge Elimination System (WPDES) permit requirements for biosolids. However, due to positive analytical testing results, the AWWTP did meet the WPDES permit requirements even without digestion. As such, there is not a requirement to landfill the blended sludges (undigested sludge) that was created during the polymer event. In summary, there were not any regulatory issues or permit violations as a result of this incident.

HAULED WASTE IMPACT:

The Hauled Waste Program was affected by a loss of waste and revenue during the event. The projected revenue not realized is estimated to be $133,861. As of February 14, the majority of remediation expenses had been reported and have been included in this report. The remediation response expenses included salaries of city staff, mechanical contractor

work, engineering, polymer product loss, natural gas purchases. These response expenses totaled $240,655.

Conversely, due to the hauled waste reprieve, some operating expenses were not experienced (e.g., hauled waste: electrical, chemical, biosolids generation and land application). The estimated avoided expenses totaled $46,264.

In total, the response and hauled waste program losses are estimated to be 2.3% of projected revenues for 2023. It should be noted that the hauled waste losses are a projection and actual revenues will be recorded at year's end.

INSURANCE CLAIM:

The City's insurance carrier has been noticed of a claim for property damages (e.g., elevator repair, gas, and smoke alarm repairs, etc.).

PROGRAM RECOMMENDATIONS:

An investigative team was formed to find root causes and provide recommendations to eliminate future occurrences. That team's findings will be presented to a third party that has working experience reviewing similar industrial incidents. The report findings and corrective actions are currently being addressed to the extent possible with the open insurance claim. Forthcoming information on this matter will be reported out as it becomes available.

Wastewater Polymer Incident Expense Report

Org	Object	Project	Description	2022 Actual	2023 Actual	Expense to Date	PO's, Adjustments Signed Contracts	
5411	610100	4539	Regular Salaries	3,438.22	7,535.14	10,973.36	0.00	**
5411	610200	4539	Labor Pool Allocations	0.00	0.00	0.00	0.00	
5411	610400	4539	Call Time Wages	0.00	0.00	0.00	0.00	
5411	610500	4539	Overtime Wages	0.00	0.00	0.00	0.00	
5411	615100	4539	FICA	178.95	540.74	719.69	0.00	
5411	615200	4539	Retirement	233.80	512.39	746.19	0.00	
5411	615301	4539	Health Insurance	475.05	1,286.58	1,761.63	0.00	
5411	615302	4539	Dental Insurance	32.79	89.81	122.60	0.00	
5422	610100	4539	Regular Salaries	2,611.42	8,338.82	10,950.24	0.00	**
5422	610200	4539	Labor Pool Allocations	2,899.65	9,758.27	12,657.92	0.00	
5422	610400	4539	Call Time Wages	450.00	200.00	650.00	0.00	
5422	610500	4539	Overtime Wages	3,463.86	7,177.23	10,641.09	0.00	
5422	615100	4539	FICA	595.96	1,973.77	2,569.73	0.00	
5422	615200	4539	Retirement	561.30	1,852.55	2,413.85	0.00	
5422	615301	4539	Health Insurance	1,880.51	5,133.22	7,013.73	0.00	
5422	615302	4539	Dental Insurance	114.40	319.34	433.74	0.00	
5422	631000	4539	Miscellaneous Chemicals	66,830.40	0.00	66,830.40	0.00	
5422	632601	4539	Repair Parts	0.00	3,079.73	3,079.73	0.00	
5422	640400	4539	Consulting Services	1,557.00	9,318.75	10,875.75	4,883.25	
5422	640800	4539	Contractor Fees	0.00	500.00	500.00	50,963.11	*
5422	643200	4539	Lab Fees	0.00	2,412.05	2,412.05	0.00	
5422	659900	4539	Other Contracts/Obligation	1,551.13	2,565.35	4,116.48	0.00	
				$86,874.44	$62,593.74	$149,468.18	$55,846.36	

Total Expenses, PO's & known open contracts	$205,314.54
Estimated Lost Revenue	$133,860.76
Estimated reduction in expense due to no hauled waste	($46,264.00)
Estimated Natural Gas purchase for 24 days	$35,340.00
	$328,251.30

* Includes estimated invoice of $30,000 for elevator service
** Does not include labor costs from 1/29/2023 - 2/11/2023
*** Final review of January labor costs needs to be completed

as of 2/14/2023

Appleton Wastewater Treatment Plant
Operations Synopsis
October 2022 – December 2022

