

**Year 5 Annual Report**  
**Massachusetts Small MS4 General Permit**  
**Reporting Period: July 1, 2022-June 30, 2023**

*\*\*Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are to publicly accessible sites\*\**

*Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2022 and June 30, 2023 unless otherwise requested.*

**Part I: Contact Information**

Name of Municipality or Organization:

EPA NPDES Permit Number:

**Primary MS4 Program Manager Contact Information**

Name:  Title:

Street Address Line 1:

Street Address Line 2:

City:  State:  Zip Code:

Email:  Phone Number:

**Stormwater Management Program (SWMP) Information**

SWMP Location (publicly available web address):

Date SWMP was Last Updated:

If the SWMP is not available on the web please provide the physical address:

## Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here:

**Impairment(s)**

Bacteria/Pathogens     
  Chloride     
  Nitrogen     
  Phosphorus  
 Solids/ Oil/ Grease (Hydrocarbons)/ Metals

**TMDL(s)**

*In State:*     
  Assabet River Phosphorus     
  Bacteria and Pathogen     
  Cape Cod Nitrogen  
 Charles River Watershed Phosphorus     
  Lake and Pond Phosphorus

*Out of State:*     
  Bacteria/Pathogens     
  Metals     
  Nitrogen     
  Phosphorus

Next, check off all requirements below that have been completed. **By checking each box you are certifying that you have completed that permit requirement fully.** If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

### Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
  - This is not applicable because we do not have sanitary sewer
  - This is not applicable because we did not find any new SSOs
  - The updated SSO inventory is attached to the email submission
  - The updated SSO inventory can be found at the following publicly available website:
- Updated system map due in year 2 as necessary
- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary

- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

### **Bacteria/ Pathogens** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

#### Annual Requirements

##### *Public Education and Outreach\**

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Permittee or its agents disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria
  - This is not applicable because there are no septic systems present

*\* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

*The Town plans to increase public education, outreach, and targeted messaging. The Town plans to add a "Stormwater" section to the Town webpage to post educational materials. Additionally, the Town has goals of working with local public access television to provide informational messaging regarding stormwater management. The Town currently has no social media presence, but plans to discuss a Town social media policy. Similarly, the Town plans to increase educational BMP messaging through other means, including distributing pet waste management pamphlets with dog license renewal.*

### **Nitrogen** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

#### Annual Requirements

##### *Public Education and Outreach\**

- Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

*\* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

*Structural BMPs*

- Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the Nitrogen Source Identification Report, including: *(select the items of the evaluation that have been completed below)*
  - Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date
  - Estimated cost of redevelopment or retrofit BMPs
  - Engineering and regulatory feasibility of redevelopment or retrofit BMPs
- Completed a listing of planned structural BMPs and a plan and schedule for implementation
  - The BMP list and implementation schedule is attached to the email submission
  - The BMP list and implementation schedule can be found at the following publicly available website:

- Any structural BMPs listed in Attachment 3 to Appendix F already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP, and the estimated nitrogen removed in mass per year by the BMP were documented.

- No BMPs were installed
- The above referenced BMP information is attached to the email submission
- The above referenced BMP information can be found at the following publicly available website:

Total estimated nitrogen removed in lbs/year from the installed BMPs:

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

**Phosphorus** (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach\**

- Distributed an annual message in the spring (April/May) encouraging the proper use and disposal of grass clippings and encouraging the proper use of slow-release and phosphorus-free fertilizers

- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

*\* Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

*Structural BMPs*

- Completed the evaluation of all permittee owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d or identified in the Phosphorus Source Identification Report, including: *(select the items of the evaluation that have been completed below)*

- Next planned infrastructure, resurfacing, or redevelopment activity planned for the property (if applicable) OR planned retrofit date
- Estimated cost of redevelopment or retrofit BMPs
- Engineering and regulatory feasibility of redevelopment or retrofit BMPs

- Completed a listing of planned structural BMPs and a plan and schedule for implementation
  - The BMP list and implementation schedule is attached to the email submission
  - The BMP list and implementation schedule can be found at the following publicly available website:

- Any structural BMPs already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP, and the estimated phosphorus removed in mass per year by the BMP were documented.

