



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: July 12, 2023 Date of Meeting: July 20, 2023
 Submitted by: Dawn Tuomala Time Required: 15 minutes
 Department: DPW - Admin Background Info. Supplied: Yes No
 Speakers: Leo Laviolette, Jerid Pretzer, William Feltus

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

Appointment:	<input type="checkbox"/>	Recognition/Resignation/Retirement:	<input type="checkbox"/>
Public Hearing:	<input type="checkbox"/>	Old Business:	<input checked="" type="checkbox"/>
New Business:	<input type="checkbox"/>	Consent Agenda:	<input type="checkbox"/>
Nonpublic:	<input type="checkbox"/>	Other:	<input type="checkbox"/>

TITLE OF ITEM

Municipal Separate Storm Sewer System Yearly Update

DESCRIPTION OF ITEM

REFERENCE (IF KNOWN)

RSA: Warrant Article:
 Charter Article: Town Meeting:
 Other: N/A:

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

Projector:	<input type="checkbox"/>	Grant Requirements:	<input type="checkbox"/>
Easel:	<input type="checkbox"/>	Joint Meeting:	<input type="checkbox"/>
Special Seating:	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Laptop:	<input checked="" type="checkbox"/>	None:	<input type="checkbox"/>

CONTACT INFORMATION

Name: **Dawn Tuomala** Address: **Town Hall**
 Phone Number: **(603) 424-5137** Email Address: **dtuomala@merrimacknh.gov**

APPROVAL

Town Manager: Yes No Chair/Vice Chair: Yes No

Hold for Meeting Date:



TOWN OF MERRIMACK INTER-DEPARTMENT COMMUNICATION

DATE: July 12, 2023

AT (OFFICE): Department of Public Works

FROM: Leo Laviolette
Deputy DPW Director/Environmental

To: Paul Micali, Town Manager

SUBJECT: **Municipal Separate Storm Sewer System (MS4) 5 Year Update**

The EPA Municipal Separate Storm Sewer System (MS4) permit went into effect on July 1, 2018. The Notice of Intent was submitted by the Town of Merrimack in 2018. The permit was accepted by the EPA in May of 2019. The most recent Annual Report is due to the EPA on September 30th, 2023. This report will be prepared and sent to the EPA outlining the accomplishments we have made during the past year.

This year was the Year 5 requirements of the MS4 permit. In Year 5 we updated the Town's Stormwater Management Plan (SWMP). In addition, the permit requires six Minimum Control Measures (MCMs) to be implemented. Each year, the measures are addressed with either specific year or annual tasks. The six measures are:

MCM 1 – The Year 5 Outreach Requirements were fulfilled by promoting and sending out educational pamphlets. The Pet Waste pamphlet was sent to dog owners in town via the license information. The Septic Maintenance pamphlet is distributed by the waste haulers. The Industrial Maintenance pamphlets were sent out to local Industrial classified businesses in town.

MCM 2 – The Town Council Meeting September of 2022 satisfied the requirement of MCM2 for Year 5. This Town Council meeting will fulfill part of the Year 6 requirements for Public Involvement and Participation. In addition DPW promotes public involvement with events such as: Touch a Truck, Hazardous Waste Collection Days, Adopt a Road Roadside Clean-ups, etc.

MCM 3 – The Illicit Discharge Detection and Elimination (IDDE) Plan has been revised for this year as well as system mapping updates. Outfall inventory was confirmed and as well as some Wet-Weather Sampling performed for Year 5.

MCM 4 – Performed active construction site inspections for erosion and sediment (E&S) control compliance. Continued with updating the 2006 Construction Standards and the suggested changes to the Chapter 167 of the Town Code to address erosion and sediment control on construction sites. DPW Admin employees obtained EPA certification for E&S control site inspections.

MCM 5 – Post Construction Stormwater Management is performed by requiring new developments to utilize proper site Best Management Practices (BMPs) and require post-construction maintenance of the stormwater systems by owner in perpetuity.

MCM 6 – The Town of Merrimack performs the Good Housekeeping rules that are required for the permit. Each Town owned facility is inspected and maintained by the Town and follows the requirements set forth in the SWMP as well as the applicable Stormwater Pollution Prevention Plan (SWPPP). The SWPPP for the Highway garage and other Town properties has been revised for Year 5.

Appendix F&H – Applied for Clean Water State Revolving Fund Grants for water quality studies/ engineering for Baboosic Lake and Horseshoe Pond in effort to reduce phosphorous and bacteria loading within these impacted waterbodies.