Wastewater Treatment Program

- The Appleton Wastewater Treatment Plant (AWWTP) final effluent met Wisconsin Department of Natural Resources (WDNR) discharge monitoring reporting limits for carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), phosphorous, and ammonia. The plant maintained good treatment and a healthy microbiological population with a sludge retention time of 9.0 days. Dewatering processes functioned well and converted 15.9 million gallons (MG) of primary digested sludge to biosolids.
- On December 26, 2022, a bulk load of cationic polymer was off loaded into the Hauled Waste Station. The polymer entered the anaerobic digesters and caused a cascade of equipment and process issues resulting in bypassing the digesters. This matter is being addressed separately from the synopsis and communicated to the Utilities Committee through a series of updates at the Utilities Committee meetings.

Summary of Treatment

Parameter	October	November	December	Average
Industrial Flow (MG)	30.0	30.1	37.9	32.7
Domestic Flow (MG)	219.9	320.0	276.5	272.1
Total Flow (MG)	249.9	350.1	314.4	304.8
Influent CBOD Load (Avg Daily lbs)	22,128	22,012	23,034	22,391
Influent TSS Load (Avg Daily lbs)	44,693	46,999	45,980	45,891
Influent Phosphorous Load (Avg Daily lbs)	423	434	439	432
Influent Ammonia Load (Avg Daily lbs)	2,537	2,194	2,287	2,339
Effluent CBOD Load (Avg Daily lbs)	445	608	556	536
Effluent TSS Load (Avg Daily lbs)	222	486	284	331
Effluent Phosphorous Load (Avg Daily lbs)	10	19	14	14
Effluent Ammonia Load (Avg Daily lbs)	37	89	172	99
% Treatment Removal of CBOD	98.0	97.2	97.6	97.6
% Treatment Removal of TSS	99.5	99.0	99.4	99.3
% Treatment Removal of Phosphorous	97.6	95.6	96.8	96.7
% Treatment Removal of Ammonia	98.5	95.9	92.5	95.7

Project Updates

- 2019 Appleton Wastewater Plant Improvement Projects: The project includes replacement of the Return Activated Sludge (RAS) pumps, process piping modifications (e.g., blended sludge, filtrate, waste gas flare), outside secondary chemical offloading containment repairs, primary clarifiers #5 & #6 drive replacements (2020 CIP), and H-Building effluent pump replacements (2020 CIP). Final project completion occurred during the 4th quarter of 2022. -- **COMPLETE**
- 2021 Secondary Clarifier Drive Rebuild Project: On June 2, 2021, Common Council approved contract award for the removal, rebuilding, and reinstallation of drive equipment on Secondary Clarifiers #1 through #6 to Sabel Mechanical. Sabel Mechanical successfully reinstalled the drives on Secondary Clarifiers #1 and #2 in August 2022. Sabel removed the last two drives on Secondary Clarifiers #4 and #5 for rebuilding

in September. Sabel completed work and successful commissioned the final two drives in November 2022 which concluded this project. -- **COMPLETE**

- Appleton Wastewater Treatment Plant Sludge Storage Building Addition: The construction contract with Miron Construction in the amount of $5,330,989 was approved by Common Council on July 20, 2022. The contract was subsequently fully executed with a formal notice to proceed issued by Applied Technologies, Inc. on August 2, 2022. The construction submittal process immediately pursued with active construction tentatively scheduled for March or April 2023.
- 2022 Phase I Appleton Wastewater Plant Belt Filter Press Equipment Upgrades: McMahon Associates, Inc. (McMahon) continued engineering services as part of the Solids Dewatering Equipment Upgrades project. The AWWTP will be replacing all three exiting Belt Filter Press (BFP) units and add one additional BFP. The additional BFP will provide the required dewatering capacity based on future growth projections and redundancy to facilitate critical maintenance events. The public bidding phase was initiated October 20, 2022, and closed on November 10, 2022, with Staab Construction as the least cost bidder at $5,063,000. Contract award subsequently occurred at Common Council December 7, 2022 with the Notice to Award issued thereafter. Contract execution and formal Notice to Proceed is expected to occur in early January 2023.