- No BMPs were installed
- The above referenced BMP information is attached to the email submission
- The above referenced BMP information can be found at the following publicly available website:

Total estimated phosphorus removed in **lbs/year** from the installed BMPs:

*Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:*

*The Town's regulated area within the Ten Mile River watershed includes approximately 1000 feet of Cross Street which does not have closed drainage systems.*

**Solids, Oil and Grease (Hydrocarbons), or Metals**

Annual Requirements

*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads
  - The street sweeping schedule is attached to the email submission
  - The street sweeping schedule can be found at the following publicly available website:

- Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicated excessive sediment or debris loadings

*Optional:* If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

*The Town targets areas that are subject to higher sediment loading and frequently more than 50% full, described further in MCM6.*

*Optional:* Use the box below to provide any additional information you would like to share as part of your self-assessment:

### **Part III: Receiving Waters/Impaired Waters/TMDL**

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

- Yes
- No

If yes, describe below, including any relevant impairments or TMDLs:

### Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

#### MCM1: Public Education

Number of educational messages completed **during this reporting period:**

Below, report on the educational messages completed **during this reporting period**. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

**BMP:/Message name here/**

Message Description and Distribution Method:

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

Message Completed for:    Appendix F Requirements     Appendix H Requirements

Was this message different than what was proposed in your NOI?    Yes     No

If yes, describe why the change was made:

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*Add an Educational Message*

#### MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) **during this reporting period:**

No public involvement during this period.

Was this opportunity different than what was proposed in your NOI? Yes  No

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

The Town coordinated with volunteers during the Keep Rehoboth Beautiful Annual Spring Roadside cleanup event. Hosted in April, this event included 275 volunteers and 5 1-ton dump trucks worth of trash were properly removed and disposed of by Town staff. Additionally, the Town offers services to collect waste oil at the Highway Garage as well as paint and electronics at the Transfer Station.

### MCM3: Illicit Discharge Detection and Elimination (IDDE)

#### Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

- This SSO section is NOT applicable because we DO NOT have sanitary sewer

Below, report on the number of SSOs identified in the MS4 system and removed **during this reporting period.**

Number of SSOs identified:

Number of SSOs removed:

#### MS4 System Mapping

Optional: Provide additional status information regarding your map:

The Town originally completed mapping of its MS4 system in 2008, but this data is no longer available. The Town has since remapped its outfalls, identifying 25 outfalls in the regulated area.

#### Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- No outfalls were inspected
- The above referenced outfall screening data is attached to the email submission
- The above referenced outfall screening data can be found at the following publicly available website:

\_\_\_\_\_

Below, report on the number of outfalls/interconnections screened **during this reporting period.**

Number of outfalls screened:

Below, report on the percent of outfalls/interconnections screened **to date.**

Percent of outfalls screened:

*Optional:* Provide additional information regarding your outfall/interconnection screening:

*The Town conducted outfall screening and sampling of all 25 outfalls. A draft report summarizing the results of dry-weather outfall screening inspections and sampling is attached here. The Town plans to continue working with their consultant to review and finalize this report.*

**Catchment Investigations**

*If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.*

- No catchment investigations were conducted
- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following publicly available website:

\_\_\_\_\_

Below, report on the number of catchment investigations completed **during this reporting period.**

Number of catchment investigations completed this reporting period:

Below, report on the percent of catchments investigated **to date.**

Percent of total catchments investigated:

*Optional:* Provide any additional information for clarity regarding the catchment investigations below:

\_\_\_\_\_

**IDDE Progress**

*If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.*

- No illicit discharges were found
- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following publicly available website:

\_\_\_\_\_

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed **during this reporting period.**

Number of illicit discharges identified:

Number of illicit discharges removed:

Estimated volume of sewage removed:  gallons/day

*Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed **since the effective date of the permit (July 1, 2018).***

Total number of illicit discharges identified:

Total number of illicit discharges removed:

*Optional:* Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

**Employee Training**

Describe the frequency and type of employee training conducted **during this reporting period:**

*Town employees have received virtual IDDE training through the Central Massachusetts Regional Stormwater Coalition (CMRSWC) IDDE Training Workshop.*

**MCM4: Construction Site Stormwater Runoff Control**

*Below, report on the construction site plan reviews, inspections, and enforcement actions completed **during this reporting period.***

Number of site plan reviews completed:

Number of inspections completed:

Number of enforcement actions taken:

*Optional:* Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

**MCM5: Post-Construction Stormwater Management in New Development and Redevelopment**

**Ordinance or Regulatory Mechanism**

Date update was completed (due in year 3):

Website of ordinance or regulatory mechanism:

**As-built Drawings**

*Below, report on the number of as-built drawings received **during this reporting period.***

Number of as-built drawings received:

*Optional:* Enter any additional information relevant to the submission of as-built drawings:

**Street Design and Parking Lots Report**

Below, describe any changes made or planned to be made to local regulations and guidelines based on the report completed in Year 4:

*The Town plans to develop a Street Design and Parking Lots Report in the coming permit years, as staffing and budget allow.*

**Green Infrastructure Report**

Below, describe progress towards making green infrastructure practices allowable based on the report completed in Year 4:

*The Town plans to develop a Green Infrastructure Report in the coming permit years, as staffing and budget allow.*

**Retrofit Properties Inventory**

Below, list remaining permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas (must maintain a minimum of 5 sites in inventory until less than 5 sites remain):

*The Town plans to complete a Retrofit Properties Inventory in the coming permit years, as staffing and budget allow.*

Below, list all properties that have been modified or retrofitted with BMPs to mitigate impervious area that were inventoried as part of 2.3.6.d of the permit. Non-MS4 owned properties that have been modified or retrofitted with BMPs to mitigate impervious area may also be listed, but must be indicated as non-MS4.

### MCM6: Good Housekeeping

#### **Catch Basin Cleaning**

*Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins **during this reporting period.***

Number of catch basins inspected:  town-wide

Number of catch basins cleaned:

Total volume or mass of material removed from all catch basins:  *cubic yards*

*Below, report on the total number of catch basins in the MS4 system.*

Total number of catch basins:

*If applicable:*

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

*Material in all catch basins is measured during inspections and recorded. The Town prioritizes catch basins in areas Town-wide that receive high sediment loading or any catch basin sumps that are more than 50% full during two consecutive routine cleanings.*

#### **Street Sweeping**

*Report on street sweeping completed **during this reporting period** using one of the three metrics below.*

- Number of miles cleaned:
- Volume of material removed:
- Weight of material removed:

**Stormwater Pollution Prevention Plan (SWPPP)**

*Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.*

Number of site inspections completed:

Describe any corrective actions taken at a facility with a SWPPP:

*No actions need to be taken*

**Additional Information**

**Monitoring or Study Results**

*Results from any other stormwater or receiving water quality monitoring or studies conducted during the reporting period not otherwise mentioned above, where the data is being used to inform permit compliance or permit effectiveness must be attached.*

- Not applicable
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following publicly available website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

*The Town currently has limited staff and resources related to its MS4 program, as well as staff turnover. Despite this, the Town is working diligently to bring several overdue requirements into compliance over the coming permit years. The Town is working with their consultant to finalize their IDDE report, which should allow the Town to successfully begin catchment investigations.*

**Additional Information**

*Optional:* Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above. If any of the above year 5 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

**Activities Planned for Next Reporting Period**

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 6 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

