

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

UNIVERSITY OF NEW HAMPSHIRE

Permit Year 3

July 1, 2020 through June 30, 2021

EPA NPDES Permit Number NHR041000

Authorized Representative:

The authorization letter is:

Publicly available at the website:

<https://www.unh.edu/facilities/storm-water-management>

"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

Signature 

Date: 09/10/2021

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

SWMP: <https://www.unh.edu/facilities/storm-water-management>

IDDE: <https://www.unh.edu/facilities/storm-water-management>

MCM1 - Public Education and Outreach

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:

Residents.

University of New Hampshire Campaign Metrics: In Year 3, 100 flyers were distributed to the UNH Library.

Goal was achieved.

Message Date: September 2020

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.

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.

University of New Hampshire Campaign Metrics: In Year 3, 100 flyers were distributed to the UNH Library.

Goal was achieved.

Message Date: September 2020

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 about impacts from yard waste to waterbodies, alternatives to dumping yard waste and laws against dumping yard waste near or in waterbodies.

Targeted Audience: Residents

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.

University of New Hampshire Campaign Metrics: In Year 3, 100 flyers were distributed to the UNH Library.

Goal was achieved.

Message Date: September 2020

BMP: Septic System Maintenance

There are no septic systems on the UNH, Durham campus.

BMP: Industrial Outreach

There are no Industrial Facilities on the UNH, Durham campus.

MCM2 - Public Participation

BMP: Public Participation in Stormwater Management Program Development

Description: The Stormwater Management Program was reviewed within University of New Hampshire Facilities and GIS departments. Documents and records relating to the permit are retained and available for 5 years to the public at <https://www.unh.edu/facilities/storm-water-management>

Measurable Goal(s):

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

MCM3 – Illicit Discharge Detection and Elimination

BMP: IDDE Legal Authority

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

BMP: Sanitary Sewer Overflow (SSO) Inventory

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

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 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: 65

Number of dry weather samples taken: 9

Number of wet weather outfall inspections/sampling events: 0

Number of wet weather samples taken: 0

Number of catchment investigations: 0

Number of illicit discharges: 0

Number of illicit discharges removed: 0

Estimated gallons of flow removed: 0 gallons

BMP: Employee Training

Three 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: 6

Number of inspections: 30

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 Construction and Renovation Standard, consistent with the permit requirements, has been adopted.

A Post-Construction Standard has been created with links and references included in our SWMP.

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://scholars.unh.edu/pdch_5_33/2/. 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, 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 (2) years from completion of the project.

BMP: Long-term Operation and Maintenance Procedures

University of New Hampshire currently follows long-term development performance practices such as annual and post-storm inspections. 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 University, 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 University of New Hampshire.

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: 966

Number catch basins inspected in accordance with the SWMP: 480

Number of catch basins cleaned: 250

Total volume of material removed: 30 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: 14

Volume of swept material: 31 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.

University of New Hampshire has adopted a Salt Reduction Plan in accordance with Appendix H that has been implemented in the MS4 regulated area and/or community wide. University of New Hampshire Salt Reduction Plan can be found at:

https://www.unh.edu/sites/default/files/departments/facilities/Energy/unh_salt_reduction_plan.pdf

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

University of New Hampshire has inspected all permittee owned treatment structures (excluding catch basins)

BMP: SWPPP (due year 3)

SWPPPs were implemented for the following facilities buildings: #198, #21, #67, #69, #70, #98, #114, #288, and #278, 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.unh.edu/sites/default/files/departments/facilities/unh_swppp_2020.pdf.

Number of site inspections for facilities that require a SWPPP completed: 9

Number of corrective actions identified: 0

Number of corrective actions taken: 0

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

University of New Hampshire 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.

TMDL's and Water Quality Limited Waters

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.

Phosphorus

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.

University of New Hampshire 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.

University of New Hampshire 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.

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 [New Hampshire DES MS4 annual salt usage](#) reporting form.

University of New Hampshire 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.

University of New Hampshire created a Salt Reduction Plan which can be found at https://www.unh.edu/sites/default/files/departments/facilities/Energy/unh_salt_reduction_plan.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-(Appendix 1)-.

Description of Any Changes in Identified BMPs or Measurable Goals

University of New Hampshire 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

University of New Hampshire will continue to implement activities in accordance with the permit and SWMP.