

Year 4 Annual Report
New Hampshire Small MS4 General Permit
Reporting Period: July 1, 2021 - June 30, 2022
Bedford, NH

EPA NPDES Permit Number NHR041036

Certification of Small MS4 Year 4 Annual Report

"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

Rick Sawyer

Title

Town Manager

Signature



Date

9/27/2022

Authorized Representative:

The authorization letter is:

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

N/A

- ☐ Publicly available at the website:

N/A

Primary MS4 Program Manager Contact Information:

Name: Jeanne Walker Title/Position: Town Engineer/Assistant Director of Public Works

Department: Public Works

Street Address: 55 Constitution Drive

City: Bedford

State: New Hampshire

Zip Code: 03110

Email: jwalker@bedfordnh.org

Phone Number: 603-472-3070

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 Bedford's Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents and other pertinent Year 4 information can be found in submission or at the following websites, and will be referred to throughout this report:

SWMP: SWMP: <https://www.bedfordnh.org/DocumentCenter/View/4891/Bedford-SWMP-?bidId=>

Date SWMP was Last Updated: 9/12/2022

IDDE Program Plan: <https://www.bedfordnh.org/DocumentCenter/View/4065/MCM-3>

SSO Inventory: None for this reporting period

Dry Weather Screening Data: None for this reporting period

Inventory and Ranking of Outfalls/Interconnections:
<https://www.bedfordnh.org/DocumentCenter/View/5966/Bedford-Outfalls-Spreadsheet>

Wet Weather Screening Data: None for this reporting period

Catchment Investigation Data: None for this reporting period

Illicit Discharge Removal Report: None for this reporting period

Salt Reduction Plan: <https://www.bedfordnh.org/DocumentCenter/View/5965/Appendix-H-Salt-Reduction-Plan-Draft>

Nitrogen Source Identification Report: N/A

Phosphorus Source Identification Report: N/A

Chloride Reduction Plan: N/A

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 type="checkbox"/> Nitrogen |
| <input type="checkbox"/> Phosphorus | <input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals | |

TMDL(s)

- | | | |
|--|-----------------------------------|--|
| <input checked="" type="checkbox"/> Bacteria and Pathogens | <input type="checkbox"/> Chloride | <input checked="" 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?

☒ Yes

The Town of Bedford has made changes to the list of receiving waters, outfalls, or impairments since the NOI submission, due to changes in the 2018 303(d) list. The following impairments and/or TMDLs have been added or delisted:

Water Quality Impaired Waters:

Added:

- Bog Brook, Dissolved Oxygen & pH
- South Perimeter Brook, Chloride & Iron
 - **Note:** *This is not actually located in Bedford* but is listed on the 303(d) list as being in Bedford. It is located on the east side of the Merrimack River and Bedford is located on the west side of the Merrimack River.

Delisted:

- Pointer Club Brook
- Bowman Brook

TMDL: None

Minimum Control Measures

MCM 1: Public Education

Total number of all MS4 related educational efforts completed during this reporting period: **8**

BMP #1.1: Septic System Maintenance – Brochures/Pamphlets

Document Name: “Get Pumped!” Brochure

Web Address: <https://www.bedfordnh.org/DocumentCenter/View/4103/Septic-System-Maintenance-Brochure>

Description: Distribute and promote brochure, 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

Responsible Department/Parties: Bedford Public Works Department

Measurable Goal(s): Increase residents’ awareness of septic system maintenance and water quality impacts. Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.2: Pet Waste Disposal – Brochures/Pamphlets

Document Name "Every Drop" Brochure

Web Address: <https://www.bedfordnh.org/DocumentCenter/View/4102/Petwaste-Disposal-Brochure>

Description: Distribution and promotion of "Every Drop" flyer with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include pledge to pick up pet waste. Available during dog registration and other events or venues (veterinarians, dog training, groomers, etc.). Posted at the Town office and on the town's stormwater website. Every Drop is a collaborative education effort with PREP, NHDES and other partners.

