

**New Hampshire Small MS4 General Permit
Annual Report**

Merrimack, NH

Permit Year 2

(Reporting Period: July 1, 2019 to June 30, 2020)

EPA NPDES Permit Number NHR041018

Certification

Authorized Representative:

The authorization letter is:

- Attached to this document (document name listed below):

Merrimack NH Authorization Signed.PDF

- Publicly available at the website:

“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 Name

Dawn B. Tuomala

Signature



Date

September 25, 2020

Primary MS4 Program Manager Contact Information:

Position/Title: Deputy DPW Director/Town Engineer

Name: Dawn B. Tuomala, PE, LLS, CWS

Department: Public Works Administration

Phone Number: (603) 424-5137

Address: 6 Baboosic Lake Road, Merrimack, NH 03054

Email: dtuomala@merrimacknh.gov

Small MS4 Authorization

The following annual report is intended to document the activities undertaken over the reporting period from July 1, 2019 through June 30, 2020 in accordance with the Notice of Intent (NOI). The 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 Town of Merrimack Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents can be found at the following website and will be referred to throughout this report:

SWMP: https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/1._swmp.pdf

IDDE: The Draft IDDE Plan is available at the DPW Administration Offices and will be put on line when the Public Comment Period opens. Due to the impacts of Covid-19 the process has taken longer than anticipated. It is very difficult to hold all of the required Public Hearings needed for the Code Changes. The Town Code will need to be changed in several locations such as those in the Town of Merrimack's Town Code Chapters 167 and Chapter A198-12 (H).

MCM 1 - Public Education and Outreach

Year 2 Activities

BMP: Grass and Fertilizer

Document Name and/or Web Address:

Green Grass & Clear Water Brochure: https://www4.des.state.nh.us/nh-ms4/?page_id=54.

For a Town Specific Flyer also See:

https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/green_glass_clear_water.pdf

Description:

Distribution and promotion of a tri-fold flyer that outlines simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings. The pamphlet also references additional information at the UNH extension service.

Targeted Audience:

Residential &/or Business and Institutions

Measurable Goal(s):

Lawn care enthusiast 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.

In Year 1 - 75 of flyers were distributed. In Year 2 - 125 flyers were distributed during town events. Fliers are also available at many municipal locations. *Goal was achieved to increase the amount of information that was passed out to the residents.*

Message Date:

The fliers were distributed at Town events during the summer and fall last year. This year due to Covid-19 we had to cancel all of the events. The fliers remain in various Town buildings throughout the Town for the general public.

BMP: Pet Waste Disposal

Document Name and/or Web Address:

"Every Drop" post cards or flyer https://www4.des.state.nh.us/nh-ms4/?page_id=54

For a Town Specific Flyer also See:

https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/dog_waste_brochure.pdf

Description:

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. The flyer was updated this year to include the Town Code regarding Chapter 119. Section 119-4 describes the Duty to dispose of their pet wastes.

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. There will be an increase of dog owners picking up and properly disposing of their pet waste. The goal was to have every dog owner receive a copy of the flyer when they registered their dog.

In Year 2 – The Town Clerk requested 4,500 fliers be prepared and sent out to those residents who registered their dogs. Due to the fliers going out we have had several calls from residents requesting more fliers to hand out to their neighbors to get them to pick up after their dogs. We also had a call requesting that we include horse droppings also. **Goal was achieved.**

In year 2 we also posted at the various kiosks at the trail heads in town to pick up after your dog. This information was added to the listing of park/trail rules that are posted. **Goal was achieved.**

Message Date: At time of license renewal. Goal for next year is to continue getting the information out to the dog owners. An infomercial will be produced and aired on our local television station. It will be played over 1,000 times to the general public.

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/g/files/vyhlif3456/f/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. As a result of the flyers we have had reports of illegal dumping within certain wetland areas and have been able to correct the issue by placing of signage and reciting the RSA.

