

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

**Town of Durham**

**Permit Year 4**

**July 1, 2021 through June 30, 2022**

EPA NPDES Permit Number NHR041006

# Certification

## Authorized Representative:

The authorization letter is:

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

- Publicly available at the website:


[https://www.ci.durham.nh.us/sites/default/files/fileattachments/public\\_works/page/55264/nh\\_ms4\\_authorization\\_durham\\_nhr041006.pdf](https://www.ci.durham.nh.us/sites/default/files/fileattachments/public_works/page/55264/nh_ms4_authorization_durham_nhr041006.pdf)

"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

RICHARD REINE

Signature



Date

9.28.22

## Primary MS4 Program Manager Contact Information:

Richard Reine  
Public Works Director  
Public Works Department  
100 Stone Quarry Drive  
Durham, NH 03824  
603-868-5578  
rreine@ci.durham.nh.us

# Small MS4 Authorization

The following annual report, which serves as a self-assessment, is intended to document the activities undertaken over the **reporting period from July 1, 2021 through June 30, 2022** in accordance with the Permit.

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 Town of Durham's Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents can be found at the following websites and will be referred to throughout this report:

SWMP: <https://www.ci.durham.nh.us/publicworks/stormwater>

IDDE: <https://www.ci.durham.nh.us/publicworks/stormwater>

**Dry Weather Screening Data:** see attached submission

**Inventory and Ranking of Outfalls/Interconnections:** see attached submission

**Catchment Investigation Data:** see attached submission

**Nitrogen Source Identification Report:** see attached submission

**Chloride Reduction Plan:** <https://www.ci.durham.nh.us/publicworks/stormwater>

# Self-Assessment

Select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the 2018 EPA approved Section 303(d) Impaired Waters List which was used for the Year 4 reporting period and can be found here:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/2018-epa-approval-20200225.pdf>.

All **Appendix F and H requirements** can be found under “Appendix F and H: Water Quality Limited Waters & TMDLs” section of this report.

Impairment(s)		
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input checked="" type="checkbox"/> Chloride	<input checked="" type="checkbox"/> Nitrogen
<input type="checkbox"/> Phosphorus	<input type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals	
TMDL(s)		
<input checked="" type="checkbox"/> Bacteria and Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Lake and Pond Phosphorus

# Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

No

The Town of Durham has not made changes to the list of receiving waters, outfalls, or impairments since the NOI submission.

# MCM1 - Public Education and Outreach

## Year 4 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](https://www4.des.state.nh.us/nh-ms4/?page_id=54).



**Green Grass & Clear Water**

*Did you know that you can have a healthy, green lawn that is both attractive and safer for the environment?*

Some lawn care practices create local water quality problems. Excess nutrients (including nitrogen and phosphorus found in fertilizers) that run off our properties into nearby waterbodies can trigger harmful algal blooms.

Many of us enjoy the time we spend working on our lawns and are willing to try new practices as long as our lawns continue to look good. This information card shares simple and easy tips, customized for northern New England, that can lead to **Green Grass & Clear Water**.

