STILLWATER ENVIRONMENTAL ENGINEERING, INC. • PO Box 426, ORONO, MAINE 04473

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) STORMWATER MANAGEMENT PLAN (SMP)

For

Town of Gorham
75 South Street, Gorham, ME 04038
(207) 222-1600

Prepared By
Stillwater Environmental Engineering, Inc.

March 29, 2021

MS4 General Permit Effective July 1, 2022

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1 Introduction

1.1 Regulatory Overview

The Town of Gorham (Town) is subject to the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s). The most recent permit was issued by the Maine Department of Environmental Protection (MDEP) on October 15, 2020, to be effective for 5 years from July 1, 2022 to June 30, 2027 (see **Attachment E**). The permit authorizes the direct discharge of stormwater from regulated MS4s to waters of the State, other than groundwater, pursuant to Water Pollution Control Law 38 M.R.S.A. § 413. The Town of Gorham submitted a Notice of Intent (NOI) to comply with the terms and conditions of the MS4 General Permit on or before March 31, 2021 (see **Attachment F**).

The General Permit covers operations or activities associated with stormwater runoff within identified "urbanized areas" of the municipality's regulated MS4. An urbanized area is a classification of the U.S. Census Bureau that is based on population density and amount of concentrated development – factors that result in increased stormwater volume and pollutant load to receiving waterbodies in the area.

The U.S. Environmental Protection Agency (USEPA) and MDEP began regulating communities for their stormwater discharges using the Urbanized Area criteria in 2003. The Town of Gorham became regulated in 2003 based on the 2000 census. **Attachment A** shows the urbanized area regulated by the 2022 MS4 General Permit for the Town. This map was developed from the inclusive sum of the U.S. Census Bureau census conducted in 2000 and 2010. The 2022 MS4 General Permit does not include any modifications to urbanized area based on data from the 2020 U.S. Census.

The Town of Gorham encompasses a total land area of approximately 51.29 square miles, with approximately 17% (8.8 square miles) of that total area within the Town's urbanized area. According to the 2010 U.S. Census, the population of the Town is estimated to be 16,428, with 6,814 residents within the regulated urbanized area.

Each of the four MS4 General Permits (effective 2003, 2008, 2013, and 2022) have required that the regulated MS4s develop, and implement a Stormwater Management Plan (SMP) to coincide with the effective dates of the General Permit. The SMP is designed to reduce or eliminate polluted stormwater runoff to the maximum extent practicable (MEP) from its regulated MS4. The elements of the SMP are described in **Section 1.3**.

1.2 Cooperation Between Regulated Communities

There are 30 municipalities, two transportation agencies, and eight state/federal agencies in the State of Maine subject to MS4 General Permit regulation. Historically, there is a strong regional and/or state-wide collaborative effort among regulated entities to develop and carry out required permit activities. Most regulated MS4s (municipal, transportation, and state/federal) in the State are part of an established regional stormwater working group consisting of MS4 communities and supporting local organizations. These working groups include:

- Interlocal (Greater Portland) Stormwater Working Group (ISWG);
- Bangor Area Stormwater Working Group (BASWG);
- Androscoggin Valley (Lewiston-Auburn) Stormwater Working Group (AVSWG); and
- Southern Maine (York County) Stormwater Working Group (SMSWG).

The Town of Gorham is a member of ISWG, a coalition of fourteen MS4 municipalities in the greater Portland area (Biddeford, Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Old Orchard Beach, Portland, Saco, Scarborough, South Portland, Windham, Westbrook, and Yarmouth) as well as the University of Southern Maine, and Southern Maine Community College, which are also regulated as MS4s under a separate permit.

1.3 Stormwater Management Plan

As mentioned in the Regulatory Overview, operators of a regulated small MS4 are required to design a stormwater management plan (SMP) that will effectively:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP);
- Protect water quality; and
- Satisfy the appropriate water quality requirements of the USEPA's Clean Water Act.

The SMP is a tool describing how a regulated community plans to manage stormwater in a way that will limit pollutant loads and protect the quality of receiving waters. The plan is *not enforceable*, yet is *adaptive*, allowing the permittee to adjust approaches and practices throughout the permit cycle if needed, based on regular evaluation of their effectiveness, changing conditions, specific local concerns, and/or other factors. Some SMP modifications require MDEP review and approval and public notice.

Specifications of the MS4 General Permit are primarily based on qualitative *minimum control measures* (MCMs) of stormwater management, less so on quantitative requirements (e.g. numeric water quality criteria). This SMP describes how the Town will implement Best Management Practices (BMPs) to meet the six MCMs that are defined in Part IV(C) of the 2022 MS4 General Permit:

I - Public Education and Outreach

II - Public Involvement and Participation

III - Illicit Discharge Detection and Elimination Program

IV - Construction Site Stormwater Runoff Control

V - Post-Construction Stormwater Management in New Development and Redevelopment

VI - Pollution Prevention/Good Housekeeping for Municipal Operations

The 2022 MS4 General Permit requires that for each MCM, the Town must:

a) Define appropriate BMPs;

b) Designate a person(s) responsible for implementing each BMP;

c) Define a date or timeline with milestones for implementation of each BMP; and

d) Define measurable goals for each BMP.

This SMP is developed in accordance with the terms and conditions of the MS4 General Permit reissued by the MDEP on October 15, 2020. Many of the BMPs in this plan continue or expand upon BMPs developed under prior MS4 General Permits. Specific requirements for addressing MCMs have changed though the six MCMs have remained the same for all permit cycles.

Section 1.4 describes the Town's water quality status, and the watershed(s) that are considered to be priorities when considering stormwater management practices to prevent or alleviate impairment of waters.

Section 1.5, **Section 1.6**, and **Section 1.7** describe how permit coverage is obtained, how the SMP is modified (when needed), when public notice is required, and annual reporting requirements.

The MDEP will review this SMP and determine if the Town is controlling pollutants to the *maximum extent practicable* (MEP). MEP is the USEPA's statutory standard for pollutant reduction requirements of permitted MS4s, and the term is flexible in consideration that pollutant control strategies will vary for each small MS4 based on unique local conditions and factors such as cost, existing technology, and logistics of BMPs. The Town is allowed to consider these concepts as they select BMPs to meet permit requirements but the MDEP decides if the Town is meeting the MEP standard. *Practices that were considered MEP under the MS4 2013 permit may no longer meet that standard and must be improved or expanded based on changed conditions.*

1.4 Discharges to Impaired Waters

Discharges to waterbodies with approved Total Maximum Daily Load (TMDL) or discharges causing or contributing to impairment have additional requirements in the 2022 MS4 General Permit:

1. If an MS4 has a point source discharge to a water with a TMDL approved before 10/15/2020, the discharge must be consistent with any TMDL requirements established by the MDEP.
    - If a TMDL is approved or modified by the EPA after 10/15/2020, the MDEP will notify the permittee if any changes are needed to the SMP, and may take other actions regarding the approved TMDL as identified in the 2022 MS4 General Permit.
2. If an MS4 has a discharge to an Urban Impaired Stream, it must develop and implement three (3) BMPs to address the water's impairment, unless the MDEP has determined the MS4 discharge is not causing or contributing to the impairment.

1.4.1 Town of Gorham Water Quality Status

The Town of Gorham MS4 discharges to the following waterbodies:

- Tannery Brook;
- Mosher Brook;
- Little River;
- Presumpscot River;
- Hamblen Brook;
- Indian Camp Brook;
- Gully Brook;
- Unnamed Tributaries to Indian Camp Brook; and
- Unnamed Tributary to Stroudwater River

There are no waterbodies to which the municipality discharges with impairment classifications within the MS4 regulated area requiring additional actions by the Town per the 2022 MS4 General Permit. Mosher Brook is impaired for *E. coli* and is included in the 2009 Maine Statewide Bacteria TMDL. As indicated through correspondence with MDEP staff, the Town's IDDE program is sufficient to address this impairment.

However, the Town recognizes and prioritizes stormwater management practices that minimize pollutant loading to its most vulnerable waters. Previous MS4 General Permits required regulated MS4s to identify

a Priority Watershed, and apply BMPs to that watershed. The 2022 MS4 General Permit does not contain any specific requirements related to Priority Watersheds. However, it does require an MS4 to have a procedure in place to prioritize watersheds when addressing illicit discharges. The Town of Gorham uses this prioritization to identify where illicit discharge inspections are conducted first. The Town may also use the prioritization for illicit discharge investigations in the event there were insufficient resources to address all potential illicit discharges simultaneously.

The Town identifies Tannery Brook as its priority watershed when developing and implementing the Town's illicit discharge detection and elimination (IDDE) plan, which is described in **Section 3.3**. The Tannery Brook watershed is located in the "Gorham Village", and approximately half of its area is within the Urbanized Area. It was chosen as the highest priority watershed because it includes the majority of the built-up areas in the Town. In addition, it has been a focus of concern in the past by the Cumberland County Soil & Water Conservation District (CCSWCD).

The area directly upstream of the Presumpscot River is the Town's second highest priority watershed. It includes the "Little Falls" area at the north end of Gorham's Urbanized Area, to the east of Route 202.

1.5 Obtaining Coverage to Discharge

As required, a Notice of Intent (NOI) to comply with the 2022 MS4 General Permit was submitted to the MDEP with this SMP. A copy of the Town's NOI is provided in **Attachment F**.

Following review of the SMP and NOI, the MDEP may issue a permittee specific DEP Order, establishing terms and conditions that are enforceable in addition to the language in the 2022 MS4 General Permit, which is also enforceable.

A 30-day Public Notice is required for both the NOI and the permittee specific DEP Order (as applicable).

Once the MDEP issues authorization to discharge, the permittee has 60 days to update the SMP to reflect any new or changed requirements based on the DEP Order (as applicable) and any public comments. The new permit conditions will take effect on July 1st, 2022.

1.6 SMP Modifications

The SMP must be amended during the permit term (2022 - 2027) if the MDEP or the regulated MS4s determine that:

a) The actions required by the BMPs fail to control pollutants to meet the terms and conditions of the MS4 General Permit and the permittee specific DEP Order (as applicable);

b) The BMPs do not prevent the potential for a significant contribution of pollutants to Waters of the State other than groundwater; or

c) New information results in a shift in the SMP's priorities.

Even though this SMP is not an enforceable document, if any modifications are made, the SMP will be made available for 30-day public comment by posting the changes on the Town's website.

If the changes being made are not explicitly required by the 2022 MS4 General Permit or the permittee specific DEP Order (as applicable), the opportunity for public comment will be made on the Town's website annually and the MDEP will be notified of the changes in the annual report following the permit year the changes were made.

If the changes being made are explicitly required by the 2022 MS4 General Permit or the permittee specific DEP order, the applicable processes will be followed:

- *Modifications initiated by the Town*: the Town will notify the MDEP prior to changing any elements by filing a permit application with the MDEP that includes a justification to formally modify the requirement; or
- *Modifications initiated by the MDEP*: MDEP will notify the Town, and the Town must respond within 30 days with a written explanation of intended SMP modifications. The Town must then modify the SMP within 90 calendar days of the Town's written response, or within 120 calendar days of the MDEP notice (whichever is less). Any such modification must be submitted to the MDEP for final review.

1.7 Annual Compliance Report and Record Keeping

By September 15th of each year, the Town will electronically submit an Annual Compliance Report for the MDEP's review using the standardized form provided by the MDEP. The Annual Compliance Report must be sent to:

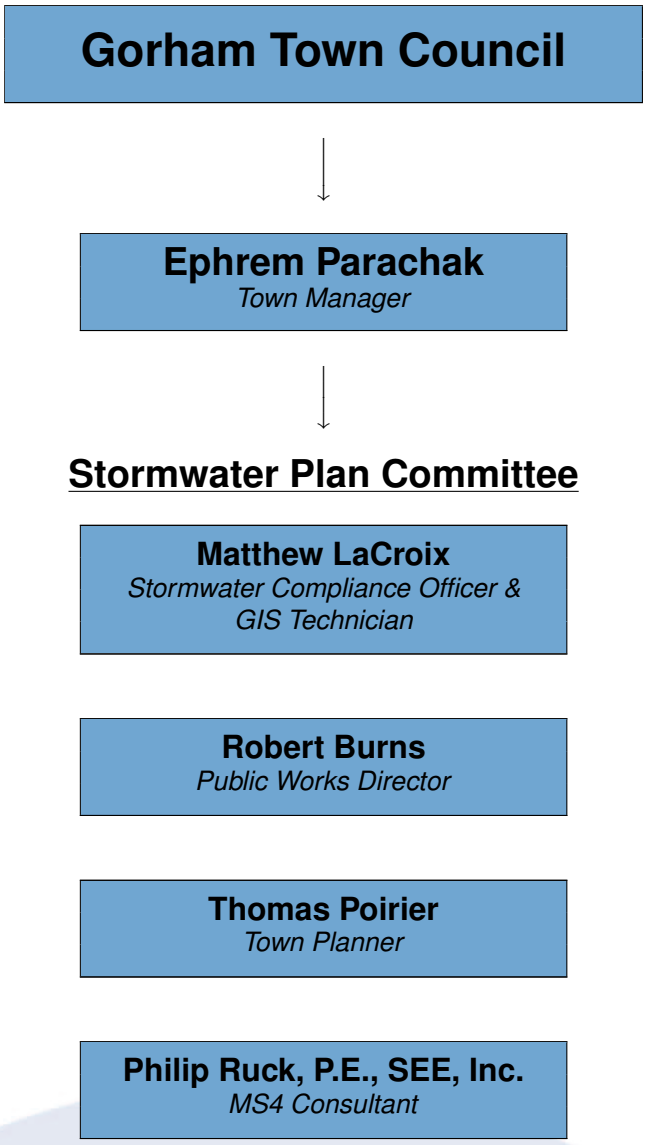
Rhonda Poirier
Municipal/Industrial Stormwater Coordinator
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017
rhonda.poirier@maine.gov

The MDEP will review the annual report and provide comments to the Town . Changes to the report based on the MDEP's review comment(s) must be submitted to the Department within 60 days of the receipt of the comment(s).

As a regulated MS4, the Town must keep records required by the 2022 MS4 General Permit and permit modification for at least three (3) years following its expiration or longer if requested by the MDEP Commissioner. The Town must make records (including this SMP) available to the public at reasonable times during regular business hours.

2 SMP Organization

2.1 Plan Management Hierarchy



2.2 Additional Environmental Plans

The Town implements the following existing environmental plans:

- Operations and Maintenance (O&M) Plan for Municipal Operations (available upon request);
- Illicit Discharge Detection and Elimination (IDDE) Plan (**Attachment C**);
- Stormwater Pollution Prevention Plan (SWPPP) for the Public Works Facility (available upon request); and
- Spill Prevention, Control, and Countermeasure Plan (SPCC) for the Public Works Facility (available upon request).

3 Minimum Control Measures

3.1 MCM I - Education/Outreach Program

The 2022 MS4 General Permit requires municipalities to develop and implement two Education/Outreach Campaigns to address stormwater issues of significance:

1. An Outreach to Raise Awareness Campaign targeted at two audiences applying three (3) tools per audience per year. One target audience must be the public and the second audience may be selected from: municipal, commercial, development/construction, or institutions.

2. An Outreach to Change Behavior Campaign to promote one behavior change directed at two audiences using a minimum of three (3) outreach tools per year. This campaign will promote and reinforce desirable behaviors designed to reduce stormwater pollution.

In 2018, the ISWG executed a statewide survey to assess public awareness of a variety of stormwater issues and related behaviors. The survey results report was included in the ISWG Permit Year 5 (2017-2018) MS4 annual report. In addition, the ISWG communities reviewed regional water quality related to stormwater issues, examined the unique conditions within each of their communities, and evaluated the needs for public education around stormwater at five of their regional meetings (9/13/2018, 3/21/2019, 7/18/2019, 3/26/2020, 5/21/2020). Based on the survey results and the discussions at their regional meetings, the ISWG communities agreed on which issues of significance to address and what tools and messages might be effective. Each of the BMPs provides a brief introductory section describing the rationale for the selection of the BMP based on the ISWG members' understanding of their community. The BMPs are further structured to allow for adaptive education and outreach approaches to create a strong, diverse, and effective campaign over the duration of this permit.

The Town of Gorham will fulfill the requirements for Public Education/Outreach through participation in the ISWG and the Town's provision of funding to the CCSWCD for Public Education/Outreach services, as described in the following BMPs. The BMPs will be implemented according to their individual timelines over the term of the permit.

3.1.1 BMP1A - Outreach to Raise Awareness Campaign

The 2022 General Permit requires each MS4 permittee to implement an outreach campaign to increase stormwater pollution awareness and deliver information to the general public. The public outreach campaign must be delivered using at least three (3) outreach tools per year.

Description: The 2022 MS4 General Permit requires the permittee to raise awareness of the public and one of the following groups: municipal, commercial, development/construction, or institutions. This BMP describes the reasoning and measurable goals for the public audience and the selected second audience, development/construction.

The Think Blue Maine campaign began in 2003 as a statewide effort to raise awareness of common stormwater pollutants and ways to prevent those pollutants. The Think Blue Maine campaign has been historically successful in increasing awareness of stormwater issues. The ISWG, AVSWG, and SMSWG coordinate their Think Blue Maine messaging and education efforts to provide consistent messaging in Southern Maine. In addition, the Massachusetts and New Hampshire small MS4s are using a similar Think Blue campaign, so there is some regionally consistent messaging in circulation.

In 2018, the ISWG executed a statewide survey around public awareness of stormwater issues and behaviors that impact stormwater. Ninety-four percent of survey respondents ages 25-34 stated it was "very important to have clean water in the lakes and streams in [their] community", and 86% of respondents believe that stormwater runoff has a major impact or somewhat impacts water quality, but only 46% of respondents were able to correctly describe what happens to stormwater at their residence. The ISWG communities will use the Think Blue Maine campaign to raise awareness of the target audience to be more aware of stormwater issues and be more willing to change their behavior in the future.

Measurable Goals:
The Town, through its participation in the ISWG, will raise 15% of the target audience's awareness of what happens to stormwater at their residence or place of work. According to the 2019 US Census Bureau, the ISWG region's population for ages 25 to 34 is approximately 38,000 people and 15% of the target is approximately 6,000 people.

- **Target Audience:** People 25-34 in the ISWG region
- **Overarching Message:** "Water that lands on our roads, roofs, and other hard surfaces picks up pollutants and carries them to our local waterbodies without being treated." This message will be presented with variations based on target audience interests and outreach tools used.
- **Outreach Tools:** A minimum of three outreach tools will be selected from **Attachment B** each year. Each tool will be assessed and customized based on the target audience's receptiveness to the method. Any tool used in a given year will be tailored to the message of the relevant target audience subset based on common characteristics and/or demographics.
- **Effectiveness:** Effectiveness will be evaluated annually by tracking process indicators for each tool implemented that year and by tracking impact indicators where available (See **Attachment B**).

