

# STORMWATER MANAGEMENT PROGRAM (SWMP)

TOWN OF MILTON, NEW HAMPSHIRE

424 White Mountain Highway

Milton, New Hampshire

Prepared for:



Prepared by:



## GeoInsight

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GeoInsight Project 10078-002

Permit ID NHR041020

COPY # \_\_\_\_\_

**June 30, 2021**  
**PERMIT YEAR 3**

## LIST OF SWMP REVISIONS

NUMBER	DATE	DESCRIPTION OF REVISION	COMPLETED BY
0.	06/30/2021	Development of SWMP	GeoInsight, Inc.
1.			
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## HOLDERS OF THE SWMP

COPY #	DEPARTMENT/ ORGANIZATION	NAME	INITIALED ACCEPTANCE	DATE
0.	Town Administrator	Chris Jacobs		
1.	Town Planner	Bruce Woodruff (consultant)		
2.	Board of Selectmen	Claudine Burnham, Chair		
3.	Highway Department	Pat Smith, Road Agent		
4.	Parks and Recreation	Karen Brown, Director		
5.	Strafford Regional Planning Commission			
6.	Milton Three Ponds Association			
7.	GeoInsight, Inc.	Christene Binger Megan Dalton		
8.				
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## SWMP 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 gathered and evaluated 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."

Name: \_\_\_\_\_  
(Printed)

Title: \_\_\_\_\_  
Town Administrator

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## EXECUTIVE SUMMARY

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### WHAT IS AN MS4 PERMIT AND WHY MILTON?

Local drainage systems, whether natural or constructed, are important features that carry stormwater runoff away from developed areas to undeveloped areas, waterbodies, and wetlands. Although these drainage systems help to manage stormwater in our built environment, they are also a primary source of untreated pollutants in receiving waters including bacteria, nutrients, oil, trash, and many other contaminants. In general, stormwater runoff is defined by the U.S. Environmental Protection Agency (EPA) as “nonpoint source pollution”, meaning that the source of the pollution may not be directly attributable to a single spatial point or polluter. Stormwater runoff from a variety of sources including streets, parking lots, and lawns picks up and carries pollution contaminants as it moves across ground surfaces before entering local drainage systems and receiving waters.

A municipal separate storm sewer system (MS4) is a man-made conveyance of stormwater that includes stormwater collection and outfall structures within a city or town. These structures include (but are not limited to) catch basins, drain manholes, culverts, piping, stormwater basins, stormwater treatment practices, swales, and ditches. As with approximately sixty other municipalities in NH, a number of the Town of Milton’s MS4s are regulated under the EPA Clean Water Act (CWA) and requires a permit for discharges to the environment.

The “*General Permits for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in New Hampshire*” (the Permit) is administered by the EPA to authorize municipalities to discharge stormwater from their regulated MS4s under the EPA National Pollutant Discharge Elimination System (NPDES) and the over-arching CWA.

The conditions of the Permit direct permittees to properly manage potential pollution in stormwater. The Permit does not cover non-stormwater discharges such as industrial or wastewater sources. Such discharges require separate and/or individual permitting from the EPA. The EPA’s New Hampshire MS4 General Permit covers New Hampshire small cities and towns under the EPA NPDES Permit No. NHR041000 (*Part 1.1*).

In 2003, the Town of Milton (the Town) became subject to MS4 permitting in Phase II of the EPA NPDES program, where previously only cities having populations over 100,000 were regulated. The 2003 permit required newly regulated municipalities to begin to develop and implement pollution reduction measures in stormwater discharges from their regulated MS4s. The current Permit (2017) continues the EPA’s phased approach requiring the permittee to develop an initial written Storm Water Management Program (SWMP) and add specific elements each year over the term of the Permit, and beyond.

This written Storm Water Management Program (SWMP) describes the activities and Best Management Practices (BMPs) that the Town intends to implement to meet the requirements of the Permit as outlined in the Town’s submitted and EPA-approved Notice of Intent (NOI).

Following the first issued version, the SWMP must be updated each year to document the Town’s progress and continued plans to meet the schedule and requirements of the Permit.

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## PERMIT REQUIREMENTS

**Permit Effective/Start Date:** July 1, 2018  
**Modifications Effective/Start Date:** January 6, 2021

### **Notice of Intent (NOI) Due September 28, 2018 (*Part 1.7.2*)**

The Town submitted an NOI to the EPA on December 20, 2019 that:

- identified 2003 Permit requirement completion dates, as applicable;
- identified local receiving waters and impairments under the 2016 NHDES Surface Water Quality List (303(d) list);
- outlined the Town's current baseline BMPs to manage stormwater and measures intended to meet the current (2017) Permit water quality requirements;
- certified that the Town intends to comply with the Permit requirements; and
- requested authorization to discharge stormwater from its MS4 under the NH General Permit.

EPA authorization to discharge under the Permit was received by the Town effective April 20, 2021.

### **Special Eligibility Determinations (*Part 1.9*)**

The Town must annually certify the findings of endangered species and historic property screenings per *Appendices C & D* of the Permit and document resulting agency consultations (if required).

### **Stormwater Management Program – Due June 30, 2019 (*Part 1.10*), updated annually**

The over-arching goal of the Stormwater Management Program (SWMP) is to reduce the discharge of pollutants to receiving waters to the "maximum extent practicable" (MEP), to protect the overall water quality of town, state, and federal water resources, and comply with the requirements of the CWA.

As the Town was previously covered under the 2003 permit, applicable written requirements for the SWMP are outlined in *Part 1.10.2* of the 2017 Permit. These overall requirements include:

- program responsibility assignments;
- water resource and impairment documentation;
- special eligibility documentation;
- mapping of the MS4;
- listing of measures intended to comply with water quality standards;
- protection of water supplies; and
- annual program assessment, review, updates, and reporting.

An important requirement of the Permit is to identify responsible parties within the Town to oversee, manage, implement, and document/report the activities of the SWMP. MS4 drainage conveyances refer to structures that carry stormwater from collection (catch basins) to outfalls and includes piping, culverts, ditches, and swales. The inspection and maintenance of MS4 structures is provided within the Town's Highway Department, while oversight and reporting are managed by the Town's Administration Department. See Section 3.0, *Milton Stormwater Management Program Team*, for details on specific SWMP responsibilities.

The most significant part of the SWMP includes a framework for stormwater management defined as the "Six Minimum Control Measures" (MCMs) that outlines how the Town will "*reduce Pollutants to the Maximum Extent Practicable (MEP)*" (US Environmental Protection Agency, 2017). The requirements for each of the six MCMs are detailed in the Permit sub-parts:

*Part 2.3.2* MCM1 Public Education and Outreach

*Part 2.3.3* MCM2 Public Involvement and Participation

*Part 2.3.4* MCM3 Illicit Discharge Detection and Elimination Program

*Part 2.3.5* MCM4 Construction Site Stormwater Runoff Control

*Part 2.3.6* MCM5 Stormwater Management in New Development and Redevelopment  
(Post Construction) Stormwater management

*Part 2.3.7* MCM6 Good Housekeeping and Pollution Prevention for Municipal Operations

Each MCM has specific phased requirements under the Permit and are described in further detail in Sections 5 through 10 of this SWMP.

Enhanced BMPs to address Impaired Waters are additional requirements for Towns that have been identified in the Permit for certain water impairments or for waterbodies that have a formal EPA-approved Total Maximum Daily Load plan (TMDL) for pollutants of concern as outlined in *Part 2.1.1* and *Appendix H, Part I*.

For Milton, the Permit identifies that enhanced BMPs are required within the Town's regulated area under the statewide Bacteria TMDL (*Part 2.2.1.e and Appendix F*) for the Milton Pond Recreation Area Beach (NHDES 2018), and nitrogen impairments for tributaries of Great Bay (impaired waters without a TMDL) (*Part 2.2.2.b and Appendix H*) as detailed in Section 11.

### **Annual Reporting - Due annually by September 30 (*Part 4.0*)**

Each year the Town is required to submit an annual compliance report to the EPA for July 1 through June 30 (reporting period) of each Permit year. The report must include a self-assessment of the program, discussion of progress made toward BMP measured goals, updates on the status of water quality for receiving waters per the current EPA-approved NHDES impaired waters lists (303(d) and 305(b)), adjustments/updates to the BMPs, collected outfall screening and sampling data, and descriptions of future planned activities and goals for the next reporting period.

## **Progressive Annual Requirements**

The Permit intends for the written SWMP to be a 'living document' to be reviewed and updated annually.

### Annually

At a minimum, for the SWMP, the Town must:

- review and update the SWMP as a whole (*Part 1.10.2.9*);
- review and update of who is responsible for SWMP program implementation (*Part 1.10.2.1*);
- update endangered species and historic properties special eligibility supporting documentation and resulting agency consultations, if any (*Part 1.9*);
- review and update listing of all receiving waters and state-listed impairments within the Town's regulated area (*Part 1.10.2.2*);
- implement and document Public Education and Public Participation programs (MCM1 and MCM2) per Permit requirements (*Parts 2.3.2 and 2.3.3*);
- continue the Illicit Discharge Detection and Elimination Program (IDDEP) including investigations and documentation of possible and suspected violations, as applicable (*Part 2.3.4*);
- review and update MS4 mapping and outfall ranking based on dry-weather screening and sampling, as well as adding new development and other physical changes within the MS4. (*Part 2.3.4.5.b*);
- revise/update outfall inventory and ranking based on field data, dry-weather screening, sampling, and catchment investigations. (*Part 2.3.4.7.a*);
- complete annual IDDEP staff training (*Part 2.3.4.11*);
- continue catch basin cleaning program, provide annual report and documentation of implemented program (*Part 2.3.7.1.d.ii*);
- continue street sweeping program, including additional sweeping in areas draining to nutrient (nitrogen) impaired waters, provide annual report and documentation of implemented program (*Part 2.3.7.1.d.iii*);
- continue to implement winter road maintenance plan with the goal to reduce and minimize the use of road salts and sand (*Part 2.3.7.1.d.v*);
- provide applicable staff training for SWPPPs and O&Ms (*Part 2.3.7*); and
- submit an Annual Report with all required documentation to EPA no later than September 28 following each Permit Year (*Part 4.4*).

Under each MCM, at a minimum, the permittee must:

- list each baseline BMP with responsible party, measurable goals, and planned milestones (*Part 1.10*); and
- identify a plan for verifying progress of each goal (*Part 1.10*);

## Year 1 Requirements

Permit requirements for Year 1 included (but are not limited to):

- initial listing of all receiving waters and impairments within the regulated area (*Part 1.10.2.2*);
- mapping of the Town's MS4s, specifically locating all outfalls and identifying receiving waters within the Town's regulated area (*Part 2.3.4.5.a*);
- preparing a written IDDEP, initial outfall ranking, and dry-weather screening program procedures (*Parts 2.3.4.6, 2.3.4.7.a, and 2.3.4.7.b.i*);
- providing written procedures for construction inspections for erosion and sedimentation controls, construction site plan reviews, and enforcement (*Part 2.3.5.3.b and 2.3.5.3.e*);
- developing a schedule for catch basin cleaning no less than once annually, provide annual documentation of implemented program (*Part 2.3.7.1.d.ii*);
- preparing a written winter road maintenance procedure to address storage, and aim to reduce and minimize the use of road salts and sand (*Part 2.3.7.1.d.v*);
- providing written procedures for annual inspections and maintenance of existing and constructed stormwater structures (other than catch basins) (*Part 2.3.7.1.d.vi*); and
- describing measures to protect drinking water sources (*Part 3.2*).

## Year 2 Requirements

Permit requirements for Year 2 included (but are not limited to):

- complete mapping of the Town's MS4s, including piping, treatment structures, interconnections, and catchment delineations within the Town's regulated area (*Part 2.3.4.5.a*);
- prepare written Catchment Investigation Procedures (*Part 2.3.4.8*);
- begin or continue the dry-weather screening program (*Part 2.3.4.7.b*);
- review and develop Town regulations to meet Permit requirements (*Parts 2.3.5.3.a and 2.3.6.a.ii*);
- update land use application review procedures (SOP) to include Permit requirements (*Part 1.10.2.b*);
- develop an inventory for all Town-owned properties, including listing all materials that may be exposed to stormwater on Town properties (*Part 2.3.7.1*);
- prepare Stormwater Pollution Prevention Plans (SWPPPs) and Town Operations & Maintenance Plans (O&Ms) for all Town-owned properties in accordance with Permit requirements (*Parts 2.3.7.1 and 2.3.7.2*); and
- develop written procedures for O&M activities (for town properties) (*Part 2.3.7.1*);

### Year 3 and 4 Requirements

The following is a summary of the minimum Permit requirements expected to be undertaken in Permit Years 3 and Year 4:

- complete dry-weather outfall screening and revised outfall ranking (*Part 2.3.4.7.b*);
- start catchment investigations (*Part 2.3.4.8.a*);
- prepare a report assessing Town street and parking lot design requirements relative to the creation of impervious cover (*Part 2.3.6.c*);
- prepare a report assessing Town regulations and zoning to include and encourage green infrastructure practices (*Part 2.3.6.d*);
- prepare a Town inventory and priority ranking of existing town-owned infrastructure that can be retrofitted to reduce the volume and pollutant loading of stormwater discharges. (*Part 2.3.6.e*); and
- prepare a Nitrogen Source Identification Report.

### **SWMP Availability (*Part 1.10.1*)**

*The permittee shall retain a copy of the current SWMP required by this permit at the office or facility of the person listed as the program contact on the submitted Notice of Intent (NOI). The SWMP shall be immediately available to representatives from EPA; a State agency; the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request.*

The SWMP must be made available to the public in hard copy and should also be available online for download or electronically by request.