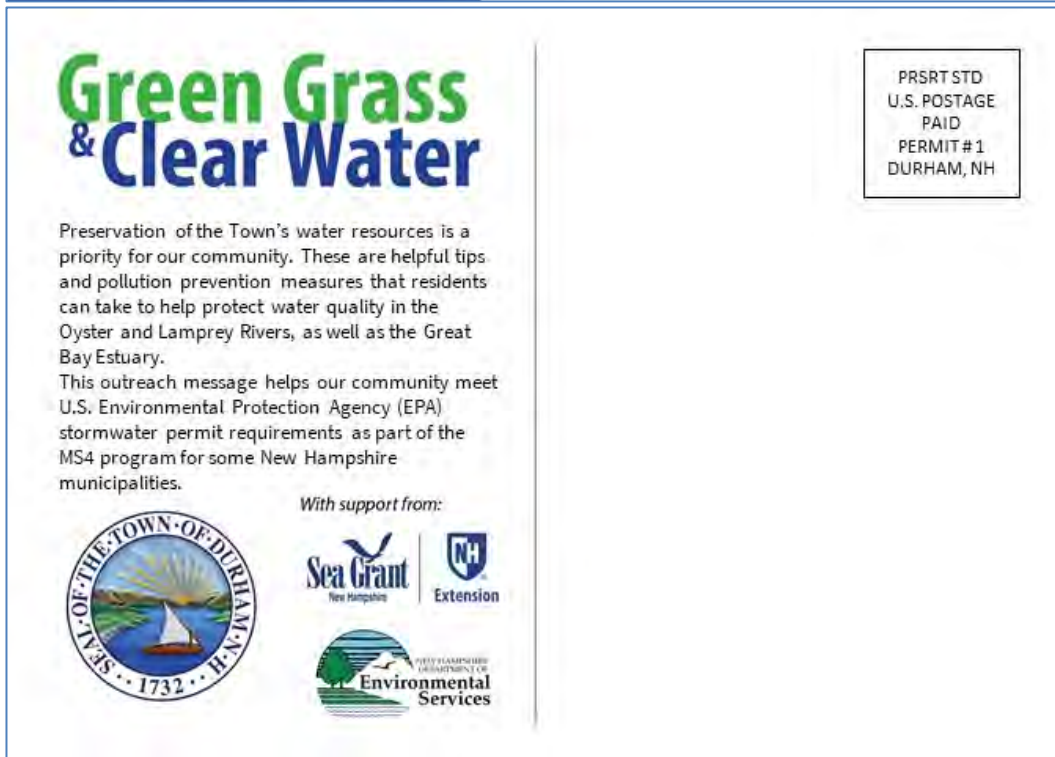
For more details about these tips and others:

[extension.unh.edu/tags/home-lawn-care](https://extension.unh.edu/tags/home-lawn-care)

- 1 Choose the right grass seed.** The best seed mixes include low maintenance varieties with higher % of fine-leaf fescues and turf- or compact-type tall fescues, and lower % of Kentucky bluegrass and perennial rye grass.
- 2 Mow smart.** Leave grass at least 3" high. Cut no more than one-third (1/3) of the blade each time you mow to encourage longer, stronger roots. Leave the grass clippings after mowing so they can return nutrients to the soil.
- 3 Don't overwater.** 1" of water per week (from rain or irrigation) is usually enough. Overwatering can cause nutrients to move out of root zones and into waterbodies or groundwater.
- 4 Have your soil tested** to learn more about specific characteristics and needs of your lawn. Contact UNH Cooperative Extension: [extension.unh.edu/programs/soil-testing-services](https://extension.unh.edu/programs/soil-testing-services)

**Only if your lawn requires added nutrients from fertilizer:**

- 5 Avoid overapplying.** Measure the area where you plan to apply and calculate the square footage. For lawns 10+ years old, apply half (1/2) the amount recommended for your square area one time per season. New lawns may need another application. Apply no more than 4 times per season.
- 6 Choose the right fertilizer.** Select fertilizers with zero or low phosphorus unless a soil test says otherwise. Slow release nitrogen fertilizer is generally preferable. Over-applying fertilizer (any type) can cause water quality issues.
- 7 Know when and where to apply.** Apply only after spring "green up" and before mid-September. Avoid applying in mid-summer. Never apply near waterbodies or storm drains.



**Green Grass & Clear Water**

Preservation of the Town's water resources is a priority for our community. These are helpful tips and pollution prevention measures that residents can take to help protect water quality in the Oyster and Lamprey Rivers, as well as the Great Bay Estuary.

This outreach message helps our community meet U.S. Environmental Protection Agency (EPA) stormwater permit requirements as part of the MS4 program for some New Hampshire municipalities.

With support from:

Sea Grant New Hampshire | Extension

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

PRSR STD  
U.S. POSTAGE  
PAID  
PERMIT # 1  
DURHAM, NH

(\*Note that Post Card was personalized for Town of Durham to recognize our connection with the Oyster River, Lamprey River and Great Bay\*)

**Description:**

Distribution and promotion of flyers produced by UNH Cooperative Extension and NH Sea Grant outlining simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings.

**Targeted Audience:**

Residential and/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 quantity of materials distributed and numbers and change in visits to UNH Cooperative Extension or municipal stormwater webpages.

