

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

TOWN OF STRATHAM

Permit Year 3

July 1, 2020 through June 30, 2021

EPA NPDES Permit Number NHR041000

Certification

Instructions: All reports, including SWPPPs, inspection reports, annual reports, monitoring reports, reports on training and other information required by this permit must be signed by a person described in Appendix B, Subsection 11.A or by a duly authorized representative of that person in accordance with Appendix B, Subsection 11.B. If there is an authorized representative to sign MS4 reports, there must be a signed and dated written authorization. Use the following language if your municipality wishes to file using an authorized representative.

Authorized Representative:

The authorization letter is:

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

☒ Publicly available at the website:

www.strathamnh.gov


Instructions: Use the following language if signed by a person described in Appendix B.

"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

DAVID MOORE

Signature



Date

9/27/2021

Primary MS4 Program Manager Contact Information:

Name: NATE MEARS

Title/Position:

DIRECTOR

Department: PUBLIC WORKS DEPARTMENT

Street Address: 10 BUNKER HILL AVENUE

City: STRATHAM

State: New Hampshire

Zip Code:

03885

Email: NMEARS@STRATHAMNH.GOV

Phone Number:

603-772-5550

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, 2020 through June 30, 2021** in accordance with the Permit.

The Notice of Intent (NOI) can be found at the following (document name or web address):

<https://www3.epa.gov/region1/npdes/stormwater/nh/tms4noi/stratham.pdf>

Compliance activities have been identified and described in the Town of Stratham 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.strathamnh.gov/planning-board/pages/stratham-and-ms4>

IDDE: <https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

Any work or progress negatively impacted by the COVID-19 pandemic should be noted. For example, if education and outreach efforts were impacted, note how.

MCM1 - Public Education and Outreach

Instructions: Use the following language if your municipality has Nitrogen or Phosphorus. Every municipality is assumed to be following MCM1 criteria for Bacteria Impairments.

The following describes SSC Education & Outreach decisions made collectively and available on the NHDES MS4 Blog. This language should also be included in your SWMP and is redundant for Year 3.

Year 3 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.

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.

In Year 2, 50 flyers were distributed. In Year 3, 75 flyers were distributed to Transfer Station patrons. Our Goal was achieved.

Information was also printed in Town Select Board Newsletter and made available through social media. Additionally the "Green Grass & Clean Water" information was printed on large format story boards and displayed in Municipal Center, at Town Meeting and Household Hazardous Waste Collection Day. Our Goal was achieved.

Message Date:

Spring/Summer 2021

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

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.

Following is the number of residents that pledged through the PREP "Every Drop" website:
Year 3 = 0

While no residents pledged through PREP "Every Drop" website 80 flyers were distributed to residents at the Municipal Center, Town Meeting, public parks and regional Household Hazardous Waste event. Use of dog waste stations have increased, approximately 3,500 dog waste bags were provided and utilized by park patrons during year 3.

Goal was achieved.

Message Date: April/time of dog license renewal.

BMP: Disposal of Leaf and Grass Clippings

Document Name and/or Web Address:

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.

The Stratham Conservation Commission once again managed the sale of residential compost bins and the Stratham Department of Public Works continued to receive yard waste at the transfer station. This waste is composted and screened into useable soil for DPW projects.

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.

Following is the number of flyers, pledge cards, or door hangers that were distributed:

Year 3 = 90

An average of 150 residents view the best management practices for Leaf and Grass Clippings weekly at the Transfer Station and Municipal Center

Goal was achieved.

Message Date:

Fall September/October 2021

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

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.

In Year 3 the “Get Pumped NH” literature was made available to nearly 1,300 residents through Stratham’s digital and print monthly newsletter.

Goal was achieved.

Message Date:

Spring/Fall 2021

BMP: Developer/Construction Outreach

Description:

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

Targeted Audience:

Land Developers/Contractors

Measurable Goal(s):

Contractors and Land Developers are aware of the need for proper erosion control practices during site development.