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## **VOLUME 2 IDDEP DATA**

IDDEP Reports, Investigations, and Elimination Documentation  
(none for Years 1-3)

Dry-weather Sampling Data  
(in process)

Wet-weather Sampling Data  
(none for Years 1-3)

## **VOLUME 3 TOWN-OWNED PROPERTY GOOD HOUSEKEEPING**

Town-Owned Property Inventory

Town Facility Stormwater Pollution Prevention Plans  
None identified, evaluation on-going

Town Property Operations & Maintenance Procedures  
Highway Department (Highway Maintenance Yard)  
Town Transfer Station  
Wastewater Treatment Plant  
Parks and Open Spaces  
Buildings and Facilities  
Vehicles and Equipment  
Stormwater Treatment Structures

### **Nomenclature and conventions of this manual include:**

<i>Part x.x</i>	Refers to the specific sections of the 2017 NH MS4 General Permit (the Permit).
<i>text in italics</i>	is text taken directly from the reference source (primarily the Permit).
IDDEP	Illicit Discharge Detection and Elimination Program is a sub-manual within this Stormwater Management Plan.
MCM	Minimum Control Measure
SWMP	Stormwater Management Plan (or Program)

## 1.0 BACKGROUND

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### 1.1 STORMWATER REGULATION

The *Stormwater Phase II Final Rule* (Phase II) was promulgated in 1999 and was the next step after the *1987 Phase I Rule* in the U.S. Environmental Protection Agency's (EPA) effort to preserve, protect, and improve the nation's water resources from polluted stormwater runoff. The Phase II program expanded the Phase I program by requiring additional operators of Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and operators of small construction sites to implement programs and practices to control polluted stormwater runoff (through the National Pollutant Discharge Elimination System (NPDES) permits).

Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated "nonpoint" sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule, all MS4s with stormwater discharges from U.S. Census Bureau designated Urbanized Areas (UAs) are required to seek NPDES permit coverage for those stormwater discharges.

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### 1.2 MS4 PERMIT PROGRAM BACKGROUND

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from New Hampshire (NH) MS4s consistent with the Phase II rule. The 2003 NH MS4 Permit covered "operators" of "traditional" (i.e., cities and towns) and "non-traditional" (i.e., federal and state agencies) MS4s located in New Hampshire. This permit expired on May 1, 2008 but has remained in effect until operators were authorized under the current 2017 NH MS4 General Permit, which became effective on July 1, 2018, and as modified January 6, 2021. A copy of the 2017 NH MS4 General Permit (as modified in 2020) is included in **Appendix A**.

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### 1.3 HISTORY OF MS4 FOR THE TOWN OF MILTON

The Town of Milton obtained coverage under the 2003 MS4 permit and operated under this permit until the new permit became effective in 2018. Under the 2003 Permit, Milton actively worked on Permit requirements as noted in annual reports filed with the EPA from 2004 through 2006, 2008, and 2015. **Table 1.1** provides a summary of BMPs implemented under each of the 2003 Permit six Minimum Control Measures (as summarized from annual reports).

The first requirement of the 2017 Permit was to file a Notice of Intent with the EPA for coverage under the 2017 Permit. Due to changes in Town administration, the deadline for this requirement was missed. A notice of *Termination of Permit Coverage...*, dated August 15, 2019, was sent to the Town from the EPA. The Town filed the required NOI with the EPA on December 20, 2019. After review and additional information provided to the EPA in early 2021, the EPA issued Milton an *Authorization to Discharge* on April 20, 2021.

<b>TABLE 1.1 Milton NH 2003 MS4 Permit BMPs</b>	
<b>MCM1 Public Education and Outreach</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Newsletter	Included annual article relating to stormwater management in local monthly publication.
Household Hazardous Waste Disposal	Held annual collection day at Turnkey Landfill.
Classroom Education	Developed a program for education at the grade school level.
Earth Day	Annually, up to twice per year.
<b>MCM2 Public Involvement and Participation</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Storm Drain Stenciling	Stenciling was completed for identified storm drains.
Volunteer Monitoring	Stenciling work was completed by a volunteer group.
Earth Day	Annually, volunteer litter collection.
<b>MCM3 Illicit Discharge Detection and Elimination Program</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Storm Drain Map	Mapping of storm drains was reported to have been completed.
Illicit Dumping Response	Responded to reports of illicit discharges.
<b>MCM4 Construction Site Stormwater Runoff Control</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Site Plan Zoning Review	Updated site plan requirements.
<b>MCM5 Stormwater Management in New Development and Redevelopment (Post Construction Stormwater Management)</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Construction Stormwater Management	Updated site plan requirements.
Buffer Zone/Easements	Town adopted regulations to consider buffer zones and conservation easements during site plan review.
<b>MCM6 Good Housekeeping and Pollution Prevention for Municipal Operations</b>	
<b>BMPs:</b>	<b>Achievements:</b>
Vehicle Maintenance	Maintains good maintenance practices and documents spills and cleanups, if applicable.
Storm Drain Cleaning	The town has advanced its storm drain cleaning program to be completed regularly by contractor.
Cover Salt Storage	A town salt storage building was constructed in 2005.
Used Oil Recycling	Continuance of program. Flyers and posters keep public informed.

## 2.0 INTRODUCTION AND PERMIT COVERAGE

The Town of Milton (the Town) is located in Strafford County, eastern central New Hampshire, along the Maine border, and north of the City of Rochester. Abutting New Hampshire towns include Wakefield to the north, Middleton west, Farmington southwest, and Rochester to the south. In Maine, border towns to the east of Milton, across the Salmon Falls River, include Lebanon and Acton. According to the 2010 U.S. Census, Milton's population is reported to be approximately 4,600 residents in 2,140 households (*New Hampshire Economic + Labor Market Information Bureau*). The Town covers approximately 34.3 square miles, which includes roughly 1.9 square miles (826 acres) of surface waters, or 5.7% of open water coverage<sup>1</sup>.

Running along the entire eastern border of Milton (also the state line), the Salmon Falls River is the primary waterbody in the town. As the Salmon Falls River flows into Milton from the north, the river has a number of tributaries and is impounded in several locations. Salmon Falls River impoundments that lie along the Milton eastern boundary from north to south (upstream to downstream) include:

- Rowe Dam Impoundment
- Waumbek Dam Impoundment
- Salmon Falls River VII Impoundment
- Salmon Falls River I Impoundment (Northeast Pond)
- Milton Three Ponds Dam (Townhouse Pond, Milton Pond)
- Milton Leatherboard Dams Impoundments
- Salmon Falls River II Impoundment (aka South Milton Dam)
- Spaulding Pond (dam in Rochester)

Primary Milton tributaries to the Salmon Falls River, from north (upstream) to south (downstream) include:

- Farnham Brook
- Miller Brook
- Branch River
- Great Brook / Lyman Brook

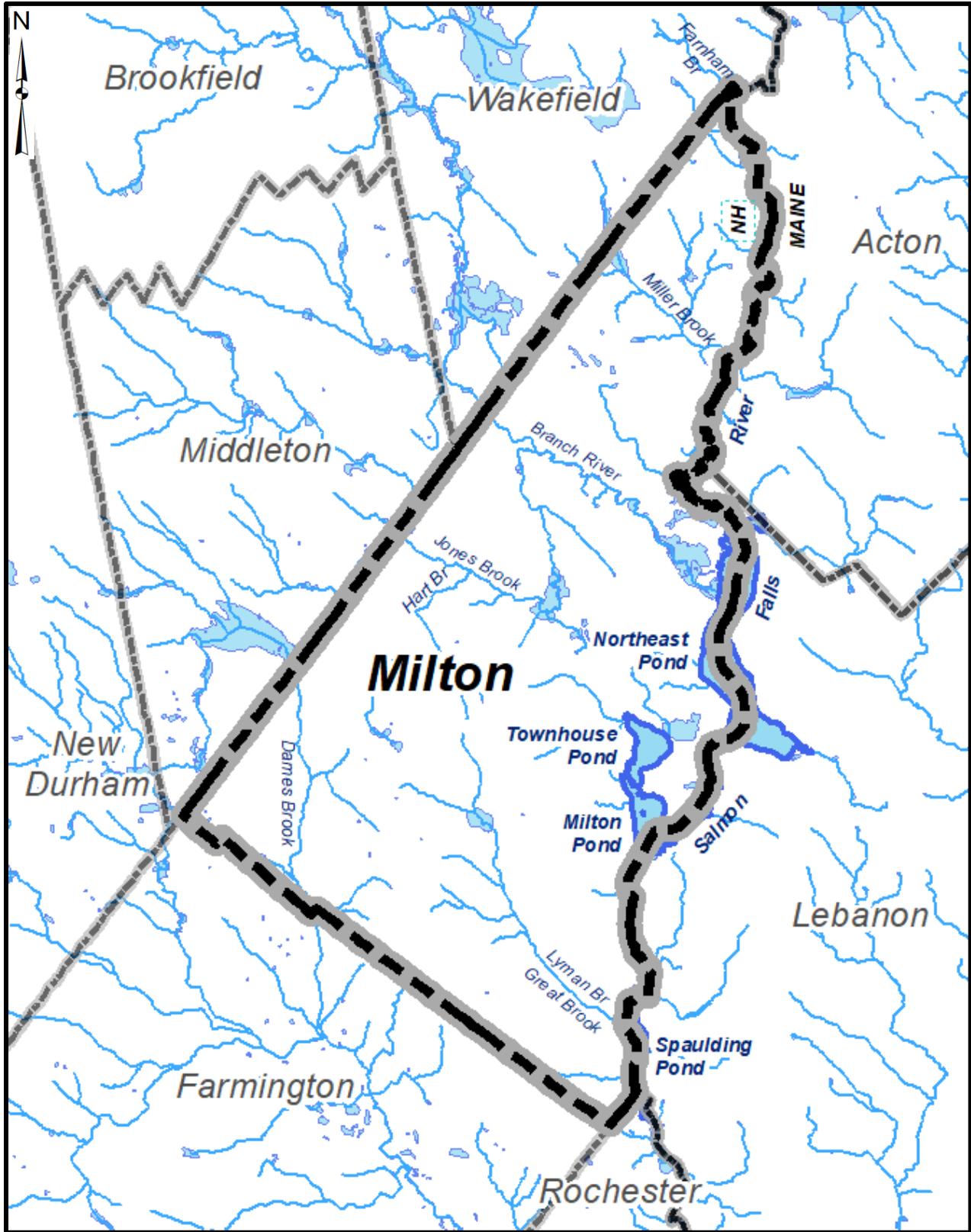
Pollution in stormwater runoff can come from many sources and lead to impaired water quality in local and downstream waterbodies. Protection of these waters from pollution is a priority for the Town and residents but is also the law as required by the EPA. Within Milton's MS4 regulated area, a preliminary stormwater mapping study (2021 desktop only<sup>2</sup>) identified 39 catch basins, 8 outfalls, and 2 interconnections with another MS4 (NHDOT).

**Figure 2.1** shows Milton with respect to adjacent towns both in New Hampshire and Maine. See also detailed waterbody mapping, *Outfall & Impaired Waterbodies* map referenced in Section 7.0, *MCM3, Illicit Discharge Detection & Elimination Program* and in **Appendix DB**.

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<sup>1</sup> Per GIS analysis of USGS National Hydrography Dataset

<sup>2</sup> GIS and imagery desktop analysis by Geolinsight, January 2021



**Figure 2.1 Milton NH Locus and Adjacent Towns**

Source: NH GRANIT and State of Maine GIS

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## 2.1 LIMITATIONS OF COVERAGE

Several sources of stormwater discharges are not covered under the 2017 NH MS4 General Permit including:

- a. non-stormwater mixed with stormwater;
- b. stormwater associated with industrial activity;
- c. stormwater associated with construction activity;
- d. stormwater covered under another NPDES permit, including other regionally issued general permits;
- e. any stormwater discharges or discharge-related activities that are likely to adversely affect any species listed as endangered or threatened under the Endangered Species Act (ESA) or may result in the adverse modification or destruction of habitat that is designated as critical under the ESA;
- f. stormwater discharges whose direct or indirect impacts do not prevent or minimize adverse effects on any Essential Fish Habitat;
- g. stormwater discharges or stormwater discharge-related activities that have an effect on a property that is listed or eligible for listing on the National Register of Historic Properties (NRHP);
- h. stormwater discharges to oceans;
- i. stormwater discharges prohibited under 40 CFR § 122.4 (prohibitions under the NPDES program); and
- j. stormwater discharges to the subsurface subject to state Underground Injection Control (UIC) regulations.

Refer to *Part 1.3* of the Permit for detailed coverage limitations.

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## 2.2 ALLOWABLE NON-STORMWATER DISCHARGES

In general, the following are considered allowable non-stormwater discharges under the Permit:

- a. water line flushing;
- b. landscape irrigation;
- c. diverted stream flows;
- d. rising groundwater;
- e. uncontaminated groundwater infiltration;
- f. uncontaminated pumped groundwater;
- g. discharge from potable water sources;
- h. foundation drains;
- i. air conditioning condensation;
- j. irrigation water, springs;
- k. water from crawl space pumps;
- l. footing drains;
- m. lawn watering;
- n. individual resident car washing;
- o. flows from riparian habitats and wetlands;
- p. de-chlorinated swimming pool discharges;
- q. street wash waters;
- r. residential building wash waters without detergents; and
- s. discharges or flows from fire-fighting activities.

Refer to *Part 1.4* of the Permit for detailed coverage limitations.