Implementation:
A minimum of three of the tools from **Attachment B** will be implemented each year for the duration of the permit.

Responsible Party: Stormwater Coordinator (with implementation assistance from Cumberland County Soil & Water Conservation District)

3.1.2 BMP1B - Contractor Outreach to Raise Awareness

Description:
Evaluation of municipal stormwater programs, through annual meetings with municipal staff and officials, has revealed a large amount of effort required to comply with MCM 4 tasks. The ISWG communities identified opportunities to better address common MCM 4 goals through coordinated regional and statewide stormwater education to developers and contractors to reduce development and construction-related stormwater pollutants that are not already required by MCM 4. Due to the cyclical nature of the development/construction sector, a baseline evaluation will be conducted in Permit Year 1 to establish contractor and developer awareness and the baseline target audience.

Measurable Goals:
The Town, through its participation in the ISWG, will raise awareness of developers and contractors by 15% from the Permit Year 1 established baseline concerning construction-related stormwater pollutants and methods available to reduce the discharge of those pollutants.

- **Target Audience:** Developers and contractors who are located within the ISWG region.

- **Overarching Message:** "Through proper design and site management, erosion and sediment control best management practices can reduce the potential to negatively impact local water bodies." This message will be presented with variations based on target audience interests and outreach tools used.
- **Outreach Tools:** A minimum of three outreach tools will be selected from **Attachment B** each year. Each tool will be assessed and customized based on the target audience's receptiveness to the method. Any tool used in a given year will be tailored to the message of the relevant target audience subset based on common characteristics and/or demographics.
- **Effectiveness:** Effectiveness will be evaluated annually by tracking process indicators for each tool implemented that year and by tracking impact indicators where available (See **Attachment B**). Effectiveness will also be measured by the number of DEP certified contractors operating in the ISWG region over the course of the permit term.

Implementation:
A minimum of three of the tools will be implemented each year for the duration of the permit.

Responsible Party: Stormwater Coordinator (with Implementation assistance from CCSWCD).

3.1.3 BMP1C - Outreach to Change Behavior Campaign

The 2022 General Permit requires each MS4 permittee to implement an outreach campaign to promote and reinforce desirable behaviors designed to reduce stormwater pollution. The permittee must promote a minimum of one (1) behavior change per permit term and shall be directed to two (2) audiences annually and using a minimum of three (3) different outreach tools per year.

Description:
The ISWG communities have focused on changing behavior to reduce nutrients into regional waterbodies in their MS4 permit for the past three permit cycles. The ISWG communities will continue their efforts to reduce sources of nutrients, focusing on getting two target audiences to properly dispose of pet waste as their primary behavior change goal, for the following reasons:

1. Generally, excess nutrients in our waters are a nationally recognized water quality issue related to stormwater – there are multiple common sources of nutrients including sediments, pet waste, septic systems, and fertilizers;
2. The Statewide survey conducted in Permit Year 5 of the previous cycle identified that survey correspondents are aware that nutrient sources (including pet waste) are a common stormwater pollutant and correspondents expressed a willingness to take action to help correct stormwater pollution. Eighty-four percent of 2018 survey respondents in the ISWG region ages 25 to 34 and 67% of 2018 survey respondents in the ISWG region ages 35 to 55 selected "picking up pet waste and putting it in the trash" as a practice they believed could reduce water pollution;
3. Most ISWG communities are part of the Casco Bay watershed. In the June 2019 Casco Bay Nutrient Council report, nutrients were identified as the main pollutant of concern for the health of Casco Bay. While there is discrepancy between nutrient models as to the contribution percentages of the three main sources of nutrients (stormwater, wastewater, and atmospheric deposition), stormwater runoff is believed to contribute between 24% and 64% of the nitrogen entering the bay;
4. Several ISWG communities have encountered problems with pet waste not being picked up or not being properly disposed of in the trash, causing local water quality concerns and unsanitary conditions for the public and municipal staff;

5. Most ISWG communities have taken steps to discourage improper pet waste disposal through ordinances. However, there are currently still barriers to effectively educating and enforcing these types of ordinances; and

6. Dog owners ages 25 to 64 are the least likely age group to pick up after their dog. However, dog owners age 25 to 64 receive their information through different outreach methods. In order to provide effective messaging on proper dog waste management, two audiences will be created to allow appropriate outreach tools to be used per age group.

A baseline evaluation will be conducted in Permit Year 1 to establish dog owner behavior of dog waste disposal and the baseline target audience within the ISWG region.

Measurable Goals:
The ISWG communities will work toward changing the behavior of 15% of dog owners so more will properly dispose of their pet waste.

- **Target Audience One:** Pet owners ages 25-34 within the ISWG region.
- **Target Audience Two:** Pet owners ages 35-55 within the ISWG region.
- **Overarching Message:** "Dispose of dog waste as a solid waste, so it does not end up in our stormwater. Once in the stormwater, dog waste contributes nutrients, bacteria, and pathogens to our ponds, lakes, streams, rivers, and bays, which can lower property values, harm our drinking water, and hinder recreational and economic opportunities." This message will be presented with variations based on target audience interests and outreach tools used.
- **Outreach Tools:** A minimum of three outreach tools for each audience will be selected from **Attachment B** each year. Each tool will be assessed and customized based on the target audience's receptiveness to the method. Any tool used in a given year will be tailored to the message of the relevant target audience subset based on common characteristics and/or demographics.
- **Effectiveness:** Effectiveness will be evaluated annually by tracking process indicators for each tool implemented that year and by tracking impact indicators where available (See **Attachment B**). Effectiveness will also be evaluated by conducting surveys of dog waste disposal at public areas and tracking the presence of dog waste bags in catch basins.

Implementation:
A minimum of three of the tools will be implemented each year per audience for the duration of the permit.

Responsible Party: Stormwater Coordinator (with Implementation assistance from CCSWCD).

3.1.4 BMP1D - Effectiveness Evaluation

The 2022 General Permit requires each MS4 permittee to identify methods it will use to evaluate the effectiveness of each awareness and behavior change campaign. A relevant baseline evaluation (e.g. from previous permit cycle) must be conducted prior to each campaign, followed by an evaluation in year five of this permit to assess the overall effectiveness of the outreach program. Any message or delivery mechanism found ineffective or of unsatisfactory efficacy, must be modified accordingly.

Description:
The Town will collect Education/Outreach program data to show evidence that progress toward the defined awareness and behavior goals of the program is achieved.

Measurable Goals:

1. The Municipality, through its participation in ISWG, will submit an annual report each year of the 2022 MS4 General Permit term documenting the implementation of each BMP. The annual report will include the message for each audience, the methods of distribution, the outreach tools used, the measures/methods used to determine on-going effectiveness of the campaigns, and any changes planned based on the measures of effectiveness; and

2. In Permit Year 5 of the 2022 MS4 General Permit, the Town, through its participation in ISWG, will conduct an evaluation of the overall effectiveness of the Awareness and Behavior Change BMPs (BMPs **1A, 1B, and 1C**). The evaluation will be a review of the annually reported benchmark values for the Awareness and Behavior Change BMPs as well as documentation of overall changes during the permit term. The evaluation will identify recommendations for future awareness and behavior change target audiences, messages, tools, and benchmarks. A comprehensive survey will be conducted for the ISWG region to evaluate the impact of the awareness campaigns.

Implementation Tools:
At the beginning of and throughout the 2022 MS4 permit cycle, the Town will collect E&O program data and periodically assess the effectiveness of the awareness and behavior change campaigns (BMP1A, 1B, and 1C). The following tools will be implemented for evaluation:

1. Annually track the effectiveness of the outreach tools used; and

2. Through participation in ISWG, in PY5 the Town will contribute to the overall evaluation of ISWG's E&O programs and the Town's own outreach.

Responsible Party: Stormwater Coordinator (with Implementation assistance from CCSWCD)

3.1.5 BMP1E - Additional ISWG Activities

This BMP describes activities that are not required by the 2022 MS4 General Permit but are being conducted by the Town to supplement the Education/Outreach program.

Description:
The Town will participate in ISWG school outreach and yardscaping outreach.

Measurable Goals:

1. The Town will continue to support the CCSWCD's youth education curriculum to community schools as funding allows. Annual reports will include the total number of students reached, which schools were involved, and the lesson topics covered; and

2. The Town will support the regional YardScaping effort to reduce nutrients from entering regional waterways and increase buffers. Annual reports will include the total number of people reached, partner point of sale locations, and workshop survey data.

Implementation Tools:
Each permit year, the Town will support the Cumberland County Soil & Water Conservation District youth education curriculum and yardscaping campaign.

Responsible Party: Stormwater Coordinator (with Implementation assistance from CCSWCD)

3.1.6 BMP1F - Student Internship Program

This BMP describes activities that are not required by the 2022 MS4 General Permit but are being conducted by the Town to supplement the Education/Outreach program.

Description:
To help educate students about stormwater pollution and potential career options, the Town will continue to host at least one student for an internship position. This internship was started during the previous permit cycle. The intern may help with tasks such as dry weather outfall inspections, stormwater BMP inspections, stream assessments, and stream clean-ups.

Measurable Goals:

1. The Town will continue to have at least one high school intern each permit year to learn about careers in stormwater.
2. The internship will be two weeks long and include an evaluation at the conclusion of the position.

Implementation Tools:
Each permit year, the Town will have one high school intern. This position will include one or more of the following tasks:

- Dry weather outfall inspections;
- Stream Assessments;
- Stormwater BMP inspections;
- Stream clean-ups; or
- Another similar stormwater management related task.

Responsible Party: Stormwater Coordinator (with Implementation assistance from CCSWCD)

3.2 MCM II - Public Involvement and Participation

MS4 permittees must fully comply with MCM II by involving the public in the planning and implementation process of improving water quality and reducing stormwater quantity via their stormwater program. BMPs for this MCM must support active involvement of the public and stakeholders.

The Town will fulfill the requirements for Public Involvement and Participation through participation in the ISWG and the municipality's provisions of funding to CCSWCD for Public Involvement and Participation services, or through directly fulfilling the requirements, as described in this section of the plan.

3.2.1 BMP2A - Public Notice of Stakeholder Involvement

The MS4 permittee must comply with applicable state and local public notice requirements using effective mechanisms for reaching the public and comply with the Maine Freedom of Access Act when stakeholders are involved with implementation of the permit. The permittee must document the stakeholder meetings and attendance in the annual report as a way of measuring this goal.

Description:
The Town will follow state and local Public Notice requirements when involving stakeholders, including ISWG, in the implementation of the 2022 MS4 General Permit.

Measurable Goal:

- The Municipality will follow applicable state and local public notice requirements for their Stormwater Management Plans and Notices of Intent (NOIs) to comply with the MS4 General Permit by making copies of the NOIs and plans available on the Municipality's website. The Municipality will also document public meetings related to their stormwater program and attendance of those meetings in their annual report; and
- ISWG members meet as a group six times per year to review issues associated with implementation of the Stormwater Management Plan and MS4 General Permit. These meetings will be publicized through the CCSWCD website, on ISWG member websites, and open to the public.

Implementation Tools:
The Town will comply with public notice and access requirements by:

1. Providing public notice of ISWG meetings via the Town website; and
2. Posting the SMP on the Town website.

Responsible Party: Stormwater Coordinator (with implementation assistance from Cumberland County Soil & Water Conservation District)

3.2.2 BMP2B - Public Events

The permittee or regional stormwater group of which the permittee is a member must annually host/conduct or participate in a public event that includes a pollution prevention and/or water quality theme.

Description:
As a member of the ISWG, the Town will partcipate in at least one public event each permit year. These events will increase public involvement and participation in reducing stormwater pollution.

Measurable Goal:
The Town will annually host, conduct, and/or participate in a public community event with a pollution prevention and/or water quality theme from the list included in the 2022 MS4 General Permit or another activity approved by the MDEP. Stormwater stewardship and educational messages and activities will be incorporated into the event. The event will be advertised on the Town website, through the Town's and CCSWCD's social media accounts, and other municipal and CCSWCD communication methods. The annual report will include a description of the event and the estimated attendance/participation.

Implementation Tools:
Each permit year the Town will participate in at least one public event coordinated by the ISWG with a pollution prevention and/or water quality theme.

Responsible Party: Stormwater Coordinator (with implementation assistance from CCSWCD)

3.3 MCM III - Illicit Discharge Detection and Elimination

Each MS4 permittee must implement and enforce a program to detect and eliminate illicit discharges and unauthorized non-stormwater discharges. The program must address the following four components: 1) Procedures for prioritizing watersheds, 2) Procedures for tracing the source of an illicit discharge, 3) Procedures for removing the source of the discharges, and 4) Procedures for program evaluation and assessment.

To meet MS4 General Permit requirements for this MCM, the Town will continue to implement its Illicit Discharge Detection and Elimination (IDDE) program, which includes:

- A Watershed-based map of the Town's stormwater management system;
- A written IDDE Plan which includes;
  - Inspections of outfalls owned/operated by the Town (and monitoring of outfalls which flow during dry weather);
  - Investigations of potential illicit discharges;
  - Enforcement of the Non-Stormwater Discharge Ordinance; and
  - A Quality Assurance Project Plan (QAPP).
- Development of a prioritized list of outfalls which have the potential to cause illicit discharges during wet weather.

The following BMPs will be implemented to meet this MCM.

3.3.1 BMP3A - Non-stormwater Discharge Ordinance

The permittee must continue to implement a non-stormwater discharge ordinance that prohibits non-stormwater discharges and provides for the implementation of appropriate enforcement procedures and actions.

Description:
The Town approved its Non-Stormwater Discharge Ordinance, which is included as Chapter 1, of the Town's Stormwater Ordinance in March of 2011. The ordinance has been implemented since approval, and is enforced by the Town Code Enforcement Officer.

Measurable Goals:

1. The Town will implement and enforce its non-stormwater discharge ordinance throughout the 2022 MS4 permit cycle; and
2. Any violations of the non-stormwater discharge ordinance and related enforcement actions during the permit cycle will be documented.

Implementation:
The Town will continue to implement and enforce its non-stormwater discharge ordinance including potential sanitary sewer overflows (SSOs) to the MS4 within the Town's regulated MS4 area.

Responsible Party: Code Enforcement Officer

3.3.2 BMP3B - IDDE Plan

The IDDE program must include a written IDDE Plan to address any discharge that is not uncontaminated groundwater, water from a natural resource, or an allowable non-stormwater discharge. The plan must address dumping that results in illicit discharges to the MS4. The IDDE plan must set forth all written procedures developed in accordance with the requirements listed in the General Permit.

Description:
The Town developed an IDDE Plan as part of the 2013 MS4 General Permit, and has updated the IDDE Plan (see **Attachment C**) to meet requirements of the 2022 MS4 General Permit.

Measurable Goal:
As part of its IDDE program, the Town will review its IDDE Plan each permit year and revise the plan, as necessary.

Implementation:
The Town will continue to review their IDDE plan annually and revise the plan as needed.

Responsible Party: Stormwater Coordinator

3.3.3 BMP3C - Watershed Based Storm Sewer System Infrastructure Map

Permittees must maintain a map(s) of their municipally-owned or operated storm sewer system. The map(s) must show the location of all stormwater catch basins, connecting surface and subsurface infrastructure, depict the direction of in-flow and out-flow pipes, and the locations of all discharges from all stormwater outfalls operated by the regulated small MS4 to receiving waters or to an interconnected MS4 as well as the name of the receiving water for each outfall. Each catch basin must be uniquely identified to facilitate control of potential illicit discharges and proper operation and maintenance of these structures. Permittees must continue to keep their map(s) current and ensure that maps are reviewed for any updates at least annually. Permittees may choose to utilize paper or electronic maps for their storm sewer system.

Description:
The Town developed and refined a watershed based storm sewer system infrastructure map during previous MS4 permit cycles. The Town utilizes a Geographic Information System (GIS) based mapping system to manage all MS4 related storm sewer system components.

Measurable Goals:
The Town will annually review its storm sewer infrastructure maps and revise, as necessary. The review will encompass all existing storm sewer system infrastructure, including but not limited to:

- The location of all stormwater catch basins;
- Connecting surface and subsurface infrastructure depicting the direction of in-flow and out-flow pipes; and
- The locations and receiving waters for all municipal stormwater outfalls within the regulated area.

Implementation:
The Town will continue to refine their Town infrastructure mapping system, as necessary, during each year of the current MS4 permit cycle to address potential changes to their stormwater management system. The Town will rely on the annual storm sewer system infrastructure inspection program described in **BMPs 3D** and **6E** below to maintain awareness of system changes and necessary mapping updates.

Responsible Party: Stormwater Coordinator

3.3.4 BMP3D - Dry Weather Outfall Inspection

Permittees must implement a dry weather outfall inspection program that includes all elements outlined in Part IV(C)(3)(e)(i - vii) of the General Permit.

Description:
The Town performs annual dry weather inspections of identified stormwater outfalls in the urbanized area. The Town has identified priority areas where illicit discharges might be present. Dry weather outfall inspections are included as part of this priority IDDE program. The inspection program is designed to identify potential illicit discharges within the Town's stormwater management system, and is a critical component for minimizing stormwater pollution to receiving waterbodies.

Measurable Goal:
Annually inspect 20% of outfalls within the Town's regulated area.

Implementation:
The Town will continue to annually perform its existing dry weather outfall inspection program, prioritizing inspection of outfalls discharging from the Town's priority watershed. Stormwater Team members involved in the inspection program will be trained as necessary on how to conduct and record dry weather inspections. Inspection results will be documented in a database management system or other record keeping system for compliance purposes. The Town will rely on available resources specifically addressing illicit discharge detection and elimination, including, but not limited to the Town's IDDE Plan.

Responsible Party: Stormwater Coordinator

3.3.5 BMP3E - Wet Weather Assessment for Potential Illicit Discharges

Prior to the expiration date of the 2022 MS4 General Permit, permittees must perform a wet weather assessment for the potential for illicit discharges during wet weather events. The assessment will vary by permittee and utilize data from existing studies including those listed in Part IV(C)(3)(f) of the General Permit. The outcome of the assessment will be a list of outfalls identified for wet weather monitoring and testing, if applicable, by the permittee in the next permit cycle and the rationale for including these outfalls. On or before the expiration date of this General Permit, the permittee must identify these wet weather outfalls in its written IDDE plan, identify specific parameters for wet weather monitoring based on the EPA New England bacterial source tracking protocol or other acceptable protocols or methodologies, and specify the timing and frequency of wet weather monitoring to be completed during the term of the next permit cycle. Should the permittee complete this assessment prior to the expiration date of the General Permit, the permittee must implement the wet weather monitoring immediately.

