

Year 5 Annual Report
Massachusetts Small MS4 General Permit
New Permittees
Reporting Period: July 1, 2022-June 30, 2023

Please DO NOT attach any documents to this form. Instead, attach all requested documents to an email when submitting the form. Also ensure any websites included on this form are publicly accessible

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, 2022 and June 30, 2023 unless otherwise requested.

Part I: Contact Information

Name of Municipality or Organization:

EPA NPDES Permit Number:

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Stormwater Management Program (SWMP) Information

SWMP Location (web address):

Date SWMP was Last Updated:

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

The document has not been posted to the website due to the need to make the SWMP compliant with the Americans with Disabilities Act prior to posting, but a copy of the SWMP can be requested by calling or emailing the University's Storm Water Coordinator, Carl Shreder, at 978-934-2672 or Carl_Shreder@uml.edu, or by emailing ehs@uml.edu. In addition, hard copies of the document may be reviewed at the Lydon Library Circulation Desk, O'Leary Library Circulation Desk, and the Environmental Health & Safety Office at 600 Suffolk Street, Suite 212.

Part II: Self-Assessment

First, in the box below, select the impairment(s) and/or TMDL(s) that are applicable to your MS4.

Impairment(s)			
<input checked="" type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Chloride	<input type="checkbox"/> Nitrogen	<input checked="" type="checkbox"/> Phosphorus
<input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals			
TMDL(s)			
<i>In State:</i>	<input type="checkbox"/> Assabet River Phosphorus	<input type="checkbox"/> Bacteria and Pathogen	<input type="checkbox"/> Cape Cod Nitrogen
	<input type="checkbox"/> Charles River Watershed Phosphorus	<input type="checkbox"/> Lake and Pond Phosphorus	
<i>Out of State:</i>	<input type="checkbox"/> Bacteria/Pathogens	<input type="checkbox"/> Metals	<input type="checkbox"/> Nitrogen
			<input type="checkbox"/> Phosphorus
			<input type="button" value="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 5 Requirements

- Completed Phase I of system mapping

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:

The University is in the process or reevaluating the locations of their stormwater treatment structures. These structures will be re-added to the University's Phase I map in Permit Year 6.

The campus reevaluated their outfall/interconnection ownership recently, resulting in an updated list of areas where catchments need to be delineated. This revised mapping work will be completed in Permit Year 6.

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 publicly available website:

- Updated the outfall and interconnection inventory and priority ranking as necessary
- The priority ranking of outfalls/interconnections is attached to the email submission

- The priority ranking of outfalls/interconnections can be found at the following website:

A list of outfalls/interconnections is attached to this email submission. The list was not been prioritized because the University completed outfall/interconnection screenings during one comprehensive field event in August/September 2023. The University will use the data collected to prioritize the outfalls/interconnections prior to upcoming catchment investigations.

- Provided training to employees involved in IDDE program within the reporting period
- Properly stored and disposed of catch basin cleanings and street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt
- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- Updated inventory of all permittee owned facilities as necessary
- O&M programs for all permittee owned facilities have been completed and updated as necessary
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants
- Inspected all permittee owned treatment structures (excluding catch basins)

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:

The University currently does not have an active street sweeping program. The University does not use sand for winter road maintenance operations, and annual catch basin inspections show low amounts of sediment entering and settling in catch basins each year. The University will continue to evaluate their catch basin inspection results to identify whether street sweeping operations should be conducted on a regular basis in the future. The City of Lowell conducts their own street sweeping program which encompasses the public roadways that run adjacent to the University's owned and leased properties. The University periodically sweeps their parking lots and garages. This permit year, the University swept their East Parking Garage, Hall Street Garage, South Parking Garage, and the Big South Broadway/Riverview parking area, removing a significant amount of sediment and debris from these areas, and thus preventing the sediment and debris from entering the storm drain. The University stores and disposes of street sweepings in accordance with applicable rules and regulations.

The University reviewed the need to develop and implement SWPPPs at University owned and operated facilities in accordance with Permit Part 2.3.7.b. These facilities included their maintenance garages at 8 James Street and 1485 Middlesex Street in Lowell. The University determined that SWPPPs are not needed since these facilities conduct vehicle servicing indoors and do not discharge pollutants from these activities to the MS4 or waterbodies.

