



# TOWN COUNCIL – AGENDA REQUEST FORM

THIS FORM WILL BECOME PART OF THE BACKGROUND INFORMATION USED BY THE COUNCIL AND PUBLIC

Please submit Agenda Request Form, including back up information, 8 days prior to the requested meeting date. **Public Hearing requests must be submitted 20**

**days prior to the requested meeting date to meet publication deadlines** (exceptions may be authorized by the Town Manager, Chairman/Vice Chair).

## MEETING INFORMATION

Date Submitted: 06/16/2021

Date of Meeting: 06/24/2021

Submitted by: Dawn Tuomala & Kevin Anderson

Time Required: 20 Minutes

Department: Public Works

Background Info. Supplied: Yes  No

Speakers: Dawn Tuomala & Kevin Anderson

## CATEGORY OF BUSINESS (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Appointment:

Recognition/Resignation/Retirement:

**Public Hearing:**

Old Business:

New Business:

Consent Agenda:

Nonpublic:

Other:

## TITLE OF ITEM

**MS4 Update; Provide the Town Council with the yearly update on the MS4 program**

## DESCRIPTION OF ITEM

The program has made progress in meeting the EPA requirements with the addition of our new Environmental Coordinator. As a requirement of the permit we need to have public input as part of the process

## REFERENCE (IF KNOWN)

RSA:

Warrant Article:

Charter Article:

Town Meeting:

Other:

N/A:

## EQUIPMENT REQUIRED (PLEASE PLACE AN "X" IN THE APPROPRIATE BOX)

Projector:

Grant Requirements:

Easel:

Joint Meeting:

Special Seating:

Other:

Laptop:

None:

## CONTACT INFORMATION

Name: Dawn Tuomala

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**6 Baboosic Lake Road**

Phone Number: 424-5137

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kfox@merrimacknh.gov

## APPROVAL

Town Manager: Yes  No

Chair/Vice Chair: Yes  No



## TOWN OF MERRIMACK INTER-DEPARTMENT COMMUNICATION

**DATE:** June 16, 2021

**AT (OFFICE):** Department of Public Works

**FROM:** Kevin Anderson, PE  
Stormwater Coordinator

**To:** Paul Micali, Town Manager

**SUBJECT:** **Municipal Separate Storm Sewer System (MS4)  
3 year Update**

The 2017 permit went into effect on July 1, 2018. The Notice of Intent was submitted before the October 1, 2018 deadline. The permit was accepted, as submitted, by the EPA on May 14, 2019. This year (2021) marks Year 3 of the permit with the third annual report due September 30, 2021. This report will be prepared and sent to the EPA outlining all of the accomplishments we have made during the past year.

The determination for whether a community falls under the 2017 NH Small MS4 General Permit are defined under sections 1.1, 1.2 and 1.2.1 of the permit and are either:

1. "Located fully or partially within an urbanized area as determined by the 2010 Decennial Census by the Bureau of Census: or
2. Located in a geographic area designated by EPA as requiring a permit."

See the attached map for the Town of Merrimack Urbanized Area.

This past year presented a challenge with the limited ability to communicate due to COVID-19. The MS4 permit program continued through video conferencing with inner departments and the NH Lower Merrimack Valley Stormwater Coalition, which consists of approximately 40 New Hampshire MS4 communities. Templates created by the Coalition are the basis of how Merrimack completes the MS4 permit. The hope is to have very similar regulations between Towns while still meeting the EPA requirements. These services from the Coalition supply the town with invaluable information required for meeting state standards for the MS4.

The thought is that if we all stand united and provide the same information that it will be met with acceptance from the EPA. We have been following the basic guidelines that have been laid out in the permit. We are now in the process of planning for Year 4 and creating more sub-committees to tackle the work that needs to be completed this year. The Coalition is a beneficial asset that assists the town in staying informed and current with EPA requirements.

In the first year we were tasked with creating a Stormwater Management Program (SWMP). This document became the basis for all of the coming years and will continue to grow and evolve as the permit year's progress. The SWMP plan outlines six "Minimum Control Measures" (MCM) that will need to be followed. The six measures are:

- MCM 1 – Public Education and Outreach
- MCM 2 – Public Involvement and Participation