Should you have any questions please let me know,

Leo

CC: Dawn Tuomala; Director
File

STORMWATER MANAGEMENT

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) 2017 NH MS4 PERMIT July 2023, UPDATE

Prepared by:
Leo Laviolette
Will Feltus
Jerid Pretzer





What is an MS4 program?

- The Municipal Separate Storm Sewer System (MS4) is a permitted program operating under the National Pollutant Discharge Elimination System (NPDES) regulated by the EPA.
- The NPDES MS4 permit requires permittees to develop and implement a comprehensive Storm Water Management Program (SWMP) that must include pollution prevention measures, treatment or removal techniques, monitoring, use of legal authority, and other appropriate measures to control the quality of storm water discharged to the storm drains and ultimately to the waters of the United States.

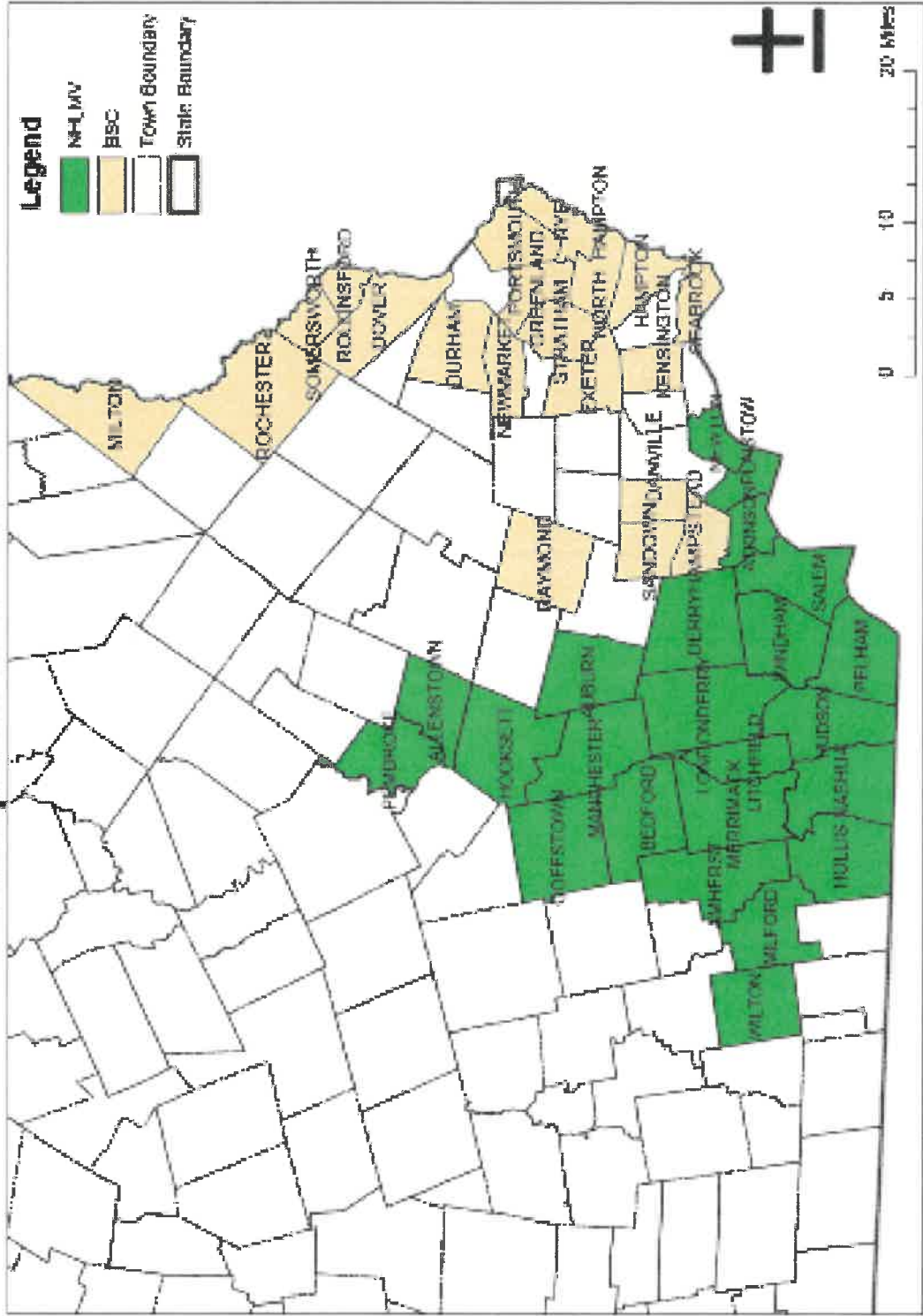


NH Communities Affected by MS4

- EPA – Determined if a community is subject to MS4
- Urbanized Areas from ten year Census data
 - 61 regulated communities in NH
 - 17 have waivers
 - Plus 3 non-traditional
 - Totals – 47 Regulated Communities