Regulatory Summary

- Monthly Discharge Monitoring reports for October, November, and December were filed electronically on time for regulatory compliance.
- The AWWTP Wisconsin Pollution Discharge Elimination System (WPDES) electronic permit application was submitted on October 2, 2021, as part of reissuance. The current WPDES permit expired on March 31, 2022. The AWWTP continues to operate under the expired permit limits until DNR reissues a permit. Procedurally, the DNR has yet to submit a draft permit for review and public comment. The exact timeline is not yet known for when that step will occur, but the DNR is anticipating that the reissued permit will be administered sometime in 2023.

Laboratory

- All sampling and laboratory testing procedures were performed in accordance with requirements outlined in the AWWTP WPDES permit.
- Discharge Monitoring Report (DMR) and Health Department testing program objectives associated with sampling and analysis were met during the reporting period.
- Sampling of influent in support of Wisconsin State Lab of Hygiene COVID Sewage Surveillance continued during the reporting period.

EFFLUENT QUALITY SUMMARY
July 2021/2022 – December 2021/2022

Table 1 – 2021 Monthly Permit Summary

Month	CBOD (mg/L)	TSS (mg/L)	TSS (lbs/day)	P (mg/L)	P[3] (lbs/day)	NH3-N [1] (mg/L)	Fecal[2] Coliform Colonies/ (100 ml)	Chlorine[2] Residual (mg/L)	pH (s.u.)
Permit Limit	*25*	*30*	*1,322 [3]*	*1*	*23 [3]*	*10, 11, 4.4, 18*	*400 col/100ml Geo.Mean*	*0.038 mg/L daily*	*6.0 - 9.0 daily limit*
July 2021	4	2	382	0.16	22	0.36	5	<0.032	7.1/7.4
August 2021	4	2	259	0.21	23	0.25	28	<0.032	7.1/7.3
September 2021	4	1	90	0.19	15	0.12	4	<0.032	7.1/7.3
October 2021	5	4	254	0.37	24	0.50	NA	NA	7.3/7.3
November 2021	6	4	223	0.28	18	0.69	NA	NA	6.5/7.4
December 2021	6	4	281	0.18	13	1.38	NA	NA	7.1/7.2
		Nov - April Period Average[3]			17.3				
		May - October Period Average[3]			21.1				

Table 2 – 2022 Monthly Permit Summary

Month	CBOD (mg/L)	TSS (mg/L)	TSS (lbs/day)	P (mg/L)	P[3] (lbs/day)	NH3-N [1] (mg/L)	Fecal[2] Coliform Colonies/ (100 ml)	Chlorine[2] Residual (mg/L)	pH (s.u.)
July 2022	4	1	67	0.17	13	0.18	10	<0.032	6.9/7.4
August 2022	5	4	406	0.22	20	0.40	4	<0.032	7.0/7.4
September 2022	4	2	205	0.17	15	1.11	4	<0.032	7.0/7.2
October 2022	7	3	223	0.15	10	0.54	NA	NA	6.9/7.2
November 2022	6	5	486	0.19	19	0.89	NA	NA	6.9/7.3
December 2022	6	3	284	0.17	14	2.00	NA	NA	6.2/7.2
		Nov - April Period Average[3]			16.5				
		May - October Period Average[3]			14.0				

NOTES:

1) Seasonal NH3-N limits: 10 mg/L Jan. 1 – Mar. 31, 11 mg/L Apr. 1 – May 31, 4.4 mg/L June 1 – Sep 30, 18 mg/L Oct 1 – Dec 31.

2) Seasonal fecal and residual chlorine limits are in effect May 1st through September 30th. Limit of Detection 0.032 mg/L.

3) April 1, 2017 WPDES Reissuance with new TSS limits expressed as monthly concentration limit (mg/L) and loading limit (lbs).

The future TMDL phosphorus limit will be 23 lbs/day expressed as a 6-month average during the months of May – October and November – April.