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## 2.3 CONTINUATION OF PERMIT

If the 2017 Permit is not reissued prior to the expiration date (June 30, 2023), it will be *“administratively continued in accordance with the Administrative Procedure Act and remain in force and effect for discharges that were authorized prior to expiration. If a small MS4 was granted permit authorization prior to the expiration date of this permit, it will automatically remain authorized by this permit until the earliest of:*

- *Authorization under a reissued general permit following timely and appropriate submittal of a complete and accurate NOI requesting authorization to discharge under the reissued permit; or*
- *Issuance or denial of an individual permit for the MS4’s discharges; or*
- *Authorization or denial under an alternative general permit.*

*If the MS4 operator does not submit a timely, appropriate, complete and accurate NOI requesting authorization to discharge under the reissued permit, or a timely request for authorization under an individual or alternative general permit, authorization under this permit will terminate on the due date for the NOI under the reissued permit unless otherwise specified in the reissued permit.” (Part 1.6)*

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## 2.4 MS4 AUTHORIZATION

The 2017 NH MS4 General Permit authorizes the discharge of stormwater from the Town’s urbanized (regulated) areas upon acceptance of the Town’s submitted NOI and authorization by the EPA. As required, the Town of Milton filed a Notice of Intent (NOI) for coverage under the 2017 New Hampshire MS4 General Permit.

Notification of acceptance of the NOI and authorization to discharge under Permit ID NHR041020 was received from the EPA Region 1 Office (Boston MA) on April 20, 2021.

The effective dates of the Permit are July 1, 2018 through June 30, 2023 (five-year term).

A copy of the NOI and EPA authorization letter is included in **Appendix B**.

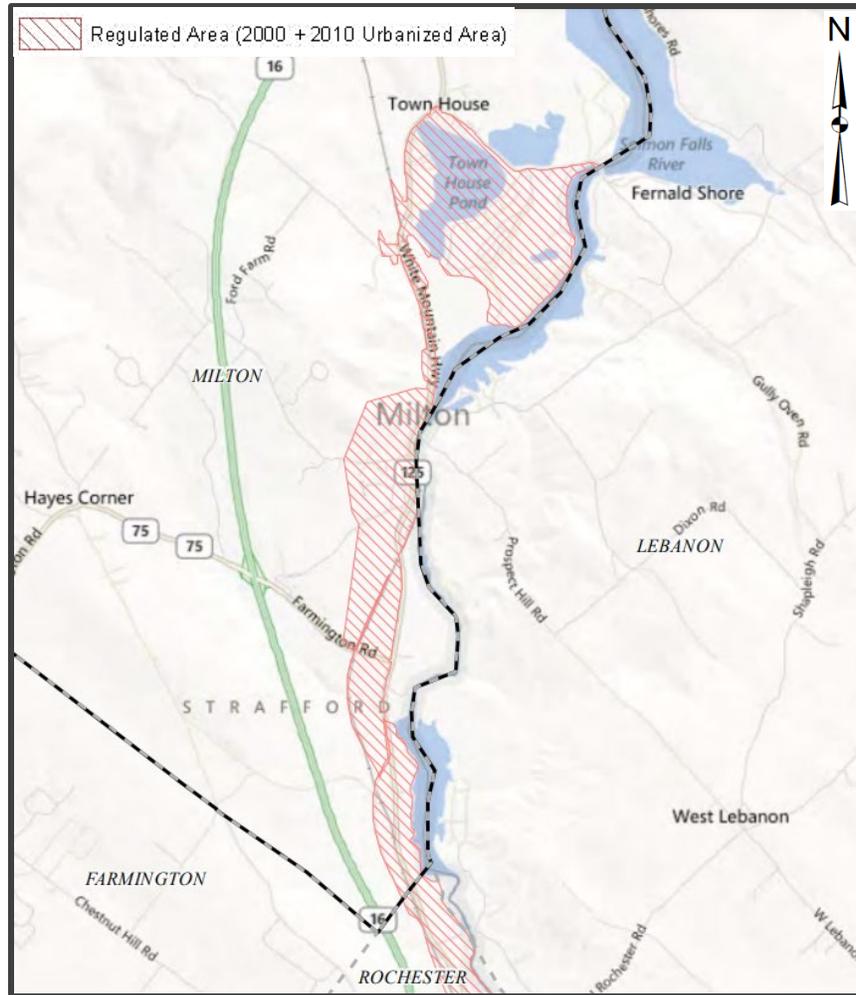
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## 2.5 SPECIAL ELIGIBILITY

### 2.5.1 AREAS OF COVERAGE

The 2017 NH MS4 General Permit applies to areas defined by the U.S. Census as “urbanized” based on census data. Also referenced as “regulated areas”, an urbanized area is defined as “a densely settled core of census tracts that have a population of at least 50,000” (US Environmental Protection Agency, 2012). The urbanized areas are not defined by town, county, or state boundaries, and may or may not include entire towns. These regulated areas define the minimum spatial limits of the Permit requirements.

For the Town of Milton, the 2010 census regulated urbanized areas includes a small band of area within the southeastern section of the town, covering about 4.6% of Milton’s land area. The EPA map “Automatically Designated MS4 Areas” for the Town of Milton is shown in **Figure 2.2**.



**Figure 2.2 Town of Milton NH MS4 Regulated Area<sup>3</sup>**

### 2.5.2 ENDANGERED SPECIES

The SWMP must include documentation supporting the Town’s eligibility determination with regard to the federal Endangered and Threatened Species and Critical Habitat Protection Act. Documentation must include information as defined in the Permit’s *Appendix C* including copies of the results of the U.S. Fish & Wildlife *IPaC online screening tool*<sup>4</sup>, a certification of eligibility based on one of three criteria, and agency consultation if required.

<sup>3</sup> Source: “NPDES Phase II Stormwater Program, Automatically Designated MS4 Areas, Milton NH”, US EPA Region 1 GIS Center Map #8824, 11/19/2012.

<sup>4</sup> Information, Planning, and Conservation system mapping tool: <http://ecos.fws.gov/ipac/>

The USFWS screening tool identified two potentially listed species, the northern long-eared bat (mammal) and the small whorled pegenia (flowering plant), that may be present in Milton NH. Information provided by the Town of Milton indicated that the Nature Conservancy confirmed the presence of the small whorled pegenia on a parcel of land on Teneriffe Mountain Road. However, no critical habitats were identified. Based on additional research, and online guidance relative to these listed species, the Town of Milton is determined to be eligible under **Criterion C**, with no additional agency consultation required at this time.

\*Reminder: proper agency consultations and updates to the SWMP must be conducted for future structural BMP projects related to the Permit where Construction General Permit (CGP) coverage is NOT being obtained.

Documentation of this certification of eligibility is to be updated annually and provided in **Appendix C**.

### 2.5.3 HISTORIC PROPERTIES

The SWMP must include documentation supporting the Town's eligibility determination with regard to historic properties. Documentation must include information as defined in the Permit's *Appendix D* including copies of consultation with the State Historic Preservation Office, if applicable.

Per instructions in the Permit's *Appendix D*, the Town of Milton filed for agency consultation on December 11, 2019, received a response dated December 13, 2019 acknowledging potential historic sites within in the Town boundaries but deferred further consultation to future time when physical projects may occur. The Town is eligible under **Criterion B**, with no additional agency consultation required at this time.

\*Reminder: proper agency consultations and updates to the SWMP must be conducted for future structural BMP projects related to the Permit where Construction General Permit (CGP) coverage is NOT being obtained.

Documentation of this certification of eligibility is provided in **Appendix C**.

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## 2.6 STORMWATER MANAGEMENT PROGRAM (SWMP)

The SWMP describes and details the activities and measures that will be implemented to meet the terms and conditions of the Permit. This document should be updated and/or modified during the Permit term as the permittee's activities are modified, changed, or revised to meet Permit conditions. The main elements of the SWMP are:

- (1) a public education program to affect public behavior regarding potential causes of stormwater pollution;
- (2) an opportunity for the public to participate and provide comments on the stormwater

- program;
- (3) a program to effectively locate and eliminate illicit discharges from the Town's MS4s;
  - (4) a program to effectively control construction site stormwater discharges to Town's MS4s;
  - (5) a program to ensure that stormwater from development projects entering the Town's MS4s are adequately controlled by the construction of permanent stormwater treatment and controls; and
  - (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

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## **2.7 SWMP AVAILABILITY**

*The permittee shall retain a copy of the current SWMP required by this permit at the office or facility of the person or position listed as the program contact on the submitted Notice of Intent (NOI). The SWMP shall be immediately available to representatives from the EPA; State agencies; the U.S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) at the time of an onsite inspection or upon request.*

The SWMP must be made available to the public in hard copy and should also be available online for download or electronically by request.

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## **2.8 SWMP REVISIONS**

This SWMP is expected to be a dynamic document to be updated as needed to accurately depict the Town's ongoing stormwater management goals, achievements, efforts, procedures, schedule, and phased requirements of the Permit. A page to document revisions and identify all the holders of the SWMP that should receive updated pages, as applicable, is located in the front pages of this manual.

### **3.0 MILTON STORMWATER MANAGEMENT PROGRAM TEAM**

#### **MILTON ORGANIZATIONAL CHART – UNDER DEVELOPMENT**

**Current MS-4 Committee:**

Chris Jacobs – Town Administrator

Julius Peel - Land Use/ Administrative Assistant

Bruce Woodruff – Milton Town Planner

## 4.0 MILTON WATER RESOURCES AND IMPAIRED WATERS

### 4.1 RECEIVING WATERS

**Table 4.1** lists all receiving waters, impairments, and number of outfalls within each waterbody segment as identified in the EPA-approved 2018 NHDES 303(d) and 305(b) lists.

TABLE 4.1 Milton NH Receiving Waters														2021.03.16		
WB_ID	WB_NAME	NHDES 2018 303(d) IMPAIRMENT											RECEIVING DISCHARGE FROM MS4	ESTIMATED OUTFALLS †		
		AUID Level	Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E.coli	Enterococcus	Other pollutant(s) causing Impairments (excluding Mercury)			State Bact. TMDL	
<b>MILTON NH WATERBODIES RECEIVING DISCHARGE FROM THE URBANIZED AREA (UA)</b>																
NHLAK600030404-01-03	MILTON THREE PONDS - MILTON POND REC AREA BEACH	4A-P										X		Y	MILTON	1
NHLAK600030404-01-01	MILTON POND	5-M											pH		MILTON	2*
NHLAK600030404-01-02	TOWNHOUSE POND	5-M											pH		MILTON	0
NHLAK600030405-02	SPAULDING POND	4C-P											non-native aquatic plants		MILTON	0
NHIMP600030405-01	SALMON FALLS RIVER - MILTON LEATHER BOARD DAM														MILTON	2
NHIMP600030405-02	SALMON FALLS RIVER - SALMON FALLS RIVER II														MILTON	2
NHRIV600030404-13	UNNAMED BROOK														MILTON	0
NHRIV600030404-14	UNNAMED BROOK														MILTON	0
NHRIV600030405-01	SALMON FALLS RIVER														MILTON	1

**TABLE 4.1 Milton NH Receiving Waters**

2021.03.16

WB_ID	WB_NAME	NHDES 2018 303(d) IMPAIRMENT											RECEIVING DISCHARGE FROM MS4	ESTIMATED OUTFALLS +	
		AUID Level	Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E.coli	Enterococcus	Other pollutant(s) causing Impairments (excluding Mercury)			State Bact. TMDL
NHRIV600030405-02	SALMON FALLS RIVER													MILTON	0
NHRIV600030405-04	LYMAN BROOK													MILTON	1
NHRIV600030405-06	UNNAMED BROOK - TO SALMON FALLS RIVER													MILTON	0
NHRIV600030405-17	UNNAMED BROOK													MILTON	1
<b>MILTON NH WATERBODIES NOT RECEIVING DISCHARGE FROM THE URBANIZED AREA (UA) - WITH IMPAIRMENTS</b>															
NHLAK600030404-02	NORTHEAST POND	5-M										pH			
NHRIV600030402-04	JONES BROOK - HART BROOK	4A-M								X			Y		
NHRIV600030402-06	BRANCH RIVER	5-M			X							pH			
NHRIV600030404-04	MILLER BROOK	5-P										pH			
NHRIV600030601-07	DAMES BROOK	5-M			X					X		pH	Y		
<b>MILTON NH WATERBODIES NOT RECEIVING DISCHARGE FROM THE URBANIZED AREA (UA) - NO IMPAIRMENTS</b>															
NHIMP600030402-04	JONES BROOK - JONES BROOK DAM														
NHIMP600030402-05	UNNAMED BROOK - WILDLIFE POND														
NHIMP600030402-06	UNNAMED BROOK - FIRE POND														
NHIMP600030403-01	UNNAMED BROOK - SLOSKY FIRE WILDLIFE POND DAM														

**TABLE 4.1 Milton NH Receiving Waters**

2021.03.16

WB_ID	WB_NAME	NHDES 2018 303(d) IMPAIRMENT											RECEIVING DISCHARGE FROM MS4	ESTIMATED OUTFALLS +		
		AUID Level	Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E.coli	Enterococcus	Other pollutant(s) causing Impairments (excluding Mercury)			State Bact. TMDL	
NHIMP600030404-01	SALMON FALLS RIVER - WAUMBEC DAM															
NHIMP600030404-02	SALMON FALLS RIVER - SALMON FALLS RIVER VII															
NHIMP600030404-03	UNNAMED BROOK - WILDLIFE POND															
NHIMP600030404-04	STAVE RECREATION POND															
NHIMP600030404-05	UNNAMED BROOK															
NHIMP600030601-03	UNNAMED BROOK - FARM POND															
NHLAK600030403-05	SALMON FALLS RIVER ROWE DAM															
NHLAK600030404-03	UNNAMED POND															
NHRIV600030402-03	JONES BROOK - HORN BROOK															
NHRIV600030402-07	JONES BROOK															
NHRIV600030402-08	UNNAMED BROOK															
NHRIV600030402-09	UNNAMED BROOK															
NHRIV600030402-10	UNNAMED BROOK															
NHRIV600030403-04	SALMON FALLS RIVER - FARNHAM BROOK															