New Hampshire MS4 Communities



Provided by NHDES



NH Stormwater Coalitions

1. **NH Lower Merrimack Valley Stormwater Coalition**
(Formerly Manchester/Nashua Stormwater Coalition)
24 Communities are Members

2. **Seacoast Stormwater Coalition**
20 Communities are Members

NH Department of Environmental Services (NHDES)

Involvement with both Coalition Groups

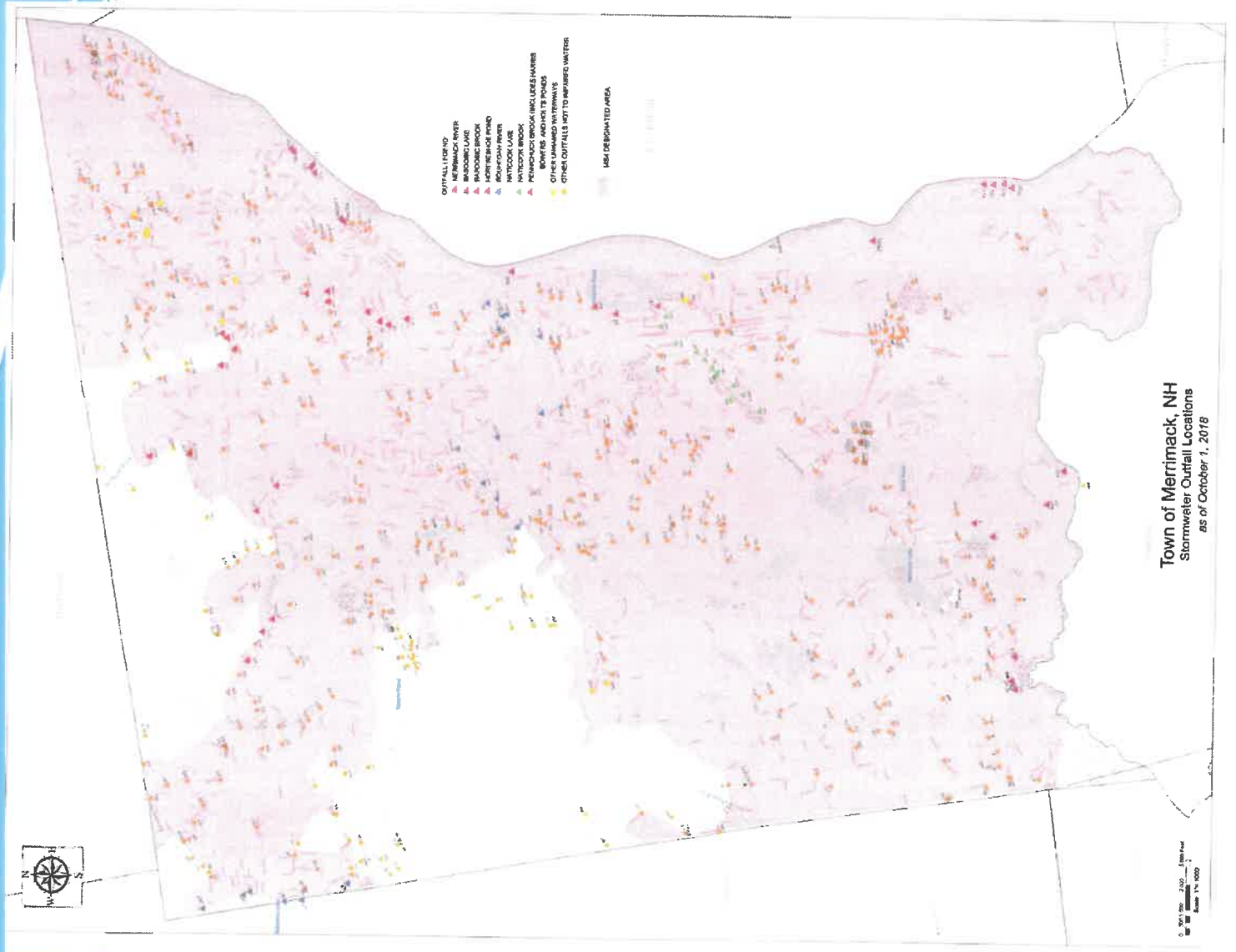
- ❖ Attend all coalition meetings
- ❖ Keep meeting minutes
- ❖ Keep a blog for sharing among participating communities
- ❖ Creating Templates
- ❖ Establish needed connections between coalitions groups
- ❖ Communicate with EPA