Description:
The Town will conduct a wet weather assessment in accordance with the 2022 MS4 General Permit Part IV(C)(3)(f), and will incorporate the wet weather assessment into their IDDE Plan by the end of PY5 (6/30/2027).

Measurable Goals:
The Town's wet weather assessment will identify all outfalls in the regulated area that have the potential for illicit discharges during wet weather events, identify targeted wet weather outfalls for monitoring during the next permit cycle, and incorporate the wet weather assessment into the Town IDDE Plan by the end of PY5.

Implementation:
The Town will conduct a comprehensive wet weather outfall assessment (identifying outfalls/parameters for

future wet weather monitoring) over the course of the 2022 MS4 permit cycle.

Responsible Party: Stormwater Coordinator

3.3.6 BMP3F - Identify Allowable Non-stormwater Discharges that Contribute Pollutants

The permittee must include if it has identified any allowable non-stormwater discharges that are significant contributors of pollutants to the MS4. The non-stormwater discharges authorized by the General Permit are listed in Part IV(C)(3)(h) of the permit. If sources are identified, then the permittee must implement measures and/or cooperate with responsible dischargers to control these sources so they are no longer significant contributors of pollutants.

Description:
The Town has prioritized the following municipal generated allowable non-stormwater discharge to its MS4:

Hydrant flushing runoff: The Town relies on Portland Water District (PWD) personnel for the flushing of all Town owned fire hydrants located in the municipality. The Town's Stormwater Management Team, in coordination with Water District personnel, developed and implemented a standard operating procedure (SOP) for the flushing of all municipally owned hydrants within the regulated urbanized area. This SOP (included in the IDDE Plan, found in **Attachment C**) ensures that discharges from the Town's MS4 to receiving waterbodies as a result of hydrant flushing activities are not significant contributors of pollutants.

Measurable Goals:
The Town will meet the following goals to control pollutant contributions from the identified allowable non-stormwater discharges:

1. Annual review of Town hydrant map, including where discharges drain to the MS4 and receiving waters;
2. Request an annual water quality report from the PWD concerning hydrant flushing activities; and
3. Address any other allowable non-stormwater discharges (see General Permit Part IV(C)(3)(h)) that are identified as significant contributors of pollutants to the MS4.

Implementation:
The Town will implement the following measures to control pollutant contributions from the Town's allowable non-stormwater discharges:

1. The Town will work with the PWD to annually review and update the Town infrastructure map to maintain location points of all hydrants;
2. The Town will request an annual water quality report documenting all best management practices implemented for hydrant flushing activities as well as the PWD's testing results of the total residual chlorine for these discharges; and
3. During each permit year, the Town will include a summary of all hydrant flushing activities conducted within the regulated area in their MS4 Annual Report.

Responsible Party: Stormwater Coordinator

3.4 MCM IV - Construction Site Stormwater Runoff Control

Each permittee must implement and enforce a program to minimize or eliminate pollutants in any stormwater runoff from construction activities that disturb one acre or more of land within the urbanized area. Reduction of stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

The Town of Gorham selected the following Best Management Practices (BMPs) to meet requirements of MCM IV, ensuring that construction on both public and private property does not impact water resources.

3.4.1 BMP4A - Erosion and Sediment Control Regulatory Mechanism

The General Permit requires that the MS4 permittee have an ordinance or other regulatory mechanism in place that requires the use of erosion and sediment control BMPs at construction sites consistent with the minimum standards outlined in Appendix C of the 2022 MS4 General Permit. Permittees who have an existing ordinance must evaluate and update it as needed within one (1) year of the effective date of this GP. Permittees without an existing ordinance must develop an ordinance within one (1) year of the effective date of this GP and have an approved ordinance in place with the necessary enforcement authority within two (2) years of the effective date of this General Permit.

Description:
The Town of Gorham will continue to enforce an existing program to reduce pollutants in any stormwater runoff to the MS4 from construction activities resulting in a land disturbance of greater than or equal to one acre within the Town's urbanized area. The Town relies on Chapter 500, which applies to a project that disturbs one acre or more of land area and requires a stormwater permit, issued by MDEP, pursuant to the Stormwater Management Law. Chapter 500 Appendix C describes housekeeping performance standards, including construction site waste control, for permitted construction projects.

Measurable Goal: In PY1, the Town will evaluate and update its existing regulatory mechanism, as necessary, to include references to the requirements found in Attachment C of the MS4 General Permit. These requirements include the provisions detailed in the MDEP Chapter 500 Appendix A - Erosion and Sediment Control, Appendix B - Inspections and Maintenance, and Appendix C - Housekeeping. If updates to the Town's existing ordinance are required, they will be completed by July 1, 2023.

Implementation:
The City will rely on the MDEP's administration and enforcement of Chapter 500 for all projects resulting in a land disturbance of greater than or equal to one acre in the City. The City may opt to implement and enforce their existing construction site stormwater runoff control program within the municipal boundary and not just the urbanized area.

Responsible Party: Stormwater Coordinator

3.4.2 BMP4B - Procedures for Site Plan Review

The MS4 permittee must develop and implement procedures for site plan review that incorporate consideration of potential water quality impacts, erosion control, waste storage, and other elements of this MCM, the ability for the public to comment on such reviews at publicly-noticed meetings, and procedures to consider information submitted by the public.

Description:
The Town of Gorham has a Site Plan Review Ordinance that applies to construction sites. The Town Planning Board is authorized to review and act on all site plans for development requiring site plan review. All Town Planning Board meetings are open to public attendance and public comment.

Measurable Goals:
The Town will meet the following goals for implementing site plan review procedures to address MS4 permit requirements:

1. In PY1, evaluate the site plan review procedures, as applicable to the MS4 program, updating the ordinance as necessary;
2. Notify the Town residents of all Planning Board meetings; and
3. Consider all public input related to site plan reviews and actions.

Implementation:
The Town will continue implementation and enforcement of its Site Plan Review Ordinance, specifically:

1. Throughout the 2022 permit cycle, the Town will review and update its Site Plan Review Ordinance as necessary to incorporate consideration of stormwater runoff control at applicable construction sites;
2. Continue to notify and invite the public to Town Planning Board meetings; and
3. Allow for public comment on site plan reviews applicable to MS4 regulation.

Responsible Party: Stormwater Coordinator

3.4.3 BMP4C - Procedures for Notification

The permittee's construction site runoff program must include procedures for notifying construction site developers and operators of the requirements for registration under the Maine Construction General Permit and Chapter 500, Stormwater Management.

Description:
To maintain the effectiveness of construction site stormwater control best management practices (BMPs), regular inspection of control measures is essential. The City will continue to inspect applicable construction projects for erosion and sediment control (E&SC) and good housekeeping/pollution prevention, as required by the MS4 General Permit. The City will also develop a construction site inspection plan, detailing inspection procedures and follow-up actions for applicable construction sites within the regulated area.

Measurable Goals:
During each permit year, the Town will rely on development and building permit applications, which include notification of requirement for registration under the MCGP or Chapter 500 requirements. During each permit year the Town will provide a brief summary of all projects meeting the requirements for notification in the MS4 Annual Report submitted to MDEP.

Implementation:
Construction site developers and operators will be made aware of this requirement through development and building permit applications for applicable projects.

Responsible Party: Stormwater Coordinator

3.4.4 BMP4D - Construction Site Inspections and Documentation

The permittee must document construction activity that disturbs one or more acres within the urbanized area. Written procedures for site inspection and enforcement authority must be documented. Construction site inspections must be completed following minimum requirements outlined in Part IV(4)(a)(v)(b) of the General Permit.

Description:
To maintain the effectiveness of construction site stormwater control best management practices (BMPs), regular inspection of control measures is essential. The Town will ensure construction projects are in full compliance with the MCGP or Chapter 500 requirements.

Measurable Goals:
The Town will meet the following goals for construction site inspections and documentation:

1. By the General Permit effective date (July 1st, 2022), develop written procedures for site inspection and enforcement of erosion and sediment control (E&SC) measures;
2. Inspect each applicable construction site for E&SC compliance at least three times during the active earth-moving phase of the operation (see **Attachment D** for a typical example of the form used for these inspections);
3. Inspect each applicable construction site for E&SC compliance annually until the operation reaches substantial completion;
4. Inspect each applicable construction site for E&SC compliance at project completion to ensure that the site reached permanent stabilization and all temporary erosion and sediment controls have been removed;
5. Document all construction inspections, enforcement action, and corrective actions taken; and
6. Summarize the inspection program results in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
Qualified Town personnel will perform, or contract to perform, applicable construction site inspections at the frequency specified in written inspection procedures. For sites not in compliance, the inspector(s) will provide site operators with guidance on how to come into compliance. Sites which are not brought into compliance with the MCGP within a reasonable period after receiving guidance from the inspector(s) or after other measures are taken by the MS4, will be reported to the MDEP for non-compliance with the MS4 Permit.

Responsible Party: Stormwater Coordinator

3.5 MCM V - Post-Construction Runoff Control for New Development and Redevelopment

Each permittee must implement and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4.

The Town selected the following Best Management Practices (BMPs) for the Post-Construction Stormwater Management MCM of this SMP.

3.5.1 BMP5A - Promote Low Impact Development

The permittee must promote strategies which include a combination of structural and/or nonstructural BMPs appropriate to prevent or minimize water quality impacts.

Description:
Developers and/or construction site operators are notified of low impact development (LID) strategies through municipal Site Plan Review applications, which refer applicants to the MDEP's Chapter 500 requirements regarding LID.

Measurable Goals:
The Town will promote LID strategies for all applicable site development projects within the urbanized area.

Implementation:
The Town will promote LID as part of its Site Plan Review procedures, relying on Chapter 500 Stormwater requirements and/or the current Town ordinance as applicable to each site development project.

Responsible Party: Storwmater Coordinator

3.5.2 BMP5B - Post-Construction Discharge Ordinance

Each MS4 permittee must have and implement a post-construction discharge ordinance, or other regulatory mechanism. Per the ordinance, applicable BMPs must be inspected annually to document their proper function and any completed maintenance. This ordinance must also include provisions for the timely correction of any identified deficiencies.

Description:
The Town will continue to rely on their existing post-construction stormwater ordinance developed during a previous permit cycle and enacted on July 1, 2009.

Measurable Goals:

1. The Town's Post-Construction Stormwater Discharge Ordinance will be reviewed and updated to meet curent MS4 General Permit requirements by the end of PY1 (July 1st, 2023).
2. During each permit year the Town will ensure applicable post-construction stormwater management BMPs discharging to its regulated MS4 are functioning properly, as required by the General Permit. This includes those that are either privately or municipally owned and operated.
3. A summary of all post-construction inspections performed for MS4 permit compliance will be provided in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
The Town Post-Construction Stormwater Discharge Ordinance will be updated to contain the following specific requirements:

- The owner or operator of a post-construction BMP must provide the Town with an annual report, completed by a qualified inspector documenting that all on-site BMPs are adequately maintained and functioning as intended; and
- If a post-construction BMP requires maintenance, the owner or operator must provide the Town with a record of the deficiency and corrective action(s) taken no later than 60 days following the date the deficiency was identified. If 60 days is not possible, then the operator must establish an expeditious schedule to complete the maintenance and establish a record of the deficiency and corrective action(s) taken.

Responsible Party: Stormwater Coordinator

3.6 MCM VI - Pollution Prevention/Good Housekeeping for Municipal Operations

The objective of this program is to mitigate or eliminate pollutant runoff from municipal operations on property that is owned or managed by the permittee and located within the urbanized area.

The Town selected BMPs for the Pollution Prevention/Good Housekeeping for Municipal Operations MCM of this SMP. The following BMPs are specific to the Town and are to be implemented in addition to those options outlined in the BASWG SMP.

3.6.1 BMP6A - Operation and Maintenance Activities

Permittees must inventory and implement written operation and maintenance (O&M) procedures for all municipal operations conducted in, on, or associated with facilities, buildings, golf courses, cemeteries, parks, and open space owned or operated by the permittee that have the potential to cause or contribute to stormwater or surface water pollution. O&M procedures must reduce stormwater pollution to the maximum extent practicable and address stormwater treatment and controls that are used to achieve compliance with the conditions of the permit.

Description:
For previous MS4 permit cycles, the Town developed and/or revised an O&M Plan for all activities occurring on municipally owned properties that have the potential to impact stormwater runoff. The O&M Plan contains an inventory of these municipal operations.

The Plan inventory includes, at a minimum, the following activities:

- Automobile Maintenance;
- Hazardous Materials Storage;
- Landscaping and Lawn Care;
- Parking Lot and Street cleaning;
- Roadway Maintenance;
- Pest Control;
- Road Salt Application and Storage;
- Spill Response and Prevention;
- Storm Drain System Cleaning;
- Vehicle Washing; and
- Vehicle Fueling System.

Measurable Goals:

1. The Town will annually review and update its inventory of municipal operations that have the potential to cause or contribute to stormwater pollution;
2. The Town will evaluate the O&M Plan annually to iteratively improve strategies and practices to eliminate or better control pollutant discharges; and
3. A summary of the O&M activities and any proposed changes to the O&M Plan based on annual evaluations will be provided in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
The Town will update its O&M Plan to meet 2022 MS4 permit requirements by the permit effective date (July 1st, 2022), and review the plan annually thereafter. During all years of the 2022 permit cycle, the Town will implement this O&M Plan for municipal activities occurring in the Town that have the potential to impact stormwater runoff.

Responsible Party: Stormwater Coordinator

3.6.2 BMP6B - Municipal Employee Training

The permittee must conduct annual employee training to prevent and reduce stormwater pollution from municipal operations and facilities subject to the MS4 permit. Compliance measures related to trainings must be documented and reported to MDEP annually, and must include: the types of trainings presented, names and titles of attendees, the length of the training, and training content delivered.

Description:
The Town provides municipal employee training on an as needed basis, but at a minumum annually. The training programs focus on municipal activities occurring in the Town which have a potential to impact stormwater runoff. Typical municipal operations with this potential have been identified in the O&M Plan in **BMP 6A**.

Measurable Goals:

1. The Town will annually evaluate and identify training needs and materials for MS4 staff regarding municipal O&M procedures.
2. Each permit year the Town will provide an appropriate employee training program that addresses means to reduce stormwater pollution from municipal operations.
3. The Town will document the following MS4 permit compliance measures for each annual training:
    - Types of training presented;
    - Percentage of municipal and contract staff trainees;
    - Occupations of municipal and contract staff trainees;
    - Duration of the training program; and
    - Content delivered during the training program.
4. The Town will report compliance measures related to municipal trainings in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
Each permit year, the Town will evaluate and identify specific training needs for municipal and contract staff regarding the Town's O&M procedures. The Town will then develop and gather materials appropriate for the topic to be presented. Topics to be covered by the training program may include, but are not limited to:

- Maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural stormwater controls to reduce pollutants discharged from the MS4;
- Controls for reducing or eliminating the discharge of pollutants into the MS4 from streets, roads, highways, parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations, snow disposal areas, and waste transfer stations; and

- Procedures for disposing of waste removed from the MS4 and areas listed above in accordance with all regulatory requirements (such as dredge spoil, accumulated sediments, floatables, and other debris).

The Town may opt to coordinate employee trainings through a regional effort sponsored by the ISWG. Town staff have participated in similar regional training programs as a cost saving measure during previous MS4 permit cycles.

Responsible Party: Stormwater Coordinator

3.6.3 BMP6C - Street Sweeping

The permittees must develop and implement a program to sweep all paved streets and paved parking lots maintained by the permittee at least once a year done soon after snowmelt.

Description:
The Town of Gorham employs a regular sweeping program on all Town owned parking lots and roads. Town personnel involved with winter maintenance operations also perform street sweeping. Applicable staff will be trained on all requirements associated with MS4 Program compliance.

Measurable Goals:

1. The Town will perform street sweeping of all municipally owned/operated roads at least one time each year, as soon as possible after snowmelt;
2. As necessary, the Town will modify their winter road and parking lot maintenance program based on annual evaluations of street sweeping activities; and
3. A summary of annual sweeping activities and any program modifications will be provided in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
During each permit year, the Town will continue to implement a sweeping program for all municipally owned parking lots and roads. The Town will annually evaluate the effectiveness of their street sweeping program and alter the program, as necessary, to meet their winter maintenance goals. Sweeping of all Town owned roads and parking lots occurs as soon as possible after snowmelt.

Responsible Party: Public Works Director

3.6.4 BMP6D - Catch Basin Inspection and Cleaning

The permittee must develop and implement a program to inspect catch basins and other stormwater structures that accumulate sediment. All catch basins and stormwater structures must be inspected at least once every other year and cleaned with a frequency appropriate to the accumulation identified. Sediments must be removed in accordance with current state law.

Description:
The Town's stormwater management system consists of a system of open ditches, catch basins and interconnecting storm drains collecting runoff that discharge to identified outfalls.

Measurable Goals:
Per MS4 permit requirements, the Town will meet the following stormwater structure inspection and cleaning goals:

1. During each permit year the Town will inspect and clean (as necessary) storm drains and catch basins in the storm sewer system to meet the following required frequency and conditions:
    - Inspect and clean a minimum of 50% of all catch basins, so that all catch basins are inspected and cleaned over the course of two years;
    - Clean catch basins more frequently if inspections indicate excessive accumulation (50% of the sump is filled) of sediment.
        - If two consecutive inspections show excess accumulation, then the Town will clean those catch basins every year.
        - If annual inspections show a decrease in sediment accumulation to less than 25% of the sump, then inspections can be resumed at a frequency of once every two years.
2. The Town will perform opportunistic inspections of the catch basins during the cleaning process to detect potential illicit discharges; and
3. Inspections will be documented in a database system used by the Town to manage all MS4 related inspections.

Implementation:
The Town will continue to inspect every year, and clean at the required frequency and conditions outlined in Measurable Goal 1, all municipally owned catch basins. See **Attachment C** for an example of the form used for these inspections.

Responsible Party: Public Works Director

3.6.5 BMP6E - Maintenance and Upgrading of Stormwater Conveyance System

The permittee must evaluate and implement a prioritized schedule, as necessary, for repairing or upgrading the conveyances, structures, and outfalls within the regulated area.

Description:
The Town's stormwater conveyance system consists of a system of open ditches, catch basins and inter-connecting storm drains collecting runoff that discharge to identified outfalls.