**TABLE 4.1 Milton NH Receiving Waters**

2021.03.16

WB_ID	WB_NAME	NHDES 2018 303(d) IMPAIRMENT											RECEIVING DISCHARGE FROM MS4	ESTIMATED OUTFALLS +		
		AUID Level	Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E.coli	Enterococcus	Other pollutant(s) causing Impairments (excluding Mercury)			State Bact. TMDL	
NHRIV600030403-05	UNNAMED BROOK - TO SALMON FALLS RIVER															
NHRIV600030403-20	UNNAMED BROOK															
NHRIV600030404-01	SALMON FALLS RIVER															
NHRIV600030404-02	SALMON FALLS RIVER															
NHRIV600030404-03	SALMON FALLS RIVER															
NHRIV600030404-05	UNNAMED BROOK - TO SALMON FALLS RIVER															
NHRIV600030404-06	UNNAMED BROOK - TO TOWN HOUSE POND															
NHRIV600030404-07	UNNAMED BROOK															
NHRIV600030404-08	UNNAMED BROOK															
NHRIV600030404-09	UNNAMED BROOK															
NHRIV600030404-10	UNNAMED BROOK															
NHRIV600030404-11	UNNAMED BROOK															
NHRIV600030404-12	UNNAMED BROOK															
NHRIV600030404-15	UNNAMED BROOK															
NHRIV600030404-16	UNNAMED BROOK															
NHRIV600030405-03	SALMON FALLS RIVER															
NHRIV600030405-18	UNNAMED BROOK															

TABLE 4.1 Milton NH Receiving Waters														2021.03.16		
WB_ID	WB_NAME	NHDES 2018 303(d) IMPAIRMENT											RECEIVING DISCHARGE FROM MS4	ESTIMATED OUTFALLS †		
		AUID Level	Chloride	Chlorophyll-a	Dissolved Oxygen/DO Saturation	Nitrogen	Oil & Grease/PAH	Phosphorus	Solids/TSS/Turbidity	E.coli	Enterococcus	Other pollutant(s) causing Impairments (excluding Mercury)			State Bact. TMDL	
NHRIV600030405-19	UNNAMED BROOK															
MILTON NH URBANIZED AREA (UA) WATERBODY CONNECTIONS																
MELAK600030404-01-01	MILTON THREE PONDS	5-M											pH		LEBANON ME	
MELAK600030404-02	MILTON THREE PONDS	5-M											pH		LEBANON ME	
MELAK600030405-02	SPAULDING POND	4C-P											non-native aquatic plants		LEBANON ME	

SOURCE: New Hampshire Department of Environmental Services 2018 EPA Approved 305(b) and 303(d) Lists

† Estimate based on limited desktop review. Actual and total discharges to be field verified.

\* Interconnection with NHDOT MS4 as final discharger.

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## 4.2 INTERCONNECTIONS WITH OTHER MS4s

The Permit defines an interconnection as: *a point where the permittee's MS4 discharges to another MS4 or other storm sewer system, through which the discharge is conveyed to waters of the United States or to another storm sewer system and eventually to a water of the United States.* **Table 4.2** lists interconnections to and from Milton with MS4s of adjacent permittees.

TABLE 4.2 Milton NH MS4 Interconnections (DRAFT)			
FROM MS4	TO MS4	RECEIVING WATERBODY NAME	RECEIVING WATERBODY AUID
MILTON	NHDOT	MILTON POND	NHLAK600030404-01-01
MILTON	NHDOT	MILTON POND	NHLAK600030404-01-01

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### 4.3 IMPAIRED WATERS

- The Town of Milton discharges stormwater into impaired waters identified in the NHDES *Section 303(d) Surface Water Quality List (2018)*. The list is compiled under the EPA Clean Water Act, describes the quality of surface waters, analyzes “the extent to which all such waters provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water”, and includes surface waters that are:
  - impaired or threatened by a pollutant or pollutant(s); and/or
  - not expected to meet water quality standards within a reasonable time even after application of best available technology standards for point sources or best management practices for nonpoint sources; and/or
  - require development and implementation of a comprehensive water quality study (a Total Maximum Daily Load (TMDL) study) which is designed to meet water quality standards.

Per Appendix A of the MS4 Permit, the definition of an impaired water is:

***“Impaired Water** – A water is impaired if it does not meet one or more of its designated use(s). For purposes of this permit, ‘impaired’ refers to categories 4 and 5 of the five-part categorization approach used for classifying the water quality standards attainment status for water segments under the TMDL program. Impaired waters compilations are also sometimes referred to as “303(d) lists”. Category 5 waters are impaired because at least one designated use is not being supported or is threatened and a TMDL is needed. Category 4 waters indicate that at least one designated use is not being supported but a TMDL is not needed (4a indicates that a TMDL has been approved or established by EPA; 4b indicates other required control measures are expected in result in the attainment of water quality standards in a reasonable period of time; and 4c indicates that the non-attainment of the water quality standard is the result of pollution (e.g., habitat) and is not caused by a pollutant.” (2017 MS4 PERMIT Appendix A – Definitions)*

**Appendix F** describes the how the Statewide Bacteria TMDL applies to the Town of Milton’s MS4 Permit requirements.

**Table 4.3** below provides general descriptions of the NHDES 303(d) list impairment categories that apply the impaired waterbodies located within Milton (non-impaired categories 2 and 3 are not shown but can be reviewed on the NHDES Surface Water Quality Program website<sup>5</sup>).

**Table 4.4** presents the waterbodies in Milton that are listed by NHDES (2018) as having Category 4 or 5 impairments, and includes each pollutant contributing to the impairment. The overall impairment category for any waterbody is defined by the highest level of any pollutant impairment.

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<sup>5</sup><https://www.des.nh.gov/water/rivers-and-lakes/water-quality-assessment>

<b>TABLE 4.3 NHDES Impaired Waters Category Descriptions</b>	
<b>NHDES Category</b>	<b>General Description</b> (This table is intended to give an overview of the NHDES Categories. See <i>Table 3-6</i> in the <i>2018 Consolidated Assessment and Listing Methodology [CALM]</i> for more detail)
<b>SEVERE: NOT SUPPORTING, SEVERE</b>	
5-P	There is an impairment per the CALM by a parameter which is a pollutant that requires a TMDL. The impairment is more severe and causes poor water quality as defined in DES sub-category 4A-P above.
4A-P	There is an impairment per the CALM by a parameter which is a pollutant and an EPA-approved TMDL has been completed. However, the impairment is more severe and causes poor water quality conditions.
4C-P	There is a parameter which is not considered a pollutant but is causing impairment per the CALM. The impairment is more severe and causes poor water quality as defined in DES sub-category 4A-P above.
<b>POOR: NOT SUPPORTING, MARGINAL</b>	
5-M	There is an impairment per the CALM by a parameter which is a pollutant that requires a TMDL. The impairment is marginal as defined in DES sub-category 4A-M above.
4A-M	There is an impairment per the CALM by a parameter which is a pollutant and an EPA-approved TMDL has been completed. However, the impairment is relatively slight or marginal.

<b>TABLE 4.4 Milton NH MS4 Permit Impaired Waters</b>		
<b>2018 NHDES 303(d) LIST IMPAIRMENT ASSESSMENT OUTCOME (Regulated Area)</b>		
<b>SEVERE: NOT SUPPORTING, SEVERE (5-P, 4A-P, 4C-P)</b>		
<b>Indicator contributing to Impairment</b>	<b>MILTON THREE PONDS - MILTON POND REC AREA BEACH NHLAK600030404-01-03</b>	<b>SPAULDING POND NHLAK600030405-02</b>
Escherichia coli (E. coli)	4A-P	
Non-Native Aquatic Plants*		4C-P
<b>POOR: NOT SUPPORTING, MARGINAL (5-M and 4A-M)</b>		
<b>Indicator contributing to Impairment</b>	<b>MILTON POND NHLAK600030404-01-01</b>	<b>TOWNHOUSE POND NHLAK600030404-01-02</b>
pH	5-M	5-M
<b>OTHER IMPAIRMENTS</b>		
Nitrogen (Great Bay tributaries)	<b>SALMON FALLS RIVER (multiple AUID segments)</b>	

\* no requirements under MS4 permit

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#### 4.4 INCREASED DISCHARGES

Discharges to surface waters are subject to NHDES antidegradation regulations including NH Code Section Env-Wq 1700. Any increased discharges to surface waters must receive prior authorization from the NHDES and all such authorizations shall be tabulated in this SWMP. If a NHDES approval specifies additional conditions or requirements in the authorization, then those requirements are incorporated into the Permit by reference.

No new or increased discharges are permitted to impaired waters listed in categories 5 or 4 on the most recent EPA-approved New Hampshire Integrated Report of waters listed per the Clean Water Act Sections 303(d) and 305(b) unless the permittee demonstrates that there is no net increase in loading to the impaired water for the pollutant(s) for which the waterbody is impaired.

A proposal having new or increased discharges to impaired waters may be allowed providing either:

1. documentation that the pollutant(s) for which the waterbody is impaired is not present in the new or increased discharge; or
2. documentation that the total load of the pollutant(s) of concern to any impaired portion of the receiving water does not cause an overall increase as a result of the proposed increased discharges.

For the Town of Milton, controlling discharges from sites and maintaining water quality is regulated through the Town's public education program under the Permit, IDDEP, local land use regulations, and municipal good housekeeping program as outlined in this SWMP.

Milton land use regulations provide stormwater management requirements for development and redevelopment sites. These regulations include (but are not limited to) design review and approval of proposed new and redevelopment projects, construction phase site stormwater management, and post-construction stormwater infrastructure inspections and maintenance.

The Town's Good Housekeeping Program includes (but is not limited to) the following stormwater management BMPs:

- an Operations and Maintenance Program (O&M) for town-owned properties and stormwater infrastructure including inspections;
- Stormwater Pollution Prevention Plans (SWPPPs) for town facilities within the regulated area where materials and activities may be exposed to stormwater (if any). SWPPPs include spill response, covered salt storage, regular facility inspections and maintenance, and staff training; and
- written Standard Operating Procedures (SOPs) for town activities that relate to and provide water quality protections including (but not limited to) infrastructure inspections, catch basin cleaning, street sweeping, winter road maintenance, and yard waste management.

## 4.5 GROUNDWATER AND PUBLIC WATER SUPPLY PROTECTION

The Permit includes additional requirements for the State of New Hampshire that provides for the protection of local groundwater and public water supplies. **Table 4.5** shows NHDES identified public water supplies (active only) within the Town’s regulated area.

<b>TABLE 4.5 Public Water Supplies within Milton NH Regulated Area</b>			
<b>WATER SUPPLY NAME</b>	<b>ADDRESS</b>	<b>NUMBER WELLS</b>	<b>POPULATION SERVED</b>
MILTON WATER DISTRICT	ROCKY POINT ROAD	5	800
PINELAND PARK	VACHON RD	2	425

Source: NHDES GIS Well and Water Supply Dataset (2021).

NHDES water supply data also identifies well head and source water protection areas. **Table 4.6** includes the protection areas that intersect with Milton’s MS4 area.

<b>TABLE 4.6 Water Protection Areas within Milton NH Regulated Area</b>		
<b>WATER SUPPLY NAME</b>	<b>TOWN</b>	<b>POPULATION SERVED</b>
MILTON WATER DISTRICT	MILTON	800
PINELAND PARK	MILTON	425
SOMERSWORTH WATER WORKS	SOMERSWORTH	12,000

Source: NHDES GIS Well and Water Supply Dataset (2021).

Water supply in Milton, both public and private, is generally dependent on groundwater. The Town’s zoning and land use regulations include protections for local water supply as requirements to meet NHDES standards for the management of stormwater, prescriptive wellhead protective radii, and an established groundwater protection overlay zoning district (Milton Zoning Article XVI).

As shown in **Table 4.7**, the New Hampshire Groundwater Protection Act (RSA 485-C) identifies several potential sources for water supply contamination that should be considered when reviewing the installation of new wells including the proximity to stormwater treatment BMPs.

Other potential threats to groundwater can come from more scattered and singular sources such as leaking/failed underground storage tanks (including heating fuel), storage and use of HPFs (herbicides, pesticides, and fertilizers), older and failing residential septic systems, or rock blasting activities.

Future groundwater and water supply protections that the Town may consider include:

- creating a voluntary facility inspection/evaluation program for high-load properties that may be sources of potential contamination to groundwater; and/or
- Groundwater reclassification through the NH Groundwater Protection Act.

<b>TABLE 4.7 Potential Contamination Sources<sup>1</sup></b>	
<ul style="list-style-type: none"> <li>• Vehicle service and repair shops</li> <li>• General service and repair shops</li> <li>• Metalworking shops</li> <li>• Manufacturing facilities</li> <li>• Underground and above-ground storage tanks</li> <li>• Waste and scrap processing and storage</li> <li>• Transportation corridors</li> <li>• Septic systems (at commercial and industrial facilities)</li> <li>• Laboratories and certain professional offices (medical, dental, veterinary)</li> </ul>	<ul style="list-style-type: none"> <li>• Use of agricultural chemicals<sup>2</sup></li> <li>• Salt storage and use</li> <li>• Snow dumps</li> <li>• Stormwater infiltration ponds or leaching catch basins</li> <li>• Cleaning services</li> <li>• Food processing plants</li> <li>• Fueling and maintenance of earth moving equipment</li> <li>• Concrete, asphalt, and tar manufacture</li> <li>• Cemeteries</li> <li>• Hazardous waste facilities</li> </ul>
<p><sup>1</sup>As identified in New Hampshire's Groundwater Protection Act (RSA 485-C)  <sup>2</sup>Subject to BMPs developed and administered by N.H. Dept. of Food, Agriculture, and Markets</p>	

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#### **4.6 GROUNDWATER RECHARGE**

The Town encourages the implementation of groundwater recharge to the 'maximum extent practical' through their zoning ordinance and land use regulations. These regulations include provisions for (but are not limited to):

- maximum impervious lot coverage requirements;
- stormwater management and erosion control requirements; and
- on-site groundwater recharge to maintain or exceed the annual recharge from pre-development site conditions.
- landscaping for groundwater recharge to the maximum extent practicable.