MCM 3 – Illicit Discharge Detection and Elimination (IDDE) Program

MCM 4 – Construction Site Stormwater Runoff Control

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

MCM 6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- MCM 1 – NH Department of Environmental Services (NHDES) helped the coalition communities by creating different Templates that we could then use to create the educational pamphlets. The pamphlets we created (see attached) were distributed to the various public groups. So far six pamphlets have been created, fulfilling requirements for residents/homeowners and commercial/industrial users. The pamphlets created in Year 1 deals with “dog poop”, the second with lawn fertilizer, and the third with leaf disposal. The pamphlets created in Year 2 cover stormwater formation for businesses, Stormwater Permit Program information for construction site operators, and sewage disposal system information. These are posted on our website and are out for distribution. In Year 3 with the aid of the Media Division, a dog poop infomercial was created. It had 444 hits on Facebook to date and was played 10 times on Merrimack TV.
- MCM 2 – We are required to hold annual opportunities for the public to participate in the review and implementation of the Town’s SWMP. This will continue to be fulfilled by speaking at Town Council meetings. The public will have opportunities to participate in the implementation of the SWMP through the Adopt a Road Program, and the EnviroScape Demonstration at various annual events like Public Works Open House, Lioness Touch-A-Truck, First Grade Field Trip, and Reeds Ferry School Celebration.
- MCM 3 – As part of the IDDE program, Chapter 167 in the Town of Merrimack Codes is in the process of being re-written to include the IDDE Program. Language needs to be added to the code which will address authority to implement and enforce the IDDE program. It will need to come before Town Council three times to have the changes made.
- MCM 4 – Presently, Chapter 167 in the Town Codes are the only code/regulations that the Town of Merrimack has in regards to the Construction Site Construction Runoff Control. Town Council will need to approve the changes to Chapter 167 to allow for better adaptability of changes in the EPA permit.
- MCM 5 – Post Construction has been incorporated as part of the Chapter 167 and the Site Plan Regulations. Projects are required to have a Post Construction Meeting and Annual Reports submitted to Community Development.
- MCM 6 – The Town of Merrimack has already been performing many parts of the Good Housekeeping rules that are being required for this year’s permit. Highway personnel has been using the tablets verify the location of the catch basins and fill out the catch basin cleaning sheets. Once it is filled out on the tablet, the form can be filed electronically directly into our GIS system. This will enable us to better prepare the final annual report that is due to the EPA by September 30, 2021.

In the report we have been able to quantify the amount of material that is being removed from the catch basins and how many basins are being cleaned in a year. We will have a better understanding as to which ones will need to be cleaned more often in the future, what ones need repairs etc.

Street Sweeping has also been tracked and recorded to prove to the EPA that we are improving our methods to reduce the amount of pollutants reaching the impaired waters in Town.

Parks and Open Spaces inspections, Buildings and Facilities inspections, and Stormwater Structures inspections are more large housekeeping items that will be completed in the coming year. The remaining parts of the Good Housekeeping will need to be done in the fourth year of the permit which begins on July 1, 2021.

There will need to be proper Highway and Solid Waste yard maintenance performed each year along with spill avoidance plans set up. Evaluations and record keeping will need to be performed each year for the annual report.

A stormwater team was created at the end of Year 3 to help enable other Town departments to work in unison for the permit. The members are John Manuele, Lori Barrett, Robert Price, and Dawn Tuomala.

The Town underwent an audit of the MS4 program by the EPA's sub consultant, PG Environmental. The audit was announced to the Town via email on July 10, 2020, which included a written pre-audit records request. The audit was scheduled from August 4, 2020 to August 7, 2020. The town fulfilled its obligations with the issuance of requested additional information, including example documentation of catch basin inspection and cleaning, dry weather sampling records, erosion and sediment control plans and edits, documentation of issues from construction site inspections, and informal employee training. The audit took place as scheduled and consisted of preceding record review by PG Environmental followed by 4 Zoom question-and-response style interviews split up by the separate minimum control measures (MCMs).

The EPA issued a final report on October 8, 2020, which outlined observations made by PG Environmental. The findings of the audit report identified areas of potential Permit noncompliance and they did not constitute any formal notice of violation. The final report noted areas in need of improvement, primarily the implementation, system mapping, and legal enforcement of minimum control measure 3 (MCM-3) Illicit Discharge Detection and Elimination (IDDE) program – this item will be brought to the Town Council for discussion this year in the form of a revision/addition to the Town Code. Further recommendations include adopting formal written records of construction site inspections and catchment investigations, actively advertising the availability of MS4 program documentation to the public, and posting the most up to date version of the Town's Stormwater Management Plan (SWMP) to the Town's website.

