

New Hampshire Small MS4 General Permit Annual Report

City of Portsmouth

Permit Year 3

July 1, 2020 through June 30, 2021

EPA NPDES Permit Number NHR041027

Certification

Authorized representative:

The authorization letter is:

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

☐ Publicly available at the website:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name

Brian F Goetz

Signature



Date

September 22, 2021

Primary MS4 Program Manager Contact Information:

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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://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities>

Compliance activities have been identified and described in the City of Portsmouth'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: <http://files.cityofportsmouth.com/files/dpw/2019SWMPfinal.pdf>

IDDE: <http://files.cityofportsmouth.com/files/dpw/2019SWMPfinal.pdf#page=107>

MCM1 - Public Education and Outreach

Year 3 Activities

BMP: Grass and Fertilizer

Document Name and/or Web Address:

Green Grass & Clear Water Brochure:

<http://files.cityofportsmouth.com/files/dpw/1 POSTCARD lawn FINAL.pdf>

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.

Following is the number of flyers that were distributed:

Year 3 = 5,400

Goal was achieved.

Message Date: May 2021

BMP: Pet Waste Disposal

Document Name and/or Web Address:

"Every Drop" post cards

<http://files.cityofportsmouth.com/files/dpw/2 EveryDrop Postcard Portsmouth 2021.pdf>

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 =2000

Goal was achieved.

Message Date: March 2021

BMP: Disposal of Leaf and Grass Clippings

Document Name and/or Web Address:

https://www.cityofportsmouth.com/sites/default/files/2019-10/FallYardWastePostcard2019.10.08_0.pdf

Description:

Distribute and promote informational yard clipping and fertilizer mailers, with messaging about impacts from yard waste to waterbodies, alternatives to dumping yard waste and laws against dumping yard waste near or in waterbodies.

Targeted Audience:

Residential &/or Business and Institutions

Measurable Goal(s):

Residents are aware of the water quality impacts of yard waste dumping near or in water bodies and safe alternatives for yard waste disposal.

Following is the number of yard clipping and fertilizer flyers that were distributed at household hazardous waste day:

Year 3 = 628

Goal was achieved.

Message Date: 08/03/20 AND 05/22/21

BMP: Septic System Maintenance

Document Name and/or Web Address:

<http://files.cityofportsmouth.com/files/dpw/4 DPW Get Pumped Brochure 2020.06.10.pdf>

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.

Following is the number of flyers that were distributed:

Year 3 = 396

Goal was achieved.

Message Date: July 2020

BMP: Industrial Outreach

Description:

Distribute outreach letter and stormwater fact sheet to industrial facilities located within MS4 or municipal boundaries to explain best management practices related to maintenance of parking lots, spill prevention, storage of industrial materials, and winter maintenance. Industrial facility operators were also made aware that they fall under the EPA Multi-Sector General Permit (MSGP) and must meet those requirements as well.

Targeted Audience:

Industrial Facilities

Measurable Goal(s):

Industrial facility operators are aware of the need for proper stormwater best management practices within their facilities and requirements under the EPA Multi-Sector General Permit (MSGP).

Following is the number of letters including fact sheets that were distributed:

Year 3 = 12

Goal was achieved.

Message Date: August 2021

MCM2 - Public Participation

BMP: Public Participation in Stormwater Management Program Development

Description: Due to COVID restrictions the Stormwater Management Program was not publicly reviewed in year 3. It was publically presented on November 18, 2019 and the video of that presentation is linked to on the City's Stormwater website. <https://youtu.be/6z-xHYteQ9M> Documents and records relating to the permit are retained and available for 5 years to the public at <http://files.cityofportsmouth.com/files/dpw/2019SWMPfinal.pdf>

Measurable Goal(s):

Input was received and records are maintained. Goal not achieved.

MCM3 – Illicit Discharge Detection and Elimination

BMP: IDDE Legal Authority

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

<http://files.cityofportsmouth.com/files/dpw/2019SWMPfinal.pdf#page=115>

BMP: Sanitary Sewer Overflow (SSO) Inventory

The City of Portsmouth has developed the SSO inventory in accordance with permit conditions and in accordance with the applicable regulations and/or municipality's NPDES discharge permit.

The SSO inventory for The City of Portsmouth has been updated as follows: including the status of mitigation and corrective measures implemented.

Number of SSO's identified Year 3: 4

Number of SSO's removed Year 3: 4

BMP: Map of Storm Sewer System

Map of storm sewer system and associated outfalls is complete.

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

All outfalls and interconnections were inspected and dry weather 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 updated, 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 sampling.

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

Number of dry weather outfall investigations/screenings: 0

Number of dry weather samples taken: 0

Number of wet weather outfall inspections/sampling events: 58

Number of wet weather samples taken: 49

See attached table of sampling results for 2020 dry weather inspections and 2021 wet weather inspections.

Number of catchment investigations: 0

BMP: Employee Training

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.

The City of Portsmouth held an IDDE training session for municipal staff in July 2020. 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. Training logs are included in Appendix F of the IDDE report.

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. All applications for Site Review must include a Stormwater Management & Erosion Control Plan as dictated by the City's Site Plan Review Regulations and are reviewed by the Planning Board and Technical Review Committee.