Although infiltration and groundwater recharge are highly encouraged, infiltration under the following conditions or sites is to be prohibited:

- where stormwater flows originate from gasoline dispensing areas and at locations with state registered underground storage tanks (UST) and above ground storage tanks (AST);
- within identified groundwater protection areas;
- within areas that have contaminants in groundwater above the NH ambient groundwater quality standards (*Env-Or 600*); or
- when stormwater originates from land uses considered a "high load area" as shown in **Table 4.8**.

<b>TABLE 4.8 High Load Areas per NHDES Env-Wq 1502.26</b>
Industrial facilities subject to the NPDES Multi- Sector General Permit
Petroleum storage facilities
Petroleum dispensing facilities
Vehicle fueling facilities
Vehicle service, maintenance, and equipment cleaning facilities
Fleet storage areas
Highway Department storage areas
Road salt facilities
Commercial nurseries
Non-residential facilities having uncoated metal roofs with a slope flatter than 20%
Facilities with outdoor storage, loading, or unloading of hazardous substances, regardless of the primary use of the facility
Facilities subject to chemical inventory under Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

All subsurface disposal of stormwater shall be in accordance with NHDES applicable groundwater, source water protection, and underground injection control requirements.

## 5.0 MCM 1 - PUBLIC EDUCATION AND OUTREACH (Part 2.3.2)

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### 5.1 MCM 1 OBJECTIVE

*Objective: The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that pollutants in stormwater are reduced.*

Under the general requirements of the Permit, a minimum of two (2) educational messages are to be delivered to each audience over the term of 5 years and are to be spaced at least one year apart. The four intended audiences are:

- residential;
- commercial/institutional;
- developers/construction; and
- industrial.

A minimum of eight messages are to be provided during the permit term. However, towns with approved TMDL waterbodies or Water Quality Impaired Waters within the regulated area must compete additional MCM 1 messages under *Section 2* of the Permit. See also Section 11 of this SWMP.

For Milton, additional messages are required for the Statewide TMDL for Bacteria Impaired Waters, 2010 for Milton Pond Recreation Area Beach.

Milton also falls under additional requirements for Water Quality Impaired Waters for nitrogen impairments in the Salmon Falls River where supplemental messages are required relative to reducing overall 'pollutant of concern' loading.

As members of the Seacoast Stormwater Coalition (SSC), several resources for public outreach messages are available to the Town on the SSC web page<sup>6</sup>.

Suggested topics for distribution by audience are presented in **Table 5.1**. Although each topic can be applied across multiple audiences, messages must be focused and prepared to address the specific issues in Milton and each individual group.

**Tables 5.2a through 5.2c** and **Table 5.3** show public outreach BMPs and messaging timing for Milton.

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<sup>6</sup> <https://www4.des.state.nh.us/nh-ms4/>

**TABLE 5.1 MCM 1 Suggested Public Education and Outreach Topics**

Education Topics	Residential	Business/ Commercial/ Institution	Developers/ Construction	Industrial
Information about stormwater and water quality	X	X	X	X
Information about illicit discharges with hotline number	X	X	X	X
Information on Milton's impaired waters	X	X	X	X
lawn care products	X	X	X	X
pet waste management	X	X		
maintenance of septic systems	X	X	X	X
infiltration benefits and practices	X	X	X	X
effects of vehicle washing/maintenance on local water quality	X	X	X	X
disposal of swimming pool water	X			
salt and deicing materials and storage	X	X	X	X
building maintenance	X	X		X
hazardous materials storage		X	X	X
waste management		X	X	X
parking lot maintenance (sweeping)		X		X
erosion & sediment controls			X	
low-impact development			X	
equipment maintenance			X	X
EPA Construction General Permit			X	
EPA Multi-Sector General Permit				X

## 5.2 MCM 1 BMPs

MCM 1 BMPs are taken directly from the Town's 2019 NOI and must be reviewed and updated annually.

MCM 1: PUBLIC EDUCATION						
BMP ID	BMP Media/Category	BMP Description	Targeted Audience	Responsible Department/Parties	Measurable Goal	Year Start BMP
1.1	Brochures/Pamphlets	Stormwater management	Developers (construction)	Planning/Zoning Department	Improved communication to ensure the town's stormwater management regulations are properly followed	2021
1.2	Brochures/Pamphlets	Landscaping and lawn maintenance	Residents, Businesses, Institutions, Industrial, and Commercial Facilities	Planning/Zoning Department	Increased awareness of nutrient management to reduce unnecessary fertilizer applications	2021
1.3	Local Public Service Announcements	Pet waste campaign	Residents, Businesses, Institutions, Industrial, and Commercial Facilities	Planning/Zoning Department	Increased awareness on the harmful impacts of pet waste on waterways	2021
1.4	Brochures/Pamphlets	Erosion and sediment control practices	Developers (construction)	Planning/Zoning Department	Improved communication to ensure the town's erosion and sediment control regulations are properly followed	2021
1.5	Direct Mailing	Septic system maintenance	Residents	Planning/Zoning Department, Conservation Commission, & Milton Three Ponds Association	Increased awareness on proper septic system maintenance	2021
1.6	Web Page	Leaf litter management	Residents, Businesses, Institutions, Industrial, Commercial Facilities, and Developers	Highway Department	Increased awareness on nutrient loading from leaf litter and proper disposal	2021
1.7	Online GIS Platform	Infrastructure Mapping		Planning/Zoning Department (GIS Coordinator)	Improved access to existing stormwater infrastructure and assets	2021

### 5.3 MCM 1 IMPLEMENTATION PLAN / SCHEDULE

<b>TABLE 5.2a MCM 1 Public Education Message Requirement Schedule by Message Type</b>						
<b>AUDIENCE</b>	<b>NUMBER MESSAGES BY PERMIT YEAR</b>					
	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>	<b>TOTAL</b>
<b>MS4 Minimum Requirement (Town-wide or MS4 Regulated Area)</b>						<b>4</b>
Residents	Replaced by TMDL & WQLW Requirements					0
Business / Institutional / Commercial	Replaced by TMDL & WQLW Requirements					0
Developers / Construction	0	1	0	1	0	2
Industrial	0	0	1	0	1	2
<b>Bacteria TMDL†</b>						<b>15</b>
Residents*	2	2	2	2	2	10
Business / Institutional / Commercial AND Industrial**	1	1	1	1	1	5
<b>Nitrogen Impairment (MS4 Regulated Area‡)</b>						<b>15</b>
Residents AND Business/ Institutional/ Commercial***	3	3	3	3	3	15
<b>TABLE 5.2b MCM 1 Public Education Message Requirement Schedule for All Messages</b>						
<b>AUDIENCE</b>	<b>NUMBER MESSAGES BY PERMIT YEAR</b>					
	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>	<b>TOTAL</b>
Residents	5	5	5	5	5	<b>25</b>
Business / Institutional / Commercial	4	4	4	4	4	<b>20</b>
Developers / Construction	0	1	0	1	0	<b>2</b>
Industrial	1	1	2	1	2	<b>7</b>

\*Pet waste with licensing plus septic systems messages. Replaces general MS4 Program.

\*\*Septic systems messages.

\*\*\*One message of each: fertilizer and pet waste and yard waste. Replaces general MS4 Program.

<b>TABLE 5.2c MCM 1 Public Education Message for Impaired Waters</b>
<b>† Bacteria TMDL/Impairment</b>
MILTON POND - MILTON POND REC AREA BEACH
<b>#Waterbodies with Nitrogen Impairment</b>
SALMON FALLS RIVER - GREAT BAY TRIBUTARIES

<b>TABLE 5.3 MCM 1 Message Timing for Impaired Waters</b>	
<b>Message Type</b>	<b>Issue Timing</b>
Grass and Fertilizer	April / May
Pet Waste	with Dog Licensing and June/July
Yard Waste	Aug - Oct
Septic System Maintenance	annually

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## 5.4 MCM 1 GOALS, MEASURES, AND PROGRESS

Public education and outreach goals expect to:

- increase awareness of how stormwater and stormwater pollution affect water quality;
- change behaviors toward the value of stormwater quality over time;
- improve local ordinance and regulations compliance;
- increase awareness of federal stormwater regulations and individual discharge permits; and
- increase awareness of best management practices and low impact design measures/methods.

Materials and messages may be publicized through direct-mailings, email, web pages, social media and other public postings and events.

Measurement of the progress of the MCM 1 BMPs may include:

- maintaining records of the number of:
  - mailings (direct and email);
  - visits to a web site or public event booth;
  - publicly posted flyers/brochures taken;
- provide annual surveys regarding stormwater knowledge and reported behaviors; and
- track improved maintenance efforts over time (i.e., less pet waste found in public spaces).

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## 5.5 MCM 1 DOCUMENTATION

Annual reporting as well as regular review and updates to this SWMP, BMPs, and goals will rely on organized and proper documentation. The following items are recommended documentation for MCM 1:

- copies of all messages provided to the public and dates sent and/or made publicly available;
- message/materials distribution lists and number of recipients; and
- copies of surveys and summarized results including number of surveys sent/returned.

## 6.0 MCM 2 - PUBLIC INVOLVEMENT AND PARTICIPATION (*Part 2.3.3*)

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### 6.1 MCM 2 OBJECTIVE

*Objective: The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP.*

Public involvement and participation is expected to be developed through several opportunities that include, but are not limited to:

- town committees holding public events where stormwater management is discussed as a specific topic;
- a SWMP committee or stakeholder group comprised of town representatives, representatives from local lake/pond associations, and other interested members of the public;
- public notice (formal and informal) of the annual comment, review, and revision period of the SWMP;
- public opportunities for volunteerism such as clean-up days or waste drop-offs; and
- public surveys.

## 6.2 MCM 2 BMPs

MCM 2 BMPs are taken from the Town’s 2019 NOI and must be reviewed and updated annually.

<b>MCM 2: PUBLIC INVOLVEMENT AND PARTICIPATION</b>					
<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>	<b>Year Start BMP</b>
2.1	Public Review	SWMP Review	Planning/Zoning Department	Annual review of stormwater management plan and posting on website and town hall for public comment	2021
2.2	Public Participation	Implement 1 or more public participation events/activities annually	Planning/Zoning Department	Public participation event(s) conducted	2021
2.3		Annual reporting	Planning/Zoning Department	Annual reporting of public participation activity and public review/comment on SWMP	2020

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### 6.3 MCM 2 GOALS, MEASURES, AND PROGRESS

Public participation goals aim to:

- provide regular opportunities for involvement in the Town's SWMP;
- increase public knowledge regarding stormwater management and water quality through participation opportunities; and
- encourage public volunteerism for local water quality improvement projects.

Opportunities for public involvement must be posted at least 30 days in advance of an event. Postings may be through direct-mailings, email, web pages, social media, and public notices in local news sources and other public places.

Measurement of the progress of the MCM 2 BMPs may include tracking:

- the number of participants at events and meetings;
- the number of comments received during the SWMP review period; and
- quantity of removed or drop-off items.

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### 6.4 MCM 2 DOCUMENTATION

Annual reporting as well as regular review and updates to this SWMP, BMPs, and goals will rely on organized and proper documentation. The following items are recommended documentation for MCM 2:

- dates and copies of notices for annual public review of this SWMP;
- dates and minutes from stormwater committee or stakeholder meetings;
- copies of all SWMP review period comments from the public;
- dates and copies of notices for volunteer opportunities;
- dates and copies of notices for drop-off or pickup events; and
- number of participants at events and meetings.

## 7.0 MCM 3 -ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM (IDDEP) (PART 2.3.4)

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### 7.1 MCM 3 OBJECTIVE

*Objective: The permittee shall implement an IDDE program to systematically find and eliminate sources of non-stormwater discharges to its municipal separate storm sewer system and implement procedures to prevent such discharges.*

An “illicit discharge” is any discharge to a drainage system that is not comprised entirely of stormwater (with the exception of discharges authorized under separate NPDES permits other than the MS4 Permit, and other allowable discharges, see Section 2.2).

Illicit discharges can contribute high levels of pollutants, such as heavy metals, toxics, oil, grease, solvents, nutrients, and pathogens to surface waters.

Illicit discharges may take a variety of forms and may enter the drainage system through direct or indirect connections. Direct connections may be relatively obvious, such as connections from non-stormwater sources found in a piped drain system. Indirect illicit discharges may be more difficult to detect or address, such as failing septic systems that discharge untreated sewage to a ditch, or a sump pump that discharges contaminated water on an intermittent basis.

Some illicit discharges are intentional, such as: dumping used oil (or other pollutant) into catch basins; a resident or contractor illegally tapping into a storm drainage pipe or structure; illegal dumping of yard wastes into surface waters, including wetlands; improper discharges of floor drains connected to stormwater systems; and legally connected sump systems disposing of non-allowed pollutants.

The primary goal of the IDDEP is the elimination of all non-allowed stormwater discharges to the Town’s MS4s. The IDDEP is intended to provide the basis of a long-term assessment and improvement program under the SWMP by systematic investigation and identification of pollution sources.

Per the Permit, at a minimum, the complete written IDDEP is provided in **Appendix D** and includes:

- Legal authority to access, inspect, direct the termination of an identified pollution source, suspend access to the MS4, provide municipal intervention, disallow non-stormwater or increased discharges to the MS4s, and/or levy fines. (See IDDEP **Appendix DA**).
- MS4 system mapping is under development and aims to spatially locate waterbodies, known impairments, outfalls, watersheds, catchments, municipally owned stormwater treatment structures (detention basins, culverts, catch basins, infiltration areas, etc.), and interconnections with other MS4s. (IDDEP **Appendix DB**).