For the past three years, we have done the work in house and with the help of the coalition group. It quickly became apparent that this is a full time position. Since my hiring in February 2021 as Environmental Coordinator, I have been reviewing and creating databases to assist in tracking the

status and trends of the outfall sampling. Efforts continue with preparing operation and maintenance tasks and schedules for personnel to fulfill to for permit compliance such as the inspection of parks and facilities, stormwater ponds, basins and treatment structures. We are now in the third year of the sampling program. Summer interns started in May and the next few weeks are full with the last round of testing and inspections before the close of the reporting period on June 30, 2021. During this reporting year, the interns will have investigated the 88 identified outfalls that drain directly into surface waters. They also conducted sampling on the 9 outfalls that were flowing in dry weather. Due to COVID-19, we have had to send more of our samples out to the independent lab for analysis that we were originally planning to do.

We have been working on the GIS system with the contractor to improve the accuracy of the mapping. We have been continually updating the mapping of the drainage and sewage structures, including their invert and outlet elevations. Additional structures still need to be located and created in the system including the updated drainage piping and connections. Work done over the past year included catch basin inspection and cleaning, outfall inspection and sampling, and treatment swale and detention basin inspection and maintenance forms. Many improvements have been made, and there is still more mapping to do and data to collect to improve the accuracy of the GIS system.


This year's activities will conclude with the filing of our annual report in September.

Should you have any questions please let me know,

Kevin

CC: Kyle Fox; Director

**STORMWATER  
MANAGEMENT**  
*MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)*  
**2017 NH MS4 PERMIT**  
**June 2021 UPDATE**



Prepared by:  
Kevin Anderson, PE

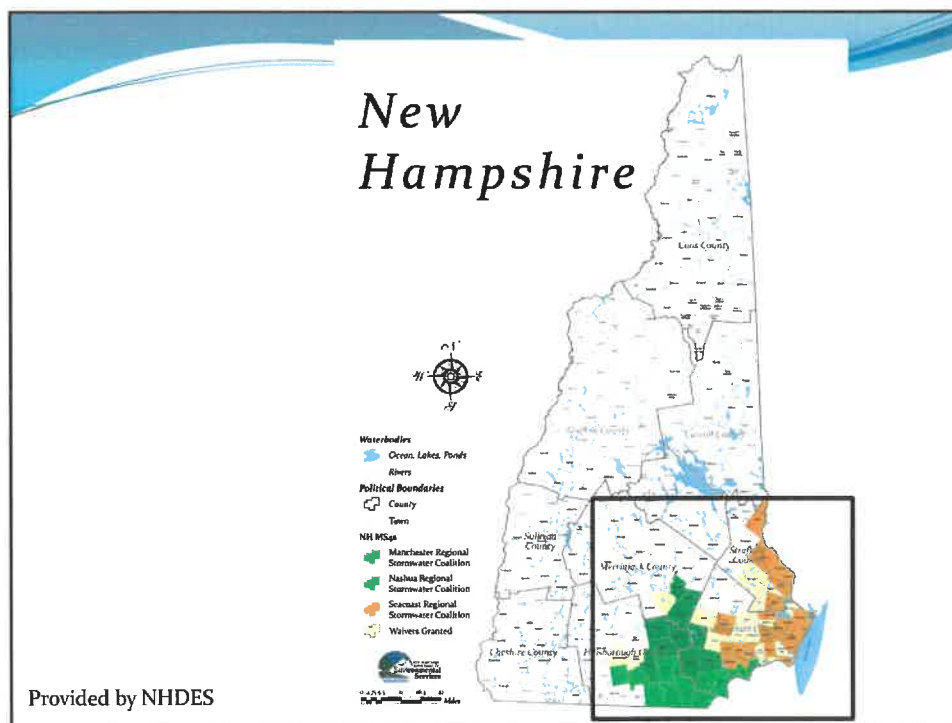
(Provided by NHDES)

## NH Communities Affected by MS4

- EPA – Determined if a community is subject to MS4
  - Urbanized Areas from 2000 & 2010 Census
    - 66 regulated communities in NH
      - 16 have waivers
      - Plus 3 non-traditional
      - Totals – 47 Regulated Communities

## NH Communities – Waived (16)

- Barrington
- Bow
- Brentwood
- Candia
- Chester
- East Kingston
- Epping
- Fremont
- Hampton Falls
- Lee
- Lyndeborough
- Madbury
- Mount Vernon
- Newfields
- Newington
- South Hampton







## NH Communities – NH-LMV

- Amherst
- Bedford
- Derry
- Goffstown
- Hollis
- Hooksett
- Hudson
- Litchfield
- Londonderry
- Manchester
- Merrimack
- Milford
- Nashua
- Pelham
- Salem
- Wilton
- Windham
- (Laconia)