Following is the number of Green Grass Clear Water postcards that were distributed:  
Year 4 = 1461, Mailed on June 30, 2022

**Goal was achieved.**

**Message Date:**

Also promoted in Durham Friday Updates June 17, 2022, June 24, 2022, as well as on the Town's Facebook Page. The weekly Durham Friday Updates email is sent to 4,862 email addresses (subscribers)

<https://www.ci.durham.nh.us/fridayupdate/friday-updates-june-17-2022>


<https://www.ci.durham.nh.us/fridayupdate/friday-updates-june-24-2022>

**BMP: Pet Waste Disposal**

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

"Every Drop" post cards or flyer <https://www4.des.state.nh.us/nh-ms4/wp-content/uploads/2020/12/poopCard-PREP-branded-6.25x4.25.pdf>

Town of Durham DPW Spring Newsletter Mailing – March 2022

Diesel fuel • Kerosene • Gasoline		these items to Transfer Station with your regular permit.
	<b>DO YOUR PART: SCOOP THE POOP!</b> Scooping your pooch's poop isn't just a courtesy for those walking behind you; it's the healthy and environmentally sound thing to do. Picking up after your dog is not only easy, in Durham it's the law! Take the pledge to scoop the poop, every time! <b>Every Drop Matters Take Pledge Here</b> <a href="https://stateofoureestuaries.org/everydrop/petpledge/">https://stateofoureestuaries.org/everydrop/petpledge/</a>	

**Description:**

Distribution and promotion of "Every Drop" post cards or flyers with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include pledge to pick up pet waste to be made available during

dog registration and other events or venues (veterinarians, dog training, groomers, etc.). 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. If pledges are signed, there will be an increase of dog owners committed to picking up pet waste.

**Goal was achieved.**

**Message Date:**

Summer or time of license renewal, "Scoop the Poop" Town Regulation message posted in Durham Community Friday Updates on July 2, 2021 and July 9, 2021 found here



**WHY IS PET WASTE A PROBLEM? - Do Your Part, Scoop the Poop!**  
Many NH towns have over 1,000 dogs living in them, and each dog "goes" once or twice a day. That's a lot of poop! Not only is it gross when it is left around, but it can be dangerous. Harmful bacteria and parasites - such as Giardia or Salmonella - that live in pet waste, can come in contact with other people and pets or wash into nearby waterways or storm drains. Picking up our pet's waste and throwing it out is a small change that can make a big difference in keeping our waters clean.

Five small changes that make a big difference:

- Always carry a plastic bag when you walk your dog.
- Always pick up that poop.
- Always dispose of it in a trash can.
- Never put bagged or unbagged waste in a storm drain.

<https://www.ci.durham.nh.us/fridayupdate/friday-updates-july-2-2021> and <https://www.ci.durham.nh.us/fridayupdate/friday-updates-july-9-2021>

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

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

[https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Distribute and promote informational flyers, pledge cards, and/or door hangers, with messaging about impacts from yard waste to waterbodies, alternatives to dumping yard waste and laws against dumping yard waste near or in waterbodies.

