

Year 2 Annual Report
Massachusetts 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:

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:

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 type="checkbox"/> Chloride | <input type="checkbox"/> Nitrogen | <input type="checkbox"/> Phosphorus |
| <input 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 |
| | | | 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:

WSU maintains campus-wide maps, including all utilities, that is updated as needed. Based on construction activities that occurred at the campus in 2019, an update of as-built drawings was anticipated by the spring of 2020. However, due to COVID-19 restrictions, this has been delayed. Note that changes to the as-built

drawings as unrelated to the stormwater infrastructure. WSU does not maintain public maintenance garages, public works yards, transfer stations or other waste handling facilities where pollutants are exposed to stormwater.

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:

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

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:

NA

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: [Message name here]

Message Description and Distribution Method:

- Hand out pamphlets
- Create and maintain webpage
- Hand out pamphlets designed for contractors
- Participation in the annual sustainability fair
 - o Focus the nation
 - o National teach in on global warming

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

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:

MCM2: Public Participation

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

Post the SWMP online for Plan and BMP review; Neighborhood Advisory Council; American College and University President's Climate Commitment

The annual campus clean-up day and clean-up of Moore Brook that typically occurs in the spring, was postponed due to COVID-19, but is expected to resume in 2021.

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:**

NA

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:

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:

Items not checked above do not apply to the WSU facility.

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:

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:

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:

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:

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:

No illicit discharges have been identified.

Employee Training

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

Trainings are conducted annually to personnel at all levels of responsibility and include spill prevention and response, good housekeeping and material management practices. Training initially scheduled for the spring 2020 was delayed due to COVID-19 and is anticipated to be conducted virtually in the fall of 2020.

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:

Construction activity related to the campus athletic field was completed during July 2019. Construction inspections were conducted in conjunction with the local Conservation Commission as well as WSU facilities' personnel on a regular basis.

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:

Worcester State University requires updates of campus-wide maps, including all utilities, as needed. Based on recent construction activities ongoing at the campus, an update of as-built drawings was anticipated by the spring of 2020. Due to COVID-19 restrictions, this has been delayed. Note that changes to the as-built drawings as unrelated to the stormwater infrastructure.

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:

Much of the campus asphalted areas were repaved in July and August 2020, however, there are no street or parking lot design projects planned at this time. Plans that may be developed will be discussed in future annual reports and any changes that are made will be reflected in the campus-wide as-built drawing updates.

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:

There are no green infrastructure projects planned at this time. However, should any planned changes to the campus green infrastructure be planned or made, the findings and progress will be reflected in future annual reports.

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:

There are no retrofit projects planned at this time. However, should any planned changes to the campus

impervious areas be planned or made, the findings and progress will be reflected in future annual reports.

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 mass of material removed from all catch basins:

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

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 a catch basin is identified as being greater than 50% during two consecutive routing inspections/cleaning events, Worcester State University would increase the cleaning schedule/frequency and would evaluate the cause of this condition and complete the appropriate mitigation.

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:

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:

NA

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:

NA

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:

NA

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:

Based on construction activities that occurred at the campus in 2019, an update of as-built drawings was anticipated by the spring of 2020. However, due to COVID-19 restrictions, this has been delayed. Note that changes to the as-built drawings as unrelated to the stormwater infrastructure.

The annual campus clean-up day and clean-up of Moore Brook that typically occurs in the spring, was postponed due to COVID-19, but is expected to resume in 2021.

Training initially scheduled for the spring 2020 was delayed due to COVID-19 and is anticipated to be conducted virtually in the fall of 2020.

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
- 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:

NA

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]



Semi-Annual Routine Dry Weather Inspection Checklist and Form for Illicit Discharges

Date: Sept 8, 2020
 Inspector: Bob Daulton
 Campus location and description: WSU - Lake Erie, Rockwood Box Culvert ← Douglas lot
 Date of last inspection May 6, 2020

GENERAL

1. What are the weather conditions? Clear, dry, -81°F
2. Last rain event: 5/2
3. Amount of rain: ~~0.12~~ 0.13
4. If wet weather, is stormwater runoff leaving site? Is the runoff discolored, odiferous, or oily? What could be the source of the discoloration, odor or sheen? N/A
5. If dry weather, is non-stormwater discharge evident? Is the runoff discolored, odiferous, or oily? If yes, what is the source? No flow detected or ground water infiltration at Chandler Village C.R.