- Statement of responsibilities that identifies the lead departments and personnel responsible for implementing and enforcing the IDDEP. (See SWMP Organization Chart in Section 3).
- Standard operating procedures required under the IDDEP (IDDEP appendices).
- An assessment and ranking methodology for prioritizing outfall investigations (IDDEP Section D5).
- Dry and wet weather screening and sampling programs (IDDEP Section D6 and IDDEP appendices).
- Written catchment investigation program (IDDEP Section D7).
- A municipal training plan for the IDDEP (IDDEP Section D8).
- Continuous data maintenance, progress assessment, and reporting (IDDEP Section D9).

## 7.2 MCM 3 BMPs

MCM 3 BMPs are taken directly from the Town’s 2019 NOI and must be reviewed and updated annually.

<b>MCM 3: ILLICIT DISCHARGE DETECTION and ELIMINATION PROGRAM</b>				
<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>
3.1	Sanitary Sewer Overflows (SSO) inventory	Develop SSO inventory in accordance with permit conditions	Sewer Department	Complete within 1 year of effective date of permit
3.2	Storm sewer system map	Create map and update during IDDE program completion	Highway Department & Planning/Zoning (GIS Coordinator)	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit
3.3	Written IDDE program development	Create written IDDE program	Highway Department	Complete within 1 year of the effective date of permit and update as required
3.4	Implement IDDE program	Implement catchment investigations according to program and permit conditions	Highway Department	Complete 10 years after effective date of permit
3.5	Employee training	Train employees on IDDE implementation	Highway Department	Train annually
3.6	Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	Highway Department	Complete 3 years after effective date of permit
3.7	Conduct wet weather screening	Conduct in accordance with outfall screening procedure	Highway Department	Complete 10 years after effective date of permit
3.8	Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	Highway Department	Complete ongoing outfall screening on completion of IDDE program

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## 7.3 MCM 3 IMPLEMENTATION PLAN / SCHEDULE

The Town will implement this IDDEP under the following schedule:

### Permit Year 3 (Due June 30, 2021)

- Refine mapping of receiving waters, impaired waters, and outfalls (initial desktop mapping completed under the 2003 MS4 Permit).
- Complete initial outfall ranking and prioritization.
- Complete written IDDEP.
- Complete written IDDEP procedures.
- Hold annual IDDEP employee training.
- In annual reporting, provide statement of Permit compliance, summary of work, updated plans completed in the Permit year, and summary of program progress (report due September 30, 2021 for activities through June 30, 2021).

### Year 4 through Year 9

- Continue to develop and update mapping.
- Complete dry weather screening for prioritized outfalls.
- Start wet weather outfall screening/sampling if applicable.
- Update mapping to include catchment delineations, and upstream outfall infrastructure (including swales and other treatment practices) .
- Start catchment investigations.
- Hold IDDEP employee training annually.
- In annual reporting, provide statement of Permit compliance, summary of work and updated plans completed in the Permit year, and summary of program progress (due annually).

### Year 10

- Complete Phase II mapping.
- Complete wet weather outfall screening/sampling, as applicable.
- 100% catchment investigations complete.
- Hold annual IDDEP employee training.
- In annual reporting, provide statement of Permit compliance, summary of work and updated plans completed in the Permit year, and summary of program progress (report due September 30, 2029 for activities through June 30, 2029).

See also *2017 MS4 Permit IDDEP Schedule* in the IDDEP provide in **Appendix D**.

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## 7.4 MCM 3 GOALS, MEASURES, AND PROGRESS

The goal of the IDDEP is the elimination of all non-allowed stormwater discharges to the Town's MS4s. However, it is important to define interim milestones to properly assess the progress and success of the program over time.

Key interim milestones/goals for the IDDEP are:

1. Complete dry-weather screening for all outfalls by the end of Year 3.

Dry-weather screening of 13 outfalls is expected to be completed in 2021.

Milestones will include:

- a summary of the number of outfalls screened; and
  - a summary of the screening results (i.e., number of dry weather discharges identified).
2. Complete catchment investigations by the end of Year 10.

The Town currently has 13 outfalls identified in the regulated area (ranked both "High" and "Low"). Although many of the outfalls may become excluded based on the results of dry-weather screening (no suspected illicit discharges), other outfall catchments may require additional screening and/or time to fully investigate. It is difficult to accurately estimate a number of catchment investigations before completing the dry-weather screening; however, a plan must be established with the understanding that it will become more refined over time as more information is collected within the regulated area.

Investigation periods can be set in six month increments with measured indicators to include:

- summaries of the number and percent of catchments investigated;
- the number of associated structures in each catchment;
- the estimated acreage of each catchment investigated;
- the number and percentage of rescreened/resampled outfalls from previous investigation periods;
- the number of illicit discharges identified and eliminated or notes regarding the on-going removal process; and
- the estimated illicit discharge volume removed from the Town's MS4s.

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## 7.5 MCM 3 DOCUMENTATION

At a minimum, the following must be documented in each annual report with respect to the IDDEP:

- number and percent of catchments investigated during the reporting period (each Permit year);
- the number of illicit discharges identified and eliminated during the reporting period (each Permit year);
- all dry and wet weather screening and sampling results; and
- the estimated illicit discharge volume removed from the Town's MS4s.

Additional documentation that will be useful in the management and reporting of the IDDEP includes:

- logs/records of reported calls and complaints regarding suspected illicit discharges;
- zoomed in mapping of more complex catchments investigated;
- notes regarding the on-going illicit discharge removal processes (when not completed, i.e., letters sent, fines levied, court filings, etc.);
- applicable inspection and maintenance records; and
- employee training opportunities; type, dates, number attended.

## 8.0 MCM 4 - CONSTRUCTION SITE STORMWATER RUNOFF CONTROL (Part 2.3.5)

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### 8.1 MCM 4 OBJECTIVE

*Objective: The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on construction sites so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.*

MCM 4 provides the basis for regulating stormwater runoff during planning, design, and construction phases, to protect local natural resources from degradation and prevent adverse impacts to adjacent and downstream land, property, facilities, and infrastructure.

Standards to regulate stormwater discharges from land development projects and other construction activities aim to control and minimize increases in stormwater runoff rates and volumes, site soil erosion, and nonpoint source pollution associated with construction-related stormwater runoff.

The Town's primary components of the Construction MCM 4 will include :

- A regulatory mechanism that requires the use of erosion and sediment controls (ESC) at construction sites including the control of wastes.
- Procedures for site plan review by the Town of all proposed new and redevelopment projects to ensure the use of appropriate and adequate ESC measures and provide for the review the proposed post-development design of stormwater treatment in conformance with Town regulations and Permit requirements as described in Section 9 for MCM 5, Post-Construction.
- Minimum construction phase requirements that include:
  - erosion and sediment control measures are required prior to any site disturbance, and all sediments must be retained within the project area.
  - wetland areas and surface waters must be protected from sediment.
  - disturbed soil areas must be stabilized consistent with the NHDES Stormwater Manual.
  - native site vegetation shall be retained to the maximum extent practicable (MEP).
  - all temporary control measures and accumulated sediments must be removed after final site stabilization.
  - BMPs must be located outside buffer zones.
- Requirements for developers and construction site contractors to implement ESC during construction activities.
- Requirements to control construction-related waste, including no untreated or waste discharges to the Town's MS4s.
- Procedures for construction site inspection and enforcement by the Town regarding the use of ESC measures.

## 8.2 MCM 4 BMPs

MCM 4 BMPs are taken directly from the Town's 2019 NOI and must be reviewed and updated annually.

<b>MCM 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL</b>				
<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>
4.1	Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures	Planning/Zoning Department & Code Enforcement Officer	Complete within 1 year of the effective date of permit
4.2	Site plan review	Revise procedures of site plan review and begin implementation	Planning/Zoning Department	Complete within 1 year of the effective date of permit
4.3	Develop requirements for construction operators	Adopt requirements for construction operators applicable to all approved construction and building permits	Planning/Zoning Department & Select Board through a public hearing process	Complete within 1 year of the effective date of permit
4.4	Construction and waste control	Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes	Planning/Zoning Department & Select Board through a public hearing process	Complete within 1 year of the effective date of permit
4.5	Septic system criteria	Evaluate the feasibility of adopting septic system evaluation criteria regulations	Planning/Zoning Department & Code Enforcement Officer	Complete within 2 years of the effective date of permit

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### 8.3 MCM 4 IMPLEMENTATION PLAN / SCHEDULE

The Town includes construction stormwater management requirements within their current land use regulations and will continue to update the regulations to meet the requirements of the Permit.

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### 8.4 MCM 4 GOALS, MEASURES, AND PROGRESS

The goal of these BMPs is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public. This regulation seeks to meet that goal through the following objectives:

1. Minimize increases in nonpoint source pollution caused by stormwater runoff from construction that would otherwise degrade local water quality.
2. Minimize the flow rate of surface water runoff that flows from any specific site during and following development to not exceed the pre-development hydrologic condition to the maximum extent practicable as allowable by site conditions.
3. Protect the quality of groundwater resources, surface water bodies, and wetlands.

Indicators of progress and success of MCM 4 BMPs include:

- regular inspection of 100% of all construction sites for ESC;
- a reduction in the number of resubmittals to the Town to address stormwater treatment and ESC control measures; and
- a reduction in the number of construction site ESC violations or directives resulting from Town inspections.

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### 8.5 MCM 4 DOCUMENTATION

At a minimum, the following documentation is suggested:

- number of site plan reviews tracked;
- number of site inspections;
- number of site inspection enforcement actions issued; and
- copies and dates of adopted regulations to comply with Permit requirements.

## 9.0 MCM 5 - POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT (*Part 2.3.6*)

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### 9.1 MCM 5 OBJECTIVE

*Objective: The objective of this control measure is to minimize the water quality impact from new development and reduce the water quality impact due to stormwater runoff from a redeveloped site.*

MCM 5 provides the basis for regulating stormwater runoff in post-construction to protect local natural resources from degradation and prevent adverse impacts to adjacent and downstream land, property, facilities, and infrastructure.

Standards to regulate discharges from stormwater runoff from development and redevelopment projects aim to control and minimize increases in: stormwater runoff rates and volumes; site soil erosion; stream channel erosion; and nonpoint source pollution associated with urban land conversion and associated stormwater runoff.

At a minimum, primary components of the Post-Construction MCM that apply to development and redevelopment projects that disturb one or more acres (total of all phases) shall meet the requirements of *Section 4 Element C and Element D of the Southeast Watershed Alliance's Model Stormwater Standards for Coastal Watershed Communities (SWA Model Standards)*<sup>7</sup>. These minimum requirements are summarized below.

#### A. Threshold for Post-Development Applicability

1. any development or redevelopment project that disturbs more than one acre within 100-feet of a surface water body.
2. The following activities are exempt from the post-development stormwater requirements:
  - a. agricultural and forestry practices outside wetlands and surface water buffers.
  - b. resurfacing and maintenance of roads and parking lots.
  - c. maintenance to existing buildings and structures.

Minimum stormwater management includes:

- a. controlling runoff rate and volume; and
- b. water quality treatment if discharged to a town drainage system or directly to any surface water or wetland.

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<sup>7</sup> [https://southeastwatershedalliance.org/wp/wp-content/uploads/2017/02/Final\\_SWA\\_SWStandards\\_Dec\\_2012.pdf](https://southeastwatershedalliance.org/wp/wp-content/uploads/2017/02/Final_SWA_SWStandards_Dec_2012.pdf)

## B. General Performance Criteria for Stormwater Management Plans

1. Erosion and sediment control measures are required prior to any site disturbance, and all sediments must be retained within the project area.
2. Wetland areas and surface waters must be protected from sediment.
3. Disturbed soil areas must be stabilized consistent with the NHDES Stormwater Manual.
4. Native site vegetation shall be retained to the maximum extent practicable (MEP).
5. All temporary control measures and sediments must be removed after final site stabilization.
6. BMPs must be located outside the buffer zones.
7. Stream and wetland crossings must comply with state recommended design standards.
8. Reduce stormwater; reduce impervious cover; and minimize stormwater discharges to the Town's MS4s.
9. Protect the quality of surface waters and groundwater.
10. No stormwater runoff from new development or redevelopment can discharge directly into a wetland or surface waterbody without treatment.
11. Provide management of stormwater to not contribute to water quality impairments.
12. Meet the performance specifications in the NH Stormwater Management Manual (current revision).
13. Provide on-site groundwater recharge to maintain or exceed the annual recharge from pre-development site conditions.
14. Design stormwater management using the Northeast Region Climate Center (NRCC) precipitation data, or other most recent precipitation atlas.
15. Stormwater practices relying on vegetation as treatment must include a landscaping plan and a long-term inspection and maintenance plan.
16. Submission of as-built plans including local coordinates for all installed stormwater infrastructure within two years of the completion of the project.
17. Submission of and identify the persons or entities responsible for long-term inspection and maintenance (I&M) for all installed stormwater practices including procedures for regular inspections and/or annual certifications.

## C. Stormwater Management for New Development

1. Project generated stormwater must be treated on the development site.
2. Natural flow patterns of the site shall be maintained to the MEP.
3. Runoff shall be directed to vegetated areas designed for treatment to the MEP.

4. Stormwater systems must not cause flooding or impairments to streets, adjacent and downstream properties, or local environs.
5. Stormwater design must account for upgradient runoff that flows onto the site.
6. Low Impact Development (LID) site design strategies must be used to the MEP.
7. All runoff generated from created impervious surfaces must be treated to achieve 80% removal of Total Suspended Solids (TSS) and at least 50% removal of both total nitrogen (TN) and total phosphorus (TP).
8. Post-development peak runoff rates must not exceed pre-development conditions.
9. Post-development peak volumes are to be mitigated with on-site infiltration to the MEP.
10. Stormwater treatment areas are to use native plantings appropriate for site conditions and sufficient to achieve the water quality treatment.
11. All areas that receive runoff must be designed to drain within 72-hours.
12. Snow storage areas must be located such that untreated stormwater is not discharged directly to receiving waters.
13. Salt storage areas must be covered, and loading/offloading areas must not allow untreated stormwater to discharge directly into receiving waters.
14. Runoff from snow and salt storage areas must enter treatment areas before being discharged or allowed to infiltrate.

