# New Hampshire Small MS4 General Permit Annual Report

# MERRIMACK, NH

Permit Year 1

(Reporting Period: May 1, 2018 to June 30, 2019)

**EPA NPDES Permit Number NHR041018** 

# **Certification of Small MS4 Annual Report**

"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."

Printed	Dawn B. Tuomala Deputy DPW Director/Town Engineer		
	Printed Name and Title		
Signature		Date	September 30, 2019
		_	
	ed Representative: ization letter is:		
⊠ Attache	ed to this document (document name listed below):		
Merrim	nack NH Authorization Signed		

# **Primary MS4 Program Manager Contact Information:**

Position/Title: Deputy DPW Director/Town Engineer

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Department: DPW Administration

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# **Small MS4 Authorization**

The following annual report is intended to document on the activities undertaken over the reporting period from July 1, 2018 – June 30, 2019 in accordance with the Notice of Intent. NOI can be found at the following (document name or web address):

https://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities

Compliance activities have been identified and described in the ##MUNICIPALITY's Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those document can be found at the following website and will be referred to throughout this report:

#### SWMP:

<a href="https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/merrimack-swmp-2003.pdf">https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/merrimack-swmp-2003.pdf</a>

IDDE: Mention was made in the original SWMP plan,

<a href="https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/merrimack-swmp-2003.pdf">https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/merrimack-swmp-2003.pdf</a>

The new IDDE Plan is being reviewed by all of the appropriate parties and will be put before the Town Council in the coming months for final approval into the Town Codes. The Plan is available at the DPW Administration Offices and will be put on line when the Public Comment Period opens. The process has taken longer than anticipated but it is moving forward.

# MCM1 - Public Education and Outreach

#### Year 1 Activities

#### **BMP: Grass and Fertilizer**

#### **Document Name and/or Web Address:**

Green Grass & Clear Water Brochure: <a href="https://www4.des.state.nh.us/nh-ms4/?page\_id=54">https://www4.des.state.nh.us/nh-ms4/?page\_id=54</a>. For a Town Specific Flyer also see:

https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/green glass clear water.pdf

#### **Description:**

As Described by the NOI, Distribution and promotion of three- fold flyer and a similar information sheet produced by the Town of Merrimack outlining simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings.

# **Targeted Audience:**

Residential &/or Business and Institutions

### **Measurable Goal(s)**:

Lawn care enthusiasts' residents understand the potential water quality impacts from fertilizer and improper disposal of grass clippings and are aware of the proper lawn care management techniques for reducing those impacts. Measurement includes materials distribution methods and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages.

Assessment of goals will be discussed in greater detail in year 2, see https://www4.des.state.nh.us/nh-ms4/?page\_id=54

Minimum Control Measure 1: Public Outreach and Education" for additional information.

**Message Date:** The flyers were created by the end of May and were distributed to the public during special events and were also available at the Town Hall in various locations. (After June 30, 2019 the flyer was put on the Town Web Site.)

#### **BMP: Petwaste Disposal**

#### **Document Name and/or Web Address:**

"Every Drop" post cards or flyer <a href="https://www4.des.state.nh.us/nh-ms4/?page\_id=54">https://www4.des.state.nh.us/nh-ms4/?page\_id=54</a>
For a Town Specific Flyer also see:

https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/dog waste brochure.pdf

#### **Description:**

As Described in the NOI, Distribution and promotion of "Every Drop flyer with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. Every Drop is a collaborative education effort with PREP, NHDES and other partners.

#### **Targeted Audience:**

Residents - Pet Owners

#### **Measurable Goal(s):**

Dog owners and/or dog walkers are aware of the potential water quality impacts from pet waste, local pet waste ordinances, and how to dispose of pet waste properly.

Assessment of goals will be discussed in greater detail in year 2, see <a href="https://www4.des.state.nh.us/nh-ms4/?page\_id=54">https://www4.des.state.nh.us/nh-ms4/?page\_id=54</a>

"Minimum Control Measure 1: Public Outreach and Education" for additional information

**Message Date:** The flyers were created by the end of May and were distributed to the public during special events and were also available at the Town Hall in various locations. The flyer has recently been put on the web site (after June 30, 2019).