Measurable Goals:

1. During each permit year, the Town will continue to evaluate and implement a maintenance schedule for conveyances, structures and outfalls owned and operated by the MS4; and
2. A summary of annual activities will be provided in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
The Town will continue to evaluate their stormwater conveyance system each year. Based on the results of dry weather outfall inspections, catch basin inspections (**BMPs 3D**, **6D**), and other factors, the Town will plan and implement (as necessary) a repair schedule of municipally owned conveyances, structures and outfalls.

Responsible Party: Public Works Director

3.6.6 BMP6F - Stormwater Pollution Prevention Plan (SWPPP)

The permittee must implement written procedures outlined in a stormwater pollution prevention plan ("SWPPP") for operations or facilities that are owned or operated by the permittee and not already regulated under the Maine Industrial Stormwater Program: public works facilities; transfer stations; and/or school bus maintenance facilities. SWPPP implementation must address long-term operation of structural and non-structural controls that reduce stormwater pollution to the maximum extent practicable.

Description:
During the previous permit cycle, the Town developed a SWPPP for relevant Town operations and facilities. The SWPPP includes compliance with necessary requirements under the most current issuance of the MDEP's Multi-Sector General Permit (MSGP) for Industrial Activities.

Measurable Goals:

1. The Town will perform necessary quarterly visual monitoring and other compliance tasks each year, as described in their current SWPPP;
2. The Town will make the SWPPP available to appropriate facility staff, MDEP and USEPA staff, and keep a copy of the SWPPP on-site at all times for reference and review;
3. The Town will amend the SWPPP to comply with the requirements specified in Part IV(C)(6)(d) of the MS4 General Permit by the permit effective date of July 1st, 2022;
4. The Town will further amend the SWPPP within 30 calendar days of completion of any of the following:
    - A change in design, construction, operation or maintenance that may have a significant effect on the discharge or potential for discharge of pollutants including the addition or reduction of industrial activity;
    - Monitoring, inspections, or investigations by Town, local, state or federal officials that determine the SWPPP is ineffective in eliminating or significantly minimizing the intended pollutants; or
    - A discharge occurs that is determined by the MDEP to cause or have the reasonable potential to cause or contribute to the violation of an applicable water quality standard.
5. The Town will maintain the proper documentation for inspections and monitoring activities;
6. Annual training for SWPPP activities will be provided as part of MS4 related trainings for relevant Town staff; and
7. A summary of SWPPP related activities will be provided in the MS4 Annual Report submitted to MDEP each permit year.

Implementation:
During each permit year, the Town will implement stormwater pollution control measures, non-numeric effluent limitations, and pollution prevention practices identified in the SWPPP. Town staff will perform necessary tasks to maintain compliance with the requirements of the most current issuance of the MDEP MSGP, including quarterly visual monitoring.

Responsible Party: Stormwater Coordinator

4 General Requirements

4.1 Plan Approval

The Town is committed to reduce the discharge of pollutants from its regulated small MS4 to the maximum extent practicable, and maintains the highest standards for stormwater management through regular review, updating, and implementation of this Stormwater Management Plan.

Signature

3/29/2021
Date

Ephrem Paraschak - Town Manager
Printed Name, Title

4.2 Plan Location and Public Access

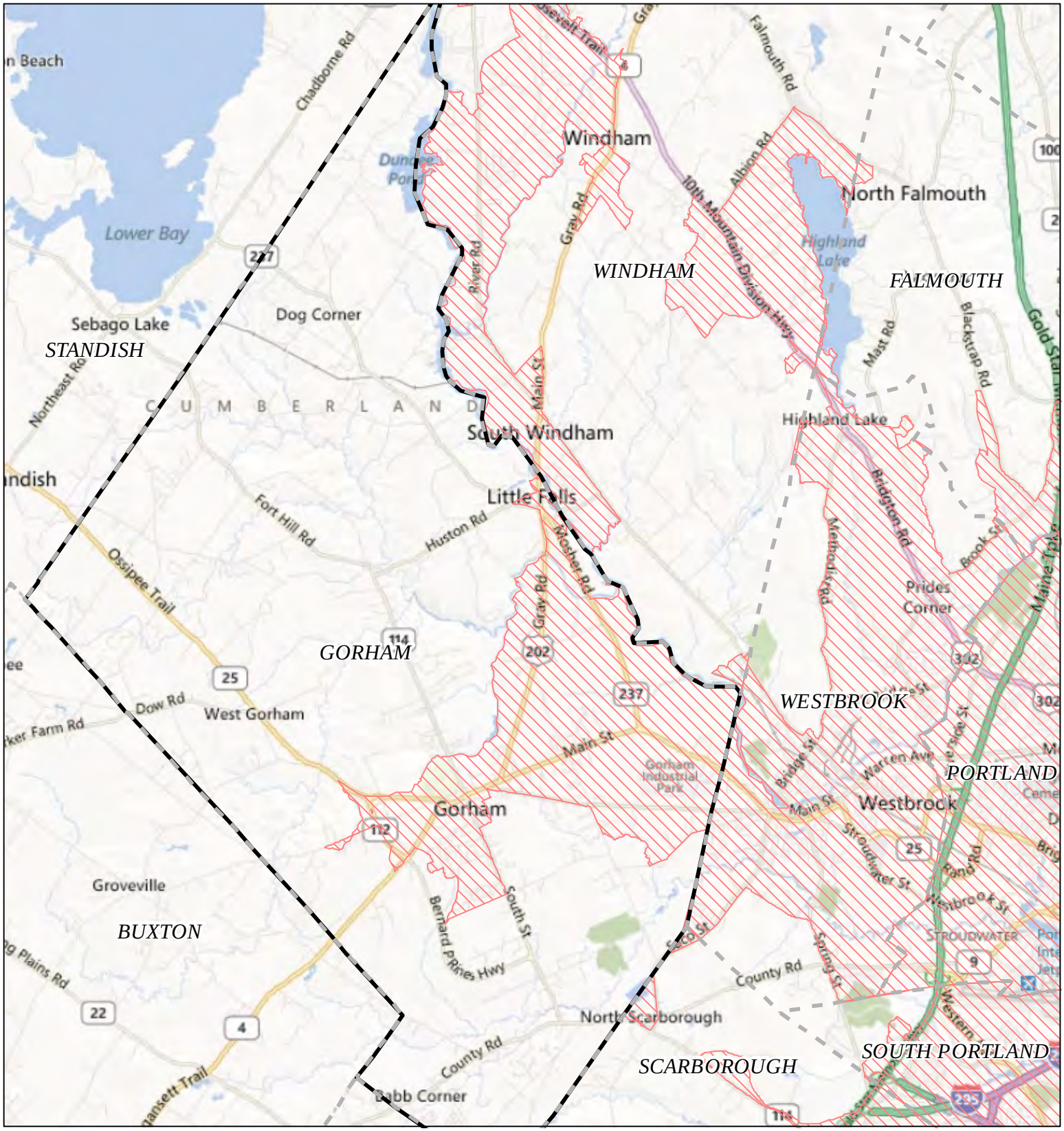
The Stormwater Management Plan and documents will be kept on file at the the Town office and will be posted on the Town website, with a backup copy located at SEE, Inc. in Orono, Maine. Copies and review of documents will be made available when requested by appropriate government agencies and public safety groups.

5 References

Portions of the Introduction and select areas of this document were adapted from a SMP Template prepared by Integrated Environmental Solutions for the Interlocal Stormwater Working Group (ISWG).

Attachments

A Urbanized Area Map



NPDES Phase II Stormwater Program
Automatically Designated MS4 Areas

Gorham ME

Regulated Area (2000 + 2010 Urbanized Area)

0 1 2 3 4 5 6 7 Kilometers

0 1 2 3 4 5 6 Miles

Town Population: 16428

Regulated Population: 6814

(Populations estimated from 2010 Census)

Urbanized Areas, Town Boundaries:
US Census (2000, 2010)
Base map © 2010 Microsoft Corporation
and its data suppliers

US EPA Region 1 GIS Center Map #8824, 11/19/2012

B Education and Outreach Tools, Levels of Effort, and Effectiveness Benchmarks

Below is a list of tools with their corresponding minimum level of effort and effectiveness benchmark that will be selected from each year to implement BMP1A, BMP1B, and BMP1C.

For effectiveness benchmarks, (P) denotes a process indicator and (I) denotes an impact indicator.

Outreach Tool	Minimum Level of Effort	Effectiveness Benchmark
Poster	10 posters/municipality	Total # of posters distributed (P)
Flyer	1 flyer	Total # of flyers distributed (P)
Brochure	1 brochure	Total # of brochures distributed (P)
Rack Card	1 rack card	Total # of rack cards distributed (P)
Newsletter Article	2 newsletter articles	Total # of newsletters distributed (P)
Post Card	1 post card	Total # of postcards distributed (P)
Fact Sheet	1 factsheet	Total # of factsheets distributed (P)
Sign	5 signs/municipality	Total # of signs distributed (P)
Story Walk	1 story walk	Number of QR code (or similar technology) scans from signs (I)
Story Map	1 regional story map	Number of visitors to webpage (I)
Stormwater Geocaching	1 regional activity (14 sites)	Number of participants per site (I)
Augmented Reality App	1 regional activity (14 sites)	Number of app downloads (I) Number of engagements within the app (I)
Municipal Electronic Message Board	3 messages	Amount of time message is displayed (P)
Email Newsletter	4 email newsletters	Number of people reached with email (P) Number of interactions with email (e.g., link clicks) (I)
Municipal Website Content	Semiannual updates to website stormwater content	Number of visitors to webpage (I)
Think Blue Maine Website Content	Semiannual updates to website content	Number of visitors to webpage (I)

Outreach Tool	Minimum Level of Effort	Effectiveness Benchmark
Social Media Post (each platform counts as separate tool)	12 posts	Amount of post engagement (e.g., reactions, comments, shares, etc.) (I)
Social Media Ad (each platform counts as separate tool)	Ad(s) run 90 days (multiple ads may be run for shorter durations to total 90 days)	Amount of ad engagement (e.g., reactions, comments, shares, link clicks etc.) (I) Number of people reached with ad (I)
Social Media Video (each platform counts as separate tool)	3 videos	Amount of ad engagement (e.g., reactions, comments, shares, link clicks etc.) (I) Number of people reached with ad (I)
Online Ad	Ad(s) run 90 days (multiple ads may be run for shorter durations to total 90 days)	Number of people reached with ad (I) Amount of ad engagement (e.g., link clicks) (I)
Radio Ad	1 radio ad	Number of people reached with ad (I)
Radio Segment	1 radio segment	Number of people reached with segment (I)
Television Ad (broadcast or streaming)	1 television ad	Number of people reached with ad (I)
Television News Segment (broadcast or streaming)	1 television news segment	Number of people reached with segment (I)
Newspaper Article	1 newspaper article	Number of people reached with segment (I)
Newspaper Ad	1 newspaper ad	Number of people reached with ad (I)
Webinar/Workshop	7 hours of training offered (multiple webinars/workshops may be offered to reach 7 hours)	Number of workshop attendees (P)
Social Gathering	3 events	Number of interactions (P)
Tabling	3 events	Number of interactions (P)

Outreach Tool	Minimum Level of Effort	Effectiveness Benchmark
Outreach partnership with local retailer	50% of industry retailers in region participating	Number of local retailers participating (P)
Outreach partnership with local organization	3 content shares by partner organization	Number of people reached (P)
Item with branding/messaging	1 item with branding/messaging	Number of people reached (P)
A DEP-approved tool	Minimum level of effort will be determined based on the tool	Effectiveness benchmark will be determined based on the tool

C Illicit Discharge Detection and Elimination (IDDE) Plan

ILLICIT DISCHARGE DETECTION AND ELIMINATION MANUAL

March 2021

Town of Gorham
Stormwater
Compliance

Revision Page

This IDDE Manual was originally developed in January of 2017, and replaced the *Illicit Discharge Detection and Elimination Program Standard Operating Procedure for the Town of Gorham Department of Public Works* (2015).

This IDDE Manual will be updated if any of the following occur:

- A new permit is issued which changes the requirements described in this IDDE Manual .
- The Town identifies that the Manual is not effective.
- Municipal operations change which need to be reflected in this Manual.

The following is a list of revisions:

Revision No.	**Revision Date**	**Description**
1	March 2021	Update to reflect 2022 MS4 General Permit requirements, including sampling and analysis and QAPP.

Table of Contents

LIST OF ATTACHMENTS

1.0 Introduction

This manual describes the Town of Gorham's Illicit Discharge Detection and Elimination (IDDE) program, as required by the Maine Department of Environmental Protection (Maine DEP) through the General Permit for Stormwater Discharges from Municipal Separate Storm Sewer System (MS4) General Permit. This manual fulfills the Minimum Control Measure (MCM) 3, which is one of six MCMs required to be included in the Town's Stormwater Management Plan.

1.1 What is an MS4?

The Maine MS4 General Permit defines a MS4 as "…a conveyance or system of conveyances designed or used for collecting or conveying stormwater…including, but not limited to roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels or storm drains owned or operated by any municipality, sewer or sewage district, Maine Department of Transportation (MDOT), Maine Turnpike Authority (MTA), State agency or Federal agency or other public entity that discharges directly to waters of the State other than groundwater."

1.2 Background of NPDES and MS4 General Permit

Although the quality of the nation's waters has improved greatly since the passage of the Clean Water Act (CWA) in 1972, many water bodies are still impaired by pollution. According to the United States Environment Protection Agency (EPA), the top causes of impairment include siltation, nutrients, bacteria, metals, and oxygen-depleting substances. Polluted stormwater runoff, including runoff from urban/suburban areas and construction sites are leading sources of impairment. To address this problem, EPA has put into place a program that regulates certain stormwater discharges.

Source: CCSWCD

In 1999, the EPA promulgated Phase II of its stormwater program under the National Pollutant Discharge Elimination System (NPDES) permit program. The Phase II program regulates discharges from small MS4s located in "urbanized areas" (as delineated by the Census Bureau in the most recent census) and from additional small MS4s designated by the permitting authority. The Maine DEP holds delegated authority under the Federal NPDES permit program to administer the MS4 General Permit in Maine. The Town of Gorham is subject to the requirements of the MS4 General Permit, which requires the Town to address six Minimum Control Measures throughout the Urbanized Area. These six MCMs are:

- MCM1 Education / Outreach Program
- MCM2 Public Involvement and Participation
- **MCM 3 Illicit Discharge Detection and Elimination (IDDE) Program**

- MCM4 Construction Site Stormwater Runoff Control
- MCM5 Post-Construction Stormwater Management in New Development and Redevelopment
- MCM6 Pollution Prevention / Good Housekeeping for Municipal Operations

1.3 IDDE Responsibilities in Town of Gorham

The Public Works Department is the lead department responsible for implementing the IDDE Program in the Town of Gorham with support from the Department of Community Development (Code Enforcement Division). The following is a brief description of the roles for each department/division:

Stormwater Compliance Officer: Responsible for overall implementation of the IDDE Program, including maintaining the ArcGIS stormwater geodatabase. Conducts inspections, sampling, investigations, record keeping, and reporting. Stormwater Compliance is part of the Public Works Department.

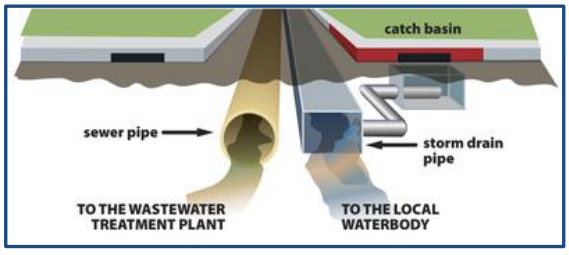
Public Works Crew and Supervisory Staff: Conduct catch basin inspections and support the Stormwater Compliance Officer with implementation as needed, including inspections and investigations of illicit discharges. Also schedule and perform maintenance of outfalls identified during inspections, perform upgrades to the stormwater system, and coordinate with Code Enforcement on removal of illicit discharges.

Code Enforcement: Leads enforcement efforts, including contacting property owners and has authority to issue Notice of Violations. Code Enforcement is a division of the Department of Community Development.

The process for coordination between departments, including data transfer, is primarily accomplished through email or over the phone. Additionally, some data is located on shared drives accessible to both departments. The Community Development Department, which includes Code Enforcement, and the Public Works Department meet weekly to discuss and coordinate on various items.

1.4 What is an illicit discharge?

An illicit discharge is defined under the MS4 General Permit as any discharge to a regulated MS4 system that is not composed entirely of stormwater other than: discharges authorized pursuant to another permit issued pursuant to 38 M.R.S. §413; uncontaminated groundwater; water from a natural resource [such as a wetland]; or other Allowable Non-Stormwater Discharges identified in Part IV.C.3.h of the MS4 General Permit.



Source: Anne Arundel County

In Gorham, the MS4 is directly connected to waterbodies, and flow does not receive any type of treatment prior to its discharge to receiving waters of the State. Since there is little or no treatment, it is vital that only stormwater be discharged from Gorham's MS4.

1.5 Types of Illicit Discharges

The Center for Watershed Protection (CWP) developed a comprehensive IDDE Manual in 2004 and provided an abbreviated update in 2011, which classifies illicit discharges into three categories related to frequency of discharge. This categorization allows communities to develop a comprehensive IDDE Plan that will address all kinds of illicit discharges. The three categories of illicit discharges identified in the CWP manual are described below along with examples of the types of discharges that may be encountered:

1. **Transitory Illicit Discharges** are typically one-time events resulting from spills, breaks, dumping, or accidents. Examples include:

    - paint equipment rinse water
    - carpet cleaning water
    - sediment from construction sites
    - wash water from vehicles (other than individual residential car washing by an owner)
    - oil or gasoline from a vehicle crash or other source
    - yard waste
    - litter or pet waste

    Transitory illicit discharges are often reported to an authority through a citizen complaint line or following observation by a municipal employee during regular duties. Since they are not recurring, they are the most difficult to investigate, trace, and remove. The best method to reduce transitory discharges is through public education, education of municipal personnel to minimize spills and accidents, tracking of discharge locations (to identify potential patterns associated with spills), and enforcement of an illicit discharge ordinance.

2. **Intermittent Illicit Discharges** occur occasionally over a period (several hours per day, or a few days a year). Intermittent Illicit discharges can result from legal connections to the storm drain system, such as a legal sump pump connection that is illegally discharging washing machine water, or illegal connections from a single home sanitary connection or floor drains from industrial or commercial operations. Intermittent discharges can also result from activities such as excessive irrigation or wash water from exterior areas. The 2022 MS4 General Permit requires that MS4s consider illicit discharges that might result from dumping. One example of this would be trash or litter dumped in/near stormwater structures might leak leachate into the system intermittently. Since intermittent discharges are longer lasting than transitory illicit discharges, they are more likely to be discovered during an opportunistic or regularly scheduled inspection. They are less difficult to trace and remove than transitory discharges but can have large or small impacts on water bodies depending on the pollutant content.