MS4 In Merrimack

- The MS4 team is comprised of DPW Admin, DPW Highway Division, Community Development, Building and Health, and Fire Marshal
- Departments work together to comply with the MS4 permit
 - DPW Admin- Report, record keep,
 - DPW Highway Division- Maintenance
 - Community Development- Approves site plans
 - Building and Health- Enforcement body for illicit discharges
 - Fire Marshall- Spill response and illicit discharge investigation
- Areas of Merrimack covered by the MS4 permit are shown in the next slide:

- Nearly all of Merrimack is under the MS4 Permit
- Areas that do not fall under the MS4 Permit are primarily conservation lands





Why is this Important?

Stormwater all across town sheds into our major water bodies such as the Merrimack River, Baboosic Lake, Lake Naticook, Horseshoe Pond, and many others.

The rise in cyanobacteria, e-coli, and other water body impacts are a direct result of the pollutants that are washed into these water bodies.

5 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 (presently updating for year 5).
- Stormwater Management Plan @ <https://www.merrimacknh.gov/stormwater>
- Yearly MS4 Requirements can be found by following the QR Code
- Create **Minimum Control Measures** (MCM's)





Minimum Control Measures

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

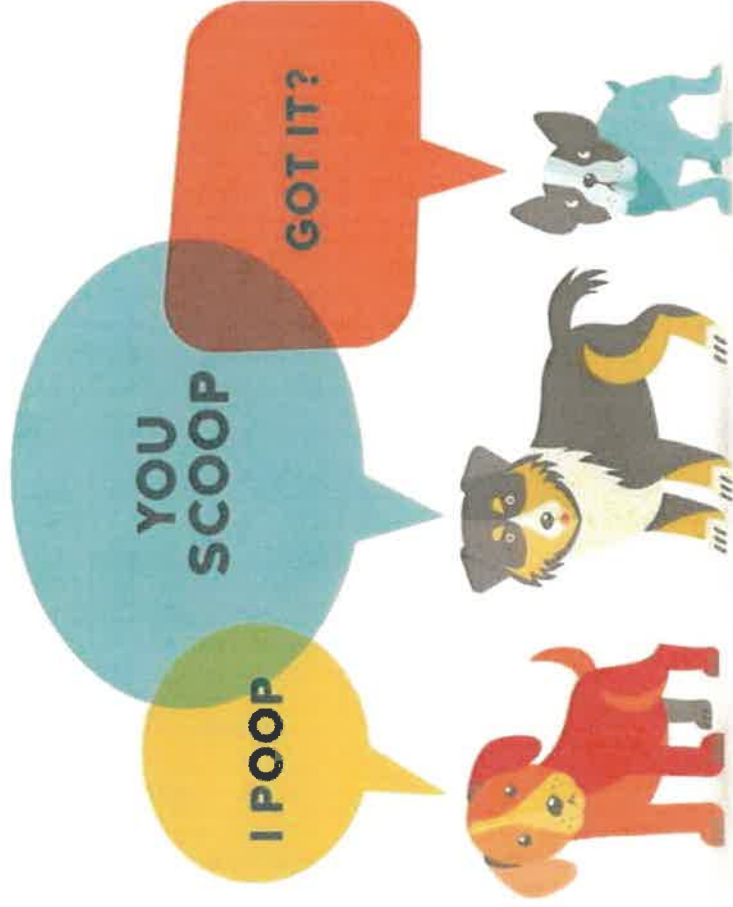
MCM 6 – Good Housekeeping and Pollution Prevention
for Permittee Owned Operations

Appendix F & H- Requirements related to discharges to
certain impaired water bodies; **Phosphorus**
& **Bacteria**



MCM 1 – Public Education and Outreach

- To educate the public that their actions do impact the environment and the Town's permit
- Targeting 4 Audiences: (2 for each/5 years)
 - Residents & Homeowners
 - Commercial & Business Properties
 - Developers/Construction/Reconstruction – Pamphlets new EPA Construction General Permit
 - Industrial Properties - Letters
- Communities created their own educational pamphlets from templates NHDES and Coalition Subcommittees created.
 - Out for distribution all year.
 - Put on the stormwater town Website.
 - Dog Poop
 - Green Grass
 - Yard Waste
 - Compost
 - Industrial Facilities



4 Small Changes That Make a Big Difference

1. Always carry a plastic bag when you walk your dog.
2. Always pick up that poop.
3. Always dispose of it in a trashcan.
4. **NEVER** put unbagged waste in a storm drain.