<https://files.cityofportsmouth.com/files/planning/SitePlanReviewRegs.pdf#page=47>

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

Number of site plan reviews completed: 17

Number of inspections: 17

Number of enforcement actions: 0

MCM5 – Post Construction Stormwater Management in New Development and Redevelopment

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

City adopted new Site Plan Regulations in November 2020 requiring new and redevelopment disturbing 15,000 sq ft or more area to treat stormwater using SWA recommendations.

<https://files.cityofportsmouth.com/files/planning/SitePlanReviewRegs.pdf#page=51>

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 adopted. Submission requirements for stormwater management reports and plans are included in local regulations and can be found at:

<https://files.cityofportsmouth.com/files/planning/SitePlanReviewRegs.pdf#page=51>.

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 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 as a condition for the release of performance security bond.

Number of as-built drawings received: 15

BMP: Long-term Operation and Maintenance Procedures

The City of Portsmouth is currently developing long-term development performance practices for approved privately-owned development projects. As part of the 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 the City of Portsmouth

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

A Stormwater Operations and Maintenance Manual was developed and can be found on the City of Portsmouth website. Specific O&M procedures for the BMPs listed below can be found in the linked document.

[http://files.cityofportsmouth.com/files/dpw/Portsmouth Stormwater Operations & Maintenance Plan.pdf](http://files.cityofportsmouth.com/files/dpw/Portsmouth%20Stormwater%20Operations%20&%20Maintenance%20Plan.pdf)

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: 2,558

Number catch basins inspected in accordance with the SWMP: 550

Number of catch basins cleaned: 440

Total volume or mass of material removed: 115 tons

BMP: Street Sweeping Program

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

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

Number of (lane) miles swept: 790

Mass of swept material: 150 tons

BMP: Winter Road Maintenance Program

A winter road maintenance program has been established with a goal of reducing salt usage. Salt reduction strategies have been implemented as outlined in our SWMP. All road salt storage piles are enclosed/covered to prevent runoff into storm drains and water bodies.

The City of Portsmouth has adopted a Salt Reduction Plan in accordance with appendix H that has been implemented in the MS4 regulated area and/or community-wide. The City of Portsmouth Salt Reduction Plan can be found at:

[http://files.cityofportsmouth.com/files/dpw/Portsmouth Salt Reduction Plan-Final.pdf](http://files.cityofportsmouth.com/files/dpw/Portsmouth%20Salt%20Reduction%20Plan-Final.pdf)

BMP: Permittee Owned Facilities Inventory

A review of all permittee owned facilities was completed and the inventory has been updated. The SWMP has been updated to reflect this and includes the following additional facilities:

- Senior Activity Center

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

The City of Portsmouth has inspected all permittee owned treatment structures (excluding catch basins)

BMP: SWPPP

SWPPPs were implemented for the following facilities: Department of Public Works 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 [http://files.cityofportsmouth.com/files/dpw/Stormwater Pollution Prevention Plan \(SWPPP\) September 2021.pdf](http://files.cityofportsmouth.com/files/dpw/Stormwater%20Pollution%20Prevention%20Plan%20(SWPPP)%20September%202021.pdf)

Number of site inspections for facilities that require a SWPPP completed: 2

Number of corrective actions identified: 0

Number of corrective actions taken: 0

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

The City of Portsmouth has completed the inventory and formally inspected all municipally owned BMPs. Maintenance is carried out in accordance with the procedures outlined in the SWMP.

TMDL's and Impaired Bodies of Waters

TMDL(s)

Bacteria/Pathogens

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

Impairments

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.

The City of Portsmouth 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. The City has also initiated the development of a Nutrient Source Identification Report (NSIR) which is expected to be completed by June 2022.

Solids, Oil and Grease (Hydrocarbons), or Metals

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

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 [UNH T2 online tool](#) or the [New Hampshire DES MS4 annual salt usage](#) reporting form.

The City of Portsmouth 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.

Created a Salt Reduction Plan which can be found at [http://files.cityofportsmouth.com/files/dpw/Portsmouth Salt Reduction Plan-Final.pdf](http://files.cityofportsmouth.com/files/dpw/Portsmouth%20Salt%20Reduction%20Plan-Final.pdf)

Additional Required Information

Monitoring or Study Results

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

FB Environmental Associates conducted water quality monitoring of the Sagamore Creek. A draft report, titled *2020 – 2021 WATER QUALITY MONITORING REPORT FOR SAGAMORE CREEK*, is in production.

Description of Any Changes in Identified BMPs or Measurable Goals

The City of Portsmouth 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

The City of Portsmouth will continue to implement activities in accordance with the permit and SWMP. For the following reporting cycle the following activities are planned:

- Snow Rodeo- Winter Maintenance and salt reduction training for all public works employees
- Outreach videos on stormwater BMPs
- Instagram account @Thinkblueportsmouthnh, a platform to find education and outreach videos
- Install additional pet waste sign at City parks
- Continue to host two Household Hazardous Waste Collection Days a year
- Collaboration with the Seacoast Stormwater Coalition on BMP for privately owned outreach and tracking
- Collaboration with UNH Stormwater Center and Department of Environmental Services, hosting Pollution Tracking and Accounting Program (PTAP) training for New Hampshire Seacoast communities
- Collaboration with Strawberry Banke, “Water has a Memory” museum exhibit with Think Blue! Stormwater education and outreach