The Planning Department held 3 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.strathamnh.gov/planning-board/pages/stratham-and-ms4> Documents and records relating to the permit are retained and available for 5 years to the public at <https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

Measurable Goal(s):

Input was not received; likely related to COVID-19 Pandemic; input always welcome.

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 is not applicable to Stratham because we do not have sanitary sewer or known sanitary sewer overflows.

Number of SSO's identified Year 3: 0

Number of SSO's removed Year 3: 0

BMP: Map of Storm Sewer System

Map of storm sewer system and associated outfalls is in progress.

BMP: IDDE Program (Screenings of Outfalls/Interconnections, Catchment Investigations, and IDDE Progress)

All outfalls and interconnections (excluding problem and excluded outfalls) were inspected and screened. Outfall catchments and interconnections priority ranking were updated based on the information collected during the dry weather inspections. A written IDDE plan has been developed, and written catchment investigation procedures are included.

Outfall identification, characterization and prioritization information has been updated and included in the IDDE plan based on dry weather and wet weather inspection and sampling.

The following tasks have been completed in accordance with the permit.

Number of dry weather outfall investigations/screenings: 8

Number of dry weather samples taken: 2

If conducted during year 3, the investigation data is included in submission.

Number of wet weather outfall inspections/sampling events: 8

Number of wet weather samples taken: 2

If conducted during year 3, the investigation data is included in submission.

Number of catchment investigations: 85

If conducted during year 3, the investigation data should be included in submission.

Number of illicit discharges: 0

Number of illicit discharges removed: 0

Estimated gallons of flow removed: 0 gallons

BMP: Employee Training

Stratham staff were trained using IDDE training videos created by UNH, the City of Dover, and NHDES. Video topics included collecting data and water samples in the field, and analyzing for pertinent parameters as identified in the permit. A video addressing the issues associated with stormwater, common pollutants of concern, how to identify an illicit discharge, and general IDDE sampling protocols is being prepared by NHDES. The video is estimated to be finalized and available to permittees in August 2021. 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: 3

Number of inspections: 9

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

A program to address post-construction stormwater runoff from all new development and redevelopment projects has been developed and implemented, and includes projects that disturb a minimum of one acre, or less than one acre if part of a larger common plan. Procedures for new development and re-development have been prepared/adopted. Submission requirements for stormwater management reports and plans are included in local regulations and can be found at Stratham's Planning Department. The regulations require that

all applications shall include a comprehensive Stormwater Management Plan (SMP). The SMP shall include a narrative description and an Existing Conditions Site Plan showing all pre-development impervious surfaces, buildings and structures; surface water bodies and wetlands; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers, locations of various hydrologic group soil types, mature vegetation, and land topographic contours. Additional submissions include as-built plans and inspection and maintenance plans for all permanent stormwater control measures. As-built drawings are required to be submitted no later than two years from completion of the project.

BMP: Long-term Operation and Maintenance Procedures

A program to address long-term post-construction stormwater runoff from all new development and redevelopment projects has been developed and implemented, and include projects that disturb a minimum of one acre, or less than one acre if part of a larger common plan. Procedures for long-term Operation and Maintenance have been prepared. Submission requirements for stormwater management reports and plans are included in local regulations and can be found at Stratham's Planning Department. In an effort to standardize the long-term O&M and inspection submission requirements across all New Hampshire MS4 communities, as well as standardize any non-compliance actions taken by the municipality, the Seacoast Stormwater Coalition is in the process of working with a selected engineering group (VHB) to develop standardized resources, guidance and an inspection template that towns and municipalities can use to better promote, track and enforce the implementation of best management practices for privately-owned parking areas and drainage infrastructure. These are anticipated to be finalized in the fall of 2021 and will be adopted by Stratham.

