

# **Stormwater Management Program (SWMP)**

Somerville

93 Highland Ave Somerville MA 02143

EPA NPDES Permit Number MAR041082

# Certification

**Authorized Representative (Optional):** All reports, including SWPPPs, inspection reports, annual reports, monitoring reports, reports on training and other information required by this permit must be signed by a person described in Appendix B, Subsection 11.A or by a duly authorized representative of that person in accordance with Appendix B, Subsection 11.B. If there is an authorized representative to sign MS4 reports, there must be a signed and dated written authorization.

The authorization letter is:

- Attached to this document (document name listed below)

- Publicly available at the website below

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Printed Name

Signature \_\_\_\_\_

Date

[Click Here for Revisions](#)

# Background

## Stormwater Regulation

The Stormwater Phase II Final Rule was promulgated in 1999 and was the next step after the 1987 Phase I Rule in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule all MS4s with stormwater discharges from Census designated Urbanized Area are required to seek NPDES permit coverage for those stormwater discharges.

## Permit Program Background

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (2003 small MS4 permit) consistent with the Phase II rule. The 2003 small MS4 permit covered "traditional" (i.e., cities and towns) and "non-traditional" (i.e., Federal and state agencies) MS4 Operators located in the states of Massachusetts and New Hampshire. This permit expired on May 1, 2008 but remained in effect until operators were authorized under the 2016 MS4 general permit, which became effective on July 1, 2018.

## Stormwater Management Program (SWMP)

The SWMP describes and details the activities and measures that will be implemented to meet the terms and conditions of the permit. The SWMP accurately describes the permittees plans and activities. The document should be updated and/or modified during the permit term as the permittee's activities are modified, changed or updated to meet permit conditions during the permit term. The main elements of the stormwater management program are (1) a public education program in order to affect public behavior causing stormwater pollution, (2) an opportunity for the public to participate and provide comments on the stormwater program (3) a program to effectively find and eliminate illicit discharges within the MS4 (4) a program to effectively control construction site stormwater discharges to the MS4 (5) a program to ensure that stormwater from development projects entering the MS4 is adequately controlled by the construction of stormwater controls, and (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

## Town Specific MS4 Background (optional)

The City of Somerville's sewer system is primarily a combined sewer system. However, some areas of the City have separate storm systems that discharge to the Alewife Brook and the Mystic River. The City employs stormwater management practices to mitigate the negative effects of stormwater runoff and discharges to the surrounding waterbodies. This document outlines the stormwater management practices that are currently in place and ones that will be implemented in the future both under the City's volition and to comply with the requirements of the 2016 MS4 General Permit and the 2019 Administrative Order issued from the EPA to the City.

# Small MS4 Authorization

The NOI was submitted on

The NOI can be found at the following (document name or web address):

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Authorization to Discharge was granted on

The Authorization Letter can be found (document name or web address):

# Stormwater Management Program Team

## SWMP Team Coordinator

Name	Jessica Fosbrook	Title	Director of Engineering
Department	Engineering		
Phone Number	6176256600x5416	Email	jfosbrook@somervillema.gov
Responsibilities	Management of the Stormwater Management Program and permit compliance. SWMP and Annual Report coordination and documentation. Liaising with mandating agencies.		

## SWMP Team

Name	Rich Raiche	Title	Director of Infrastructure and Asset Man
Department	Infrastructure and Asset Management		
Phone Number	6176256600x5410	Email	rraiche@somervillema.gov
Responsibilities	Oversight of SWMP and Annual Report coordination and documentation. Liaising with mandating agencies.		

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Name	John Deluca	Title	Director of Water & Sewer
Department	Water & Sewer		
Phone Number	6176256600	Email	jdeluca@somervillema.gov
Responsibilities	Management of Water & Sewer Department responsibilities.		

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Name	Jay Hayden	Title	Sewer Operations Director
Department	Water & Sewer		
Phone Number	6176256600	Email	jhayden@somervillema.gov
Responsibilities	Management of Sewer Department SWMP responsibilities.		

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Name	Denise Taylor	Title	Director of Communications & Commu
Department	Communications & Community Engagement		
Phone Number	6176256600	Email	dtaylor@somervillema.gov
Responsibilities	Management of communications needed for SWMP.		

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Name	Cortni Kerr-Desir	Title	Principal Analyst
Department	Somerset		
Phone Number	6176256600	Email	ckerr@somervillema.gov
Responsibilities	Oversees interdepartmental responsibilities.		

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Name	Eric Weisman	Title	Director of Operations
Department	Somerset		
Phone Number	6176256600	Email	eweisman@somervillema.gov
Responsibilities	Management of DPW SWMP responsibilities.		