In addition we created a dog poop video that is available on MerrimackTV and the Blog/FaceBook.

EVERY DROP

Small Changes. Big Difference.

Stormwater Pollution Control for Industrial Facilities

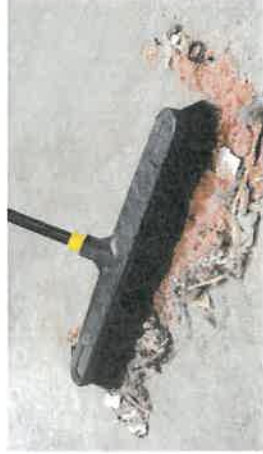
Keeping pollutants out of the drainage system

Material handling and storage, equipment maintenance and cleaning, and other activities at industrial facilities are often exposed to the weather. Stormwater runoff from rain or snowmelt that comes in contact with these activities can pick up pollutants, and transport them directly, or

indirectly through the Town of Merrimack's storm drains which flow untreated into nearby waterbodies and degrade water quality. Pollutants harm fish and wildlife, make our water unsafe to drink, and can impact recreational use of waters.



You are responsible for pollutants that leave your property



- **Cleaning:** Maintain an orderly facility. Sweep paved driveways, parking lots, and storage areas regularly.
 - **Maintenance:** Perform vehicle and equipment maintenance and repair indoors or off site. Inspect vehicles and equipment for leaks regularly.
 - **Washing:** Perform cleaning of equipment and/or vehicles on impervious surfaces with drains piped to the sanitary sewer or a tight tank.
 - **Storage:** Store all materials, products, and waste indoors in covered, sealed, labeled containers. Storage area should be dry, cool, well-ventilated, and insulated.
 - **Spill Prevention:** Develop spill prevention and response procedures. Check storage areas often for leaks and spills. Equip storage areas with easily accessible spill cleanup kits. Immediately clean-up spills and report as appropriate.
- **Cleaning:** Sweep paved driveways, parking lots, and storage areas regularly.
 - **Maintenance:** Perform vehicle and equipment maintenance and repair indoors or off site. Inspect vehicles and equipment for leaks regularly.
 - **Washing:** Perform cleaning of equipment and/or vehicles on impervious surfaces with drains piped to the sanitary sewer or a tight tank.
 - **Storage:** Store all materials, products, and waste indoors in covered, sealed, labeled containers. Storage area should be dry, cool, well-ventilated, and insulated.
 - **Spill Prevention:** Develop spill prevention and response procedures. Check storage areas often for leaks and spills. Equip storage areas with easily accessible spill cleanup kits. Immediately clean-up spills and report as appropriate.
- As an industry owner or operator, you are responsible for all pollutants that leave your property. Where possible, minimize or prevent exposure of pollutants to stormwater following these tips:

Winter Maintenance Best Practices

- Merrimack is working to reduce the potential for contamination of local waterways by minimizing chloride (salt) exposure. To help track and reduce chloride levels in those waters:
- **Cover salt piles** and place them on an impervious pad.

- **Limit the amount of salt** applied to parking lots and driveways.
- **Hire a New Hampshire Certified Green SnowPro Contractor** for your winter maintenance, or ask your current contractor to become certified. See link in attached Green SnowPro brochure.

Report annual salt usage using the UNH Technology Transfer Center online tool at: <http://www.roadsalt.unh.edu/Salt/>. If you use a Certified Green SnowPro contractor, it will be included with their annual salt usage reporting.

visit EPA's website at: <https://www.epa.gov/npdes/stormwater-discharges-industrial-activities>

Your industrial facility may require a Multi-Sector General Permit (MSGP). The MSGP requires operators of certain industrial facilities to develop a Stormwater Pollution Prevention Plan (SWPPP). To learn more, visit EPA's website at:

Our Community Cares

- Our community cares about clean water and is doing its part to help prevent water pollution in local waterways.
- Drop off your yard waste at the Municipal Public Works for composting.
- NEVER dispose of leaves or clippings in or near storm drains, drainage channels, wetlands or waterbodies!

COMPOSTING



What is compost?