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

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

BMP: Green Infrastructure Report (due in year 4)

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

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

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

MCM6 – Good Housekeeping and Pollution Prevention for Permittee Owned Operations

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 of 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 permit.

Number of catch basins within MS4 regulated area: 10

Number catch basins inspected in accordance with the SWMP: 85

Number of catch basins cleaned: 49

Total volume or mass of material removed: 15 cubic yards

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 permit.

Number of (lane) miles swept: 7

Volume or mass of swept material: 3 cubic yards

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. All road salt storage piles are enclosed/covered to prevent runoff into storm drains and water bodies.

Stratham has adopted a Winter Maintenance Procedures in accordance with MCM #6 that has been implemented in the MS4 regulated area. Stratham's Winter Maintenance Procedures can be found at: <https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

BMP: Permittee Owned Facilities Inventory

All permittee owned facilities, including inventory, are included in our SWMP. There were no changes to report during Year 3.

BMP: O&M Programs And Procedures For Permittee-Owned Properties

O&M programs for all permittee owned facilities have been completed and are included in our SWMP. All maintenance procedures have been implemented for permittee owned facilities in accordance with O&M programs.

BMP: Permittee Owned Treatment Structures

Stratham has inspected all permittee owned treatment structures (excluding catch basins)

BMP: SWPPP (due year 3)

SWPPPs were implemented for the following facilities: public works yards, transfer stations, and Stratham Hill Park where pollutants are exposed to stormwater.

Inspections are completed, corrective actions taken, and employees regularly trained as outlined in the SWPPP(s). The SWPPP(s) and associated documentation are located at <https://www.strathamnh.gov/planning-board/pages/stratham-and-ms4>

Number of site inspections for facilities that require a SWPPP completed: 3

Number of corrective actions identified: 0

Number of corrective actions taken: 0

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

Stratham continues to collect information with a goal of inventorying and formally inspecting all municipally owned BMPs. Maintenance is carried out in accordance with the procedures outlined in the SWMP. Any BMPs that are safety or flooding hazards are dealt with as needed.

Instructions: Only include relevant portions for your municipality.

TMDL's and Water Quality Limited Waters

Stratham through its participation in the Seacoast Stormwater Coalition, and continued involvement with the NHDES led Pollutant Tracking and Accounting Program (PTAP) and the Pollutant Loading Maps (aka Hot Spot Maps), will satisfy the tracking and accounting requirement of the municipally-owned structural and non-structural BMP's. Calculations are in accordance with attachments of Appendix F.

Nitrogen

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

Stratham through its participation in the Seacoast Stormwater Coalition, and continued involvement with the NHDES led Pollutant Tracking and Accounting Program (PTAP) and the Pollutant Loading Maps (aka Hot Spot Maps), will satisfy the tracking and accounting requirement of the municipally-owned structural and non-structural BMP's. Calculations are in accordance with attachments of Appendix F.

Chloride

Outfalls to these receiving waters have been ranked as high priority for the IDDE implementation in the initial outfall ranking.

Tracking of the amount of salt applied to all municipally owned and maintained surfaces, and reporting of salt use has been completed either using the [New Hampshire DES MS4 annual salt usage](#) reporting form.

Stratham through its participation in the Seacoast Stormwater Coalition, and continued involvement with the NHDES-led Green Snow Pro Program, have completed winter road maintenance procedures and continue to develop public education efforts regarding impacts of salt use, methods to reduce salt use on private property, and modifications to driving behavior in winter weather.

The Municipal Green Snow Pro Certification Program bill was delayed during the 2020 legislative session due to COVID-19. The bill was put back into legislation during the 2021 legislative session. In June of 2021, it was noted as "ought to pass" by the House of Representatives.

Additional Required Information

Monitoring or Study Results

No additional monitoring or studies were completed.

Description of Any Changes in Identified BMPs or Measurable Goals

Stratham 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 for the Next Reporting Cycle

Stratham will continue to implement activities in accordance with the permit and SWMP.