YEAR 2022 RECEIVING STATION REVENUE

Hauler	January	February	March	April	May	June	July	August	September	October	November	December	Y-T-D Total
A & B Leist Trucking	$ 155,140.59	$130,533.65	$ 156,997.30	$ 182,013.10	$ 144,798.81	$ 152,868.28	$ 169,189.98	$ 139,270.91	$ 89,065.61	$ 99,523.36	$ 104,753.43	$ 80,601.91	$ 1,604,756.93
Buttles Custom Ag	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Hickory Meadows	$ 24,903.48	$ 20,475.06	$ 32,031.60	$ 42,276.54	$ 26,113.02	$ 34,735.80	$ 29,600.94	$ 34,187.97	$ 35,696.22	$ 49,801.26	$ 47,130.24	$ 33,339.06	$ 410,291.19
Holland Sanitary Dist. 1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Jeff Waldvogel Trkg.	$ 34,629.34	$ 34,267.37	$ 38,307.65	$ 39,227.94	$ 45,610.75	$ 45,195.54	$ 47,505.15	$ 42,033.78	$ 38,975.02	$ 46,304.25	$ 36,614.32	$ 26,966.28	$ 475,637.39
Movin Materials	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Waldvogel Trucking	$ 1,638.34	$ 1,815.63	$ 1,789.65	$ 1,722.67	$ 1,876.88	$ 1,622.57	$ 1,558.66	$ 1,903.44	$ 1,960.88	$ 1,857.87	$ 1,983.29	$ 1,661.49	$ 21,391.37
2022 Total	$ 216,311.75	$187,091.71	$ 229,126.20	$ 265,240.25	$ 218,399.46	$ 234,422.19	$ 247,854.73	$ 217,396.10	$165,697.73	$ 197,486.74	$ 190,481.28	$ 142,568.74	$ 2,512,076.88
2021 Total	$160,614.00	$157,415.55	$178,568.93	$193,304.25	$197,959.99	$183,861.33	$240,826.87	$261,064.97	$231,369.79	$217,146.14	$172,718.91	$ 173,227.16	$ 2,368,077.89

3% Rate Increase effective 1/1/18
1% Rate Increase effective 1/1/19
5% Rate Increase effective 10/1/20
4% Rate Increase effective 01/01/22

Date: January 13, 2023
Copies: K. Rindt (via email)
C. Shaw (via email)
B. Kreski
Utilities Committee

Appleton Water Treatment Plant
Operations Synopsis
October, November, December 2022

Performance Summary

The table below presents selected water production and quality performance metrics for the current and previous reporting period.

Treated Water Quality. All compliance parameters met or exceeded regulatory requirements.

Water Production. Compared with Q4 of 2021 (Y/Y) average production decreased by about 1%.

Raw Water Quality. Average Q/Q lake turbidity increased nearly 25% from Q3 2022. Y/Y levels also increased by less than 1% from Q4 2021.

Energy Efficiency. Applied electrical energy efficiency Y/Y increased by over 11% from Q4 2021.

WATER PLANT PARAMETERS	Previous (Q3 2022)			Current (Q4 2022)		
	July	August	September	October	November	December
Water Treated						
Finished (million gallons), total	308.5	305.1	269.1	264.5	246.5	262.3
Finished (million gallons / day), average	9.9	9.8	9.0	8.5	8.2	8.5
Electrical Energy (WTF)						
Consumption (Megawatt-hours)	527.8	522.8	461.1	443.9	424.7	457.9
MWH / million gallons produced	1.7	1.7	1.7	1.7	1.7	1.7
Lake Turbidity (NTU), average	10.19	12.71	10.54	8.17	18.76	14.81
Water System Microbial Quality						
Total Coliform Samples	81	81	81	81	81	81
Compliance with Standard	100%	100%	100%	100%	100%	100%
Finished Water Quality						
Water Temperature (Degrees F)	75.5	75.1	68.9	53.5	43.16	33.51
Turbidity (NTU), average	0.06	0.06	0.04	0.05	0.05	0.05
%<0.15 NTU standard	100	100	100	100	100	100
pH (SU), average	8.4	8.5	8.6	8.7	8.8	8.8
Total Chlorine (mg/L)	1.79	1.80	1.87	1.77	1.85	1.89
Fluoride (mg/L)	0.70	0.73	0.73	0.70	0.69	0.69
Orthophosphate (mg/L)	0.63	0.70	0.67	0.69	0.61	0.65

Laboratory

- In support of plant operations, staff conducted analyses according to method protocols for pH, turbidity, alkalinity, hardness, free/total chlorine, ammonia, phosphorus, potassium permanganate, and fluoride.
- In support of distribution operations, staff performed required 81+ monthly Coliform bacteria analyses along with heterotrophic plate count (HPC) testing.
- Quarterly disinfection by-product rule monitoring with wholesale water customers (DBPR-2) was completed.

Safety

- Maintained WTF Safety programs by completing scheduled safety inspections, fire prevention inspections, and monthly meetings. No significant incidents to report.
- Applied appropriate COVID-19 countermeasures as directed by city policy.