3. **Continuous Illicit Discharges** are typically the result of a direct connection from a sanitary sewer, overflow from a malfunctioning septic system, or inflow from a nearby subsurface sanitary sewer that is malfunctioning. Continuous illicit discharges are usually easiest to trace

and can have the greatest pollutant load but are typically the costliest and most time consuming to correct because they likely involve construction and alteration of subsurface connections (CWP and Robert Pitt, 2004). They can result from cross connections, physical defects in a sanitary sewer system, or malfunctioning subsurface wastewater disposal system (SWDS).

1.6 Overview of IDDE Manual Components

The MS4 General Permit requires an IDDE Plan be developed and implemented to assist the Town in locating and eliminating illicit discharges. An overview of each component of this IDDE Manual is provided in this subsection, and the remaining sections of this document describe how the Town of Gorham is implementing each component.

- Mapping and Inventory – The Town is required to maintain a map of their municipally-owned or operated storm sewer system. Section 2.0 of this document describes the Town's storm sewer system map.

- Authority to Prohibit Illicit Discharges – To the extent allowable under state or local law, the Town must effectively prohibit, through an ordinance or other regulatory mechanism, non-stormwater discharges into the system and implement appropriate enforcement procedures and actions. Section 3.0 of this document describes how the Town's Non-Stormwater Discharge Ordinance is implemented.

- Priority Areas – The 2022 MS4 General Permit requires the Town have "procedures for prioritizing watersheds". The Town's priority areas are described in Section 4.0 of this document.

- Detection and Inspection – The Town must develop procedures for locating illicit discharges by conducting dry weather outfall inspections and assessing catch basins for evidence of pollutants. The 2022 MS4 General Permit also requires the monitoring be conducted on outfalls that are flowing during dry weather. Section 5.0 of this document describes the Town's detection and inspection procedures.

- Wet Weather Assessment – The Town must complete a wet weather assessment prior to the expiration of the 2022 MS4 General Permit for the potential for illicit discharges during wet weather events. Section 6 of this document describes the required wet weather assessment.

- Procedures to Investigate and Remove Illicit Discharges – The Town must develop procedures for locating the source of the discharge and procedures for the removal of the source. Sections 7.0 and 8.0 of this document describes how the Town investigates potential discharges to determine their sources, and removes illicit discharges once the source is discovered.

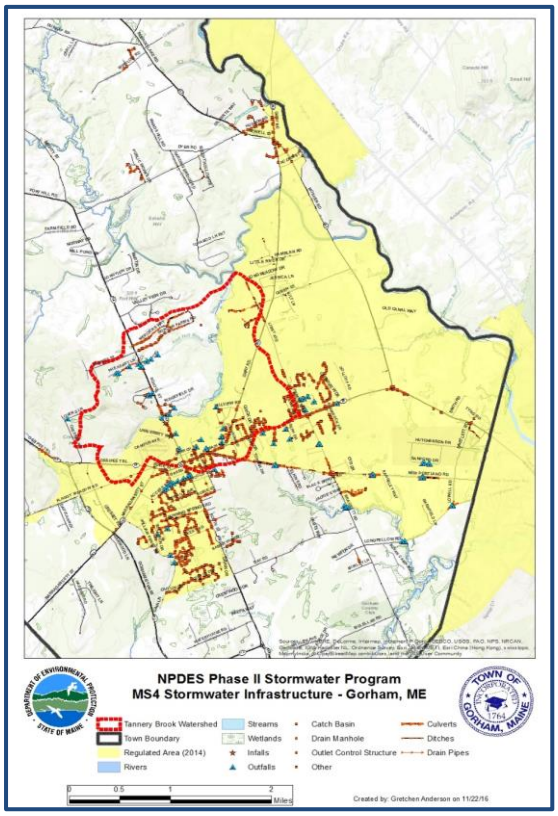
- Procedures to Document Illicit Discharges – The Town must develop procedures for documenting actions and evaluating impacts on the storm sewer system after the removal. Section 9.0 describes how the Town tracks illicit discharges.

Section 10.0 of this document describes the record retention requirements of the MS4 General Permit and Section 11.0 of this document provides references.

2.0 Mapping and Inventory

2.1 Mapping

The MS4 General Permit requires small MS4s to "maintain a map(s) of their municipally-owned or operated storm sewer system. The map(s) must show the location of all stormwater catch basins, connecting surface and subsurface infrastructure and depict the direction of in-flow and out-flow pipes, and the locations of all discharges from all stormwater outfalls operated by the regulated small MS4 to receiving waters or to an interconnected MS4 and the name of the receiving waters for each outfall. Each catch basin must be uniquely identified to facilitate control of potential illicit discharges, and proper operation and maintenance of these structures".



The Town of Gorham has developed and continues to maintain mapping of the MS4 using their Geographic Information System (GIS). The inventory is maintained and updated by the Stormwater Compliance Officer/GIS Technician as needed (e.g. infrastructure upgrades, new developments, etc.). Information about the inspection, cleaning, and upgrading of the MS4 system is provided by the Public Works Department.

2.2 Inventory

The stormwater infrastructure inventory data for the MS4 is collected by Public Works Department Stormwater Compliance Officer/GIS Technician using a Global Positioning System (GPS) unit. The data features collected include catch basins, manholes, storm drain pipes, outfalls, culverts, ditches, etc. For each feature, specific information is gathered including size, material, type, length, date, GPS location, comments, reference number, condition, etc. All data is housed on a server at the Town Hall. The "Stormwater" geodatabase contains the following layers:

- Infalls
- Outfalls

- Drainage Structures
- Culverts
- Ditches
- Drain Pipes

The GIS data is used to create maps, both digital and hard copy, which are used by the town employees, including Public Works Department and Code Enforcement Department for various tasks including inspections and cleaning the MS4. Town employees also have access to an ArcGIS Online Map Viewer. Plotted maps (both digital and paper) are replotted as needed and following significant changes to the data.

3.0 Authority to Prohibit Illicit Discharges

The Town of Gorham's authority to prohibit illicit discharges is under the Non-Stormwater Discharge Ordinance, which was originally adopted on May 3, 2005 as a stand-alone ordinance. It was later incorporated as Chapter 1 of the Stormwater Ordinance, which was adopted March 1, 2011. The Town's Stormwater Ordinance is available at: https://www.gorham-me.org/sites/g/files/vyhlif4456/f/uploads/storm_water_ordinance.pdf.

The Non-Stormwater Discharge Ordinance was created from a model ordinance developed by the Maine Municipal Association for towns that are regulated by the MS4 General Permit. Though the MS4 General Permit is only applicable to the Urbanized Area of the Town, the Town implements the Non-Stormwater Discharge Ordinance town wide. The Ordinance allows the following non-stormwater discharges to the storm drain system if they do not cause or contribute to violations of water quality standards:

- landscape irrigation
- diverted stream flows
- rising ground waters
- uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20))
- uncontaminated pumped ground water
- uncontaminated flows from foundation drains
- air conditioning and compressor condensate
- irrigation water
- flows from uncontaminated springs
- uncontaminated water from crawl space pumps
- uncontaminated flows from footing drains
- lawn watering runoff
- flows from riparian habitats and wetlands
- residual street wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material has been removed and detergents are not used)
- hydrant flushing and firefighting activity runoff

- water line flushing and discharges from potable water sources
- individual residential car washing

The Code Enforcement Officer, Assistant Code Enforcement Officer, and any employee designated by the Town Manager constitute the Enforcement Authority who administers, implements, and enforces the Non-Stormwater Discharge Ordinance.

Discharges from hydrant and water line flushing are required to be dechlorinated if they are to be discharged to a portion of the MS4 system that discharges to a small stream. In accordance with the Maine DEP November 18, 2016 issue Profile for Drinking Water System Discharges to Regulated Small MS4s, the Portland Water District primarily dechlorinates during flushing to meet Total Residual Chlorine (TRC) acute water quality criteria of:

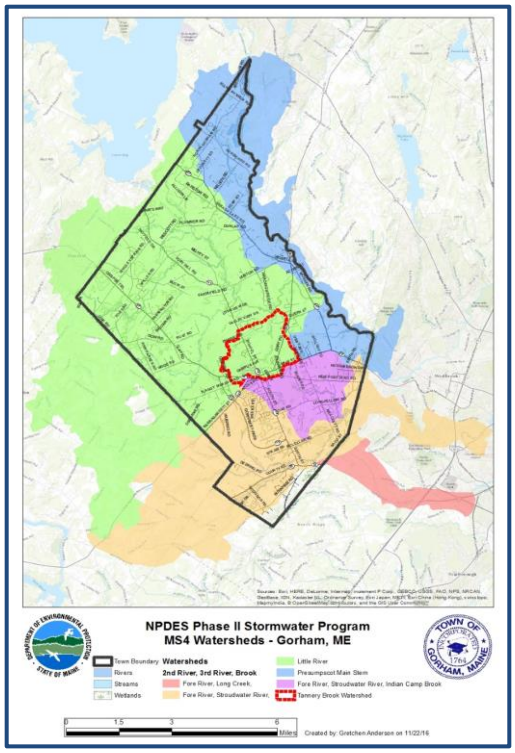
- Freshwater – 19 ug/L (adjusted to 50 ug/l per the Maine DEP as the reporting limit for available reliable and consistent test methods).

The Portland Water District flushes hydrants in Gorham every three years and provides an annual report to the Town describing water dechlorination methods in use for any flushing conducted.

4.0 Priority Areas

4.1 Priority Areas

The 2022 MS4 General Permit requires the IDDE program to have procedures for prioritizing watersheds, which can be used to implement a prioritized dry weather outfall inspection program and address illicit discharges.



The Town of Gorham conducts some outfall inspections in priority areas each year, and may also use the prioritization for illicit discharge investigations. In the event there were insufficient resources to investigate multiple potential illicit discharges simultaneously, potential illicit discharges in the priority watershed would be conducted first. To prioritize watersheds, the Town considered the amount of watershed located within the urbanized area and land use as well as impairment status of the waterbodies.

The Town's priority areas are as follows:

- Priority watershed – Tannery Brook (red outline in adjacent figure)
- Other noted watershed – Presumpscot River
- Other noted watershed – Mosher Brook

Although Mosher Brook is impaired, Tannery Brook watershed is the Town's priority given its location in "Gorham Village", which is the most built-up area of Town, where as Mosher Brook watershed has more agricultural land use. If an illicit discharge is suspected or detected during routine work, the standard operating procedures contained in this manual will be followed, and it will be reported to the Stormwater Compliance Officer, regardless of what watershed it is located in.

5.0 Detection and Inspections

5.1 Catch Basin Inspections

As part of the catch basin inspections and cleaning required under Minimum Control Measure 6, Public Works staff access catch basins for evidence of an illicit discharge and note the presence or evidence of odor, pet waste, foam, sewage, discoloration, algal growth, oil sheen, etc. If Public Works staff observes evidence of an illicit discharge, the evidence is documented as part of the inspection and provided to the Stormwater Compliance Officer for further action. Catch basin inspections are completed in the field using the ArcGIS Collector App. Information collected during the inspection is outlined in Attachment B.

5.2 Call-in Inspections

The Public Works Department will conduct inspections of potential illicit discharges reported by a citizen or other Town departments. Information from call-ins will be collected via telephone by the Stormwater Compliance Officer or Administrative Assistant using the Illicit Discharge Incident Report form (in Attachment C) and logged on the Illicit Discharge Tracking Sheet (in Attachment D). Call-ins may also be received from the Public Works online "Report a Stormwater Violation" form found at: https://www.gorham-me.org/home/webforms/stormwater-violation. Citizen call-ins occurring after normal business hours are directed to hang up and dial 911 for emergencies and for non-emergencies to dial the Town Dispatch Center at (207) 839-5581. Normal business hours are 7:00 a.m. to 3:30 p.m., Monday through Friday.

Additionally, fluids resulting from a vehicle crash in town will be recorded by the Cumberland County Dispatch Center and emailed to the Public Works Director, who forwards them to the Stormwater Compliance Officer for tracking on the Illicit Discharge Tracking Sheet and/or for further action. The Gorham Police and Fire Department respond to these incidents and apply absorbent materials to the spills. The tow truck company contracted with the Town through the Police Department cleans up the absorbent materials related to the spills.

Initial investigation of the potential illicit discharge will be conducted by the Stormwater Compliance Officer or Public Works staff as described under Section 5.3.1 Physical Indicators and Initial Investigation.

5.3 Dry Weather Outfall Inspections

All MS4 outfalls located within the Urbanized Area will be inspected at least once per permit cycle. Dry weather inspections are a visual inspection of the outfall location. The inspection includes characteristics of the outfall as well as information such as flow, odor, and obvious debris/pollution.

The Town of Gorham uses a hybrid approach to inspection outfalls, which includes using a mobile device to locate the outfall, utilize the mapping component, and attach photos to the GIS feature in the field and paper forms to record inspection information. The data from the paper forms are incorporated into ArcGIS Desktop and ArcGIS Online back in the office, any information collected using ArcGIS Collector is automatically synched with ArcGIS Online. Inspection information is recorded on the Dy Weather Outfall Inspection Form included in Attachment B.

Dry weather is defined as a time when:

- There has been no snow or ice melt for 72 hours or
- There has been no precipitation greater than ¼ inch for 72 hours.

If an outfall is inspected within the 72 hour window for rain or melting, and it is not flowing, the inspection can be considered a dry weather inspection.

The following guidelines are used:

- Inspections are performed during periods of dry weather.
- Inspections are performed in a safe and efficient manner.
- Inspections are performed during periods when vegetation is minimal, such that outfalls can be easily located.
- Observations include the following at a minimum:
    - Sheen
    - Discoloration
    - Foaming
    - Sanitary Sewage
    - Excessive Algal Growth
    - Odor
- Photographs are typically taken at the time of inspection for documentation purposes.
- Inspections are performed where the Town has safe and legal access to the structure to be inspected.
- Public Works Supervisory Staff is informed, if maintenance issues are identified to allow work to be prioritized with other projects in Town.
- Outfalls that show evidence of an illicit discharge, but are not flowing will be reinspected at a later date.

Locations where field inspections will occur are reviewed prior to conducting the inspections as some locations present safety concerns, and the inspector notifies the office of their anticipated

field location at the time of the inspection. If additional staff is needed, this is coordinated with the Public Works Director. Inaccessible outfalls are inspected at the first accessible upstream location within the stormwater system (e.g. catch basin, manhole, pipe). During the inspection, the immediate area around, upstream, and downstream of the outfall will be observed, and photographs of the outfall and anything noteworthy will be taken.

5.3.1. Physical Indicators and Initial Investigation

During dry weather outfall inspections, it is important to indicate the conditions observed at the specific location, including flow, odor, obvious debris/pollution, and water clarity; however, these are indicators and cannot be fully relied upon by themselves. A few considerations:

- **Sewage** – An observation of sewage or residual evidence of sewage at an outfall location indicates that there is an illicit discharge to the MS4, and the source of sewage must be found.
- **Foam** – An observation of foam can indicate a variety of things. Some foams are naturally formed by the movement of the water. If the foam is located at a water drop-off and break up quickly, this may only be water turbulence related. If the foam have a fragrant odor, this can indicate the presence of laundry water or wash water in the flow.
- **Oil sheens** – An observation of oil sheen needs to be investigated to determine the source of the oil sheen. Some oil sheens are common and occur naturally by in-stream processes when an iron bacteria forms a sheet-like film. Organic sheens will break apart when disturbed. Synthetic oil sheens, on the other hand, will swirl when disturbed. If the sheen swirls and reforms when disturbed, then the sheen is from an oil source.

When dry weather flows are observed at an outfall, the flow is considered non-stormwater related. This flow could potentially be an illicit discharge, but it may also be a flow generated from an allowable non-stormwater discharge, groundwater, or water form a natural resource (see Section 5.4 for additional considerations).

If indicators of a potential illicit discharge are observed during an inspection, the following steps will be taken as soon as practicable:

- Look for a potential source in the general / surrounding area of the discharge.
- Gather as much information on the potential illicit discharge as possible, such as: date, weather (recent rainfall/snowmelt), physical location, description of discharge location, indicators of illicit discharge (odor, appearance, staining, floatables, residual evidence, etc.).
- Report potential illicit discharge to the Public Works Director to review next steps.
- Clean up and remove obvious pollution, such as excess sediment, organic debris, sewage or residual products, petroleum/chemical products, or trash/litter as soon as practical to prevent further discharge or exposure of such pollutants.
- Follow up detection with investigation using various inspection techniques, such as visual inspections or dye testing to determine the source of the discharge (see Section 7 Procedures to Investigate Illicit Discharges).

- Remove the illicit discharge through enforcement of Chapter 1 of the Stormwater Ordinance, once the source is identified (see Section 8 Procedures to Remove Illicit Discharges).

5.4 Outfall Sampling and Analysis

Outfall sampling and analysis is required under the 2022 MS4 General Permit when an outfall is observed to be flowing during dry weather conditions regardless of if it has exhibited evidence of an illicit discharge.

A Quality Assurance Project Plan (QAPP) has been developed to provide sampling personnel the information that will assist them in collecting samples and using field equipment, test kits, and/or obtaining analyses. The QAPP describes the sampling procedures that should be used as well as the analytical methods and field equipment that are appropriate for use in investigating potential illicit discharges and flowing outfalls. The QAPP also provides guidance on interpretation of the results obtained so that investigators can make informed decisions about whether to continue investigating a potential source, or whether results indicate a flowing outfall might be from a natural source. The QAPP is contained in Attachment E to this IDDE Manual.

For dry weather flows from outfalls that are suspected of being from an allowable non-stormwater discharge, groundwater, or water from a natural resource, the cause of the steady flow should be evaluated based on considerations, such as: the time of year (i.e. is it related to high groundwater flows), absence or presence of other indicators (i.e. odor, color, stains, sewage/toilet paper, oil sheen, suds), activities in the surrounding areas that could be contributing the flow (i.e. outdoor car wash, someone draining their pool, hydrant flushing), and the presence of contributing flow from a natural resource. The potential cause for the steady flow should be noted during the inspection. If as-built drawings are available, they should be reviewed to see if they provide information on the potential cause of the steady flow (i.e. underdrain or foundation drain connections, etc.).

5.5 Cooperation with other MS4s

Since the Town of Gorham has interconnections with other MS4s, it may be necessary to conduct cooperative investigations with other MS4s or to inform them of issues associated with the Town of Gorham's infrastructure, including potential illicit discharges. The MS4 contacts with which Gorham has interconnections are listed in the table below.