## 1st Year Requirements

### Stormwater Management Program

- Document used by permittee to describe the activities and measures that will be implemented to meet the terms and conditions of the permit
- Is to be changed, updated and modified throughout the permit as the permittee's activities change
- Comply with the schedules
- Create **Minimum Control Measures (MCM's)**

## MCM'S

MCM 1 – Public Education and Outreach

MCM 2 – Public Involvement and Participation

MCM 3 – Illicit Discharge Detection and Elimination (IDDE) Program

MCM 4 – Construction Site Stormwater Runoff Control

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

MCM 6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations

## MCM 1 – Public Education and Outreach

- Targeting 4 Audiences: (2 for each/5 years)
  - Residents & Homeowners
  - Commercial & Business Properties
  - Developers/Construction/Reconstruction
  - Industrial Properties
- NHDES created different templates
- Communities took the templates & created their own educational pamphlets
  - Out for distribution May 2019
  - On the Website

## **MCM 2 – Public Involvement and Participation**

- Engage the community in the review and implementation of the Stormwater Management Program.
- Will have a Public Meeting or comment time once all Departments have weighted in and it's posted.
- Public participation opportunities include the Adopt-A-Road Program & EnviroScape Demonstration
  - Public Works Open House
  - Lioness Touch-A-Truck
  - Frist Grade Field Trip
  - Reeds Ferry School Celebration

## **MCM 3 – Illicit Discharge Detection & Elimination Program (IDDE)**

- Legal Authority to Prohibit, Investigate and Eliminate
- Change Code 167
- Definitions & Prohibitions
- Elimination of Illicit Discharges
- Non-Stormwater Discharges
- Sanitary Sewer Overflows
- System Mapping – Phase I and II

### **MCM 3 – Illicit Discharge Detection & Elimination Program (IDDE) (Continued)**

- Outfall Inventory & Interconnections Initial Ranking
- Dry Weather Outfall Screening & Sampling
- Wet Weather Outfall Screening & Sampling
- Follow-up Rankings
- Catchment Investigations
- Employee Training

### **MCM 4 – Construction Site Stormwater Runoff Control**

- Objective to minimize or eliminate erosion and maintain sediment on construction sites
- Part of Chapter 167 in the Town Codes
  - Code will need to be revised through Town Council Public Hearings
  - Regulations will need to be approved by the Planning Board by Public Hearings

### **MCM 5 – Post Construction Stormwater Management in New Development and Redevelopment (Year 2)**

- Objective is to minimize the water quality impact from new development and reduce the water quality impact due to stormwater runoff from a redeveloped area.
- Already do this through Chapter 167 and our Site Plan Regulations
- Create Operations and Maintenance Plans for each development and reporting requirements to Town

### **MCM 6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations**

- Create an inventory of:
  - Parks and Open Spaces:
    - Pay particular attention to pesticides, herbicides & fertilizers
  - Buildings and Facilities: Schools, Town Offices, Police, Fire Station, Pools and Highway Garage etc.
  - Vehicles and Equipment
    - Storage of vehicles
    - Spills/Containment
    - Wash water

## **MCM 6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations (Continued)**

- Infrastructure Operations and Maintenance
  - Street Sweeping
  - Catch Basin Cleaning
  - Winter Road Maintenance
    - Green Sno Pro (Min. salt useage) & Training
- Stormwater Pollution Prevention Plan (SWPPP)
  - Pollution Prevention Team
  - Desc. Facility & ID Pollutant Sources
  - Spill Avoidance
  - Evaluations – record keeping

## **MS4 Program Audit**

- August 4, 2020 to August 7, 2020
- Sub Consultant: PG Environmental
- Zoom question-and-response style interviews split up by the separate minimum control measures
- Town fulfilled its obligations with the issuance of requested information
- EPA issued a final report on October 8, 2020

## EPA Audit Report

- Audit report identified areas of potential Permit noncompliance:
  - Implementation, system mapping, and legal enforcement of MCM-3 Illicit Discharge Detection and Elimination (IDDE) program
- Further recommendations:
  - Adopting formal written records of construction site inspections and catchment investigations
  - Actively advertising the availability of MS4 program documentation to the public
- EPA did not constitute any formal notice of violation

## Year 2 (2020 - 2021)

- Annual Report:
  - <https://www3.epa.gov/region1/npdes/stormwater/nh/reports/2020/merrimack-nh-ar20.pdf>
- NOI:
  - [https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/merrimack\\_nh\\_2018\\_noi.pdf](https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/merrimack_nh_2018_noi.pdf)
- SWMP:
  - [https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/i\\_swmp.pdf](https://www.merrimacknh.gov/sites/g/files/vyhlf3456/f/uploads/i_swmp.pdf)