- Composting is a natural process of decomposition of organic material into a rich soil amendment.
- Composting leaf and yard waste, creates a useful soil amendment to be incorporated into gardens, and used as a mulch around trees or as a top dressing on lawns.
- Composting is beneficial to the environment by reducing the amount of waste that makes its way to New Hampshire's landfills and incinerators.

What can I compost?

USE

leaves
lawn clippings
pine needles
weeds
straw
hay
sawdust
wood ashes
shredded newspaper
animal manures
coffee grounds
fruits & vegetables
crushed eggshells

DON'T USE

meats
bones
fatty foods
oils
dairy products
colored newspaper
coal ashes
dog or cat wastes
pressure treated wood
plywood
anything not bio-degradable

For Purchase through the Merrimack Transfer Station

Compost Bin

- The use of backyard composting systems by residents can divert food and yard waste, which comprises about 24% of land fill material, by creating beneficial compost to be used in personal gardens.
- Unit dimensions: 33" x 33" , 10.5 cubic feet or 80 gallons

Rain Barrels

- Conserve municipal water supply with backyard rain barrels.
- Residents benefit from trapping rainwater that is free from chlorine and water treatment chemicals perfect for watering lawns, plants, and gardens.
- Unit dimensions: 26" (diameter) by 34" (height); 55 gallons



MCM 2 – Public Involvement and Participation

- Engage the community in the review and implementation of the Stormwater Management Program- found on the Town of Merrimack website <https://www.merrimacknh.gov/stormwater> (comments/questions requested)
- Holding a public meeting with town council for yearly updates and to solicit any comments on the program.
- Other Programs:
 - Touch a truck
 - Hazardous Waste Collection Day
 - Adopt A Road – Roadside Cleanup
 - Eversource Freon Event



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

- IDDE can be any discharge to the public stormwater system that is not storm or ground water.
- Legal Authority to Prohibit, Investigate and Eliminate
- Change Code 167 - bringing before council
- Elimination of Illicit Discharges
- Non-Stormwater Discharges
- Sanitary Sewer Overflows
- System Mapping – constantly updating



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

- Outfall Inventory & Interconnections Initial Ranking
- Wet Weather Outfall Screening & Sampling-began this year
- Follow-up Rankings
- Employee Training



MCM 4 – Construction Site Stormwater Runoff Control

- Objective to minimize or eliminate erosion and sediment migration from construction sites.
 - Report to Community Development weekly and after 0.25” of Rain
- Part of Chapter 167 in the Town Codes (under construction)
 - Code will need to be revised through Town Council Public Hearings
- Updating 2006 construction standards
 - To include erosion control within these standards



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

- Objective is to minimize the water quality impacts from new and re-developed areas.
- Currently perform this through Chapter 167 and our Site Plan Regulations.
- Create Operations and Maintenance Plans for each new development and report yearly to Community Development.
- Hold Post Construction meetings and report requirements once or twice a year on or before June 30th
 - Requirements runs with the property.



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

- **Created Inventory of:**
 - **Parks and Open Spaces:**
 - Usage of 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
 - All Highway employees are Green Snow Pro trained to minimize salt usage
- Stormwater Pollution Prevention Plan (SWPPP)
 - Pollution Prevention Team
 - Description Facility & ID Pollutant Sources
 - Spill Avoidance
 - Evaluations – record keeping



Appendix F & H

Requirements related to discharges to certain impaired waterbodies

- Complete Phosphorus Source Identification Report
- Calculate Baseline Phosphorus, Allowable Phosphorus Load and Phosphorus Reduction Requirement
- Provide a Lake Phosphorous Control Plan scope
- Additional street sweeping requirements for the high pollutant loading areas
- Evaluating to retrofit BMPs for high pollutant areas
- Record any BMP modifications along with an explanation; what and outcome

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Appendix F & H (Continued)

- Phase 1 of the Baboosic Lake CWSRF is complete
- Applied for a second grant to continue work and engineering
 - Will find out in the fall if the town receives the grant
- After the completion of phase 2 another grant will be needed for construction
- Applied for a CWSRF grant to study Horseshoe Pond
 - Will hear if the grant was awarded to the town in the fall



Year 6 Tasks

July 1st, 2023 – June 30th 2024

- Continue dry and wet weather sampling to identify any illicit discharges
 - If an illicit discharge is found perform an investigation to find the source
- Present code 167 to Town Council for approval
- Continue all yearly requirements
- Hand out new compost flyer
- Update the Storm Water Management Plan (SWMP)



Questions?