Entity	Contact	Email	Phone
Maine Department of Transportation (MDOT)	Kerem Gungor	Kerem.gungor@maine.gov	(207) 592-3489
University of Southern Maine Gorham	John Souther	john.souther@maine.edu	O: (207) 780-4585 C: (207) 805-4107
City of Westbrook	Lynn Leavitt	lleavitt@westbrook.me.us	(207) 854-0660 Ext. 3006

Notification letters with interconnected MS4s related to obtaining coverage under the 2022 MS4 General Permit are included in Appendix G of the Stormwater Management Plan.

6.0 Wet Weather Assessment

The Town will conduct a wet weather assessment for the potential for illicit discharges during wet weather events. The Town will utilize data from existing studies, including (but not limited to):

- Sanitary sewer systems located in a common trench with stormwater infrastructure, particularly those with known infiltration.
- Subsurface wastewater disposal systems that are 20 years old or more, or those in areas known to have experienced recent malfunctions or failures.
- Complaints of sewage odor at a stormwater outfall during wet weather events.
- Direct discharge from the stormwater system to any of the following.
    - Public beach or recreational area.
    - A waterbody impaired for bacteria.
    - Drinking water supply.

The outcome of the assessment will be a list of outfalls identified for wet weather monitoring and testing, if applicable, in the next permit cycle and the rationale for including these outfalls.

On or before the expiration of the 2022 MS4 General Permit, the Town will identify outfalls using the assessment and include them in an attachment to this IDDE Manual. The IDDE Manual will also be updated to include procedures for wet weather monitoring based on the EPA New England Bacterial Source Tracking Protocol or other acceptable protocols or methodologies and specify the timing and frequency of wet weather monitoring to be completed during the term of the next permit cycle. If the Town completes the wet weather assessment and includes it within the IDDE Manual prior to the expiration of the 2022 MS4 General Permit, the Town will implement the wet weather monitoring upon completion of the update.

7.0 Procedures to Investigate Illicit Discharges

Once an illicit discharge has been identified and detected, tracing will be implemented to locate the source of discharge. An Illicit Discharge Incident Report Form (Attachment C) will be completed to record the discharge and the incident will be logged in the Illicit Discharge Tracking Sheet (Attachment D), both of which are maintained by the Stormwater Compliance Officer.

7.1 Tracing Techniques

Tracing will involve systematic inspections starting at the initial detection location and gradually working upstream within the storm drain and/or ditch system looking for indicators of the discharge until a potential source is identified or no further evidence is found. Various inspection techniques will be used

depending on the type of discharge and whether a potential source has been identified. Gorham's primary tracing technique is visual inspections. The following techniques may be utilized by Town staff when tracing an illicit discharge.

7.1.1 Visual Inspections

Public Works will rely on visual observation and inspection within the drainage system as the primary means to investigate the source of an illicit discharge. The visual inspection process the Public Works Department will follow is generally described below.

Source: Pro-Hawk Inspections

1. Staff starts at the initial detection location, such as at the outfall where the potential illicit discharge was observed.
2. Staff works "upstream" from initial detection location, moving up the stormwater system to the first manhole or further up the municipal roadside ditch, if the outfall is a ditch outfall.
3. Staff looks for indicators such as flow, staining, deposits, or residual evidence that would lead to the source of the discharge.
4. Staff continues to move to the next upstream manhole or further up the municipal roadside ditch until a potential source is identified or no further evidence of an illicit discharge is observed. Junction lines entering the stormwater system at manholes that are inspections are noted and confirmed on the stormwater map. Depending on the circumstances, including observation of flow or other indicators coming from the junction lines, these lines may also be inspected.
5. During the inspection process, the following observations are noted:
    a. Presence of flow
    b. Odors
    c. Colors/Clarity
    d. Stains or deposits on the bottom of structure(s)
    e. Oil sheen, scum or foam on any standing water
6. If the source is located, information is relayed to the Stormwater Compliance Officer and Public Works Director for next steps.

7.1.2 Dye Testing

Dye testing will be used to investigate a potential source of an illicit discharge to assist in confirming or ruling out the location of an illicit discharge. Dye testing is particularly effective in determining direct connection of sanitary services to the storm drain line. The dye testing procedures the Public Works Department will follow is generally described below:

1. Staff obtains permission to access private property. If a dye test is needed on the inside of a building, staff will obtain written permission. Once permission is granted, staff will begin the dye testing procedure.
2. Staff pours dye into plumbing fixtures, such as sinks and toilets, and flushes it through the plumbing system.
3. Additional staff members monitor the stormwater and sanitary sewer systems to observe where the dye discharges to.
4. If dye enters the stormwater system, the dyed location is relayed to the Stormwater Compliance Officer and Public Works Director for next steps.

7.1.3 Sandbagging/Damming

This method may be used by Town staff to determine if a discharge is intermittent. Staff would place and secure sandbags at strategic locations within the system to isolate the source of the discharge by creating a dam to trap dry weather discharges. When placed at junction lines, they help rule out branches of the system and narrow down the source. Sandbagging would only be conducted during a forecasted dry weather, and sand bags would be left in place for a maximum of 48 hours to prevent blockage of the stormwater collection system.

8.0 Procedures to Remove Illicit Discharges

Once the source of an illicit discharge has been identified, an Illicit Discharge Report (Attachment C) will be generated and sent to the Code Enforcement Department who will initiate the removal process. The Public Works Director or designee will provide technical information to the Code Enforcement Department including any suggestions on how to remediate the illicit discharge or on the possible correction. If the source of the suspected illicit discharge cannot be identified, the outfall will be reinspected at a later date.

Enforcement and removal of illicit discharges will be accomplished through the reliance on Chapter 1 (Non-Stormwater Discharge) of the Town's Stormwater Ordinance.

As part of the removal process, the Code Enforcement Department and/or the Public Works Department will determine who is financially responsible for removal of the illicit discharge (i.e. municipality, private property owner, or exempt person).

- If the municipality is responsible, the appropriate municipal authority will be notified, removal will be scheduled, and the necessary repairs or corrections will be made.
- If a private property owner is responsible, the owner will be contacted, a Notice of Violation will be issued, and the schedule for removal will be determined. No repairs or corrections will be made on private property without the direction of the appropriate municipal authority.
- If an exempt party (see table below) is responsible, the facility operator will be notified as well as the appropriate enforcement authority.

Exempt Facility	Regulation	Enforcement Authority
Maine Department of Transportation	Maine General Permit for the Discharge of Stormwater from the MDOT and MTA MS4s	Maine DEP
University of Southern Maine Gorham	Maine General Permit for the Discharge of Stormwater from State and Federally Owned MS4s	Maine DEP
Industrial Facilities with select SIC codes	Multi Sector General Permit for Industrial Activities	Maine DEP

The illicit discharge must be removed or eliminated within 60 days of identification of the source of the illicit discharge. If this is not possible, an expeditious schedule for its elimination will be established and summarized in the MS4 General Permit annual report.

If it is determined that an "imminent and substantial danger" exists as a result of the illicit discharge, access to the storm drain system will be suspended. Once the removal process is completed, a follow-up inspection will be conducted to confirm that the illicit discharge has been eliminated.

9.0 Procedures to Document Illicit Discharges

The Town will document the progress of investigating and removing illicit discharges using an Illicit Discharge Tracking Sheet (Attachment D). The spreadsheet is maintained in Excel. Each year, the Town is required to complete an annual report summarizing the activities completed under the Stormwater Management Plan. The Stormwater Compliance Officer retains a copy of the Illicit Discharge Tracking Sheet as back-up documentation of investigative and removal work completed.

10.0 Record Retention

The MS4 General Permit requires the Town to keep records of all stormwater activities. Thorough record keeping is particularly important for a successful IDDE program. Records of past problems can help focus an investigation in the right direction or identify repeat offenders. Thorough record keeping is also critical to the enforcement process.

The Stormwater Compliance Officer will retain paper or electronic files related to the implementation of the IDDE program for a minimum of three years after the expiration of the MS4 General Permit term or longer if requested by the Maine DEP or the EPA. Examples of the different types of information to be retained include:

- **Citizen Call-Ins –** Stormwater Violation Reports, Illicit Discharge Tracking Sheet

- **Outfall Inspections –** Outfall inspection forms, photographs, Incident Report Forms, Illicit Discharge Tracking Sheet
- **Outfall Sampling and Analysis –** Field forms and lab reports
- **Investigations –** Illicit Discharge Reporting Form, photographs, Illicit Discharge Tracking Sheet
- **Corrective Action –**compliance letters, correspondence with property owners, proof of corrected problems (contract and invoice for completed work or clean field investigation report), Illicit Discharge Tracking Sheet

References

Aquarion Engineering Services and Casco Bay Estuary Partnership, 2005. Guidelines and Standard Operating Procedures for Stormwater Phase II Communities in Maine. Available at: http://thinkbluemaine.cumberlandswcd.com/index.php/documents/ (under Minimum Control Measures Resources – 3. Illicit Discharge Detection & Elimination)

Cape Elizabeth, Town of, 2021. Draft Illicit Discharge Detection and Elimination Plan.

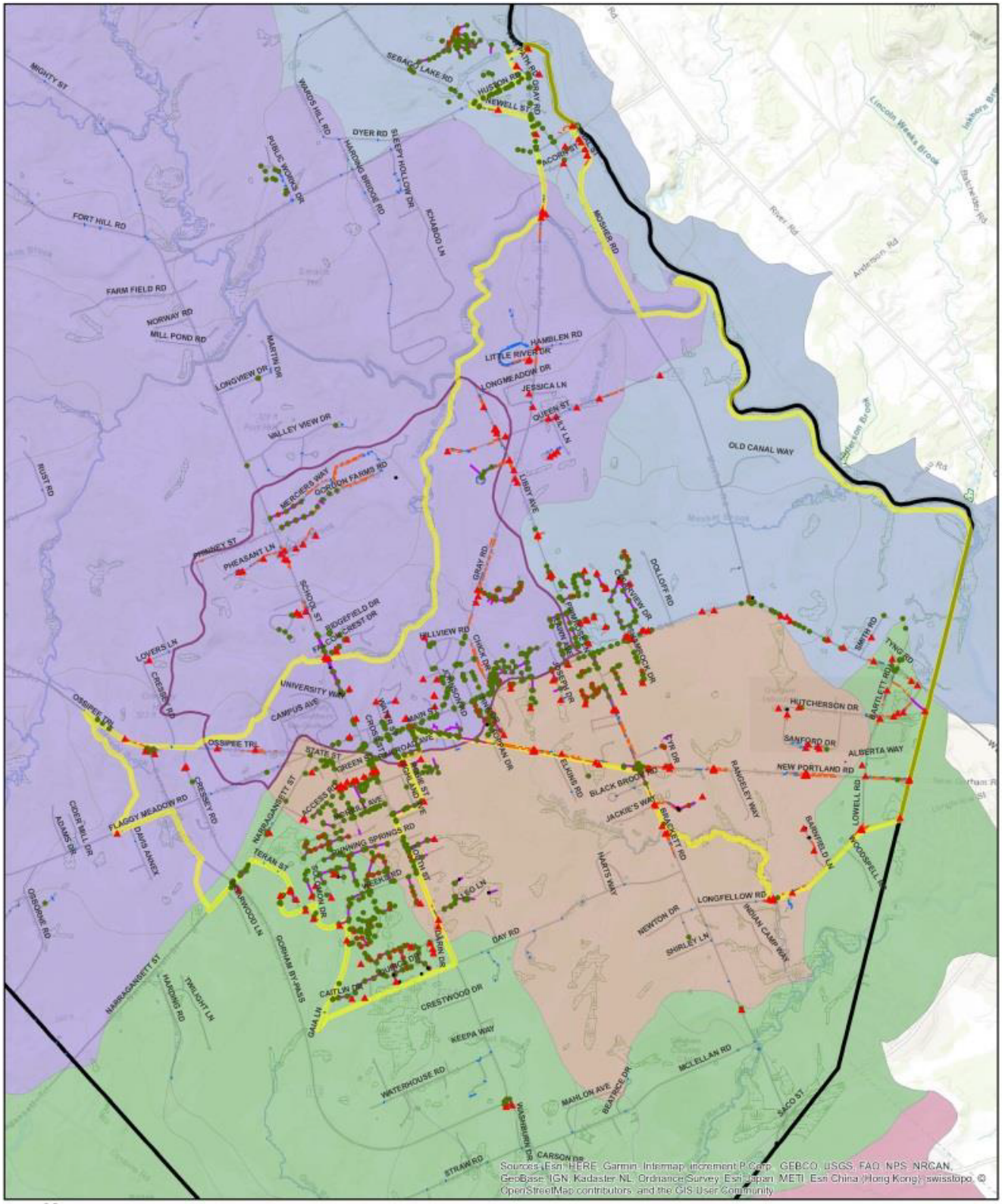
CWP and Robert Pitt, 2011 Illicit Discharge Detection and Tracking Guide. Available at: https://www.riverkeeper.org/wp-content/uploads/2015/03/Center-for-Watershed-Protection_Illicit-Discharge-Tracking-Guide-short.pdf

CWP and Robert Pitt, 2004. Illicit Discharge Detection and Elimination Manual – A Guidance Manual for Plan Development and Technical Assessments. October 2004. Available at: https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf

Gorham Department of Public Works, Town of, 2015. Illicit Discharge Detection and Elimination Program Standard Operating Procedure.

USEPA New England Bacterial Source Tracking Protocol, 2012. Available at: https://www3.epa.gov/region1/npdes/stormwater/ma/2014AppendixI.pdf

ATTACHMENT A
Stormwater Infrastructure Map



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MS4 General Permit Stormwater Program - Gorham, ME
Watershed-Based Storm Sewer System Infrastructure

TOWN OF GORHAM, MAINE 1764

- Long Creek
- Stroudwater River
- Indian Camp Brook
- Little River
- Presumpscot River
- Nonesuch River
- Tannery Brook
- Urbanized Area
- Town Line Polygon
- Infalls
- Outfalls
- Drain Pipes
- Culverts
- Ditches
- Catch Basin
- Drain Manhole
- Other
- Outlet Control Structure

0 0.25 0.5 1 1.5 2 Miles

Prepared by: **Matthew LaCroix, Stormwater Compliance Officer**
Date: **3/4/2021**

ATTACHMENT B
Inspection Fields and Forms

GIS FIELD AND DOMAINS FOR CATCH BASIN INSPECTIONS

Field	Domain
Structure ID	Auto populated with unique ID when structure is selected
Structure Type	Catch Basin, Drain Manhole, Yard Drain, etc.
Location	Manually populated based on what road location
Responsibility	Municipal, Private ,etc.
Inspected	Y/N
Inspection Date	Manually populated
Cover Condition	Poor, Fair, Good, Excellent
Drainage Condition	Poor, Fair, Good, Excellent
Condition Comments	Open Text Field
Maintenance Needed	Y/N
Date Last Cleaned	Auto populated based on Cleaning Date
Cleaned in <insert previous year>	Y/N
Grit Volume	¼ full, ½ full, ¾ full, full
Leaves	Y/N
Rocks	Y/N
Odor	Y/N
Pet Waste	Y/N
Foam Soap	Y/N
Sewage	Y/N
Discoloration	Y/N
Litter	Y/N
Algal Growth	Y/N
Oil Sheen	Y/N
Cleaning Date	Manually populated
Comments	Open Text Field

Dry Weather Outfall Inspection Form

Location Information

Date: _____ **Inspector:** _____

Time: _____ **Watershed:** _____

Watershed Type: ☐ Urban Impaired ☐ MS4 Priority ☐ MS4 Non-Priority

Outfall ID: _____

Outfall Location: _____

Receiving Waterbody: _____

Photo Taken: ☐ Yes ☐ No **Photo ID:** _____

Weather: ☐ Clear ☐ Cloudy **Approximate Temp:** _____ **Wind Present:** ☐ Yes ☐ No

Precipitation in the past 3 days (72-hours): ☐ No ☐ Yes _____ inches

Pipe Flow: ☐ None ☐ Trickle ☐ Steady ☐ 1/4 pipe flow or more

Seepage Flow: ☐ None ☐ Trickle ☐ Steady ☐ 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information

Obvious Debris/Pollution:
☐ None
☐ Foam - natural
☐ Foam - not natural
☐ Floating Green Scum
☐ Oil / Sheen - natural
☐ Oil / Sheen - not natural
☐ Vegetative Mat / Excessive Algal Growth
☐ Sewage Solids
☐ Discolorations / Staining

Odor:
☐ None/Natural
☐ Musty
☐ Sewage/Septic

Water Clarity:
☐ Clear
☐ Cloudy
☐ Opaque

Sediment Condition: ☐ Open ☐ 1/4 Full ☐ 1/2 Full ☐ 3/4 Full ☐ Plugged

Outfall Type: ☐ Pipe ☐ Ditch ☐ Swale

Structure Condition: ☐ Excellent ☐ Fair ☐ Poor

Outlet Stabilization Required: ☐ Yes ☐ No

Trash/litter present: ☐ Yes ☐ No **Yard waste observed:** ☐ Yes ☐ No

General Comments:

Potential Sources / Actions Taken:

Follow up required: ☐ Yes ☐No

ATTACHMENT C

Incident Report and Illicit Discharge Reporting Forms

ILLICIT DISCHARGE INCIDENT REPORT FORM

(Modified from: *Illicit Discharge Detection and Elimination-A Guidance Manual for Program Development and Technical Assessments,* CWP, 2004.) Rev. 3/4/21

Incident ID:

Responder Information	
Call taken by:	Call date:
Call time:	Precipitation (inches) in past 72 hrs:
Reporter Information	
Incident time:	Incident date:
Caller contact information (*optional*):	

Incident Location *(complete one or more below)*

Latitude and longitude:			
Stream address or outfall #:			
Closest street address:			
Nearby landmark:			
Primary Location Description	**Secondary Location Description:**		
☐ Stream corridor (*In or adjacent to stream)*	☐ Outfall	☐ In-stream flow	☐ Along banks
☐ Upland area *(Land not adjacent to stream)*	☐ Near storm drain	☐ Near other water source (stormwater pond, wetland, etc.) Describe:	
Outfall ID closest to or most likely to be impacted by discharge:			
Extent of area affected by the discharge:			
Narrative description of location:			

Upland Problem Indicator Description

☐ Dumping	☐ Oil/solvents/chemicals	☐ Sewage
☐ Wash water, suds, etc.	☐ Other: _____	