Operations

- Operated two UV Disinfection reactors continuously during the quarter.
- Maintained Main Pressure Zone pressure increases as recommended by Water Distribution System Master Plan.
- Nature's Way transmission line repaired.
- Electrical testing successfully completed at Water Plant.
- Handrail installed on top of Matthias Tower. Matthias Tower disinfected per AWWA guidelines and put back in service.
- Faith Technologies worked on fire alarm system upgrade.
- #1 and #2 Sodium Hypochlorite tanks successfully relined and returned to service.
- Air compressor replacement project ongoing.
- 2nd Raw water line piping project started.

Staffing & Training

- Staffing levels temporarily reduced by reassignment of one Water Plant Operator.
- Maintained normal staff schedules and work assignments.

WATER MAIN BREAK/ JOINT LEAK REPORT -

YEARLY WATER MAIN BREAK COMPARISON

MONTH 21	MONTH 22	YTD 21	YTD 22
15	13	137	121

LOCATION	BREAK DATE	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	TOTAL DOLLAR VALUE FOR BREAK* (Water Costs + Repair Costs)
509 N. Kensington Dr.	12/2/2022	309269	CIP	8"	1967	1/16" Crack	3 Hours	60,779	$369.54	$9,369.54
NOTES: The break was found due to water bubbling out of the road. The duration was calculated based on the time water was seen bubbling until it was repaired.										
1745 N. Superior St.	12/2/2022	309269	CIP	6"	1922	1/16" Crack, 2" Hole	7 Hours	348,567	$2,119.29	$11,119.29
NOTES: The break was found due to water bubbling out of the road. The duration was calculated based on the soil saturation.										
915 E. McKinley St.	12/2/2022	309269	CIP	8"	1967	1/16" Crack	3 Hours	45,584	$277.15	$9,277.15
NOTES: The break was found due to water bubbling out of the road. The duration was calculated based on the time notified of water bubbling until it was repaired.										
431 W. Seymour St.	12/7/2022	309269	CIP	8"	1963	1/8" Crack	4 Hours	144,031	$875.71	$9,875.71
NOTES: The break was found due to water bubbling. The duration was calculated by the soil saturation and when the bubbling water was seen until it was repaired.										
415 S. Fidelis St.	12/7/2022	309269	CIP	8"	1971	1/8" Crack	7 Days	5,105,406	$31,040.87	$40,040.87
NOTES: The break was found due to water surfacing on roadway. The duration was calculated by the soil saturation and the last time the area was correlated.										

**Water Loss is calculated at the residential rate of $6.08 per 1000 gallons.

LOCATION	BREAK DATE	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	TOTAL DOLLAR VALUE FOR BREAK* (Water Costs + Repair Costs)
217 S. Lee St.	12/9/2022	309269	CIP	6"	1941	2" Hole	4 Hours	162,076	$985.42	$9,985.42
NOTES: The break was found due to a call in by a resident. The duration was calculated by the amount of water bubbling and the time of the resident's call.										
918 E. Glendale Av.	12/11/2022	309269	CIP	8"	1952	3" Hole	6 Hours	547,008	$3,325.81	$12,325.81
NOTES: The break was found due to a call in by a resident and the APD. The duration was calculated by the amount of water and mud on the road.										
1007 S. Matthias St.	12/15/2022	309269	CIP	8"	1962	1/8" Crack	4 Hours	133,159	$809.61	$9,809.61
NOTES: The break was found due to water coming up in the roadway. The duration was calculated by the amount of water and the time of the call.										
S. Ritger St. & E. Fremont St.	12/20/2022	309269	CIP	6"	1946	1/8" Crack	4 Hours	79,478	$483.23	$9,483.23
NOTES: The break was found due to water bubbling in the street. The duration was calculated by the soil saturation and the time the water was seen bubbling.										
1509 N. Douglas St.	12/20/2022	309269	CIP	6"	1958	1/16" Crack	4 Days	902,148	$5,485.06	$14,485.06
NOTES: The break was found when the resident called in due to a wet basement. The duration was calculated by how long the resident noticed his walls getting wet.										
3137 N. Roemer Rd.	12/22/2022	309269	DIP	12"	1978	5" Hole	4 Hours	1,163,822	$7,076.04	$16,076.04
NOTES: The break was found by water bubbling up. The duration was calculated by the soil saturation and when the break was called in until it was repaired.										
2415 E. Bona Av.	12/23/2022	309269	CIP	8"	1970	1/4" Crack	4 Hours	243,115	$1,478.14	$10,478.14
NOTES: The break was found due to water bubbling up in the roadway. The duration was calculated from the time was water bubbling was noticed until the time it was fixed.										