#### BMP: Disposal of Leaf and Grass Clippings

#### **Document Name and/or Web Address:**

https://www4.des.state.nh.us/nh-ms4/?page id=54

For a Town Specific Flyer also see:

https://www.merrimacknh.gov/sites/merrimacknh/files/uploads/yard waste.pdf

#### **Description:**

Distribute and promote informational flyer, with messaging about impacts from yard waste to waterbodies, alternatives to dumping yard waste and laws against dumping yard waste near or in waterbodies.

#### **Targeted Audience:**

Residential &/or Business and Institutions

#### **Measurable Goal(s):**

Residents are aware of the water quality impacts of yard waste dumping near or in water bodies and safe alternatives for yard waste disposal.

Assessment of goals will be discussed in greater detail in year 2, see

https://www4.des.state.nh.us/nh-ms4/?page\_id=54

Minimum Control Measure 1: Public Outreach and Education" for additional information

#### **Message Date:**

The message was created in May and has been distributed to the public during special events. It has also been available at the Town Hall in various locations. The flyer has recently been put on the Town Web site (see above) (after June, 2019).

# **BMP: Septic System Maintenance**

#### **Document Name and/or Web Address:**

https://www4.des.state.nh.us/nh-ms4/?page\_id=54

#### **Description:**

Distribute and promote brochure, directing to website to educate New Hampshire homeowners with septic systems on how to identify, locate and maintain those systems. Get Pumped NH is a collaborated effort between the New Hampshire Association of Septage Haulers (NHASH) and the New Hampshire Department of Environmental Services (NHDES).

#### **Targeted Audience:**

Septic System Owners

## **Measurable Goal(s):**

Residents are aware of water quality impacts from septic systems, the importance of maintaining septic systems and how to maintain them.

Assessment of goals will be discussed in greater detail in year 2, see <a href="https://www4.des.state.nh.us/nh-ms4/?page\_id=54">https://www4.des.state.nh.us/nh-ms4/?page\_id=54</a>

"Minimum Control Measure 1: Public Outreach and Education" for additional information

**Message Date:** In 2019 we used the EPA and the NHASH flyers and they were handed out to the haulers to be given to the residents of the Town.

# MCM2 - Public Education and Outreach

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# MCM3 – Illicit Discharge Detection and Elimination

#### **BMP: IDDE Legal Authority**

The municipality does not have a combined drainage and sewage system and has nothing new to report.

#### BMP: Sanitary Sewer Overflow (SSO) Inventory

Number of SSO's identified this year/ Number of SSO's removed this year. 0/0

#### **BMP: Map of Storm Sewer System**

Map of storm sewer system and associated outfalls is in progress in accordance with the accepted NOI. Since April 2019 the Town has been undertaking changing over to a new GIS system provider. The Town was also recently flown to be able to obtain better topographic information that will help identifying the system and catchment areas. We are still awaiting the newer information before spending time and more money evaluating the system. The original outfall map is available at the DPW Administration Office and on line through our internal GIS system.

#### **BMP: IDDE Program**

A Written IDDE plan has been developed and is now being internally reviewed. It will be brought before the Town Council for Public Review and Comment and finally acceptance by the Town Council. The procedure is taking longer than anticipated due to the many varied departments that will be involved to some extent.

Initial outfall identification, characterization and prioritization has been completed and included in the IDDE plan. Written investigation deliverables will progress in accordance with the accepted NOI and is scheduled to be complete by April 1, 2020.

Number and percent of total outfall catchments served by the MS4 evaluated using the catchment investigation procedure:

Number of dry weather outfall investigations/screenings through June 30, 2019: **0** 

Number of wet weather outfall inspections/sampling events through June 30, 2019: 0

Number of illicit discharges removed: **None were found; none were removed.** 

Estimated gallons of flow removed: 0

#### **BMP: Employee Training**

As a routine IDDE, materials and training, including information on how to identify illicit discharges are made available to all involved employees in accordance with IDDE plan. Employees are encouraged to attend UNH Technology Transfer Center (T<sup>2</sup>) - Road Scholars Programs.

# MCM4 – Construction Site Stormwater Runoff Control

The Town of Merrimack has an existing Construction Site Stormwater Runoff Controls that is presently part of the Town Code 167 (Adopted July, 2011 and amended December, 2017). A newly re-written site inspection and enforcement program for erosion and sediment control measures has been created and is working through our approval process. The Code will be rewritten along with a set of new regulations updating and improving our current process.