Stream Corridor Problem Indicator Description

Odor	☐ None	☐ Sewage	☐ Rancid/Sour	☐ Petroleum (gas)
	☐ Sulfide (rotten eggs); natural gas	☐ Other: Describe in "Narrative" section		
Appearance	☐ "Normal"	☐ Oil sheen	☐ Cloudy	☐ Suds
	☐ Other: Describe in "Narrative" section			
Floatables	☐ None:	☐ Sewage (toilet paper, etc)	☐ Algae	☐ Dead fish
	☐ Other: Describe in "Narrative" section			
Narrative description of problem indicators:				
Suspected Violator (name, personal or vehicle description, license plate #, address, etc.):				

Copy of this Incident Tracking Sheet to be filed at the Department of Public Works

Investigation Notes	
Work order number assigned to incident (if applicable):	
Initial investigation date:	Investigators:
☐ No Investigation made	Reason:
☐ Reported to different Department/Agency (including DEP)	Department/Agency: Notification Date: Name and contact of Person reported to: Actions Required:
☐ Investigated: No action necessary	
☐ Investigated: Requires Action / Follow Up	Description of actions required:
Description of correction action taken:	
Amount of time between the call/discovery and initial investigation (in hours):	
Amount of time to investigate incident (in hours):	
Date incident resolved/closed:	
Notes:	

Town of Gorham Illicit Discharge Reporting Form*

Incident ID:				
Reporter Information				
Incident Date:			Incident Time:	
Caller contact information (if available):				
Responder Information				
Call taken by:			Call date/time:	
Response date/time:			Precip prev. 72 hrs:	
Incident Location				
Latitude / Longitude:				
Stream address or outfall #:				
Closest street address:				
Nearby landmark:				
Primary Location Description		**Secondary Location Description**		
☐ Stream corridor		☐ Outfall	☐ In-stream flow	
☐ Upland area		☐ Near storm drain	☐ Near other waste source (SW pond, wetland, etc.)	
Description of location & incident details:				
Upland Problem Indicator Description				
☐ Dumping		☐ Oils/solvents/chemicals	☐ Sewage	
☐ Wash water, suds, etc.		☐ Other:_____		
Stream Corridor Problem Indicator Description				
Odor	☐ None	☐ Sewage	☐ Rancid/sour	☐ Petroleum (gas)
	☐ Sulfide	☐ Other (describe in narrative section)		
Appearance	☐ "Normal"	☐ Oil sheen	☐ Cloudy	☐ Suds
	☐ Other (describe in narrative section)			
Floatables	☐ None	☐ Sewage (toilet paper, etc.)	☐ Algae	☐ Dead fish
	☐ Other (describe in narrative section)			
Description of problem indicators & response:				
Suspected Violator (name, personal or vehicle description, license plate #, etc.):				
Report completed by:				

**Adapted from Center for Watershed Protection's Illicit Discharge Detection and Elimination Technical Appendices (Oct. 2004)*

INSERT MAP HERE

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(3.5" X 2.6")

CAPTION HERE

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(3.5" X 2.6")

CAPTION HERE

ATTACHMENT D
Illicit Discharge Tracking Sheet

TOWN OF GORHAM
MS4 STORMWATER PROGRAM
ILLICIT DISCHARGE TRACKING SHEET

Date of Incident/Date Reported:	**Report Initiated by**: Phone, drop-in, contact info (optional), maintenance, inspection, etc.	**Location of Discharge**: If known - lat/long, outfall #, closest street address, nearby landmark, etc.	**Description of Discharge**: For example, dumping, wash water, suds, oil/solvents/chemicals, sewage, etc.	**Actions to be Taken**: Who, What, Where, When, and How… (what should be done).	**Description of Resolution**: Outcome of actions taken and any necessary follow-up (what was done).	**Date Resolved**:

ATTACHMENT E

Quality Assurance Project Plan (QAPP)

STORMWATER MONITORING QUALITY ASSURANCE PROJECT PLAN (QAPP)

1.0 Background and Scope

This Quality Assurance Project Plan (QAPP) was developed based on a template prepared for the Interlocal Stormwater Working Group (ISWG), February 2021.

In Maine, there are 30 municipalities (permittees) regulated by the 2022 Maine General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4 General Permit). The MS4 General Permit requires that the municipalities conduct dry weather inspections on 100 percent of their outfalls during the five-year term of the MS4 General Permit.

Under most conditions, if an outfall is observed to have dry weather flow, monitoring must be conducted to assess whether there is an illicit discharge associated with the flow. (Part IV(C)(3)(e)(vi) of the MS4 General Permit contains a few conditions under which flowing outfalls do not need to be monitored.)

The 2022 MS4 General Permit requires sampling and analysis for the following parameters whether or not the outfall's dry weather flow exhibits evidence of an illicit discharge:

- E. coli, enterococci, total fecal coliform or human Bacteroides;
- Ammonia, total residual chlorine, temperature, and conductivity; and
- Optical enhancers or surfactants.

The objective of the monitoring is to collect data that can be used to determine if there is an illicit discharge present in the flow or if the flow is from uncontaminated groundwater, water from a natural resource, or an allowable non-stormwater discharge.

> Illicit Discharge means any discharge to a regulated MS4 system that is not composed entirely of stormwater other than:
>
> - discharges authorized pursuant to another permit issued pursuant to 38 M.R.S. §413;
> - uncontaminated groundwater;
> - water from a natural resource [such as a wetland]; or
> - other Allowable Non-Stormwater Discharges identified in Part IV(C)(3)(h) of the MS4 General Permit.

The purpose of this QAPP is to provide sampling personnel information that will assist them in collecting samples and analyzing the samples using field equipment/test strips and/or laboratories in a manner that ensures sufficient accuracy and precision so that sampling personnel and regulators can be confident there is or is not an illicit discharge present in dry weather flow from an outfall. This QAPP provides information on select field equipment/test strips and analytical methods available to use to comply with the requirements for Dry Weather Outfall Monitoring.

Each municipality is required by the MS4 General Permit to prepare a written Illicit Discharge Detection and Elimination (IDDE) Plan. This QAPP has been developed as an attachment to a municipality's IDDE Plan, and therefore does not contain all of the IDDE requirements associated with the MS4 General Permit. The IDDE Plan should be consulted to determine the municipality's frequency of inspections. In addition, if there is evidence of an illicit discharge, the municipality must conduct additional investigations to identify the source and work with responsible parties to remove the source. The IDDE Plan describes the processes and procedures specific to a municipality for the subsequent investigations.

2.0 Sampling Procedures

Samples are required to be collected at outfalls that exhibit dry weather flow (defined as flow after there has been no precipitation greater than ¼ inch for 72 hours, and no melt water from snow or ice).

Personnel should be prepared to collect samples during any outfall inspection, as dry weather flow is sometimes intermittent, and if personnel need to return to the site later in the same day, or several days later, the dry weather flow may no longer be present. **Table 1** contains a list of equipment that should be prepared and available to conduct dry weather monitoring.

Samples will be collected aseptically from a flowing source or from dammed water in the outfall pipe, meaning the opening of the sample bottle should not touch the outfall, catch basin or manhole, the sampler's fingers, etc. Samples should not be collected from stagnant water, including water in the sump of a catch basin. A sample pole may be used to aid in sample collection. If a structure is not flowing enough for a sample to be collected aseptically, a sample should not be collected at that time. In the event that an outfall is submerged, either partially or completely, or inaccessible, field staff will proceed to the first accessible upstream catch basin or manhole for the observation and sampling and report the location on the Field Data Sheet. Field staff will continue to the next upstream structure until there is no longer an influence from the receiving water on the sampling.

This outfall, though in poor condition because it is cantilevered, provides a good opportunity for a clean catch of its discharge.

This outfall is partially submerged and a clean catch of its discharge is not possible. If tidal influences are strong, wait until low tide to sample. Additional options include: sampling upstream structures or using sand bags around the outfall to prevent contamination from backflow.

Table 1 provides a list of equipment that should be gathered and available for use in the event dry weather outfall monitoring needs to be conducted.

TABLE 1 FIELD EQUIPMENT FOR MONITORING

Equipment	Use/Notes
Clip board and Field Data Sheets	For organization of field sheet/writing surface; field sheets for dry weather screening and sampling
Chain of Custody Forms	To ensure proper handling of all samples
Non-latex gloves	To protect the sampler as well as the sample from contamination
1 gallon of distilled water and rinse bottle	For rinsing sampling equipment
1 roll paper towels	For wiping off sampling bottles
Garbage bags	For collecting any trash created
High beam flashlight	For looking in outfalls or manholes
Cooler with ice and thermometer	For transporting samples to the laboratory
Digital camera	For documenting field conditions at time of inspection
Small white board with pen	To document Outfall ID, date, and time in photo
Personal protective equipment	Reflective vest, safety glasses, and boots at a minimum, sun screen, bug spray
Portable handheld meter	For sampling temperature and conductivity
Test strips	For sampling ammonia and chlorine
Sharpies or water-proof pens	For labeling sample containers
Sheet of blank labels	To label sample bottles as needed
Sample bottles	For laboratory samples
Plastic beakers (250 mL) or disposable whirl bags	For sample collection (prior to pouring into sample containers).
Pry bar, pick, hammer, or small mallet	For opening catch basins and manholes when necessary
Sandbags	For damming low flows in order to take samples
Scissors or utility knife	Multiple uses
Measuring tape	Measure distances and depth of flow
Safety cones	Safety
Hand sanitizer	To clean hands
Zip ties/duct tape	For making field repairs
Rubber boots/waders	For accessing shallow streams/wet areas
Sampling pole and/or sampling pump and tubing	For accessing hard to reach outfalls and manholes
Box of 1 gallon plastic bags	Multiple uses, including storing “clean” and “dirty” beakers, storing soaked unbleached cotton pad for optical brightener sample, if used
First aid kit	For minor cuts/abrasions

For each outfall sampled, a Field Data Sheet will be used to document the date, time, and location of sample(s) collected, weather conditions, any general observations related to the tests being performed, and results of any parameters analyzed using field equipment or test strips. Note that the Field Data Sheet has a place to document sample observations including odor, color, turbidity, presence of algae, etc.

The observations can be documented in this location instead of, or in addition, to the observations made during the normal outfall inspection (which should be conducted in accordance with the MS4's IDDE Plan).

The sample for E.coli should be collected first, directly in a sterile bottle provided by the laboratory without rinsing first, and placed on ice. Other samples can be collected in a clean beaker/whirl bag or directly in sample containers. If possible, collect water from the flow directly in the sample bottle. Be careful not to disturb sediments or touch inside of sample container. If using laboratory supplied bottles or factory-sealed, disposable whirl bags for sampling, no preparation is needed. If using reused beakers or other device to collect the sample, triple rinse the device with distilled water and then in water to be sampled prior to each use. The same applies to sample vials and the meter probe.

Samples to be taken away from the sampling site for analysis will be labelled with the date, time and sample location as well as the name of the sampler. Example labels are provided in **Addendum 1** along with an example field data collection sheet.

When using a third-party laboratory for any off-site analysis, sample bottles should be obtained before the sampling event. Coordination with the laboratory is also recommended to ensure that sample hold times and preservation requirements are being met. If samples are being collected on a Friday, some laboratories need prior notice to meet short hold times. Analytical methods, hold times and other pertinent information is described in Section 3 of this QAPP. Laboratory samples are to be accompanied by a chain of custody form as described in Section 5 of this QAPP.

After sampling events, any reusable sample collection containers will be cleaned with soap and water or trisodium phosphate and water. Cleaning will be completed in a location where wash water can be discharged to a licensed wastewater treatment plant, sanitary sewer, or septic system.

3.0 Analyses and Reporting limits

The MS4 General Permit does not require samples to be analyzed using Clean Water Act (CWA) Methods published in 40 Code of Federal Regulations Chapter 136. The use of field equipment/test strips and laboratories are both allowed. The MS4 General Permit does not require samples to be analyzed by a laboratory that is certified by the Maine DEP. However, this QAPP specifies that when a commercial laboratory is used for a CWA method, it will be certified by the Maine DEP for the CWA method specified. Use of a certified laboratory is specified in this QAPP because the data generated by a certified lab would be more likely to stand up in a court of law than data generated by a non-certified lab. This QAPP does not specify CWA methods or Maine DEP certification for use of field equipment/test strips.

A list of commercial certified laboratories is available on the Maine DEP website at: https://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml .

Table 2 provides information related to sampling parameters, analysis methods, and sample preservation and holding times that may be used during dry weather outfall monitoring. Analysis methods specified in **Table 2** include CWA methods, field equipment, and test kits, where applicable.

User manual(s) for field equipment to be utilized for dry weather monitoring are included as **Addendum 3** to this QAPP. The Town is not proposing the use of test kits, which would require safety data sheets (SDS). The field test strips are non-hazardous and do not require SDSs.

TABLE 2 SAMPLING PARAMETERS, ANALYSIS METHODS, AND SAMPLE PRESERVATION AND HOLDING TIMES

Bacteria	**CWA Method, Field Equipment, or Test Kit**	**Preservation**	**Holding time**	**Bottle needed**	**Notes on Use**
E. coli	SM 9223 B (IDEXX Colilert Quanti-Tray) EPA 1603 (membrane filtration, MF) Or SM 9221 B (Most probable number, MPN)	Ice	To lab within 6 hours Analyze within 2 hours of receipt	120 mL or 250 mL plastic sterile bottle with lid from lab	Use for discharges to freshwater (with ammonia and either optical enhancers or surfactants)
Ammonia	**CWA Method, Field Equipment, or Test Kit**	**Preservation**	**Holding time**	**Bottle needed**	**Notes on Use**
Ammonia	Hach Ammonia Test Strips	None	Immediate (w/in 15 minutes) in Field	Field jar or beaker	
Total Residual Chlorine	**CWA Method, Field Equipment, or Test Kit**	**Preservation**	**Holding time**	**Bottle needed**	**Notes on Use**
Chlorine	Industrial test Systems Ultra-Low Total Chlorine Test Strips and other mid-range chlorine test strips	None	Immediate (w/in 15 minutes) in Field	Field jar or beaker	As of 6/2020, USEPA had not used Ultra low chlorine test strips (0.2 to 0.5 mg/L). Informal review shows these should be used simultaneously with a mid-range (0.5 to 10 mg/l) test strips to double check range.
Temperature and Conductivity (use both)	**CWA Method, Field Equipment, or Test Kit**	**Preservation**	**Holding time**	**Bottle needed**	**Notes on Use**
Temperature	Temperature/ Conductivity probe	None	Immediate (w/in 15 minutes) in Field	Field jar or beaker	Use to distinguish between groundwater and surface water.
Conductivity	Temperature/ Conductivity probe	None	Immediate (w/in 15 minutes) in Field	Field jar or beaker	Use to distinguish between salt water and fresh water.
Optical Enhancers or Surfactants (select one)	**CWA Method, Field Equipment, or Test Kit**	**Preservation**	**Holding time**	**Bottle needed**	**Notes on Use**
Surfactants	SM5540C	Ice	To lab within 24 hours Analyze within 48 hours	500 mL plastic bottle from lab	Works on most soaps (laundry detergent, personal care products, dish soap)
Optical brighteners	VWR handheld UV lamp: UV-A: 360-365 nm, model number 89131-488	None	Analyze within 7 days	Unbleached cotton pad wetted with sample placed in sealed baggie	Works only on water with high to moderate laundry detergent. Provides only presence/absence.

4.0 Quality Control

The following are the reporting limits required by the MS4 General Permit:

- Ammonia: 0.5 mg/L
- Surfactants: 0.25 mg/L
- Total Residual Chlorine: 0.05 mg/L
- E. coli bacteria 4 cfu/100 ml
- Enterococcus 10 cfu/100 ml

To ensure the data collected meets the required reporting limits, the MS4 permittee will use either a Maine Certified Laboratory or one of the field equipment/test strip methods listed in **Table 2** to assess dry weather flow.

Maine Certified Laboratories have standard reporting limits for the parameters that conform to the MS4 General Permit required reporting limits. The test strips listed in **Table 2** has a use range that is appropriate for the work being conducted, and which meets the MS4 required reporting limits. Test strips that have expired will not be used. Test strips and temperature/conductivity probes that have useful life limits will be replaced when they have reached the end of their useful lives.

4.2 Equipment or Rinsate Blanks. Where possible, dedicated equipment and containers are used to collect samples, so that equipment and rinsate blanks are not required to be collected and analyzed.

If equipment or collection containers are being used multiple times in the field for different sample locations during a sampling event, they should be triple rinsed in between samples with distilled water and then rinsed with the water to be sampled, and an equipment or rinsate blank should be collected and assessed to evaluate if there is carryover contamination from reuse of the same sampling equipment. A minimum of one equipment or rinsate blank will be collected per sample event using distilled water. A blank is to be prepared for each laboratory parameter to be analyzed, and are to be handled using procedures identical to those used for the laboratory samples. Refer to the USEPA Volunteer Monitor's Guide to Quality Assurance Project Plans for additional information (EPA Document 841-B-96-003).

5.0 Field Data Sheets and Chain of Custody

As described in Sampling Procedures, Field Data Sheets will be used to document sample collection. Field Data sheets will document the type of field equipment or test strips used and results of any field analysis. Example Field Data Sheets are provided in **Addendum 1** to this QAPP.

Whenever samples will be sent to a laboratory for analysis, a Chain of Custody will be used to document sample collection dates, times, analytical methods requested, and custody of the sample from the time it was collected, until the time it was analyzed. An example Chain of Custody is provided in **Addendum 2** to this QAPP.

6.0 Data Reports

Field data collection sheets shall constitute data reports for analyses using field equipment or test kits. Whenever samples are sent to a laboratory for analysis, data reports are provided by the laboratory showing the sample location, date and time of collection, results of the analysis, the reporting limit, the person who conducted the analysis, and the analytical method used.

7.0 Data Review and Follow up

Once all data has been received, it will be reviewed by the Stormwater Compliance Officer. Data will be stored electronically or in paper format for at least three years following the expiration date of the MS4 General Permit, as required by the MS4 General Permit.

If the person collecting the sample is the Stormwater Compliance Officer, they may opt to have another municipal staff person or third-party review the data. Data should be reviewed within two weeks of receipt, and additional investigations should be implemented to identify the source of any potential illicit discharge if any of the thresholds in **Table 3** are exceeded.

