

Year 2 Annual Report
New Hampshire Small MS4 General Permit
Reporting Period: July 1, 2019-June 30, 2020

*****Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form*****

Unless otherwise noted, all fields are required to be filled out. If a field is left blank, it will be assumed the requirement or task has not been completed. Please ONLY report on activities between July 1, 2019 and June 30, 2020 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization: City of Portsmouth, NH

EPA NPDES Permit Number: NHR041027

Primary MS4 Program Manager Contact Information

Name: Brian Goetz

Title: Deputy Director of Public Works

Street Address Line 1: 680 Peverly Hill Road

Street Address Line 2: na

City: Portsmouth

State: NH

Zip Code: 03801

Email: bfgoetz@cityofportsmouth.com

Phone Number: (603) 766-1420

Stormwater Management Program (SWMP) Information

SWMP Location (web address): <http://files.cityofportsmouth.com/files/dpw/2019SWMPfinal.pdf>

Date SWMP was Last Updated: Sep 25, 2020

If the SWMP is not available on the web please provide the physical address:

Dept of Public Works, 680 Peverly Hill Road, Portsmouth NH 03801

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the most recent EPA approved Section 303(d) Impaired Waters List which can be found here: <https://www.epa.gov/tmdl/region-1-impaired-waters-and-303d-lists-state>

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

Next, check off all requirements below that have been completed. By checking each box you are certifying that you have completed that permit requirement fully. If you have not completed a requirement leave the box unchecked. Additional information will be requested in later sections.

Year 2 Requirements

- Completed Phase I of system mapping
- Developed a written catchment investigation procedure and added the procedure to the SWMP
- Developed written procedures to require the submission of as-built drawings and ensure the long term operation and maintenance of completed construction sites and added these procedures to the SWMP
- Enclosed or covered storage piles of salt or piles containing salt used for deicing or other purposes
- Developed written operations and maintenance procedures for parks and open space, buildings and facilities, and vehicles and equipment and added these procedures to the SWMP
- Developed an inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment and added this inventory to the SWMP
- Completed a written program for MS4 infrastructure maintenance to reduce the discharge of pollutants
 - Developed written SWPPPs, included in the SWMP, for all of the following permittee owned or operated facilities: maintenance garages, public works yards, transfer stations, and other waste handling facilities where pollutants are exposed to stormwater

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Annual Requirements

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements
- Kept records relating to the permit available for 5 years and made available to the public
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented
 - This is not applicable because we do not have sanitary sewer
 - This is not applicable because we did not find any new SSOs
 - The updated SSO inventory is attached to the email submission
 - The updated SSO inventory can be found at the following website:

- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- Provided training to employees involved in IDDE program within the reporting period
- All curbed roadways were swept at least once within the reporting period
- Updated outfall and interconnection inventory and priority ranking as needed

Optional: If you would like to describe progress made on any incomplete requirements listed above, provide any additional information, and/or if any of the above annual requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

The City is still working on dry weather sampling results to inform improved priority ranking of outfalls.

Bacteria/ Pathogens (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)

Annual Requirements

*Public Education and Outreach**

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

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Chloride Impairment

Annual Requirements

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Portsmouth has initiated the development of a Draft Reduction Plan which is anticipated to be completed by the end of Year 3.

Nitrogen Impairment

Annual Requirements

*Public Education and Outreach**

- Distributed an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers
- Distributed an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate
- Distributed an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

** Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information)*

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

Potential structural BMPs

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents was tracked and the nitrogen removal by the BMP was

- estimated consistent with Attachment 1 to Appendix H. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated nitrogen removed in mass per year by the BMP were documented.

- The BMP information is attached to the email submission
- The BMP information can be found at the following website:

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

*Distributed an annual message in the spring (Fall 2019) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers

*The lawn care/ fertilizer public education message was disseminated in May of 2020 at Household Hazardous Waste Day.

*Downtown area streets are swept weekly and mapping of curbed streets is complete.

*BMP inventory completed but estimates of nitrogen removal are still being developed and will be finalized in Year 3.