D. Stormwater Management for Redevelopment

1. Redevelopment Criteria:
  - a. The percentage of the site covered by existing impervious areas must be calculated.
  - b. Development having less than 40% existing impervious surface coverage must meet the requirements of new development projects above.
  - c. Redevelopment having more than 40% existing impervious surface coverage, must manage stormwater for water quality by:
    - i. disconnection or treatment of at least 30% of the existing impervious cover and at least 50% of the proposed impervious surface using filtration media practices (preferred); or
    - ii. implement LID techniques onsite to the MEP to provide treatment for at least 50% of the entire site area.
2. Retrofitting existing stormwater infrastructure as feasible may also be considered.
3. Off-Site Mitigation Option for Redevelopment Projects:
  - a. Where full on-site treatment is not feasible, the Town will consider a written request from the applicant for off-site mitigation implemented within the project subwatershed for the same receiving waterbody.

- b. Off-site mitigation must be equivalent to no less than the total area of impervious cover NOT treated on-site.
- c. An off-site location proposal is required and must include the planned off-site location with applicable landowner approvals, the specific management measures, and an implementation schedule.

Additional post-construction MCMs that the Town is expected to complete by the end of Permit Year 4 include:

- an assessment of Town street and parking design requirements relative to reducing impervious cover within the regulated area.
- an assessment of Town regulations relative implementing green infrastructure practices within the regulated area.
- an inventory of all Town-owned property and infrastructure that can be retrofitted with stormwater reduction measures from impervious areas. The report shall also identify a list of potential locations selected for further review.

## 9.2 MCM 5 BMPs

MCM 5 BMPs are taken directly from the Town's 2019 NOI and must be reviewed and updated annually.

<b>MCM 5: POST CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT</b>				
<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>
5.1	As-built plans for on-site stormwater control	As-built plans are already a requirement in the town's site plan regulations and will be used to ensure long term operation and maintenance and development of the SWMP	Planning/Zoning Department & Planning Board	Require submission of as-built plans for completed projects within 2-years of effective date of permit
5.2	Target properties to reduce impervious areas	Complete an inventory and priority ranking of permittee- owned property and existing infrastructure that could be retrofitted with BMPs designed to reduce the frequency, volume and pollutant loads of stormwater discharges to its MS4 through the mitigation of impervious area	Highway Department	Complete 4 years after effective date of permit and report annually on retrofitted properties
5.3	Determine feasibility and allow green infrastructure implementation	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist	Planning/Zoning Department	Complete 4 years after effective date of permit and implement recommendations of report
5.4	Street design and parking lot guidelines	Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options.	Planning/Zoning Department	Complete 4 years after effective date of permit and implement recommendations of report
5.5	Ensure any stormwater controls or management practices for new development and redevelopment meet the retention or treatment requirements of the permit and consistent with the Southeast Watershed Alliance's Model Stormwater Standards for Coastal Watershed Communities	Adoption, amendment, or modification of a regulatory mechanism to meet permit requirements	Planning/Zoning Department & Planning Board	Complete 2 years after effective date of permit

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### 9.3 MCM 5 IMPLEMENTATION PLAN / SCHEDULE

The Town includes post-development stormwater management requirements within their current land use regulations and will continue to update the regulations to meet the requirements of the Permit.

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### 9.4 MCM 5 GOALS, MEASURES, AND PROGRESS

The goal of these standards is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public. This regulation seeks to meet that goal through the following objectives:

1. Minimize increases in stormwater runoff from development and redevelopment to reduce flooding, siltation, and streambank erosion, and maintain the integrity of stream channels.
2. Minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality.
3. Minimize the surface water runoff that flows from any specific site following development to not exceed the pre-development hydrologic condition to the maximum extent practicable as allowable by site conditions.
4. Reduce stormwater runoff rates and volumes, soil erosion, and nonpoint source pollution, wherever possible, through stormwater management controls and ensure that these management controls are properly maintained and pose no threat to public safety or cause excessive municipal expenditures over time.
5. Protect the quality of groundwater resources, surface water bodies, and wetlands.

Indicators of progress and success of MCM 5 BMPs include demonstrating a progressive increase in:

- applications using LID and green infrastructure;
- number of developments that manage salt and snow in compliance with the Permit;
- proposed treatment devices and practices that reduce TSS and TN loading (MEP) into MS4s;
- submissions of as-built stormwater practices;
- submissions of long-term I&M of as-built stormwater practices; and
- 100% annual inspections and/or annual certifications of constructed stormwater practices.

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## 9.5 MCM 5 DOCUMENTATION

At a minimum, the following documentation is suggested:

- tracked number of applications using LID and green infrastructure;
- number and percentage of new and redeveloped projects that manage salt and snow in compliance with the Permit;
- tracked number of proposed treatment devices and practices that reduce TSS and TN loading (MEP) into MS4s;
- number and percentage of submissions of as-built stormwater practices;
- submissions of long-term I&M of as-built stormwater practices;
- number and percentage of annual inspections and/or annual certifications of stormwater devices; and
- copies of adopted and implemented land use regulations that comply with Permit requirements.

Beginning with the Year 5 annual report and in each annual report thereafter, the Town will report on Town-owned properties and infrastructure that have been retrofitted with BMPs to mitigate impervious area.

## 10.0 MCM 6 - GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR PERMITTEE OWNED OPERATIONS (*Part 2.3.7*)

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### 10.1 MCM 6 OBJECTIVE

*Objective: The permittee shall implement an operations and maintenance program for permittee operations that includes a training component and has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee operations.*

MCM 6 focuses on municipal operations and maintenance (O&M) of Town-owned properties and infrastructure through the implementation of proactive pollution prevention measures. Primary components of municipal good housekeeping include:

- A completed inventory of all municipally owned properties:
  - parks and open space;
  - buildings and facilities where pollutants are exposed to stormwater runoff; and
  - vehicles and equipment.
- Written O&M Programs for municipally owned properties and facilities.
- Written O&M Programs for municipal infrastructure within the regulated area.
- Implement catch basin cleaning and inspection schedule and procedures.
- Implement street sweeping schedule and procedures (if applicable).
- Written winter road maintenance procedures.
- Implement municipal stormwater treatment inspection and maintenance schedule and procedures.
- Development of Stormwater Pollution Prevention Plans (SWPPPs) for each municipally owned facility within the regulated area where pollutants may be exposed to stormwater (if any).
- Provide staff SWPPP training.

## 10.2 MCM 6 BMPs

MCM 6 BMPs are taken directly from the Town's 2019 NOI and must be reviewed and updated annually.

<b>MCM 6: GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR PERMITTEE OWNED OPERATIONS</b>					
<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>	<b>Year Start BMP</b>
6.1	Operations and maintenance (O&M) procedures	Create written O&M procedures including all requirements contained in 2.3.7.1 for parks and open spaces, buildings and facilities, and vehicles and equipment	Highway Department	Complete and implement 2 years after effective date of permit	2020
6.2	Prepare inventory	Inventory all permittee- owned parks and open spaces, buildings and facilities, and vehicles and equipment	Highway Department	Complete 2 years after effective date of permit and implement annually	2020
6.3	Infrastructure Operations and Maintenance	Establish and implement program for repair and rehabilitation of MS4 infrastructure	Highway Department	Complete 2 years after effective date of permit	2020
6.4	Stormwater Pollution Prevention Plan (SWPPP) or maintenance garages, transfer stations, and other waste- handling facilities	Create SWPPPs for all municipal properties or individual facilities per section 2.3.7.2 requirements	Highway Department	Complete 2 years after effective date of permit	2020
6.5	Catch basin cleaning	Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full. Ensure proper storage/disposal of basin cleanings.	Highway Department	Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually	2020
6.6	Street sweeping program	Sweep all streets and permittee- owned parking lots in accordance with permit conditions	Highway Department	Complete once per year in spring and more frequently in permittee determine target areas	2020

**MCM 6: GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR PERMITTEE OWNED OPERATIONS**

<b>BMP ID</b>	<b>BMP Categorization</b>	<b>BMP Description</b>	<b>Responsible Department/Parties</b>	<b>Measurable Goal</b>	<b>Year Start BMP</b>
6.7	Winter road maintenance and road salt use optimization program	Establish and implement a program to minimize the use of road salt and evaluate opportunities for the use of alternative materials	Highway Department	Implement salt use optimization during deicing season	2020
6.8	Inspections and maintenance of stormwater treatment structures	Establish and implement inspection and maintenance procedures and frequencies	Highway Department	Inspect and maintain treatment structures at least annually	2020

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### 10.3 MCM 6 IMPLEMENTATION PLAN / SCHEDULE

Annual catch basin cleaning and street sweeping are established Town activities. Other BMPs for MCM 6 are in the process of being implemented.

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### 10.4 MCM 6 GOALS, MEASURES, AND PROGRESS

The goal of development of municipal O&M and SWPPP programs is to provide proactive pollution prevention for Town properties and respective employee training. Indicators of BMP success would include:

- 100% municipal catch basins cleaned and inspected;
- 100% streets cleaned within the regulated area, at a minimum, twice per year for road drainage that discharges to impaired waters;
- 100% stormwater treatment practices inspected within the regulated area;
- Reduction in winter salt use over the Permit term; and
- 100% employee training, a reduction in emergency repairs of infrastructure, and a reduction in reported SWPPP incidents.

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### 10.5 MCM 6 DOCUMENTATION

Documentation of MCM6 compliance includes:

- completed Town-owned property inventory;
- completed O&Ms and SWPPPs for each property and infrastructure within the Town's regulated area;
- number and percentage of catch basins cleaned and inspected, and volume of material removed;
- dates, miles, and percentage of streets cleaned and swept, and volume of material removed;
- description of disposal of catch basin cleaning and street sweeping materials;
- number and percentage of stormwater treatment practices inspected;
- total tons of salt used in winter road maintenance; and
- number of staff SWPPP training opportunities offered, and total number of employees trained.

## 11.0 TMDLs AND WATER QUALITY LIMITED WATERS (WQLW)

The Town of Milton discharges stormwater into impaired waters identified in *Part 2.2.1.e*, *Part 2.2.2.b*, and *Table F-1* of the Permit with an approved Total Maximum Daily Load (TMDL) and impaired waters requiring a TMDL (i.e., Category 4, Category 5). The applicable impaired waters are listed in **Table 11.1** below. The Town of Milton will comply with the permit conditions for these waterbodies as required in *Appendix F* and *Appendix H* of the Permit and as listed in the following additional BMPs.

<b>TABLE 11.1 MS4 Permit TMDLs and Water Quality Limited Waters for Milton NH</b>	
2017 MS4 PERMIT SECTION 2.2.1 New Hampshire Statewide TMDL for Bacteria Impaired Waters <sup>8,9</sup> September 2010, 2013 (Escherichia coli)	2017 MS4 PERMIT SECTION 2.2.2  Water Quality Limited Waters  (Nitrogen)
<b>MILTON POND MILTON POND REC AREA BEACH NHLAK600030404-01-03</b>	<b>SALMON FALL RIVER (Great Bay Tributaries) all segments in Milton</b>
not in regulated area JONES-HART BROOK NHRIV600030402-04	
not in regulated area DAMES BROOK NHRIV600030601-07	

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### 11.1 BACTERIA/PATHOGENS

Within the Town's regulated area, the Town of Milton is identified in *Part 2.2.1.e* and *Table F-1* of the Permit for an Escherichia coli impairment at Milton Pond Recreation Area Beach which has an EPA approved TMDL. Therefore, the Town is to comply with conditions described in *Appendix F Part II.1* of the Permit for regulated stormwater discharges to these waterbodies and as described in **Table 11.2** below.

<sup>8</sup> <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/final-bacteria-tmdl-report-statewide-379.pdf>

<sup>9</sup> <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/final-bacteria-tmdl-report-44.pdf>

<b>TABLE 11.2 Loading Reductions per NHDES Statewide Bacteria TMDL</b>		
<b>WATERBODY NHDES AUID</b>	<b>% LOAD REDUCTION GOAL</b>	
	<b>Single Sample</b>	<b>Geometric Mean</b>
MILTON POND RECREATION AREA BEACH NHLAK600030404-01-03	76%	no data

Source: *NHDES Final Report New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters*, September 2010.

In the event that the TMDL is modified or revised for any of the listed waterbodies, such that the EPA has approved a new TMDL for the receiving water(s) or where there is an indication that additional stormwater controls for the bacteria/pathogens impairment are no longer necessary for the water body, the Town may be relieved of these conditions. If this occurs, the Town must document the date of new approved TMDL in the SWMP and may cease the applicable program(s).

The SWMP must annually document activities implemented in accordance with the requirements of Permit *Appendix F Part II.1.a.* to reduce bacteria/pathogen in their discharges to impaired waters including implementation schedules for non-structural BMPs and any maintenance requirements for structural BMPs.

#### Annual Requirements for Bacteria TMDL Beginning Permit Year 1

- Enhanced public education BMPs (MCM 1) for:
  - pet waste; and
  - septic system maintenance.
- Rank all outfalls discharging to an impaired waterbody as “High” priority for dry-weather screening and catchment investigations (MCM 3).
- Provide annual wet-weather sampling of outfalls that discharge directly into an impaired waterbody and per IDDEP SOPs (MCM3).

## 11.2 BACTERIA/PATHOGENS BMPs

BMPs for TMDL and WQLWs waters are added to this SWMP. All BMPs must be reviewed and updated annually.