In Year 2 - 125 flyers were distributed and a few areas in town have seen an improvement in the illegal dumping of materials in the wetlands. **Goal was achieved.**

Message Date:

Fall 2019

BMP: Septic System Maintenance

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/g/files/vyhlf3456/f/uploads/ge_pumped_community_brochure.pdf

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). The Town specific flyer along with the State flyer has been distributed by the septic haulers to pass out to their clients that reside in Town. The Town flyer also references the NHDES website for more information.

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.

In Year 2 - 250 flyers were distributed. Two private septic systems were reported to be in failure. Replacement systems were approved by NHDES then re-constructed to be compliant.

Goal was achieved.

When a septic hauler comes to the Merrimack Wastewater Division to dispose of a load, they are now tracking of septic tanks pumps that were located in Merrimack. The Merrimack Wastewater Treatment Plant received delivery of over 1,960 residential pump outs in the town. The Future goal is to determine if a residence might be having an issue with their septic system by tracking the number of times per year they have to pump their system. The more pumping requirements might indicate that a leachfield is going into failure.

Message Date:

Season: Year Round

BMP: Developer/Construction Outreach

Description:

Review checklists with developers and construction contractors prior to beginning of construction project (pre-construction) to identify responsible parties, erosions control practices, other best management practices, and requirements for EPA Construction General Permit as appropriate.

A flyer was created in June to provide to commercial businesses and industrial properties to help them with their future maintenance of their properties, see below:

https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/stormwater_business.pdf

Targeted Audience:

Developer/Construction
Commercial Businesses and Industrial properties

Measurable Goal(s):

Contractors and Developers are aware of the need for proper erosion control practices during construction work.

The Town of Merrimack has been conducting pre-construction meetings for any construction project that disturbs over 20,000 square feet of land disturbance. Many of the various Town Departments are represented at these meetings. Department representatives come from Fire, Police, Building, Community Development; Public Works (Administration, Highway and Sewer). Each department brings their own standards, expertise and check lists to the meeting.

During the meeting the owner, developer and contractor are presented with a copy of Code Chapter 167 for construction and the review of stormwater plans. At the end of the meeting everyone is required to sign that they were given this information and it was discussed and understood.

The Town requires storm water erosion control reports be given to Community Development at least weekly and if there is a quarter of an inch of rain or more on any active construction site. There were 6 new Pre-Construction meetings representing 100% of projects that had received planning board approval and were actually ready to begin construction during this reporting period. **Goal was achieved.**

Message Date:

Ongoing. Meetings are required within 2 weeks prior to construction beginning on any project that exceeds 20,000 square feet of disturbance.

MCM 2 - Public Participation

BMP: Public Participation in Stormwater Management Program Development

Description: The Stormwater Management Program was publicly reviewed at a Town Council Meeting on September 12, 2019. The Town Councilors and the public were given the opportunity to ask questions on the plan. A letter was also prepared to the Town Manager to go into their records.

Other Public Participation: The Enviroscope Table and Demonstration were shown to the children and parents during a few Town events. Town events included the Town Highway garage dedication, a Touch a Truck for the kids and during the school grade visit to the garage.

We also have an Adopt a Road Program that teaches the public about the importance of picking up the trash and not leaving it beside the road to get into the waters and the drainage systems. This program is conducted in the spring on Earth Day and once in the fall in preparation for the winter months.

Measurable Goal(s): Input was received. **Goal was achieved.**

MCM 3 – Illicit Discharge Detection and Elimination

BMP: IDDE Legal Authority

The municipality has established legal authority under Chapter A198 Administrative Code. Under section A198-12 (H) the Health Officer and/or Deputy Health Officer has the authority to investigate and enforce hazards. A new draft IDDE Ordinance and regulations were prepared but due to the impacts Covid-19 have been unable to go through the full Ordinance Public Hearing requirements.