**Water Loss is calculated at the residential rate of $6.08 per 1000 gallons.

LOCATION	BREAK DATE	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	TOTAL DOLLAR VALUE FOR BREAK* (Water Costs + Repair Costs)
2317 N. Eugene St.	12/29/2022	309269	CIP	8"	1969	1/2" Crack	4 Hours	495,858	$3,014.82	$12,014.82

NOTES: The break was found due to a call in by a resident. The duration was calculated by the resident reporting that it had been running for two hours before they called.

Total Cost = $174,340.67

*In addition to the dollar value of water revenue lost, there is an average cost of $9,000 to repair each water main break (including final restoration) and an average cost of $630 to produce the lost water for each main break.

**Water Loss is calculated at the residential rate of $6.08 per 1000 gallons.

WATER MAIN BREAK/ JOINT LEAK REPORT - January 2023

YEARLY WATER MAIN BREAK COMPARISON

MONTH 22	MONTH 23	YTD 22	YTD 23
23	9	23	9

LOCATION	BREAK DATE	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	TOTAL DOLLAR VALUE FOR BREAK* (Water Costs + Repair Costs)
2307 S. Walden Av.	1/4/2023	309269	CIP	6"	1960	1/8" Crack	4 Hours	77,359	$470.34	$9,470.34
NOTES: The break was found due to a call in by a resident. The duration was calculated by the time of the resident's call and the amount of water.										
E. Cass St./S. Walter Av.	1/6/2023	309269	DIP	6"	1982	1/64" Crack	73 Days	2,994,867	$18,208.79	$27,208.79
NOTES: The break was found when a noise was heard while testing hydrants. The duration was calculated by the last time the hydrant was tested and the soil saturation.										
921 S. Arlington St.	1/9/2023	309269	CIP	6"	1970	1/16" Crack	77 Days	71,647	$435.61	$9,435.61
NOTES: The break was found due to hydrant testing. The duration was calculated by the soil saturation and the last time the hydrant was tested.										
1717 E. Calumet St.	1/12/2023	309269	CIP	12"	1965	1/16" Crack, 6" Split	12 Days	2,428,692	$14,766.45	$23,766.45
NOTES: The break was found due to noise on a hydrant while correlating. The duration was calculated by the soil saturation.										
1715 N. Division St.	1/13/2023	309269	CIP	6"	1955	1/16" Crack	13 Days	3,999,657	$24,317.91	$33,317.91
NOTES: The break was found when testing hydrants. The duration was calculated by the soild saturation.										

**Water Loss is calculated at the residential rate of $6.08 per 1000 gallons.

LOCATION	BREAK DATE	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**	TOTAL DOLLAR VALUE FOR BREAK* (Water Costs + Repair Costs)
E. Fremont St.	1/15/2023	309269	DIP	12"	1973	4" Hole	4 Hours	710,183	$4,317.91	$13,317.91
NOTES: The break was found due to a call in by APD. The duration was calculated by the time of call and the amount of water shooting into the air.										
1633 N. Ullman St.	1/18/2023	309269	CIP	6"	1948	1/16" Crack	18 Days	3,684,088	$22,399.26	$31,399.26
NOTES: The break was found while listening to hydrants as it never surfaced. The duration was calculated by the soil saturation and the last time the hydrant was tested.										
E. Glendale Av. & N. Meade St.	1/22/2023	309269	CIP	8"	1952	1/32" Crack	6 Hours	45,584	$277.15	$9,277.15
NOTES: The break was found due to a call in from a resident and the APD. The duration was calculated by the time of the call and the amount of water flowing down the road.										
1063 S. Jefferson St.	1/26/2023	309269	CIP	8"	1935	1/6" Hole & Leaking Clamp	25 Days	23,742	$144.35	$9,144.35
NOTES: The break was found when correlating. The duration was calculated by the soil saturation.										
									Total Cost =	**$166,337.78**

*In addition to the dollar value of water revenue lost, there is an average cost of $9,000 to repair each water main break (including final restoration) and an average cost of $630 to produce the lost water for each main break.

**Water Loss is calculated at the residential rate of $6.08 per 1000 gallons.