The University is in the process of reevaluating the locations of their stormwater treatment structures. These structures will be inspected in Permit Year 6.

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:

The University finalized a policy regarding pets on campus in Summer 2021, which outlines the potential negative impacts pet waste can have on stormwater quality and makes pet owners and handlers responsible for managing their own pet's waste. Students that are approved to have a service or emotional support animal on campus are required to agree to this policy in writing, and to utilize either of the designated animal relief areas located on the University's east and south campuses. Maps of these relief areas are provided to pet owners during the service/emotional support animal approval process.

The University does not have any septic systems on campus, and therefore does not provide septic system messaging to students, faculty, employees, or contractors.

Phosphorus (Combination of Impaired Waters Requirements and TMDL Requirements as Applicable)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 and phosphorus-free 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 already existing or installed in the regulated area by the permittee or its agents was tracked and the phosphorus removal by the BMP was estimated consistent with Attachment 3 to Appendix F. The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus 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:

The University is in the process or reevaluating the locations of their stormwater treatment structures. Phosphorus removal calculations will be conducted in future permit years.

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:

As discussed in the Annual Requirements section of this report, the University currently does not have an active street sweeping program. The University periodically sweeps their parking lots and garages.

Pet waste messaging is distributed to pet owners during the service/emotional support animal approval process.

The University does not distribute annual messages regarding the proper disposal of grass clippings, use of phosphorus-free fertilizers, and leaf litter management because the University's Grounds Department conducts all lawn care activities on campus. Instead of distributing messages to students and faculty, the University educates its Grounds Department staff on best management practices related to these activities to prevent the discharge of phosphorus and other pollutants from campus.

Solids, Oil and Grease (Hydrocarbons), or Metals

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 to target areas with potential for high pollutant loads
 - The street sweeping schedule is attached to the email submission
 - The street sweeping schedule can be found at the following publicly available website:

- Prioritized inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full; Cleaned catch basins more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings

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:

As discussed in the Annual Requirements section of this report, the University currently does not have an active street sweeping program. The University periodically sweeps their parking lots and garages.

In Permit Year 4, the University finalized their catch basin cleaning optimization SOP. This SOP is incorporated as part of the University's Clean Water Best Practices Manual.

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

During Permit Year 5, the University's Office of Sustainability and Grounds Department, within Facilities Operations and Services, re-instituted annual management of previously installed pollinator habitats. UMass Lowell has targeted steep hillsides and riverbank areas for pollinator gardens (4 total), and has found that the areas are significantly better at attenuating stormwater sheet flow runoff and preventing erosion than grass in the same areas. In Fall 2022, the areas were mowed and weeded to promote a dense regrowth of large, flowering plants. In Spring 2023, additional maintenance ensured maximum growth of native pollinators in these areas.

The campus launched, and certified, the UMass Lowell Arboretum in Permit Year 5. The UMass Lowell Arboretum is built on existing trees and green spaces, but started two new initiatives that positively impact stormwater and green infrastructure on campus. First, to launch the Arboretum this year, the University conducted its largest tree planting initiative on campus in several years. The University planted 33 trees and 74 shrubs across campus in Permit Year 5. In addition, campus construction standards were updated to increase the total amount of trees replanted as trees are removed for disease, damage, and/or construction.

The University installed netting at several buildings to prevent birds roosting and thus eliminating or reducing pigeon guano from accumulating on impervious surfaces. The University also implemented training and standard operating procedures for safely removing pigeon guano, to reduce the quantity of pollutants entering storm drains.

The University's Greenhouse and Urban Agriculture Farm uses all organic growing methods without use of synthetic fertilizers and pesticides. The University has planted raised berms with rhubarb to divert stormwater runoff to the existing drainage system on-site. Rainwater collected through the gutter system is funneled to an 1,800-gallon storage tank inside the greenhouse and is used to irrigate plants. Interpretive signage is located outside the greenhouse to inform the public of the University's work to promote and implement sustainable stormwater management.

