

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>

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

The Town has completed Phase I of system mapping and used the mapping information to complete dry weather screening of outfalls. During dry weather screening more precise locations of outfalls, catch basins, and storm drain infrastructure was obtained.

Catchment investigation procedures were developed and included in the updated SWMP for Permit Year 2.

Under the 2003 MS4 Permit, the Town adopted Section 239-23 through 239-36 the Town of Middleborough Bylaw, "Discharges to Municipal Storm Drainage System", which authorizes the Board of Selectmen to enforce IDDE provisions.

After reviewing the 2016 MS4 Permit, the Town developed a new stormwater bylaw, as well as rules and regulations to comply with the permit requirements and to improve stormwater management town-wide. On October 7, 2019 the Town rescinded the existing IDDE By-Law and adopted the new stormwater By Law. On August 10, 2020 the Town adopted the Stormwater Management Rules and Regulations and permitting mechanism.

The Town of Middleborough's Stormwater By-Law is included with the SWMP in Appendix D, and the accompanying Stormwater Management Rules and Regulations are included in Appendix E.

Written operations and maintenance procedures were developed for all Town owned facilities, along with an inventory of all permittee owned facilities. To address the MS4 Permit requirements, Standard Operating Procedures (SOPs) associated with the identified municipal activities and facilities have been developed. The SOPs for these facilities have been included in the Town's O&M Plan, included in Appendix F of the SWMP.

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:

There are no known locations where SSOs have discharged to the MS4 during the reporting period or in the 5

years prior to the start of the permit term.

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 that targets areas with potential for high pollutant loads
- 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 indicated 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:

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

During Permit Year 1, the Middleborough Stormwater Committee was formed. In October 2019 the Stormwater By-Law was adopted by the Board of Selectmen, and in August 2020 the Stormwater Management Rules and Regulations was adopted. These policies regulate stormwater discharge during and after construction, and provide a regulatory framework to inspect and manage residential discharges to the MS4 (sump pumps, swimming pools, etc.).

There were several public meetings during the adoption of the Stormwater By-Law and Rules and Regulations which provided an opportunity for public input. The final documents have been posted on the stormwater page of the Town of Middleborough's website.

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:

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:

Message Description: Stop Erosion in its Tracks to Keep Our Waters Clean. Message describing how to find out if work requires a Construction General Permit, directions to contact the Middleborough Conservation Commission prior to disturbing land, and use erosion and sedimentation control to protect natural landscape features including streams and wetlands.

Distribution Method: Posted online and handed out with Building Permits.

Targeted Audience:

Responsible Department/Parties:

Measurable Goal(s):

There have been no enforcement actions needed to contain stormwater runoff from construction sites during Permit Year 2.

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:[Message name here]

Message Description and Distribution Method:

Message Description: "Do your 'doody' for Clean Water". Reminds residents to clean up after their pets in parks and at home because pet waste left on lawns contains bacteria and can kill grass and other plants. If pet waste washes into storm drains and waterways, it can make the water unhealthy for people and wildlife.

Distribution Method: Posted on line and handed out with dog licenses.

Targeted Audience:

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

There have been no complaints received regarding pet waste in public spaces. 4,096 dog licenses were handed out with these fliers.

Message Date(s): July 2019 to present.

Message Completed for: Appendix F Requirements Appendix H Requirements

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

If yes, describe why the change was made:

Add an Educational Message

MCM2: Public Participation

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

The SWMP was discussed during public hearings for both the Stormwater By-Law (adopted October 2019 at Town Meeting) and the Stormwater Rules and Regulations (adopted after Permit Year Two ended, August 2020).

Additionally, there is a public feedback form on the Middleborough website under the stormwater section. It asks for public input regarding items of concern or areas for improvement, and recommendations. It gives the public the opportunity to request a meeting with Town staff and request more information.

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:**

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:

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:

During the summer of 2020 (after Permit Year 2 ended) all dry weather outfall sampling was completed (230 outfalls). In Permit Year 3 additional wet weather outfall sampling and catchment investigations will be conducted for high priority outfalls and catchment areas.