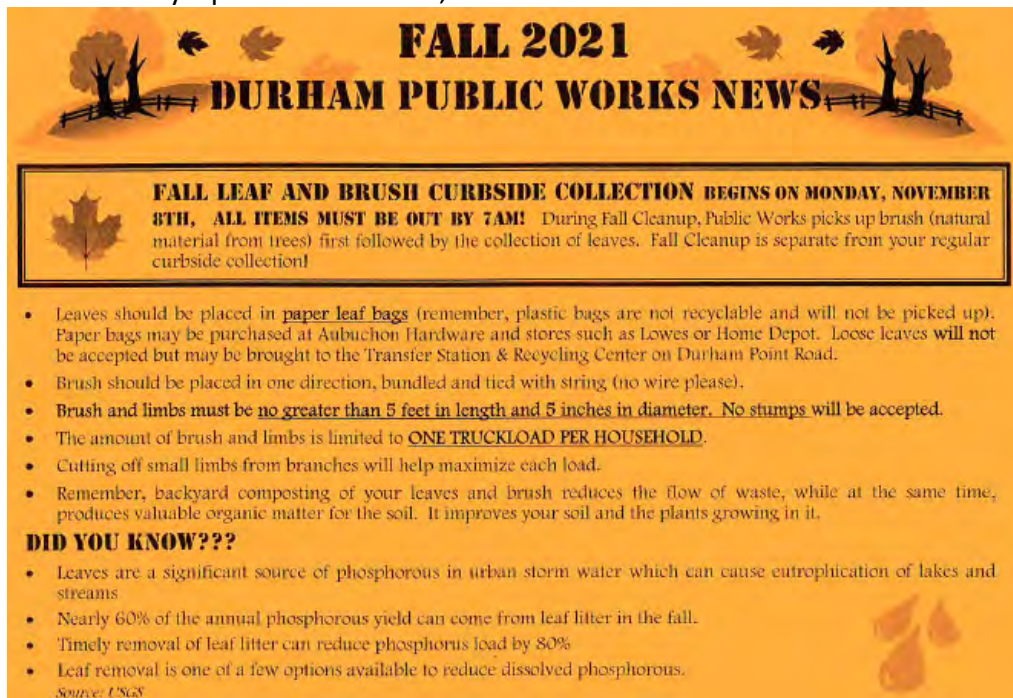
## FALL LEAF AND BRUSH CURBSIDE COLLECTION BEGINS ON MONDAY, NOVEMBER 8TH

All items must be out by 7am! During Fall Cleanup, Public Works picks up brush (natural material from trees) first followed by the collection of leaves. Fall Cleanup is separate from your regular curbside collection!

- Leaves should be placed in **paper leaf bags** (remember, plastic bags are not recyclable and will not be picked up). Paper bags may be purchased at Aubuchon Hardware and stores such as Lowes or Home Depot. Loose leaves **will not be accepted** but may be brought to the Transfer Station & Recycling Center on Durham Point Road.
- Brush should be placed in one direction, bundled and tied with string (no wire please).
- **Brush and limbs must be no greater than 5 feet in length and 5 inches in diameter. No stumps will be accepted.**
- The amount of brush and limbs is limited to **ONE TRUCKLOAD PER HOUSEHOLD.**
- Cutting off small limbs from branches will help maximize each load.
- Remember, backyard composting of your leaves and brush reduces the flow of waste, while at the same time, produces valuable organic matter for the soil. It improves your soil and the plants growing in it.

All residents should have received the **fall newsletter** in the last week.

Friday Update October 15, 2021



**FALL 2021**  
**DURHAM PUBLIC WORKS NEWS**

**FALL LEAF AND BRUSH CURBSIDE COLLECTION BEGINS ON MONDAY, NOVEMBER 8TH, ALL ITEMS MUST BE OUT BY 7AM!** During Fall Cleanup, Public Works picks up brush (natural material from trees) first followed by the collection of leaves. Fall Cleanup is separate from your regular curbside collection!

- Leaves should be placed in **paper leaf bags** (remember, plastic bags are not recyclable and will not be picked up). Paper bags may be purchased at Aubuchon Hardware and stores such as Lowes or Home Depot. Loose leaves **will not be accepted** but may be brought to the Transfer Station & Recycling Center on Durham Point Road.
- Brush should be placed in one direction, bundled and tied with string (no wire please).
- **Brush and limbs must be no greater than 5 feet in length and 5 inches in diameter. No stumps will be accepted.**
- The amount of brush and limbs is limited to **ONE TRUCKLOAD PER HOUSEHOLD.**
- Cutting off small limbs from branches will help maximize each load.
- Remember, backyard composting of your leaves and brush reduces the flow of waste, while at the same time, produces valuable organic matter for the soil. It improves your soil and the plants growing in it.

**DID YOU KNOW???**

- Leaves are a significant source of phosphorous in urban storm water which can cause eutrophication of lakes and streams
- Nearly 60% of the annual phosphorous yield can come from leaf litter in the fall.
- Timely removal of leaf litter can reduce phosphorous load by 80%
- Leaf removal is one of a few options available to reduce dissolved phosphorous.

Source: USGS

Town of Durham DPW Fall Newsletter Mailing – October 2022

### Targeted Audience:

Residential &/or Business

### 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.

Following is the number of Durham Public Works Fall newsletters that were distributed:

Year 4 = 2,119

**Goal was achieved.**

**Message Date:**

In Year 4, 75 flyers were distributed at Household Hazardous Waste Collection Day on October 23, 2021. In Year 4, flyers will be distributed at Household Hazardous Waste Collection Day on October 22, 2022. This information will be shared on the Town's website and via the communities Friday Updates.

**BMP: Septic System Maintenance****Document Name and/or Web Address:**

[https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Distributed and promoted brochure or door hangers, 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.