All leaf waste collected on campus is shredded and either used on the University's Urban Agriculture Farm or sent to Mill City Grows "Big Farm" Urban Farm location at 1001 Pawtucket Boulevard in Lowell.

The University applies fertilizers around campus four times per year. To reduce impacts to stormwater runoff quality, the University selected a product that contains 0% phosphorus, 50% organic material, and total nitrogen of approximately 3.5 pounds per 1,000 square feet.

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? 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>

- Yes
 No

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

The University reevaluated their outfall/interconnection ownership in Permit Year 5, resulting in an updated list of outfalls, interconnections, and receiving waterbodies. The list of outfalls/interconnections is attached to this email submission.

The University evaluated the "Final Massachusetts Integrated List of Waters for the Clean Water Act 2022 Reporting Cycle" and noted that no changes have been made to the University's waterbody impairments since the issuance of the 2018/2020 Integrated List.

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:**

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:1A - Website Updates for General Public

Message Description and Distribution Method:

The University's Stormwater Program webpage currently includes educational information relevant to students, faculty, the general public, businesses, industries, and contractors. Examples of topics currently covered on the web page include: what is stormwater pollution?; why is stormwater runoff pollution a problem?; impaired waterbodies surrounding the campus; what causes stormwater runoff pollution?; why is the University addressing stormwater runoff?; what is the University doing?; what can you do to help?; and contact information for the University's Facilities Service Desk and Environmental Health and Safety Department to report any drainage or potential pollution issues.

The stormwater web page can be found at: <https://www.uml.edu/eem/ehs/storm-water-management/>

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

Educate students, faculty, and the general public on ways to reduce impacts to stormwater.

Message Date(s):

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:1C - Storm Water Coordinator

Message Description and Distribution Method:

The UML Director of EHS appointed Carl Shreder as the University's Storm Water Coordinator to serve as a point of contact for information about UML's stormwater program and volunteer opportunities. Carl's contact information is included on the University's stormwater webpage. This information will be updated annually to

reflect any changes in the Storm Water Coordinator position.

The Storm Water Coordinator's contact information can be found at: <https://www.uml.edu/eem/ehs/storm-water-management/stormwater-contact.aspx>

Targeted Audience: Students, Faculty, Contractors, General Public

Responsible Department/Parties: UML Executive Director of Environmental Health & Safety

Measurable Goal(s):

Post Storm Water Coordinator name and contact information on the University's stormwater webpage and update annually.

Message Date(s): Ongoing

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:1D - Brochures/Pamphlets

Message Description and Distribution Method:

The University finalized a policy regarding pets on campus in Summer 2021, which outlines the potential negative impacts pet waste can have on stormwater quality and makes pet owners and handlers responsible for managing their own pet's waste. Students that are approved to have a service or emotional support animal on campus are required to agree to this policy in writing, and to utilize either of the designated animal relief areas located on the University's east and south campuses. Maps of these relief areas are provided to pet owners during the service/emotional support animal approval process.

Targeted Audience: Students, Faculty, Employees, General Public

Responsible Department/Parties: UML Executive Director of Environmental Health & Safety

Measurable Goal(s):

Publish/distribute annual message on pathogen controls (pet waste).

Message Date(s): Ongoing

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:Project Discussions with Developers

Message Description and Distribution Method:

The University's Environmental Health and Safety staff is involved in the design meetings and construction kickoff meetings for all projects constructed on campus. The staff asks questions and addresses matters related to stormwater pollution prevention during this process.

Targeted Audience: Contractors, Businesses

Responsible Department/Parties: Environmental Health & Safety Department

Measurable Goal(s):

Educate contractors and businesses on stormwater pollution prevention best practices during construction.

Message Date(s): Ongoing

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:

The University decided they could have more of an impact on contractor's stormwater pollution prevention considerations via involvement with design and construction meetings instead of distributing open-ended letters to contractors containing various best practices.

BMP:General Stormwater Educational Brochure

Message Description and Distribution Method:

In Permit Year 5, the University developed a brochure that conveys general educational stormwater awareness and pollution prevention messages. The University plans to add this brochure to their website in Permit Year 6, and distribute the handout to the University community through the Office of Sustainability.