Solids, Oil and Grease (Hydrocarbons), or Metals Impairment(s)

Annual Requirements

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

- Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads

Optional: If you would like to describe progress made on any incomplete requirements listed above or provide any additional details, please use the box below:

Optional: Use the box below to provide any additional information you would like to share as part of your self-assessment:

*Downtown area streets are swept weekly and mapping of curbed streets is complete. Curbed streets outside of the downtown are swept monthly, April - November.

Part III: Receiving Waters/Impaired Waters/TMDL

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

Yes

No

If yes, describe below, including any relevant impairments or TMDLs:

Added nitrogen impairment to Back Channel consistent with EPA's letter of authorization and its partial approval of the state's 2016 303(d) impaired waters list with the exception of certain coastal water assessment units.

Part IV: Minimum Control Measures

Please fill out all of the metrics below. If applicable, include in the description who completed the task if completed by a third party.

MCM1: Public Education

Number of educational messages completed during this reporting period: 3

Below, report on the educational messages completed during this reporting period. For the measurable goal(s) please describe the method/measures used to assess the overall effectiveness of the educational program.

BMP: Pet Waste Educational Post Cards / Signage

Message Description and Distribution Method:

The City distributed 1,500 pet waste post cards at City Clerk's office during the dog licensing renewal period and posted similar flyers various locations throughout the City to encourage residents to cleanup and properly dispose pet waste. The City has one dog park and several parks frequently used by dog owners.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reduce the number of observed incidences where dog waste is left on the ground in public places where dog walking is allowed.

Message Date(s): Annually March/April (dog license renewal period)

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Disposal of leaf litter educational flyer

Message Description and Distribution Method:

The City mailed 6000 Proper disposal of leaf litter educational fliers titled "Rake it or Leave it" and posted similar flyers in various location throughout the City to encourage residents to cleanup and properly dispose of leaf litter. In the Year 1 reporting period the City disposed of 691 tons of yard waste.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Increase in the volume of yard waste material hauled out at the City recycling center. Goal achieved. During

the Year 2 reporting period the City disposed of 1300 tons of yard waste.

Message Date(s): November 2019

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

BMP: Maintenance of Septic Systems Educational Pamphlete

Message Description and Distribution Method:

The City mailed 397 educational pamphlets titled "GET PUMPED!" pertaining to proper maintenance of septic systems. These mailers were sent to all residents known to not be serviced by City or private sewer systems. Similar fliers were posted in various locations throughout the City.

Targeted Audience: Residents

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Message Date(s): May 2020

Message Completed for: Appendix F Requirements Appendix H Requirements

Was this message different than what was proposed in your NOI? Yes No

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) during this reporting period:

The SWMP has been posted on City's DPW Stormwater web site and has been made available to the public for review. As changes are made over time, the revised SWMP will be reposted for public review. On November 18th, 2019 the City held a public meeting reviewing the MS4 permit and Stormwater Management

Program. The meeting can be viewed here <https://www.youtube.com/watch?v=6z-xHYteQ9M>

Was this opportunity different than what was proposed in your NOI? Yes No

Describe any other public involvement or participation opportunities conducted **during this reporting period:**

The City's online "Click and Fix" system allows residents to submit comments on stormwater or any other related issues in the City. Comments may include any observed blockages, backups, illicit discharges, violations, or other concerns. City staff perform follow up site visits and conduct any necessary maintenance in response.

MCM3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

Check off the box below if the statement is true.

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

Below, report on the number of SSOs identified in the MS4 system and removed during this reporting period.

Number of SSOs identified: 6

Number of SSOs removed: 6

MS4 System Mapping

Below, check all that apply.

The following elements of the Phase I map have been completed:

- Outfalls and receiving waters
- Open channel conveyances
- Interconnections
- Municipally-owned stormwater treatment structures
- Waterbodies identified by name and indication of all use impairments
- Initial catchment delineations

Describe any additional progress you made on your map during this reporting period or provide additional status information regarding your map:

Screening of Outfalls/Interconnections

If conducted, please submit any outfall monitoring results from this reporting period. Outfall monitoring results should include the date, outfall/interconnection identifier, location, weather conditions at time of sampling, precipitation in previous 48 hours, field screening parameter results, and results from all analyses.

- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

Below, report on the number of outfalls/interconnections screened during this reporting period.

Number of outfalls screened: 206

Below, report on the percent of total outfalls/ interconnections screened to date.

Percent of total outfalls screened: 100

Catchment Investigations

If conducted, please submit all data collected during this reporting period as part of the dry and wet weather investigations. Also include the presence or absence of System Vulnerability Factors for each catchment.

- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

Below, report on the number of catchment investigations completed during this reporting period.

Number of catchment investigations completed this reporting period: 0

Below, report on the percent of catchments investigated to date.

Percent of total catchments investigated: 0

Optional: Provide any additional information for clarity regarding the catchment investigations below:

Catchment investigations will begin to be conducted in Year 3.

IDDE Progress

If illicit discharges were found, please submit a document describing work conducted over this reporting period, and cumulative to date, including location source; description of the discharge; method of discovery; date of discovery; and date of elimination, mitigation, or enforcement OR planned corrective measures and schedule of removal.

- The illicit discharge removal report is attached to the email submission
- The illicit discharge removal report can be found at the following website:

Below, report on the number of illicit discharges identified and removed, along with the volume of sewage removed during this reporting period.

Number of illicit discharges identified: 0

Number of illicit discharges removed: 0

Estimated volume of sewage removed: 0 gallons/day

Below, report on the total number of illicit discharges identified and removed to date. At a minimum, report on the number of illicit discharges identified and removed since the effective date of the permit (July 1, 2018).

Total number of illicit discharges identified: 0

Total number of illicit discharges removed: 0

Optional: Provide any additional information for clarity regarding illicit discharges identified, removed, or planned to be removed below:

Employee Training

Describe the frequency and type of employee training conducted **during the reporting period:**

Stormwater team employees were trained once during the reporting period. This training involved locating and inspecting outfalls, how to take a bacteria sample and readings for water quality parameters pertaining to the MS4 Permit.

MCM4: Construction Site Stormwater Runoff Control

Below, report on the construction site plan reviews, inspections, and enforcement actions completed during this reporting period.

Number of site plan reviews completed: 17

Number of inspections completed: 21

Number of enforcement actions taken: 0

Optional: Enter any additional information relevant to construction site plan reviews, inspections, and enforcement actions:

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance or Regulatory Mechanism

Below, select the option that describes your ordinance or regulatory mechanism progress.

- Bylaw, ordinance, or regulations are updated and adopted consistent with permit requirements
- Bylaw, ordinance, or regulations are updated consistent with permit requirements but are not yet adopted
- Bylaw, ordinance, or regulations have not been updated or adopted

As-built Drawings

Describe the measures the MS4 has utilized to require the submission of as-built drawings and ensure long term operation and maintenance of completed construction sites:

Required by Site Development Regulations. Section 2.16 Project Inspection and Completion

2.16.3 As-Built Plan

1. At the completion of the project, the applicant shall submit to the Planning Director three (3) copies of an “as-built plan” which shall include all surface and subsurface features, easements, licenses, rights-of-way, and maintenance agreements. The plan shall be prepared and stamped by a New Hampshire licensed land surveyor.

2.16.5 Long-Term Maintenance

The property owner shall maintain the property to comply with the approved site plan and shall fulfill all reporting requirements stipulated in the site plan review agreement.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment due in year 4 of the permit term, including any planned or completed changes to local regulations and guidelines:

The City has a Complete Streets Policy adopted in 2013.
http://www.planportsmouth.com/completestreet_policy.pdf

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

Green Infrastructure Report

Describe the status of the green infrastructure report due in year 4 of the permit term, including the findings and progress towards making the practice allowable:

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

Retrofit Properties Inventory

Describe the status of the inventory, due in year 4 of the permit term, of permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas and report on any properties that have been modified or retrofitted:

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

MCM6: Good Housekeeping

Catch Basin Cleaning

Below, report on the number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins during this reporting period.