<b>TABLE 11.3 Bacteria/Pathogen TMDL BMPs</b>						
	<b>BMP Title</b>	<b>BMP Description</b>	<b>Permit Cross-Reference</b>	<b>Responsible Department/Party</b>	<b>Measurable Goal</b>	<b>Year to Start Implementation</b>
B.1	Public Education	Annual message to residential homes encouraging the proper management of pet waste, including noting any existing ordinances where appropriate. Education materials shall describe the detrimental impacts of improper management of pet waste, requirements for waste collection and disposal, and penalties for non-compliance.	<i>Appendix F Part II. 1.a.i (referencing Part 2.3.3)</i>	Planning/Zoning Department	Number of educational materials to dog owners at the time of issuance or renewal of a dog license.	2021
B.2	Public Education	Annual message to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria or pathogens.	<i>Appendix F Part II. 1.a.i (referencing Part 2.3.3)</i>	Planning/Zoning Department	Number of educational materials to septic systems owners.	2021
B.3	Illicit Discharge Program	Catchments directly discharging to a waterbody included in an approved TMDL shall be designated HIGH priority in the implementation of the IDDE program annually.	<i>Appendix F Part II. 1.a.ii (referencing Part 2.3.4)</i>	Planning/Zoning Department	Identified number of HIGH priority areas.	2021

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## 11.3 NITROGEN IMPAIRMENT

As identified in **Table 4.4**, the Salmon Falls River, a tributary to the Great Bay, is classified as an impaired water for nitrogen. Stormwater discharge management from the regulated area will follow the requirements outlined in *Appendix H Part I* of the Permit and as described in **Table 11.4** below.

In the event that the receiving water and all downstream segments are determined to no longer be impaired due to nitrogen by the NHDES and the EPA, the Town may be relieved of the *Appendix H* permit conditions. Or if the EPA approves a TMDL for the receiving water or downstream receiving water indicates that no additional stormwater controls for nitrogen are necessary, the Town may be relieved of the *Appendix H* permit conditions. If this occurs, the Town must document the date of the change in designation and/or approved TMDL in the SWMP and may cease the program for WQLWs (TMDL requirements may apply).

The SWMP must annually document activities implemented in accordance with the requirements of *Appendix H Part I.1* of the Permit to reduce nitrogen in their discharges including implementation schedules for non-structural BMPs and any maintenance requirements for structural BMPs. In the area of the impaired water and its tributaries these required enhancements include:

### Annual Requirements Beginning Permit Year 1

- Annual public education BMPs (MCM 1):
  - spring: add grass clippings and fertilizer use message;
  - summer: add pet waste management message; and
  - fall: add leaf litter disposal message.
- Develop municipal SOPs (MCM 6) for minimizing fertilizer use, grass clipping and leaf litter disposal, prohibit blowing organic waste into surface waters (including stormwater treatment practices), and increase street sweeping to twice per year OR provide fall yard waste collection program.
- Provide annual wet-weather sampling of outfalls that discharge directly into an impaired waterbody and per IDDEP SOPs (MCM3) – this will begin in Year 4.
- For outfalls that discharge directly into impairment-listed waters, connected structural BMPs intended and/or designed for nitrogen removal shall be annually monitored and tracked, reporting on estimated mass volume of nitrogen per *Appendix H* of the Permit – this evaluation will begin in Year 4.

### Requirements Due Permit Year 3

- Add development and redevelopment requirement to local regulations for optimized nitrogen removal BMPs under MCM 5.

#### Requirements Due Permit Year 4

- Develop a Nitrogen Source Identification Report (see below).
- Retrofit inventory of existing town infrastructure and priority ranking to consider BMPs to reduce nitrogen discharges, including consideration of infiltration practices.

#### Requirements Due Permit Year 5

- Provide evaluation, plan, and schedule to retrofit structural BMPs at municipally owned properties.

#### Requirements Due Permit Year 6

- Install at least one structural BMP in a high nitrogen loading area. Monitor and track performance, report on estimated mass volume of nitrogen removed annually.

### **Nitrogen Source Identification Report (Year 4)**

The Town of Milton must develop a Nitrogen Source Identification Report within four years of permit effective date. The report shall include the following elements:

1. Calculation of the total regulated area draining to the water quality limited receiving water segments or their tributaries, incorporating updated mapping of the regulated area and applicable catchment delineations (*Part 2.3.4.6*).
2. Screening, sampling, and monitoring results targeting the receiving impairment-specific water segment(s) (*Part 2.3.4.7.d*).
3. Impervious areas and Directly Connected Impervious Areas (DCIA) for the subject catchments.
4. Identification, delineation, and prioritization of potential catchments with high nitrogen loading.
5. Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment, including the removal of impervious area of permittee-owned properties.

## 11.4 NITROGEN IMPAIRMENT BMPs

BMPs for Water Quality Limited Waters are added in this SWMP. All BMPs must be reviewed and updated annually.

<b>TABLE 11.4 Nitrogen Impairment BMPs</b>						
	<b>BMP Title</b>	<b>BMP Description</b>	<b>Permit Cross-Reference</b>	<b>Responsible Department/ Party</b>	<b>Measurable Goal</b>	<b>Year to Start Implementation</b>
P.1	Public Education	Distribute an annual message in the spring (March/April) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and nitrogen-free fertilizers to Residential and Business/ Commercial/ Institution target audiences.	<i>Appendix H Part 1.1.a.i.1 (referencing Part 2.3.2)</i>	Planning/Zoning Department	Number of educational materials distributed to target audience.	2021
P.2	Public Education	Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting existing ordinances to Residential and Business/ Commercial/ Institution target audiences.	<i>Appendix H Part 1.1.a.i.1 (referencing Part 2.3.2)</i>	Planning/Zoning Department	Number of educational materials distributed to target audience.	2021
P.3	Public Education	Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter to Residential and Business/ Commercial/ Institution target audiences.	<i>Appendix H Part 1.1.a.i.1 (referencing Part 2.3.2)</i>	Planning/Zoning Department	Number of educational materials distributed to target audience.	2021
P.4	Stormwater Management in New Development and Redevelopment	The requirement for adoption/amendment of regulations shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for nitrogen removal.	<i>Appendix H Part 1.1.a.i.2 (referencing Part 2.3.6)</i>	Planning/Zoning Department	Adoption of ordinance directed at nitrogen removal.	2021

**TABLE 11.4 Nitrogen Impairment BMPs**

	<b>BMP Title</b>	<b>BMP Description</b>	<b>Permit Cross-Reference</b>	<b>Responsible Department/Party</b>	<b>Measurable Goal</b>	<b>Year to Start Implementation</b>
P.5	Stormwater Management in New Development and Redevelopment	Retrofit inventory and priority ranking under Section 2.3.6.e. of the permit shall include consideration of BMPs that infiltrate stormwater where feasible.	<i>Appendix H Part 1.1.a.i.2 (referencing Part 2.3.6)</i>	Planning/Zoning Department	Annual Report of BMPs resulting from retrofit inventory and priority ranking.	2022
P.6	Good House Keeping and Pollution Prevention for Permittee Owned Operations	Establish procedures to reduce fertilizer use, properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.	<i>Appendix H Part 1.1.a.i.3 (referencing Part 2.3.7)</i>	Planning/Zoning Department	Adoption of procedures	2021 O&Ms
P.7	Good House Keeping and Pollution Prevention for Permittee Owned Operations	Increase street sweeping frequency of all municipal owned streets and parking lots to a minimum of two times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (following leaf fall). OR Implement a fall leaf litter collection program to effectively minimize leaf litter on impervious surfaces and in stormwater drainage structures.	<i>Appendix H Part 1.1.a.i.3 (referencing Part 2.3.7)</i>	Planning/Zoning Department	Tracking of increased street sweeping on the Annual Report.	2021
P.8	Nitrogen Source Identification Report	Develop a Nitrogen Source Identification Report as described in Section 12.4.	<i>Appendix H Part 1.1.b</i>	Planning/Zoning Department	Submittal of final report to USEPA in Year 4 Annual Report	2022

**TABLE 11.4 Nitrogen Impairment BMPs**

	BMP Title	BMP Description	Permit Cross-Reference	Responsible Department/Party	Measurable Goal	Year to Start Implementation
P.9	Potential Structural BMPs	<p>Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit Part 2.3.6.e or identified in the Nitrogen Source Identification Report that are within the drainage area of the water quality limited water or its tributaries. The evaluation shall include:</p> <ol style="list-style-type: none"> <li>1. The next planned infrastructure, resurfacing or redevelopment activity planned for the property (if applicable) OR planned retrofit date;</li> <li>2. The estimated cost of redevelopment or retrofit BMPs; and</li> <li>3. The engineering and regulatory feasibility of redevelopment or retrofit BMPs.</li> </ol>	<i>Appendix H Part 1.1.c.i</i>	Planning/Zoning Department	List of planned structural BMPs and a plan and schedule for implementation in the Year 5 Annual Report to USEPA	2023

**TABLE 11.4 Nitrogen Impairment BMPs**

	<b>BMP Title</b>	<b>BMP Description</b>	<b>Permit Cross-Reference</b>	<b>Responsible Department/Party</b>	<b>Measurable Goal</b>	<b>Year to Start Implementation</b>
P.10	Potential Structural BMPs	Plan and install a minimum of one structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries targeting a catchment with high nitrogen load potential. Track and estimate the nitrogen removal by the BMP consistent with Attachment 3 to Appendix F.	<i>Appendix H Part 1.1.c.ii.</i>	Planning/Zoning Department	Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP in each annual report	2024
P.11	Potential Structural BMPs	Install structural BMPs as described in the plan. Track and estimate the nitrogen removal by the BMP consistent with Attachment 3 to Appendix F.	<i>Appendix H Part 1.1.c.iii.</i>	Planning/Zoning Department	Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP in each annual report	2025

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### **11.5 TMDL and WQLW IMPLEMENTATION PLAN / SCHEDULE**

Implementation of additional Permit requirements for the Statewide Bacteria TMDL and nitrogen WQLW will be completed per *Appendices F and H* of the Permit, and as identified in the above BMPs. In general, and unless otherwise noted in this SWMP, these additional requirements have been assimilated into the applicable Permit MCMs.

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### **11.6 TMDL and WQLW GOALS, MEASURES, AND PROGRESS**

The goal of the additional BMPs for TMDL waters and WQLWs is to reduce the overall source of the subject pollutant into the impairment-listed waterbody.

Measures, and progress related to TMDLs and WQLWs are expected to fall under the screening, sampling, and catchment investigations performed under Permit MCM 3.

Indicators of progress and success of the additional BMPs will be the reduction of subject pollutant loading over time as tracked through the MCM 3 screening, sampling, and catchment investigations program, as well as through the NHDES water quality programs.

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### **11.7 TMDL and WQLW DOCUMENTATION**

The following documentation is required for annual reporting for the TMDL and WQLW program in the areas of the impairment-listed waters:

- copies of all public education messages provided to the public, dates sent, and distribution lists;
- annual certification of additional street sweeping OR fall yard waste collection program including dates implemented and last updated;
- number of annually proposed nitrogen removal BMPs; and
- installation and tracking of installed nitrogen removal BMPs.

## 12.0 ANNUAL EVALUATIONS, RECORD KEEPING, AND REPORTING

Continuous documentation and record keeping will provide a managed basis for annual reporting and required public records. The annual reporting period is **July 1 through June 30** for each year of the Permit term with the Annual Report due to the EPA 90-days (September 28) from the end of the reporting period (Permit year).

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### 12.1 PROGRAM EVALUATION

The Town is required to provide an annual self-evaluation of the SWMP with respect to compliance with the Permit. The evaluation must describe progress made toward identified measurable goals, the effectiveness of each BMP, and any adjustments made to the BMPs during the reporting period.

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### 12.2 RECORD KEEPING

At a minimum, records related to the SWMP must be kept for no less than 5 years. Records to be kept include, but are not limited to:

- data used in the development of all SWMP programs;
- monitoring results;
- screening results;
- illicit discharge documentation;
- inspection and maintenance records related to stormwater practices;
- previous annual reports; and
- checklists.

All records and plans are required to be available to public.

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### 12.3 ANNUAL REPORTING

Annual reports are due the EPA no more than 90 days after the close of the reporting period (September 28). Each annual report shall, at a minimum, include the following information:

- self-assessment of compliance with the Permit and effectiveness of BMPs;
- assessment of BMP progress relative to identified goals and measurements;
- description of adjusted BMPs, if any;
- status and description of BMPs implemented for TMDL waters and WQLWs;
- evaluation of public education program (MCM 1), type of message for each audience, date, type of distribution;

- measures to promote public participation (MCM 2) and certify compliance with state requirements for public notifications;
- status of IDDEP (MCM 3); mapping, outfall ranking, catchment investigations;
- status of the development of municipal protocols;
- number and IDs of outfalls screened, catchments investigated, illicit discharges removed, gallons of illicit flow removed (MCM 3);
- employee training dates, subject, length, and number attended;
- number proposed project plans reviewed, number construction inspections, number enforcement actions issued (MCM 4);
- status of post construction ordinances/regulations (MCM 5);
- status of municipal O&M and SWPPP programs (MCM 6);
- volume of material removed in catch basin cleaning and street sweeping;
- status of additional state requirements;
- all outfall screening and monitoring data per the IDDEP;
- screening and monitoring data for specific pollutants identified in the statewide Bacteria TMDL (E. coli) and WQLW impaired waters (nitrogen);
- screening data dates, outfall ID, location, weather conditions, precipitation, field screening results, lab analysis results for annual reporting period;
- comparative summary for monitoring data for previous permit years;
- other water quality related studies conducted in the reporting period; and
- describe actions planned for next reporting period.

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## 12.4 UPDATING AND MODIFYING THE SWMP

Changes to BMPs must be documented in the SWMP and annual reporting including:

- describing the ineffectiveness of BMPs (if any) and need to make the adjustment or replacement;
- goals for the replacement BMP; and
- explanation of how the adjusted/replacement BMP will be more effective.

Documentation must follow the procedure annually:

- complete log at front of this SWMP;
- document the changes, date, person making change; and
- re-sign and date the certification statement.