**Goal was achieved.****Message Date:**

The Building/Code Enforcement Office reported that 20 septic systems were reconstructed between July 1, 2021 and June 30, 2022. They also reported that there are some cases where the State approved replacements that the Town did not review. Brochures are available at Building/Code Enforcement Office/Public Works Office.

**BMP: Construction/Developers Outreach****Outreach Resources:**

[https://www4.des.state.nh.us/nh-ms4/?page\\_id=54](https://www4.des.state.nh.us/nh-ms4/?page_id=54)

**Description:**

Provide the Construction General Permit outreach letter and brochure to developers, construction contractors, and other municipal or local organizations to educate them on both the new and updated requirements within the EPA 2022 Construction General Permit.

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

**Targeted Audience:**

Construction/ Developers

**Responsible Department/ Parties:**

DPW and Building Department who were responsible for this MS4 outreach effort.

**Measurable Goal(s):**

Contractors, developers, and municipal or local organizations are made aware of the updates and changes made to the EPA 2022 Construction General Permit including the requirement that those who wish to be considered a qualified person to conduct inspections must meet EPA training standards. Contractors and developers are also made aware of the need for proper erosion control practices during construction work.

Following is the number of brochures that were distributed to municipal or local organizations ***during this reporting period:***

Year 4 = 2

The Town of Durham DPW and Planning Department held 2 pre-construction meetings, representing 100% of projects that received planning board approval and began construction ***during this reporting period. Goal was achieved.***

**Message Date:** Ongoing.

## **MCM2 - Public Participation**

### **BMP: Public Participation in Stormwater Management Program Development**

**Description:** The Stormwater Management Program was publicly reviewed at <https://www.ci.durham.nh.us/publicworks/stormwater>. Documents and records relating to the permit are retained and available for 5 years to the public at the Durham Public Works Office.

**Measurable Goal(s):**

Input was received and records are maintained.

**Goal was achieved.**

## **MCM3 – Illicit Discharge Detection and Elimination**

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

The municipality has established legal authority as outlined in the IDDE plan.

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

This SSO section is NOT applicable because we DO NOT have sanitary sewer overflows.

**BMP: Map of Storm Sewer System**

In Year 3, the remainder of the Phase I mapping requirements were mapped, including stormwater BMPs, open channel conveyances, interconnections with other MS4s, and initial catchment delineations. Additionally, previously unidentified outfalls were added to the Town’s outfall inventory, and the GIS location of all outfalls were improved. In Year 4, the Town continues to make improvements to mapping. The connectivity and feature information of stormwater structures within some catchments were improved based on field activities. Two memorandums summarizing the GIS improvements completed by the Town of Durham in Year 3 are available upon request.

The Town has hired a GIS Program Administrator who has been working to improve the Town’s stormwater GIS. The Town has made significant progress on their GIS and will continue to make improvements ahead of the Year 10 deadline for Phase II mapping elements.

**Screening of Outfalls/Interconnections**

Dry weather outfall screening data can be found in this submission.

**Dry Weather Screening**

Number of outfalls screened *during this reporting period*: 32

Percent of total known outfalls screened to date *during this reporting period*: 39%  
*The inventory and ranking of outfalls/interconnections was not updated during Year 4 because outfalls/interconnections ranking did not change from Year 3.*

**Wet Weather Screening**

***Wet weather testing was not required in Year 4 and is due in Year 7.***

No outfalls were inspected for wet weather screening *during this report period*.

Number of outfalls screened *during this reporting period*: N/A

Percent of total outfalls screened to date **during this reporting period:** N/A

## Catchment Investigations

Catchment investigation data can be found in this submission.

Number of catchment investigations **during this reporting period:** 6

Percentage of total catchments investigated to date (Years 1 - Year 4): Unknown

## IDDE Progress

No illicit discharges were found **during this reporting period.**

## Employee Training

Provided training to employees involved in IDDE program **during the reporting period:**

Town of Durham staff were trained using IDDE training videos and a written IDDE SOP created by UNH, the City of Dover, and NHDES. Video topics included collecting data and water samples in the field, analyzing for pertinent parameters as identified in the permit, how to identify an illicit discharge, and general IDDE sampling protocols. Training logs are included in Appendix F of the IDDE report.