BMP: Sanitary Sewer Overflow (SSO) Inventory

Number of SSO's identified this year: zero

Number of SSO's removed this year: zero

BMP: Map of Storm Sewer System

Paper Copies of the storm sewer system maps and associated outfalls is available in the Public Works Administration Office in accordance with the accepted NOI. In order to better facilitate the MS4 program a new GIS Company has been hired to take over the data and to provide a better mapping system in the future. Due to the impacts of Covid-19 the updated contract was delayed and wasn't effective until June 2020. Due to security reasons the utilities will not be made public. Copies can be provided upon request from the Department of Public Works.

BMP: IDDE Program

A Written draft IDDE plan has been developed. The Merrimack Town Code Chapter 167 is proposed to be revised by adding IDDE ordinance into the code. A written draft IDDE regulation has been developed and will need to be adopted by the Planning Board. Due to the Covid-19 we have not been able to have the proper public hearings that it will take to change the various Codes.

Initial outfall identification, characterization and preliminary prioritization has been completed and included in the IDDE plan. Dry weather sampling has begun and the full results are available at Public Works Administration Office.

The following tasks are in progress in accordance with the accepted NOI.

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

Number of dry weather outfall investigations/screenings: 64 inspections were performed and 7 outfalls were found flowing and tested. See attached excel sheet for a summary. A full report can be provided at the Public Works Administration Office.

Number of wet weather outfall inspections/sampling events: 0
There were no wet weather outfall inspections conducted this year.

Number of illicit discharges removed: 0

Estimated gallons of flow removed: 0

BMP: Employee Training

The Town of Merrimack has always encouraged the Town employees to attend classes. The Public Works Employees attend classes specifically targeted for public works through the University of New Hampshire Technology Transfer Center (T2) Road Scholars Program. The program offers a wide variety of classes including safety, drainage and erosion control along with salt usage topics.

In addition, employees have Tool Box Talks that covers a wide topics that are concerning to the present conditions. These talks have been curtailed lately due to the impacts of the Covid-19 meeting size requirements.

The IDDE, materials and training, including information on how to identify illicit discharges and SSOs will be made available to applicable employees in accordance with IDDE plan when we are allowed to convene.

MCM 4 – Construction Site Stormwater Runoff Control

The Town of Merrimack has an existing Construction Site Stormwater Runoff Control Ordinance that is presently part of Town Code 167 (Adopted July, 2011 and amended December, 2017). The Ordinance will be reviewed and updated as needed when the IDDE is added to the ordinance.

New Updated Site Plan Regulations were adopted in September 2019 and have incorporated many more provisions for drainage including Low Impact Development and Water Quality Measures. The Subdivision Regulations and Construction Standards are currently undergoing the reviews and will be updated when time, the ability to meet and finances allow.

The following tasks are in progress in accordance with the accepted NOI.

Number of site plan reviews completed: 14 – These are reviews that were given final approved and signed during the year. The planning process might have begun the year before for some of them. There are projects that were given conditional approval but until they are given final approval and signed they are not included in the numbers.

Number of inspections: The Town of Merrimack requires any project over 20,000 square feet of disturbance provide a weekly and after a ¼” rain event SWPPP report. The reports are to be supplied by a third party for any site that is currently under construction. The reports also follow the State of NH DES Stormwater Manual requirements. Substantial growth is required before the reports are allowed to stop.

In addition, Public Works Department performs daily, semi-weekly or weekly inspections on all projects that impacts the Town Right of Way depending upon what work is being conducted. All road construction projects are monitored daily for erosion control measures.

Number of enforcement actions: If any issues are evident during a visit the contractor is notified immediately. Corrections are generally made as soon as possible after the request is made. If the contractor is not on site, an email is sent to the contractor and the owner outlining the issues. Violations have not resulted in any enforcement actions during the past year. Issues were addressed and resolved as requested.

MCM 5 – Post Construction Stormwater Management in New Development and Redevelopment

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

A Post-Construction Ordinance has been in place within Chapter 167, links and references are included in our SWMP. The newly approved Site Plan Regulations also references the Post Construction Stormwater requirements.

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. The Town Site Plan Regulations have incorporated language to design according the State of NH Stormwater Manuals along with the Low Impact Development (LID) practices and water quality.