**Annual Requirements**

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implement program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Enclose all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements
- Inspect all permittee owned treatment structures (excluding catch basins)
- Identify additional permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas so that the permittee maintains a minimum of 5 sites in their inventory, until such a time when the permittee has less than 5 sites remaining

Provide any additional details on activities planned for permit year 6 below:

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*The Town is conducting a gap analysis to identify its permit needs, resulting from personnel turnover, and intends to address these gaps in the coming permit years, as time and budget allow. Additionally, the Town has already started to identify opportunities to increase education messaging and public outreach by enhancing the Town's webpage, working with local media (e.g., television channels), and engaging directly with residents (e.g., dog license renewals).*



## **Attachment 1**

Outfall Screening Memorandum

## M E M O R A N D U M

**TO:** Deborah Arruda, Town Administrator, Town of Rehoboth

**FROM:** Stefan Bengtson, MS; William Guenther, MS

**DATE:** December 8, 2023

**RE:** Dry-Weather Outfall Screening Results

This memo summarizes the results of dry-weather outfall screening inspections and sampling, conducted by Fuss & O'Neill, to assist the Town in its compliance with the 2016 Massachusetts Municipal Separate Storm Sewer System (MS4) permit. Dry-weather conditions were defined as less than 0.1 inches of precipitation within the previous 24-hour period and no snowmelt. Inspections occurred on August 24 and September 7, 2023 and sampling occurred on September 21 and October 5, 2023. Antecedent weather conditions were determined at National Weather Service Center in Norton, MA, approximately 10 miles northwest of Rehoboth.

The Town's storm system mapping includes 25 regulated outfalls within the MS4 regulated area. Fuss & O'Neill staff assessed each outfall for dry-weather flow and any visual or olfactory evidence of illicit discharges. As specified in the Town's IDDE plan, where outfalls were inaccessible or inundated by the receiving water, the first accessible upstream structure was assessed, where feasible. Outfalls observed to be damp or actively flowing were revisited so samples could be collected. Where outfalls were flowing during a subsequent field visit, a sample of flow was collected and analyzed for parameters listed in *Table 1*. Where an outfall was damp and then not flowing during a second inspection, a third inspection was conducted. For each outfall, information was collected on visual and olfactory indicators of non-stormwater discharges and outfall physical dimensions, including images of the outfalls and any notes on unique conditions or needed maintenance.

Complete results for all dry-weather screening are included in *Attachment 1*. Eleven outfalls were observed to be flowing under dry-weather conditions during a screening visit. Samples were collected from these outfalls during follow-up visits on September 21 and October 5, 2023. Dry-weather sampling results are included in *Table 2*. Samples were analyzed for E. coli, fecal coliform, enterococcus, total nitrogen, and surfactants by New England Testing Laboratory in West Warwick, RI. All other parameters were analyzed using field test kits and portable meters, calibrated properly and following all manufacturer instructions. All samples were delivered to the laboratory within 6 hours, meeting required hold times for bacteria

**Table 1: Sampling parameters and pollutants of concern**

| Parameter (units)           | Permit Threshold |
|-----------------------------|------------------|
| Temperature (°C)            | None specified   |
| Conductivity (µS/cm)        |                  |
| Salinity (PPT)              |                  |
| Ammonia (mg/L)              | ≥0.5 mg/L        |
| Surfactants (mg/L)          | ≥0.25 mg/L       |
| Chlorine (detectable, mg/L) | >0.02 mg/L       |
| E. coli (MPN/100mL)         | 126 MPN/100 mL   |
| Enterococcus (MPN/100 mL)   | 35 MPN/100 mL    |
| Fecal Coliform (MPN/100 mL) | 88 MPN/100 mL    |
| Total Nitrogen (mg/L)       | None specified   |

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analyses. No outfall had olfactory evidence of illicit discharge, and one outfall, UNT-01, had visual evidence of a potential illicit discharge. Two unsuccessful attempts were made to collect flow from the damp outfall PR-01, which may indicate a transient or intermittent discharge.