In addition, as a routine, IDDE materials and training, including information on how to identify illicit discharges and SSOs are made available to applicable employees in accordance with IDDE plan.

## MCM4 – Construction Site Stormwater Runoff Control

A written site inspection and enforcement program for erosion and sediment control measures was created and is included in our SWMP.

The following tasks are in progress in accordance with the permit.

Number of site plan reviews completed: Mill Plaza (Review Ongoing), 74 Main St. (Review Ongoing), 19-21 Main St, Gerrish Drive (Review Ongoing), 18 Garrison Ave Amendment (Review

Completed), 15 Newmarket Road (Review Completed), 32-34 Madbury Road (Review Completed), 74 Main St. (Review Ongoing)  
Number of inspections: 4  
Number of enforcement actions: 0

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

### **BMP: Post-Construction Ordinance (due in year 3)**

A Post-Construction Ordinance, consistent with the permit requirements, has been adopted.

### **BMP: As-built Drawings**

Procedures for new development and re-development have been adopted and are included as part of the Stormwater Management Regulations within the Site Plan Regulations. The purpose of these standards is to provide reasonable guidance for the regulation of stormwater runoff, during planning, design, construction and post-construction phases, to protect local natural resources from degradation and prevent adverse impacts to adjacent and downstream land, property, facilities and infrastructure. These standards regulate discharges from stormwater and runoff from land development projects and other construction activities to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff. The stormwater management standards apply to any development or redevelopment projects that disturb 5,000 or more square feet. The Planning Board reserves the right to require any development that disturbs less than 5,000 square feet to submit, and then implement, an approved Stormwater Management Plan (complete, as described below, or abbreviated) to prevent degradation of local water resources. The Planning Board may solicit input from the Conservation Commission in making this determination, at its discretion. The applicant shall submit as-built drawings of the constructed stormwater management system to the Town of Durham Department of Public Works following construction. As-built drawings are required prior to the issuance of the Certificate of Occupancy at the completion of the project.

Number of as-built drawings received: 1 (Bagdad Wood 38 Madbury Road)

## **Retrofit Properties Inventory**

- Identified permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

Town of Durham has identified the following permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas:

Street Address	Facility name	Is this property located in the MS4 area?	Impervious Cover Area
50 Piscataqua Road	Wastewater Treatment Facility	Yes	4.19
100 Stone Quarry Drive	DPW	Yes	2.18
6 Meserve Road	Woodridge Park	No	1.29
49 Madbury Road	Library	Yes	0.77
8 Newmarket Road	Town Hall	Yes	0.69
86 Dover Road	Police Department	Yes	0.64
10 Old Piscataqua Road	Churchill Rink	Yes	0.63
8 Old Piscataqua Road	Jackson's Landing	Yes	0.63
Pettee Brook Parking Lot	Pettee Brook Parking Lot	Yes	0.62
Newmarket Road		Yes	0.61
Old Landing Road	Durham Landing	Yes	0.53
46 Dover Road	Dover Pump Station	Yes	0.43
Old Piscataqua Road	Old Piscataqua Road Parking Lot	Yes	0.40
9 Depot Road	Depot Road Parking Lot	Yes	0.33
45 Mill Pond Road	Smith Chapel	Yes	0.33
Oyster River Road	Oyster River Park	Yes	0.27

**Street Design and Parking Lot Guidelines**

- Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:
  - No updates were recommended.

**Green Infrastructure Practices**

- Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:
  - No updates were recommended.



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

### BMP: Catch Basin Cleaning Program

Number of catch basins within MS4 regulated area: 642 (This number was updated in Year 3 following GIS mapping work completed by the Town's Stormwater Consultant Environmental Partners, Inc.) Photo above was shared in the Town's Friday Updates July 2, 2021 found here



#### **ROADWAY CATCH BASIN CLEANING COMPLETED**

The Durham Public Works Department's contractor for its Catch Basin Cleaning Program, Eastern Pipe Service, removed silt and other debris from 175 storm water catch basins this week. The success of the Town's storm water conveyance system is heavily dependent on a catch basin structure that is free of damage and sediment build-up. Durham's network consists of roughly 575 basins. The Catch Basin Cleaning Program is only one part of the requirements to maintain compliance with the Town's federally issued stormwater permit known as the NPDES (National Pollutant Discharge Elimination System) MS4 (Municipal Separate Storm Sewer System) Permit issued by the Environmental Protection Agency (EPA). For more information on the Town's Stormwater Program please visit our website [HERE](#).