Number of catch basins inspected: 1,278

Number of catch basins cleaned: 1,100

Total volume or mass of material removed from all catch basins: 148.91 tons

Below, report on the total number of catch basins in the MS4 system.

Total number of catch basins: 2,558

If applicable:

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

The City has only completed one inspection/cleaning event for catch basins.

Street Sweeping

Report on street sweeping completed during this reporting period using one of the three metrics below.

Number of miles cleaned:

Volume of material removed:

[Select Units]

Weight of material removed: 201.3

tons

O&M Procedures and Inventory of Permittee-Owned Properties

Below, check all that apply.

The following permittee-owned properties have been inventoried:

- Parks and open spaces
- Buildings and facilities
- Vehicles and equipment

The following O&M procedures for permittee-owned properties have been completed:

- Parks and open spaces
- Buildings and facilities

Vehicles and equipment

Stormwater Pollution Prevention Plan (SWPPP)

Below, report on the number of site inspections for facilities that require a SWPPP completed during this reporting period.

Number of site inspections completed:

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

Additional Information

Monitoring or Study Results

Results from any other 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 must be attached.

- Not applicable
- The results from additional reports or studies are attached to the email submission
- The results from additional reports or studies can be found at the following website(s):

If such monitoring or studies were conducted on your behalf or if monitoring or studies conducted by other entities were reported to you, a brief description of the type of information gathered or received shall be described below:

FB Environmental Associates conducted water quality monitoring of the Sagamore Creek and produced a report "2019-20 WATER QUALITY MONITORING REPORT FOR SAGAMORE CREEK" dated Sept. 2020. See email attachment.

Additional Information

Optional: Enter any additional information relevant to your stormwater management program implementation during the reporting period. Include any BMP modifications made by the MS4 if not already discussed above:

- *Updated City website for Stormwater and Public Outreach
- *Participation in Seacoast Stormwater Coalition
- *Participation in PTAPP
- *Began construction of gravel wetland at DPW
- *Improved treatment and removal of nitrogen contained in stormwater at new Pierce Island wastewater treatment facility.

COVID-19 Impacts

Optional: If any of the above year 2 requirements could not be completed due to the impacts of COVID-19, please identify the requirement that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

Due to the disruption caused by the Covid19 virus pandemic, completion of the O&M Plan was delayed but it is anticipated to be completed in the 2nd half of 2020 or at the very least by the end of the Year 3 (June 2021) depending on the extent of ongoing virus disruptions.

Activities Planned for Next Reporting Period

Please confirm that your SWMP has been, or will be, updated to comply with all applicable permit requirements including but not limited to the year 3 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Inspect all outfalls/ interconnections (excluding Problem and Excluded outfalls) for the presence of dry weather flow
- Complete follow-up ranking as dry weather screening becomes available

Annual Requirements

- Annual report submitted and available to the public
- Annual opportunity for public participation in review and implementation of SWMP
- Keep records relating to the permit available for 5 years and make available to the public
- Properly store and dispose of catch basin cleanings and street sweepings so they do not discharge to receiving waters
- Annual training to employees involved in IDDE program
- Update inventory of all known locations where SSOs have discharged to the MS4 in the last 5 years
- Continue public education and outreach program
- Update outfall and interconnection inventory and priority ranking and include data collected in connection with the dry weather screening and other relevant inspections conducted
- Implement IDDE program
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspection of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all uncurbed streets at least annually
- Continue investigations of catchments associated with Problem Outfalls
- Review inventory of all permittee owned facilities in the categories of parks and open space, buildings and facilities, and vehicles and equipment; update if necessary

Provide any additional details on activities planned for permit year 3 below:



Part V: Certification of Small MS4 Annual Report 2020

40 CFR 144.32(d) Certification

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 gather and evaluate 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, I certify that 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.

Name: Title:

Signature: Date:

[Signatory may be a duly authorized representative]