Employee Training

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

The DPW staff was trained on Illicit Discharge Detection and Elimination and Spill Prevention Control and Countermeasure with a powerpoint that described how to identify and report any suspected or confirmed illicit discharges, and what to do in the event of a spill and how to report it to the proper authorities.

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:

Inspections were performed by the Conservation Commission and Planning Board from July 2019 to July 2020. These inspections were for the Wetlands Protection Act and the Planning Board rules and regulations, and included inspections of Stormwater systems. The Stormwater Rules and Regulations were not in effect during Permit Year 2. The Site Plan reviews reported completed were specifically for subdivision approvals. The Conservation Commission reviewed several more site plans specifically for the Wetlands Protection Act.

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:

As-Built drawings are required per the Stormwater By-Law which was adopted by the Board of Selectmen on October 7, 2019. The Stormwater Rules and Regulations further define the requirements of these as-built drawings, which was adopted after Permit Year 2 ended, in August 2020.

Street Design and Parking Lots Report

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

The Stormwater Committee is aware of the street design and parking lots assessment due in year 4. The Stormwater By-Law and Rules and Regulations recommend the use LID, and include many options for best management street design and parking lot regulations. The Stormwater Committee will work to further this goal before the end of permit year 4.

Green Infrastructure Report

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

The Stormwater Committee is aware of the green infrastructure report due in Year 4. As with the Street Design and Parking Lots Report, the Stormwater By-Law and Rules and Regulations include recommendations for LID technologies and BMPs that can be incorporated into all new development and redevelopment. The Stormwater Committee will work to further this goal before the end of permit year 4.

Retrofit Properties Inventory

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

The Stormwater Committee has an inventory of Town Owned facilities and spaces, and the standard operating procedures for operations and maintenance of these properties. More progress will be made towards possible retrofits during Permit Year 3.

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:

As part of the minimum control measure for Pollution Prevention/ Good Housekeeping for Municipal

Operations, the MS4 Permit requires permittees to implement an Operations and Maintenance (O&M) program for permittee-owned facilities and activities to prevent or reduce pollutant runoff and protect water quality.

If a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events, the DPW will note that catch basin and inspect it more frequently. This process will be outlined in the catch basin cleaning optimization plan.

Street Sweeping

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

- Number of miles cleaned:
- Volume of material removed: [Select Units]
- Weight of material removed:

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:

The DPW building and Middleborough Gas and Electric, Electric Division are Town owned facilities that require a SWPPP. The DPW SWPPP is up to date. The Middleborough Gas and Electric facility requires an updated SWPPP. Due to Covid-19 site inspections were delayed, and the updated SWPPP will be prepared prior to the end of October 2020.

22 site inspections were completed for facilities that do not require a SWPPP to establish O&M procedures and inventory of vehicles and equipment. These O&M procedures and inventories are included in the O&M plan in the Year 2 SWMP.

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:

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:

One SWPPP was not completed for a Town owned facility prior to the end of Permit Year 2 due to the delay in scheduling a site inspection. The SWPPP for that facility will be prepared before the end of October 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:

Dry Weather outfall screening and sampling has been completed during the summer of 2020. Wet weather sampling and catchment investigations will commence at high priority outfalls and catchment areas in the Spring of 2021.

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]

Note: When prompted during signing, save the document under a new file name.

Annual Report Submission

Please submit the form electronically via email to both EPA and MassDEP by clicking on one of the links below or using the email addresses listed below. Please ensure that all required attachments are included in the email and not attached to this PDF.

EPA: stormwater.reports@epa.gov

MassDEP: laura.schifman@mass.gov

Paper Signature:

If you did not sign electronically above, you can print the signature page by clicking the button below.

Optional: If you did not sign electronically above, you may lock the form by clicking the "Lock Form" button below which will prompt you to save the locked version of the form. Save this locked version under a new file name.