Targeted Audience: Students, Faculty, Employees, General Public

Responsible Department/Parties: Environmental Health & Safety Department, Office of Sustainability

Measurable Goal(s):

Educate students, faculty, and the general public on ways to reduce impacts to stormwater.

Message Date(s): Permit Year 6

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 University's SWMP can be requested by calling or emailing the University's Storm Water Coordinator or may be reviewed at the Lydon Library Circulation Desk, O'Leary Library Circulation Desk, and the Environmental Health & Safety Office at 600 Suffolk Street, Suite 212.

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:**

UML has established a Catch Basin Stenciling/Marking Program where University staff and student volunteers can stencil a message next to catch basins or install storm drain markers reminding people not to dump anything down the storm drains. Catch basin stenciling/marketing sends a clear message to all University employees, faculty, and students to keep trash, debris, leaf litter, and pollutants out of the storm drainage system. Currently, most of the University's catch basins have a "no dumping" message stenciled on, or near, their grate. Ways to get involved in the University's Stenciling/Marking Program are detailed at this web page: <https://www.uml.edu/EEM/EHS/Storm-Water-Management/Catch-Basin-Stenciling.aspx>

In November 2022, the University's Environmental Health and Safety Department and Facilities Project Management Team met with the City of Lowell's Wastewater Utility Department to discuss compliance obligations for matters related to the review and design of all construction projects on campus having impacts on the City's sewer and water utilities.

The University also had a Northern Middlesex Council of Governments (NMCOG) Stormwater Collaborative meeting on April 24, 2023 with Judith Rondeau (MADEP), Malcolm Harper (MADEP), Das Padmini (MADEP), Glenn MacDonald (UMass Lowell), Kartik Shah (UMass Lowell) and Craig Thomas (UMass Lowell) to discuss the UMass Lowell stormwater program and Section 319 Nonpoint Source grant opportunities.

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: Number of SSOs removed:

*Below, report on the total number of SSOs identified in the MS4 system and removed to date. At a minimum, report SSOs identified **since the effective date of the permit (July 1, 2018)**.*

Total number of SSOs identified: Total number of SSOs removed:

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

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

The University is in the process of reevaluating the locations of their stormwater treatment structures. These structures will be added to the University's Phase I map in Permit Year 6.

The campus reevaluated their outfall/interconnection ownership recently, resulting in an updated list of areas where catchments need to be delineated. This work will be completed in Permit Year 6.

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. Please also include the updated inventory and ranking of outfalls/interconnections based on monitoring results.

- No outfalls were inspected
- The outfall screening data is attached to the email submission
- The outfall screening data can be found at the following website:

No outfalls were inspected in Permit Year 5. The University completed screening all of their outfalls and interconnections in August/September 2023. The results of these screenings will be provided in the Permit Year 6 annual report submittal.

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

Number of outfalls screened:

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

Percent of outfalls screened:

Optional: Provide additional information regarding your outfall/interconnection screening:

As a new non-traditional Massachusetts MS4 Permittee, the University is not required to complete dry weather outfall screening until Permit Year 6.

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.*

- No catchment investigations were conducted
- The catchment investigation data is attached to the email submission
- The catchment investigation data can be found at the following website:

No catchments were inspected in Permit Year 5.

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

Number of catchment investigations completed this reporting period:

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

Percent of total catchments investigated:

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

As a new non-traditional Massachusetts MS4 Permittee, the University is not required to complete problem area catchment investigations until Permit Year 10.

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.

- No illicit discharges were found
- 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:

Number of illicit discharges removed:

Estimated volume of sewage removed: 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:

Total number of illicit discharges removed:

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

To be conducted in future permit years upon verification of an illicit discharge.

Employee Training

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

There were 8 training events in Permit Year 5 for Facilities Operations & Services employees regarding stormwater topics:

- October 27, 2022: 15 employees in attendance
- November 4, 2022: 9 employees in attendance
- November 8, 2022: 15 employees in attendance
- November 10, 2022: 19 employees in attendance
- November 17, 2022: 20 employees in attendance
- November 21, 2022: 9 employees in attendance
- November 22, 2022: 15 employees in attendance
- December 9, 2022: 32 employees in attendance

A total of 134 employees were trained during these training events.