**Recommendations:**

The screening and sampling work summarized here satisfies the Town's MS4 permit requirements under section 2.3.4.7.b. Based on the results in *Table 2*, along with the absence of olfactory or visual evidence of sewage, no outfall meets permit criteria of evidence of likely sewer input. One outfall, UNT-01 had evidence of potential illicit discharge, with elevated levels of surfactants only. Although no outfall exceeded permit thresholds for likely sewer input, four outfalls (TC-1, UNT-07, MB-01, and UNT-10) showed *E. coli* levels exceeding water quality standards.

Based on these results, we recommend conducting source tracking on outfalls RR-01 and UNT-01 as soon as practicable to identify a potential source of surfactants. We additionally recommend prioritizing outfalls TC-1, UNT-07, MB-01, UNT-10, and PR-01 during catchment investigations. Source tracking investigations are not required by the permit for these outfalls, but their elevated concentrations of *E. coli* indicate a higher priority level may be warranted. Catchment investigations must be completed by June 30, 2027. Catchment investigations also represent an opportunity to continue to update the Town's stormwater system map to meet the requirements of the second phase of system mapping in the permit. The permit deadline for this second phase of mapping is the same as for the catchment investigations, June 30, 2027.



**Figure 1: Foam observed at outfall UNT-01**

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**Table 2: Dry-weather sampling results from outfalls with flow. Exceedances of permit criteria<sup>1</sup> are bolded and shaded.**

| Outfall ID | Flow Description | Temperature (°C) | Conductivity (µS/cm) | Salinity (ppt) | Ammonia (mg/L) | Surfactants (mg/L) | Chlorine (mg/L) | E. coli (MPN/100mL) | Fecal Coliform (MPN/100 mL) | Enterococcus (MPN/100 mL) | Total Nitrogen (mg/L) |
|------------|------------------|------------------|----------------------|----------------|----------------|--------------------|-----------------|---------------------|-----------------------------|---------------------------|-----------------------|
| UNT-01     | Moderate         | 16.5             | 51.7                 | <0.1           | <0.25          | <b>1.18</b>        | <b>0.02</b>     | 38                  | N/A                         | N/A                       | N/A                   |
| RR-04      | Trickle          | 19.9             | 231.2                | 0.1            | <0.25          | 0.17               | <b>0.13</b>     | 2                   | 8                           | <b>39</b>                 | N/A                   |
| TC-1       | Moderate         | 16.1             | 572                  | 0.3            | <0.25          | <0.1               | <b>0.03</b>     | <b>816</b>          | <b>1,160</b>                | N/A                       | N/A                   |
| UNT-07     | Moderate         | 16.7             | 162.5                | 0.1            | <0.25          | 0.11               | <b>0.15</b>     | <b>921</b>          | N/A                         | N/A                       | N/A                   |
| MB-01      | Moderate         | 16.8             | 244.5                | 0.1            | <0.25          | <0.1               | <b>0.06</b>     | <b>133</b>          | N/A                         | N/A                       | N/A                   |
| UNT-10     | Trickle          | 19.4             | 156.7                | 0.1            | <0.25          | <0.1               | <b>0.03</b>     | <b>199</b>          | N/A                         | N/A                       | 3.97                  |
| UNT-09     | Trickle          | 17.4             | 239.8                | 0.1            | <0.25          | <0.1               | <b>0.04</b>     | 17                  | N/A                         | N/A                       | 2.32                  |
| RR-01      | Trickle          | 18.8             | 572                  | 0.3            | <0.25          | <b>1.04</b>        | <b>0.03</b>     | <1                  | <1                          | 4                         | N/A                   |

<sup>1</sup> Likely sewer input indicators are any of the following:

- Olfactory or visual evidence of sewage
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine.

## **Attachment A**

Outfall Screening Results