**Number of site plan reviews completed:** There were 7 site plans approved and signed during the time period.

**Number of inspections:** Any project within the Town Right of Way including new or reconstructed roads that has earth disturbance greater than 20,000 square feet are inspected daily, semi-weekly or weekly by the Public Works Department dependent upon their progress. The Town also requires a SWPPP report weekly or after a ½" of rain by a third party.

**Number of enforcement actions:** There were no enforcement actions for any site disturbance related activities.

# MCM5 – Post Construction Stormwater Management in New Development and Redevelopment

#### **BMP: Post-Construction Ordinance (due in year 2)**

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

#### BMP: Street Design and Parking Lot Guidance Report (due in year 4)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 4.

# BMP: Green Infrastructure Report (due in year 4)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 4.

# BMP: List of Municipal Retrofit Opportunities (due in year 4)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 4.

# MCM6 – Good Housekeeping and Pollution Prevention for Permittee Owned **Operations**

# BMP: Parks and Open Spaces Operations and Maintenance Procedures (due year 2)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# BMP: Buildings and Facilities Operations and Maintenance Procedures (due year 2)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# BMP: Vehicles and Equipment Operations and Maintenance Procedures (due year 2)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

#### **BMP: Catch Basin Cleaning Program**

A schedule for catch basin cleaning has been established with the goal of ensuring catch basin should not be more than 50% full. This is detailed in the SWMP.

Number of catch basins within MS4 regulated area: 3,000

Number catch basins inspected in accordance with the SWMP: 1,650

Number of catch basins cleaned: 1,650

Volume or mass of material removed: 1,375 cubic yards

# **BMP: Street sweeping program**

A street sweeping program has been established such that all public streets and permitee-owned parking lots are swept in accordance with permit conditions.

Number of (lane) miles swept: 350 miles and all municipal parking lots.

Volume or mass of swept material: 4,995 Tons

#### **BMP: Winter Road Maintenance Program**

A winter road maintenance program has been established with a goal of reducing salt usage. An improvement made this year includes beginning the process to update both the road and ice maintenance policy (from 1999) and the reduced salt policy (from 1984) within the Town of Merrimack.

# **BMP: Inventory of Permittee-Owned Properties (due year 2)**

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# BMP: O & M Procedures for Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment (due year 2)

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# **BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures**

Merrimack, NH continues to collect information with a goal of inventorying and formally inspecting all municipally owned BMPs. Any BMPs that are safety or flooding hazards are dealt with as needed. We purchased tablets which are being set up to report to our GIS system for the purpose of locating, updating, inspecting and keeping all Stormwater Treatment Structures.

# **BMP: SWPPP(due year 2)**

Deliverables will progress in accordance with the accepted NOI and is scheduled for year 2.

# TMDL's and Water Quality Limited Waters

## **Bacteria/Pathogens**

Outfalls to these receiving waters been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's been implemented in accordance with the SWMP. The public has been provided with Annual messages regarding pest waste and septic system care.

#### **Phosphorus**

Outfalls to these receiving waters been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's been implemented in accordance with the SWMP.

Merrimack, NH participates in the Lower Merrimack Valley Stormwater Coalition and will become involved with the NHDES led Pollutant Tracking and Accounting Program (PTAP), this will satisfy the tracking and accounting requirement of the municipally owned structural BMP's listed in Attachment II to Appendix H. Public education and outreach to the residents, commercial and business owners has been a large focus. The development and redevelopment regulations are being updated to improve the discharges. The remaining requirements will be addressed within years 4 and 5 of the permit as required.

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

Outfalls to these receiving waters been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's been implemented in accordance with the SWMP. Catch Basin cleaning and Street Sweeping remain a Good Housekeeping and Pollution Prevention for Permittee Owned Operations.

# **Additional Information:**

### **Additionally**

Merrimack, NH through its participation in the Lower Merrimack Valley Stormwater Coalition and continued involvement with the NHDES led Green Snow Pro Program are working to develop a public education regarding impacts of salt use, methods to reduce salt use on private property, modifications to driving behavior in winter weather as listed in Attachment 1 to Appendix H.

Merrimack, NH has also reduced the amount of pavement and installed treatment swales along a Town road that was originally constructed extremely wide. The treatment swales now allow the drainage from the road to be treated before it enters an impaired water.

# **Activities for the Next Reporting Cycle**

Merrimack, NH will continue to implement activities in accordance with the approved Notice of Intent.