SITE SPECIFIC INFORMATION

1. Describe the type of outfall (i.e., pipe, natural discharge point, foundation drain). Pipe, Box Culvert, Level Spreader
2. What condition is it in? All good - No Repairs necessary
3. Is an observable non-stormwater discharge noted? No
4. Describe non-stormwater discharges: N/A
5. Are there reasons for suspicions of source (i.e., discolored water, fungus, oily, motor fluids, grass clippings and leaf litter, animal waste, septic tank, sewer lines failing, exposed fill nearby, past landfill, pump site, industrial source nearby, black water source, gray water source)?
6. Describe the location of discharge and depict on map: N/A
7. Describe the source of discharge: N/A

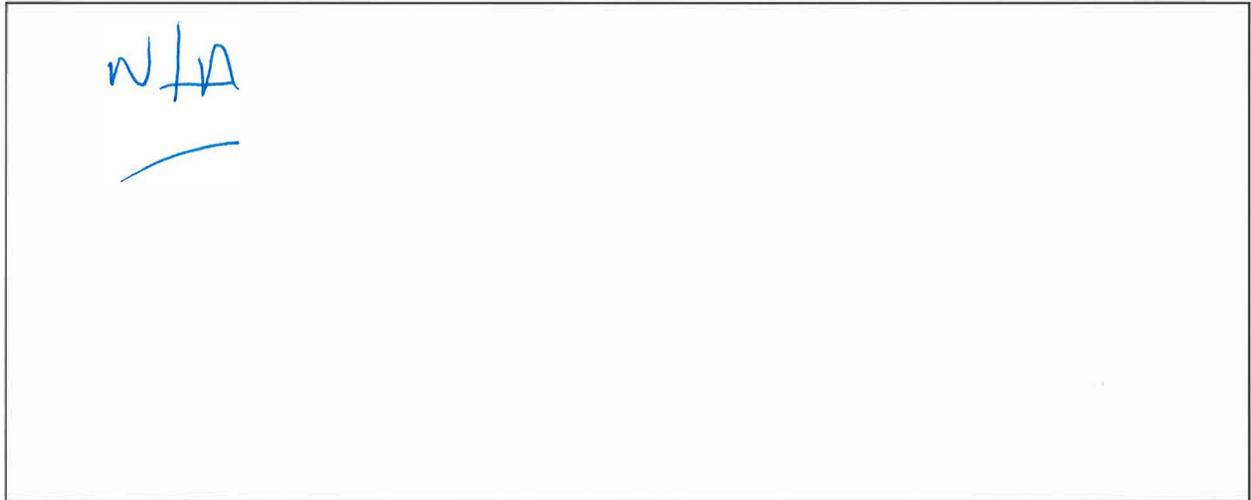
8. Describe the corrective actions recommended: None Required

9. Other observations or comments: N/A

10. Reviewed by: Bob Doff

11. Report to: file - annual Report

Sketch/Map:





Semi-Annual Routine Dry Weather Inspection Checklist and Form for Illicit Discharges

Date: 5/6/2020

Inspector: Bob D'Amico

Campus location and description: Lake Erie, Rockwood Box Culvert, Darden Hall lot

Date of last inspection 9/10/2019

GENERAL

1. What are the weather conditions? Sunny and 56°F
2. Last rain event: 5/2
3. Amount of rain: 0.13"
4. If wet weather, is stormwater runoff leaving site? Is the runoff discolored, odiferous, or oily? What could be the source of the discoloration, odor or sheen? N/A
5. If dry weather, is non-stormwater discharge evident? Is the runoff discolored, odiferous, or oily? If yes, what is the source? No water flow detected - no ground water infiltration @ Chandler Village

SITE SPECIFIC INFORMATION

1. Describe the type of outfall (i.e., pipe, natural discharge point, foundation drain). Pipe, Box Culvert - Level Spreader (Darden)
2. What condition is it in? All points in good shape - No Repairs needed
3. Is an observable non-stormwater discharge noted? No
4. Describe non-stormwater discharges: None N/A
5. Are there reasons for suspicions of source (i.e., discolored water, fungus, oily, motor fluids, grass clippings and leaf litter, animal waste, septic tank, sewer lines failing, exposed fill nearby, past landfill, pump site, industrial source nearby, black water source, gray water source)? NO
6. Describe the location of discharge and depict on map: N/A
7. Describe the source of discharge: N/A

8. Describe the corrective actions recommended: N/A

9. Other observations or comments: None

10. Reviewed by: Bob DeLuca 5/6/2020

11. Report to: file + annual report

Sketch/Map:

N/A

ROOF VENTILATION STACK INSPECTION FORM - Annually

Inspection Date: 9/8/2020

Weather Conditions - Sunny Dry ☺

Inspected By: Bob Deane

| Item Inspected | Roof Inspected (identify/name building section) | |
|---|--|-------------------|
| Description | Status | Follow-up Action* |
| Is there any visible material in the vicinity of the stacks? (Yes/No) | * Roof membrane currently being replaced - Roof Drains clear of debris | |
| What is the condition of stack piping? (ex. good, corroded, cracked) | All piping looks good - No repairs needed | |

Note: * indicates that if follow-up action is not necessary, then write "N/A" or "Not Applicable" or "Not Necessary" under Follow-up Action column (Do not leave any blanks on this form).

Bob Deane
9/8/20