Kartik Shah, UMass Lowell's Campus Planner attended a Northern Middlesex Stormwater Collaborative Meeting with the Northern Middlesex Council of Governments (NMCOG) on March 22, 2023.

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:

Number of inspections completed:

Number of enforcement actions taken:

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

The University is subject to State regulations and does not have the authority to develop ordinances for development on campus.

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

Ordinance or Regulatory Mechanism

Date ordinance was completed (due in year 3):

Website of ordinance or regulatory mechanism:

The University does not have the authority to prepare its own development requirements, as all construction on campus is managed by the State.

As-built Drawings

*Below, report on the number of as-built drawings received **during this reporting period**.*

Number of as-built drawings received:

Optional: Enter any additional information relevant to the submission of as-built drawings:

The University does not have the authority to prepare its own development requirements, as all construction on campus is managed by the State.

Street Design and Parking Lots Report

Describe the status of the street design and parking lots assessment including any planned or completed changes to local regulations and guidelines:

As a new non-traditional Massachusetts MS4 Permittee, the University is not required to complete the Street Design and Parking Lots Report until Permit Year 6.

Green Infrastructure Report

Describe the status of the green infrastructure report including the findings and progress towards making the practice allowable:

The University is a non-traditional Massachusetts MS4 Permittee and is therefore not required to prepare a Green Infrastructure Report to meet the requirements of Section 2.3.6.C of the MS4 Permit.

Retrofit Properties Inventory

Describe the status of the inventory 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:

As a new non-traditional Massachusetts MS4 Permittee, the University is not required to complete the Retrofit

Properties Inventory until Permit Year 6.

The University has completed several projects in previous permit years to reduce the amount of impervious area on campus and retrofit infrastructure.

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:

Number of catch basins cleaned:

Total volume or weight of material removed from all catch basins:

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

Total number of catch basins:

If applicable:

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

If necessary, schedule adjustments will be made to prioritize catch basins located at known problem areas (low spots) and near construction activities (roadway construction, residential, commercial, or industrial development). If inspections and maintenance activities indicate excessive sediment and debris loading (i.e. the sump is more than 50% full during two consecutive routing inspections/cleanings), these catch basins will be marked for frequent cleaning.

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:

Weight of material removed:

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:

The University reviewed the need to develop and implement SWPPPs at University owned and operated facilities in accordance with Permit Part 2.3.7.b. These facilities included their maintenance garages at 8 James Street and 1485 Middlesex Street in Lowell. The University determined that SWPPPs are not needed since these facilities conduct vehicle servicing indoors and do not discharge pollutants from these activities to the MS4 or waterbodies.

During Permit Year 4, the University continued updating campus maps for Spill Pollution Control and Countermeasure (SPCC) planning. The University's SPCC plan was updated and now identifies oil storage locations on campus, the types of containment systems in place at each location, and best practices for protecting stormwater.

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:

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. If any of the above year 5 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:

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 6 requirements summarized below. (Note: impaired waters and TMDL requirements are not listed below)

Yes, I agree

- Develop a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover
- Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
- Identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious areas

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
- Continue public education and outreach program
- Update inventory of all known locations where SSOs have discharged to the MS4
- Sweep all curbed roadways at least once within the reporting period
- Annual training to employees involved in IDDE program
- Clean catch basins in accordance with catch basin cleaning procedures to ensure that no catch basin is greater than 50% full
- Review site plans of construction sites as part of the construction stormwater runoff control program
- Conduct site inspections of construction sites as necessary
- Inspect and maintain stormwater treatment structures
- Log catch basins cleaned or inspected
- Sweep all curbed streets at least annually
- Implement SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities
- 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
- Review O&M programs for all permittee owned facilities; update if necessary
- Implement all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Enclose all road salt storage piles or facilities and implement winter road maintenance procedures to minimize the use of road salt
- Review as-built drawings for new and redevelopment to ensure compliance with post construction bylaws, regulations, or regulatory mechanism consistent with permit requirements

Provide any additional details on activities planned for permit year 6 below:

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Part VI: Certification of Small MS4 Annual Report 2023

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]