<https://www.ci.durham.nh.us/fridayupdate/friday-updates-july-2-2021>

Properly stored and disposed of catch basin cleanings so they did not discharge to receiving waters

Number of catch basins inspected **during this reporting period:** 203

Number of catch basins cleaned **during this reporting period:** 203

Total volume or mass of material removed from all catch basins **during this reporting period:** 6 CY

Total number of catch basins within the MS4 system: 642

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.

## Street Sweeping

- Properly stored and disposed of street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period.

Number of (lane) miles swept **during this reporting period**: Downtown core roadways are swept every weekday in the month of March and twice per week during the remaining 11 months of the year.

Volume of swept material **during this reporting period**: 30 Loads or approximately 90 CY

## Stormwater Pollution Prevention Plan (SWPPP)

- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities

Number of site inspections completed for **during this reporting period**: 4

Number of corrective actions taken **during this reporting period**: 0

Describe any corrective actions taken at a facility with a SWPPP:

No corrective actions necessary

## Operations and Maintenance (O & M) Programs

- O&M programs for all permittee owned facilities have been completed and/or updated as noted below:
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Updated inventory of all permittee owned facilities as necessary

All permittee owned facilities, including an inventory, are included in our SWMP. There were no changes to report during Year 4.

- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants as

outlined in the SWMP

- Inspected all permittee owned treatment structures (excluding catch basins) as outlined in the SWMP
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt as outlined in the SWMP

# Appendix F and H: Water Quality Limited Waters & TMDLs

## Bacteria/Pathogens Impairment (Appendix H) AND TMDL (Appendix F)

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate *during this reporting period*
- Permittee or its agent(s) disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time *during this reporting period*
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria *during this reporting period*

## Chloride Impairment (Appendix H)

- Updated Salt Reduction Plan as necessary *during this reporting period* and can be found at the following website <https://www.ci.durham.nh.us/publicworks/stormwater>

## Nitrogen Impairment (Appendix H)

- Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers *during this reporting period*
- Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate *during this reporting period*
- Distributed an annual message encouraging the proper disposal of leaf litter *during this reporting period*
- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) *during this reporting period*

## **Nitrogen Source Identification Report**

- The Nitrogen Source Identification Report can be found in this submission.

### **Potential Structural BMPs**

The tracking and accounting elements associated with the NH MS4 permit are ongoing, adaptive and are consistent with Attachment 3 of Appendix F of the permit. Currently there is emergent utilization of a new database tracking system called the Pollutant Tracing and Accounting Program (PTAP) supported by NHDES and a select number of municipalities. Coalition communities understand the importance of this effort and are committed to continuing to work towards better tracking and accounting strategies for both structural and non-structural BMPs. PTAP theoretically has limitless expansion capacity in the region and is already integrated with the EPA Region 1 supported BMP Accounting and Tracking Tool (BATT). This emerging collaboration will be a large component of future implementation efforts. While BMP tracking and accounting programs are not fully functional, these integrated planning tools provide a comprehensive solution to successful tracking and accounting metrics now and moving forward in the future.

### **Phosphorus Impairment (Appendix H)**

- Permittee does not have a phosphorus impairment

### **Solids, Oil and Grease (Hydrocarbons), or Metals Impairment(s) (Appendix H)**

- Permittee does not have a solids, oil and grease, or metals impairment(s)

### **Chloride TMDL (Appendix F)**

- Permittee does not have a chloride TMDL

### **Lake and Pond Phosphorus TMDL (Appendix F)**

- Permittee does not have a lake and pond phosphorus TMDL

# Additional Required Information

## Monitoring or Study Results

Results from all stormwater or receiving water quality monitoring or studies conducted **during the reporting period** and **not otherwise mentioned above**, where the data is being used to inform permit compliance or permit effectiveness is:

Not applicable

## Description of Any Changes in Identified BMPs or Measurable Goals

The Town Durham has implemented activities in accordance with the permit and outlined in the SWMP. All BMPs and measurable goals outlined in the SWMP are appropriate.

## Activities Planned for Next Reporting Period

The Town of Durham will continue to implement activities in accordance with the permit and SWMP.