Targeted Audience: Residents - Pet Owners

Responsible Department/Parties: Bedford Public Works Department

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. In addition, the town will be selecting five pledges to receive a standard dog license free of charge. Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.3: Grass and Fertilizer – Brochures/Pamphlets

Document Name: "Green Grass & Clear Water" Brochure

Web Address: <https://www.bedfordnh.org/DocumentCenter/View/4101/Grass-and-Fertilizer-Brochure>

Description: Distribution and promotion of brochure 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: Residences, Businesses and Institutions

Responsible Department/Parties: Bedford Public Works Department

Measurable Goal(s): Lawn care enthusiasts' 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 materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.4: Disposal of Leaf and Grass Clipping – Brochures/Pamphlets

Document Name: "Rake it or Leave it" Brochure

Web Address: <https://www.bedfordnh.org/DocumentCenter/View/4227/Leaf-Litter-Brochure>

Description: Distribute and promote informational flyer with messaging about impacts from yard waste on waterbodies, alternatives to dumping yard waste and laws against dumping yard waste near or in waterbodies. Promote and provide information to residents regarding the Town's new composting program.

Targeted Audience: Residences, Businesses and Institutions

Responsible Department/Parties: Bedford Public Works Department.

Measurable Goal(s): Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages. Track observations of any changes in known dumping sites. Following year 4, the Town may measure reductions in purchased fertilizer that is replaced by town produced compost. The Town may also measure reductions in solid waste volume/weight due to food waste being composted.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.5: Storm Water Website

Website: <https://ms4-and-storm-water-management-bedfordnh.hub.arcgis.com/>

Description: Information on MS4 permit requirements and posting of related documents, notices and materials regular pumping and maintenance of septic systems.

Targeted Audience: All target audiences

Responsible Department/Parties: Bedford Public Works Department/Website Administrator.

Measurable Goal(s): Maintain an up-to-date website for dissemination and posting of MS4 permit and stormwater information. Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.6: Salt Storage and Use – Brochures/Pamphlets

Document Name: Winter Newsletter Salt Bulletin

Web Address:

<https://bedfordnh.maps.arcgis.com/sharing/rest/content/items/8469529078a04ed3b844c2af8f3a8ace/data>

Description: Information on storage/use of salt or deicing materials. Information will be available on the storm water website and in the winter DPW newsletter.

Targeted Audience: Residents, businesses, institutions, commercial facilities, landscaping companies and private maintenance and snowplowing contractors.

Responsible Department/Parties: Bedford Public Works Department

Measurable Goal(s): Increase awareness of effects that salt or deicing materials have on surrounding environment and water quality; Increase awareness to better manage and reduce the amount of salt or deicing materials used; Increase awareness of proper storage of salt or deicing materials. Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.7: Salt Storage and Use – Brochures/Pamphlets

Document Name: Stormwater and Land Disturbance Management Regulations

Web Address: www.bedfordnh.org/DocumentCenter/View/4245/Stormwater-and-Land-Disturbance-Management-Regulations (page 3, #5)

Description: Information on storage/use of salt or deicing materials. Information is be available on the Town website.

Targeted Audience: Industrial facilities

Responsible Department/Parties: Bedford Public Works Department

Measurable Goal(s): Increase awareness of effects that salt or deicing materials have on surrounding environment and water quality; Increase awareness to better manage and reduce the amount of salt or deicing materials used; Increase awareness of proper storage of salt or deicing materials. Measurement includes materials distribution methods and/or numbers and/or change in visits to municipal stormwater webpages.

Message Date: Annually/Ongoing

Following is the number of municipal stormwater webpage views: **1,749**

Goal was achieved.

BMP 1.8: Hazardous Household Waste Day Flyer

Website: <https://www4.des.state.nh.us/nh-ms4/wp-content/uploads/2021/09/Bedford-Household-Hazardous-Waste-Day-Flyer.docx>

Description: Distribution of flyers produced by Town of Bedford DPW and distributed at our annual Household Hazardous Waste Day, providing information on stormwater subjects including: Septic, Pet Waste, Leaf Litter, Lawn Care and Chemical Use, Pool Draining, and Salt Use.

Targeted Audience: Residential, Business and Institutions

Measurable Goal(s):

Goal measurables are flyer distribution counts.

Following is the number of flyer distributions: **50**

Goal was achieved.

Provide any additional relevant details, in the box below:

In year 5, the Town intends to review all MCM 1 BMP's listed in the SWMP and modify them where appropriate, to create more effective and measurable public outreach practices.

MCM 2: Public Participation

- ☒ Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements as described in the Town of Bedford SWMP.
- ☒ Kept records relating to the permit available for 5 years and made available to the public

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

Description: The Stormwater Management Program (SWMP) was publicly available with a contact link to provide comments on the Town Stormwater Website (<https://ms4-and-storm-water-management-bedfordnh.hub.arcgis.com/>). Documents and records relating to the permit are retained and available for 5 years to the public at DPW administration office located at 55 Constitution Drive.