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 have been created and are included in our SWMP.

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

Deliverables have been created and are included in our SWMP.

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

Deliverables have been created and are included in our SWMP.

BMP: Catch Basin Cleaning Program

A schedule for catch basin cleaning has been established with the goal of ensuring that a catch basin should not be more than 50% full. Catch basin cleanings were properly stored and disposed so that they did not discharge to receiving waters. This is detailed in the SWMP.

The following tasks are in progress in accordance with the accepted NOI.

Number of catch basins within MS4 regulated area: 3,500

Number catch basins inspected in accordance with the SWMP: 645

Number of catch basins cleaned: 645

Volume or mass of material removed: 3,870 tons

BMP: Street sweeping program

A street sweeping program has been established such that all streets with curbing and/or catch basins and permittee-owned parking lots are swept in accordance with permit conditions. Street sweepings were properly stored and disposed so that they did not discharge to receiving waters.

The following tasks are in progress in accordance with the accepted NOI.

Number of (lane) miles swept: 385 miles and all municipal parking lots

Volume or mass of swept material: 5,370 tons

BMP: Winter Road Maintenance Program

A winter road maintenance program has been established with a goal of reducing salt usage. Salt reduction strategies have been implemented as outlined in our SWMP. Work is continuing on updating both the road and ice maintenance policy (from 1999) and the reduced salt policy (from 1984) within the Town of Merrimack. Employees are trained under the Green Snow Pro Program.

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

The Town of Merrimack 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.

Tablets were purchased for the employees to use during the Inspections and Maintenance procedures are being conducted. The new GIS Company is currently taking our manual forms and rewriting them into programs to directly incorporate all inspections and maintenance procedures directly into our GIS system. This will allow us to better track the information in the future.

BMP: SWPPP (due year 2)

The Town of Merrimack has previously had SWPPP's prepared for all of the Town facilities. SWPPPs are, consistent with the NOI and permit requirements, for the following facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater.

The maintenance garage and the public works yard are at the same facility; the original SWPPP was prepared in 2003. The facility was expanded and construction finished in 2019. A construction SWPPP was prepared and is available at Public Works. A new temporary SWPPP has been created to amend to the original SWPPP and will be incorporated into the plan in the future. Copies are kept, and inspections as outlined in completed SWPPPs will begin in year 3.

The Wastewater facility has a specific EPA permit for their facility and their own SWPPP as part of their permit. The Transfer Station also has a site specific SWPPP plan that was created in 2003. All plans are available at the Public Works Administration Office and at each facility.

TMDL's and Water Quality Limited Waters

Bacteria/Pathogens

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the initial outfall ranking and the pet waste messaging now includes the ordinance for pet wastes and has been implemented in accordance with the SWMP.

Phosphorus

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

The Town of Merrimack, NH through its participation in the Lower Merrimack Valley Stormwater Coalition and will become involved in the NHDES led Pollutant Tracking and Accounting Program (PTAP), will satisfy the tracking and accounting requirement of the municipally owned structural BMP's listed in Attachment 1 to Appendix H. Public Education and outreach to the residents, commercial and business owners has been a large focus. The development and redevelopment site plan regulations have been 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 have been ranked as high priority for the IDDE implementation in the initial outfall ranking and enhanced BMP's have been implemented in accordance with the SWMP. Catch Basin cleaning and Street Sweeping remain a Good Housekeeping and Pollution Prevention for Permittee Owned Operations.

Description of any changes in identified BMPs or measurable goals

The Town of Merrimack, NH has made changes as noted below to the following BMPs and/or measurable goals that were outlined in the approved Notice of Intent. Due to the impact of Covid-19 it has been difficult to get the changes to the Town Codes relative to:

- MCM 3: Written IDDE Program development – Draft is available
 Employee training on specifically IDDE issues
- MCM 6: Infrastructure O & M – establish and implement program for repair and
 rehabilitation of MS4 infrastructure

Activities for the Next Reporting Cycle

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