TABLE 3 THRESHOLDS FOR ADDITIONAL INVESTIGATION

Parameter	Threshold Level for Additional Investigation	Notes/Discussion
E. coli	236 cfu/100 ml – discharges into freshwater rivers or streams	All classifications of flowing fresh surface water in Maine (AA, A, B and C) have a standard that no more than 10% of the samples may exceed this concentration in any 90 day interval. A fresh surface water is at risk of impairment if it is receiving significant discharges from human sources above this concentration.
E. coli	194 cfu/100 ml – discharges into freshwater ponds	Great Ponds and lakes less than 10 acres have a standard that no more than 10% of the samples may exceed this concentration in any 90 day interval. A water of this type is at risk of impairment if it is receiving significant discharges from human sources above this concentration.
Ammonia	≥ 0.50 mg/L	This is the effective reporting limit of the Ammonia test strips and was taken from USEPA Draft 2012 Bacteria Source Tracking Protocol.
Chlorine	≥ 0.05 mg/L	Limit of test kit and was taken from USEPA Draft 2012 Bacteria Source Tracking Protocol.
Surfactants	≥ 0.25 mg/L	Taken from USEPA Draft 2012 Bacteria Source Tracking Protocol.
Optical Brighteners	--	If using a handheld fluorometer, conduct further investigation if presence of optical brighteners is detected

MS4s should use the thresholds listed above and the following general guidance to make determinations whether an outfall requires additional investigation for illicit discharges:

- Outfalls that have some visual evidence of an illicit discharge and exceed at least one of the above thresholds and should be investigated further using techniques described in the IDDE Plan.
- Outfalls that do not have any visual evidence of an illicit discharge but exceed more than one of the above thresholds should be investigated further using techniques described in the IDDE Plan

If the above thresholds are not exceeded, the MS4 may make the determination that the flow is from uncontaminated groundwater, water from a natural resource, or an allowable non-stormwater discharge.

Revisions:

1. Original document prepared for 2022 MS4 General Permit Submission to Maine DEP.

Addenda

1. Example Field Data Collection Sheet and labels
2. Example Chain of Custody
3. User Manual(s) for Field Equipment

References:

ISWG and SMSWG February 2021. *Stormwater Monitoring Program QAPP Template*, February 2021, Revision 1.

USEPA 2012. EPA *New England Bacterial Source Tracking Protocol*, Draft January 2012. Available at: https://www3.epa.gov/region1/npdes/stormwater/ma/2014AppendixI.pdf

USEPA 1996. *Volunteer Monitor's Guide to Quality Assurance Project Plans*, September 1996. EPA Document 841-B-96-003. Available at: https://www.epa.gov/sites/production/files/2015-06/documents/vol_qapp.pdf

Addendum 1
Example Field Data Collection Sheet and Labels

Field Data Collection Sheet for Dry Weather Outfall Monitoring

Date		Project Name	
Time			
Sampler's Name		Project Location	
Weather:			
Sample Type:			
Sample Location/Sketch:			

Field Parameters to Monitor

Parameter	Result (units)	Equipment Used	Threshold triggering additional investigation (see QAPP)
Temperature	C/F		No threshold. FYI: Temp. is dependent on season. Groundwater is typically 40-55 F. Surface water can be hotter or colder.
Conductivity	µs		No threshold. FYI: Groundwater is typ. less than 1000 µs. Freshwater can be as high as 2000 µs. Saltwater can be as high as 55,000 µs.
Ammonia	mg/L		≥ 0.50 mg/L
Optical Brighteners (if used)			If present
Chlorine	mg/l		≥ 0.05 mg/L

Observations (unless already documented as part of outfall inspection: odor, color, turbidity, algae, etc):

Laboratory Analyses

Parameter	Method/ Lab Code	Threshold triggering additional investigation (see QAPP)
E. coli	SM 9223 B, EPA 1603, or SM 9221 B	236 cfu/100 ml (freshwater rivers/streams); 194 cfu/100 ml (freshwater ponds)
Surfactants (if used)	SM 5540C	≥ 0.25 mg/L

Comments/Field Notes

This set of labels was designed to be used with Avery 5366 labels, but you can use any labels.

Sampler: ________________ Date: ____________
Time: ________ Field ID: ______________________

Sampler: ________________ Date: ____________
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Addendum 2
Example Chain of Custody

Laboratory Sample Chain of Custody

Client:	Contact:	Phone #:	Email
Address:	City:	State:	Zip Code:
Purchase Order #:	Proj. Name/No.:		Quote #:
Bill (if different than above):	Address:		
Sampler (Print/Sign):			Copies To:

LAB USE ONLY Work Order #:

Remarks:

Shipping Info: FEDEX UPS CLIENT

Airbill No:

Temp C Temp Blank Intact Not Intact

*	Sample Description	Date/Time Collected	Matrix water/soil /other	No. of Containers	Analysis and Container Type Preservatives									
					Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N	Filt. Y / N

COMMENTS:

Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:
Relinquished By:	Date/Time	Received By:	Relinquished By:	Date/Time	Received By:

Addendum 3
User Manual(s) for Field Equipment

Once field equipment is purchased by the Town, a copy of the user manual(s) will be included here. The user manual(s) will also be kept with the field equipment.

D Construction Inspection Form

Town of Gorham Construction Site Inspection Form		
Permit Number:	Site Contractor:	
Site Name:	Date/Time:	Inspected By:
Address/Watershed:		
Last Rain Date/Quantity:		Area Disturbed:
Reason for Inspection: ☐ Initial ☐ Routine ☐ Final ☐ Rain Event ☐ Complaint		
Project Description:		

	YES/NO/NA	COMMENTS
1. Is an Erosion and Sediment Control Plan available and being followed?		
2. Is a weekly inspection log available and up to date (if required)?		
3. Are all erosion control practices installed properly, maintained, and functioning?		
Areas at finished grade are properly stabilized		
Concentrated flow inlet/outlet protection installed		
Disturbed dormant areas stabilized		
Entrance/exits properly stabilized		
Slopes and stockpiles properly stabilized/protected		
Other		

	YES/NO/NA	COMMENTS
4. Are all sedimentation control practices installed properly, maintained, and functioning?		
Construction entrance		
Dust control practices		
Sedimentation basins/traps/diversions		
Perimeter controls		
Check dams		
Other		
5. Are ESC measures, construction activities, and housekeeping adequately maintained?		
Sedimentation/erosion in ditches		
Tracked sediment or dust at exits		
Hazardous material storage and spill control practices adequate		
Waste management (concrete/paint washout, solid waste, sanitary waste, hazardous waste, etc.) adequate		
Other		

	YES/NO/NA	COMMENTS
6. Violation, Corrective Actions, Recommendations		
Sediment/pollutants discharged from site		
Natural resource impacts		
Corrective action required		
Site compliant with all permits		
Notice of violation or stop work order issued		
Comments/Corrective Actions (complete corrective actions before the next rain event and within 7 days)		

Attach any photos taken at the time of inspection to this document.

E 2022 MS4 General Permit

An electronic version of the 2022 MS4 General Permit can be found at the below link. This permit is also available in the Town's electronic data management system.

General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems

F Notice of Intent

NOTICE OF INTENT TO COMPLY WITH MAINE GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)

PLEASE TYPE OR PRINT IN *BLACK INK ONLY*

PERMITTEE INFORMATION					
MS4 Entity	Town of Gorham			Permittee ID #	MER041027
Name and title of chief elected official or principal executive officer	Ephrem Paraschak, Town Manager				
Mailing Address	75 South Street, Suite 1				
Town/City	Gorham	State	ME	Zip Code	04038
Daytime Phone	(207) 222-1650	Email	eparaschak@gorham.me.us		
PRIMARY CONTACT PERSON FOR OVERALL STORMWATER MANAGEMENT PROGRAM (if different than PEO/CEO)					
Name and Title	Robert J. Burns, Jr., Public Works Director/Town Engineer				
Mailing Address	80 Huston Road				
Town/City	Gorham	State	ME	Zip Code	04038
Daytime Phone	(207) 892-9062	Email	rburns@gorham.me.us		
STORMWATER MANAGEMENT PLAN (SWMP)					
Urbanized Area (sq. mi.)	8.8				

I have attached our updated SWMP with ordinances, SOPs, forms. ☐

Name of streams, wetlands, or waterbodies to which the regulated small MS4 discharges (*attach additional sheets as necessary*):

Tannery Brook, Mosher Brook, Little River, Presumpscot River, Hamblen Brook, Indian Camp Brook, Gully Brook, Unnamed Tribs. to Indian Camp Brook, Unnamed Trib. to Stroudwater River

List of impaired waterbodies that receive stormwater from the regulated small MS4 (*attach additional sheets as necessary*):

Mosher Brook

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Permittee		Date	3/29/2021

This NOI registration form must be filed with the Department at the following address:

Stormwater Program Manager
Maine Department of Environmental Protection
Bureau of Water Quality
17 State House Station
Augusta ME 04333-0017
Rhonda.Poirier@maine.gov

OFFICE USE ONLY							
Date Recieved		Staff		Date Accepted		Date Not Accepted	

G Public Notice

G.1 Newspaper Proof of Advertisement

Gorham legislator revives call for convention center in Portland

By Michael Kelley

A Gorham legislator has his sights set on a $100 million convention center to be built in Portland, preferably on the peninsula.

Rep. Kyle Bailey, D-Gorham, who represents parts of Gorham and Scarborough, has sponsored a bill asking legislators to place a $115 million bond on November's ballot to fund a $100 million convention center in Portland and make improvements to the Augusta Civic Center and other public venues in the state. The bill was referred to the Committee on Appropriations and Financial Affairs on March 10.

Bailey has not proposed a specific site for a convention center, but said he prefers that it would be on the peninsula. The exact location, he said "would be further investigated and worked out with the city and other stakeholders."

A member of the Joint Standing Committee on Innovation, Development, Economic Advancement and Business, Bailey said while some may wonder about the future of large events in a post-COVID world, he believes Portland needs a convention center to stay competitive after the pandemic.

Bailey

"As we rebound we need to be really smart and strategic about where we want to go and how we will get there and not have this fear of not investing in our future," Bailey said.

Portland Chamber of Commerce President and CEO Quincy Hentzel said the time to build a convention center in Portland is now.

"We don't have 10 years to figure this out," Hentzel said. "A lot of the available space will be gone by then."

Hentzel said a convention center like the one Bailey is proposing is about more than hosting events. It could be an economic development tool by specifically targeting conventions in "sectors of the economy the state wants to grow."

"It's a great way to really showcase the state," she said.

Portland convention center proposals have come up before, but have never caught traction.

Convention, page 14

City of Westbrook

2 York St., Westbrook, ME 04092 • (207) 854-9105 • Fax: (207) 854-0635

WESTBROOK PLANNING BOARD
TUESDAY, APRIL 6, 2021, 7:00 P.M.
PERFORMING ART CENTER
WESTBROOK MIDDLE SCHOOL - 471 STROUDWATER STREET

PUBLIC HEARING

1. **2021.10 – Conditional Use – 396 Cumberland Street – Vicki Gayton – Public Hearing:** The applicant is proposing a medical office use to provide mental health therapeutic services within an existing building located at 396 Cumberland Street. Tax Map: 043 Lot 044 Zone: Residential Growth Area 1 Use: Medical Office

2. **2020.30 – Site Plan / Subdivision Amendment – Mechanic Street Parking Garage & Subdivision – TDB, LLC; City of Westbrook – Public Hearing:** The applicant is proposing an amendment to the approved site and subdivision plan to include 60-residential units and a +/-7,000 sf retail use within the footprint of the parking structure. Tax Map: 032 Lot: 007A Zone: City Center District; Village Review Overlay Zone

Public Notice

The Town of Gorham, Maine will file a Notice of Intent (NOI) to comply with the Maine General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems issued 10/15/2020 (MER041000 W009170-5Y-C-R) and an associated Stormwater Management Plan (SWMP) with the Maine Department of Environmental Protection. The NOI and SWMP will be filed on or about March 31, 2021. A copy may also be seen at the Town of Gorham Municipal Center and on the municipal website: https://www.gorham-me.org/public-works-department/pages/stormwater-compliance-0.

The DEP will review the submittal and assess if it is complete for processing within 60 days of submittal. Once it has been deemed complete for processing, it will be made available on the Maine DEP website for 30-day public comment: https://www.maine.gov/dep/comment/index.html. A request for public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptable for processing. Requests must indicate the interest of the person filing the request and specify the reasons why a hearing is warranted. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

The NOI and SWMP are also available for viewing at the DEP Office in Augusta by scheduled appointment during normal business hours during the pandemic. Written public comments or requests for information may be made to the Division of Water Quality Management, Department of Environmental Protection, State House Station #17, Augusta, ME 04333- 0017; telephone (207) 592-6233 and must include the name of the municipality filing the NOI and the Permit number provided above.

Town of North Yarmouth Full-Time Opening
Equipment Operator/Laborer/Truck Driver

The Town of North Yarmouth Public Works Dept. is accepting applications for an Equipment Operator/Laborer/Truck Driver. A valid Maine Commer-cial Class B Driver's license preferred may obtain within six (6) months of employment. Applicant must agree to a pre-employment physical, drug screening, and background check. Duties include, but are not limited to, various grounds-keeping equipment, snow plowing, cemeteries, athletic fields, municipal grounds and park/trail maintenance, and other general Public Works assignments. Experience preferred. Trade school graduates are welcome to apply. The Town of North Yarmouth offers a competitive pay rate and benefits package. Submit employment application to:

Opening NYPWD, Rosemary E. Roy, Town Manager
Town of N. Yarmouth, 10 Village Square Rd., N. Yarmouth, ME 04097
Or email: manager@northyarmouth.org
Employment applications are available at the Town Office or online at www.northyarmouth.org. The job posting will remain open until the position is filled. EOE

City of Westbrook

2 York St. Westbrook, ME 04092 • (207) 854-9105 • Fax: (207) 854-0635

LEGAL NOTICE

This City of Westbrook will file a Notice of Intent (NOI) to comply with the Maine General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems issued 10/15/2020 (MER041000 W009170-5Y-C-R) and an associated Stormwater Management Plan (SWMP) with the Maine Department of Environmental Protection. This NOI and SWMP will be filed by March 31, 2021.

A copy may be seen at the City of Westbrook Public Services Department and on the municipal website at http://westbrookmaine.com/170/Stormwater-Compliance. The DEP will review the submittal and assess if it is complete for processing within 60 days of submittal. Once it has been deemed complete for processing, it will be made available on the Maine DEP website for 30-day public comment: www.maine.gov/dep/comment/index.html.

A request for public hearing or request that the Board of Environmental Protection assume jurisdiction over this application must be received by the DEP, in writing, no later than 20 days after the application is found acceptable for processing. Requests must indicate the interest of the person filing the request and specify the reasons why a hearing is warranted. Unless otherwise provided by law, a hearing is discretionary and may be held if the Commissioner or the Board finds significant public interest or there is conflicting technical information.

The NOI and SWMP are also available for viewing at the DEP Office in Augusta by scheduled appointment during normal business hours during the pandemic. Written public comments or requests for information may be made to the Division of Water Quality Management, Department of Environmental Protection, State House Station #17, Augusta, ME 04333-0017; telephone (207)592-6233 and must include the name of the municipality filing the NOI and the Permit number provided above.

G.2 Interconnection Letters

3/10/2021

Gretchen Anderson, Environmental & Sustainability Coordinator
Windham Public Works
185 Windham Center Rd
Windham, ME 04062

Windham Interconnected MS4 Coordination

Dear Gretchen:

As you know, the Town of Gorham is regulated under the Maine General Permit for the discharge of stormwater from the municipal separate storm sewer system (MS4). Under this permit, we are required to coordinate with interconnected and nested MS4 permittees on spill response efforts.

The Town of Gorham has interconnections with your stormwater system. Therefore, if there are any spills of hazardous or non-hazardous substances that may make their way from your property into the Town of Gorham, please notify me. In the event of an emergency after hours, please contact the Gorham Police Department.

Please be certain to forward this request to any first responders or other staff that might be in a position to coordinate spill response efforts. Please contact me if you have any questions.

Sincerely,

Matthew LaCroix

Matthew LaCroix, Stormwater Compliance Officer
mlacroix@gorham.me.us
(207) 892-9062

3/10/2021

Lynn Leavitt, Sustainability Coordinator
Westbrook Public Works
371 Saco St
Westbrook, ME 04092

Westbrook Interconnected MS4 Coordination

Dear Lynn:

As you know, the Town of Gorham is regulated under the Maine General Permit for the discharge of stormwater from the municipal separate storm sewer system (MS4). Under this permit, we are required to coordinate with interconnected and nested MS4 permittees on spill response efforts.

The Town of Gorham has interconnections with your stormwater system. Therefore, if there are any spills of hazardous or non-hazardous substances that may make their way from your property into the Town of Gorham, please notify me. In the event of an emergency after hours, please contact the Gorham Police Department.

Please be certain to forward this request to any first responders or other staff that might be in a position to coordinate spill response efforts. Please contact me if you have any questions.

Sincerely,

Matthew LaCroix

Matthew LaCroix, Stormwater Compliance Officer
mlacroix@gorham.me.us
(207) 892-9062

3/10/2021

Kerem Gungor, Stormwater Engineer
Maine DOT
24 Child St
Augusta, ME 04330

DOT Interconnected MS4 Coordination

Dear Kerem:

As you know, the Town of Gorham is regulated under the Maine General Permit for the discharge of stormwater from the municipal separate storm sewer system (MS4). Under this permit, we are required to coordinate with interconnected and nested MS4 permittees on spill response efforts.

The Town of Gorham has interconnections with your stormwater system. Therefore, if there are any spills of hazardous or non-hazardous substances that may make their way from your property into the Town of Gorham, please notify me. In the event of an emergency after hours, please contact the Gorham Police Department.

Please be certain to forward this request to any first responders or other staff that might be in a position to coordinate spill response efforts. Please contact me if you have any questions.

Sincerely,

Matthew LaCroix

Matthew LaCroix, Stormwater Compliance Officer
mlacroix@gorham.me.us
(207) 892-9062

3/10/2021

John Souther, Executive Director of Facilities Management
University of Southern Maine
37 College Ave
Gorham, ME 04038

USM Interconnected MS4 Coordination

Dear John:

As you know, the Town of Gorham is regulated under the Maine General Permit for the discharge of stormwater from the municipal separate storm sewer system (MS4). Under this permit, we are required to coordinate with interconnected and nested MS4 permittees on spill response efforts.

The Town of Gorham has interconnections with your stormwater system. Therefore, if there are any spills of hazardous or non-hazardous substances that may make their way from your property into the Town of Gorham, please notify me. In the event of an emergency after hours, please contact the Gorham Police Department.

Please be certain to forward this request to any first responders or other staff that might be in a position to coordinate spill response efforts. Please contact me if you have any questions.

Sincerely,

Matthew LaCroix

Matthew LaCroix, Stormwater Compliance Officer
mlacroix@gorham.me.us
(207) 892-9062