Measurable Goal(s):

Input was received and records are maintained. **Goal was achieved.**

Public involvement and participation opportunities are also ancillary to daily operations.

The Town has also conducted the following public involvement or participation opportunities with Touch-A-Truck and Household Hazardous Waste Collection Day events.

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

- ☒ This SSO section is NOT applicable because we DID NOT find any new SSOs.

MS4 System Mapping

- ☒ Updated system map due in Year 2 as necessary:

The System map was updated in year 2 as required. Since then, the map of the system and associated outfalls is continually updated to reflect findings and changes.

Screening of Outfalls/Interconnections

- ☒ No outfalls were inspected for dry weather screening during this report period.

The inventory and ranking of outfalls/interconnections were not updated during Year 4 because outfalls/interconnections were not inspected.

Wet Weather Screening

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

Due to drought conditions no wet weather screening was performed until July 2022 and will be reported on in the next annual report.

Catchment Investigations

- ☒ No catchment investigations were conducted during this report period.

IDDE Progress

- ☒ No illicit discharges were found during this reporting period.

Total number of illicit discharges removed since the effective date of the permit (July 1, 2018): **6**

Employee Training

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

The Town of Bedford held an IDDE training session for municipal staff on 11/16/2021. 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.

Provide any additional relevant details, in the box below:

As noted, wet weather screening was delayed until July 2022 due to drought conditions. It will be reported on in the year 5 annual report.

MCM 4: Construction Site Stormwater Runoff Control

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

Number of site plan reviews completed during this reporting period: **17**

Number of inspections completed during this reporting period: **27**

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

The Town of Bedford works closely with contractors to address identified environmental concerns for the least environmental impact. Enforcement actions will only be taken as a last resort. Remedial actions were undertaken based upon comments from the inspection and properly addressed the concerns.

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance or Regulatory Mechanism

- ☒ The Town of Bedford has regulatory mechanism consistent with permit requirements 2.3.6.a.ii.

Date regulatory mechanism was adopted: **December 11, 2019**

As-built Drawings

Number of as-built drawings received during this reporting period: **1**

Retrofit Properties Inventory

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

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

1. 20 County Rd
2. 19 Nashua Rd
3. 55 Constitution Dr
4. 3 Meetinghouse Rd
5. 24 N Amherst Rd

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.

MCM 6: Good Housekeeping

Catch Basin Cleaning

- ☒ Properly stored and disposed of catch basin cleanings so they did not discharge to receiving waters
- ☒ Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events:

Number of catch basins inspected during this reporting period: **716**

Number of catch basins cleaned during this reporting period: **716**

Total volume of material removed from all catch basins during this reporting period: **359.6 cubic yards**

Total number of catch basins within the MS4 system: **2065**

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: **61**

Volume of swept material during this reporting period: **34.9 Cubic Yards**

Describe progress made on any incomplete requirements listed above or optionally provide any additional relevant details, in the box below:

Street sweeping goal was only partially met due to Covid related supply chain issues substantially impacting street sweeper repair time.

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: **9**

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 known 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)

- ☐ Permittee does not have a chloride impairment
- ☒ Updated Salt Reduction Plan as necessary during this reporting period and can be found at the following website <https://www.bedfordnh.org/DocumentCenter/View/5965/Appendix-H-Salt-Reduction-Plan-Draft>

Nitrogen Impairment (Appendix H)

- ☒ Permittee does not have a nitrogen impairment

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

Note: Street sweeping was limited due to Covid interruption but was concentrated in high pollutant load areas.

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

☒ Calculated baseline phosphorus, allowable phosphorus load, and phosphorus reduction requirement during this reporting period

☒ Defined the scope of the Lake Phosphorus Control Plan (LPCP).

The PCP scope is the entire area within our jurisdiction discharging to the impaired Waterbody during this reporting period.

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 of Bedford has implemented activities in accordance with the permit and outlined in the SWMP. All BMPs and measurable goals outlined in the SWMP are appropriate.

COVID-19 Impacts

If any of the above Year 4 requirements could not be completed *during this reporting period* due to the impacts of COVID-19, please identify the requirement(s) that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

MCM 6 – Sweeping all curbed streets: The Town made substantial efforts towards reaching this goal however due to equipment failure and extended repair times relating to Covid supply chain issues, the goal was partially met. The equipment has since been repaired and sweeping is underway to achieve the goal in year 5.

Activities Planned for Next Reporting Period

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