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Name	Mark Lawhorne	Title	Director of Highways
Department	DPW		
Phone Number	6176256600	Email	mlawhorne@somervillema.gov
Responsibilities	Management of DPW SWMP responsibilities.		

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Add SWMP Member

# Receiving Waters

The following table lists all receiving waters, impairments and number of outfalls discharging to each waterbody segment.

OR

The information can be found in the following document or at the following web address:

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Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment	Chloride	Chlorophyll-a	Dissolved Oxygen/ DO Saturation	Nitrogen	Oil & Grease/ PAH	Phosphorus	Solids/ TSS/ Turbidity	E. coli	Enterococcus	Other pollutant(s) causing impairments
Alewife Brook (MA71-04)	9	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Copper, Foam/Flocs/Scum/Oil Slicks, Lead, PCB in Fish Tissue, Sediment Bioassays (chronic toxicity freshwater), Taste and Odor.
Mystic River (MA71-02)	7	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Arsenic, Chlordane in Fish Tissue, DDT in Fish Tissue, PCB in Fish Tissue, Sediment Bioassays (Chronic Toxicity Freshwater).
Mystic River (MA71-03)	2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Ammonia (Un-ionized), Fecal Coliform, Foam/Flocs/Scum/Oil Slicks, Contaminants in Shellfish, PCB in Fish Tissue, Petroleum Hydrocarbons, Sediment Screening Value (exceedence), Taste and Odor.



# Eligibility: Endangered Species and Historic Properties

\*Reminder: The proper consultations and updates to the SWMP must be conducted for construction projects related to your permit compliance where Construction General Permit (CGP) coverage, which requires its own endangered species and history preservation determination, is NOT being obtained.

Attachments:

- The results of Appendix C U.S. Fish and Wildlife Service endangered species screening determination
- The results of the Appendix D historic property screening investigations
- If applicable, any documents from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other Tribal representative to mitigate effects

These attachments are required within one year of the permit effective date and are:

- Attached to this document (document names listed below)

- Publicly available at the website listed below

[www.somervillema.gov/stormwater](http://www.somervillema.gov/stormwater)

Under what criterion did permittee determine eligibility for ESA?

- Criterion A       Criterion B       Criterion C

Under what criterion did permittee determine eligibility for Historic Properties?

- Criterion A       Criterion B       Criterion C       Criterion D (NH only)

Below add any additional measures for structural controls that you're required to do through consultation with U.S. Fish and Wildlife Service (if applicable):

The results from the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) online system determined that the City of Somerville MS4 area contains the Northern Long-eared Bat, a Federally Listed Threatened Species. The official species list is attached to the NOI. Based on an assessment of the City's MS4 discharge and discharge-related activities, it was determined there will be no affect on the Northern Long-earned Bat or it's habitat. Based on review of the Endangered Species Act (ESA) Eligibility Criteria provided in Appendix C of the MA Small MS4 General Permit, the City of Somerville meets eligibility of USFWS Criterion C. If during the course of the permit term, the City plans to install a structural BMP not identified in this NOI, the City will perform endangered species screening and contact USFWS as needed.

Below add any additional measures taken to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed by the SHPO or THPO (if applicable):

# MCM 1

## Public Education and Outreach

### Permit Part 2.3.2

**Objective:** The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that the pollutants in stormwater are reduced.

**Examples and Templates:**

[EPA's Stormwater Education Toolbox](#)

[MassDEP's Stormwater Outreach Materials](#)

Other templates relevant to MCM 1 can be found here: <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#peo>

## **BMP: Implement Public Education Program and Educational Messages to Residents**

**BMP Number (Optional)** MCM 1-1

**Document Name and/or Web Address:**

**Description:**

Provide stormwater educational information on the City's website, social media, and via public service announcements on the City's cable channel.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

The Engineering department will leverage the educational materials provided by MyRWA and post on Twitter and the City's website and track the number of views and likes. The number of times the information is shown on the City's cable channel will be recorded.

**Message Date(s):**

One message was posted in June 2019 and another will be December 2020 (at a minimum). Additionally, the City will distribute an annual message in the spring (May/June) regarding fertilizers, an annual message in the summer (June/July) regarding the proper disposal of pet waste, and an annual message in the fall (August/September/October) regarding the disposal of leaf litter per the requirements for surrounding impaired waterbodies (further info included in the section below titled "TMDLs and Water Quality Limited Waters").

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## **BMP: Implement Public Education Program and Educational Messages to Commercial Entities**

**BMP Number (Optional)** MCM 1-2

**Document Name and/or Web Address:**

**Description:**

Provide stormwater educational information on the City's website, social media, and via public service announcements on the City's cable channel. Potential topics are parking lot maintenance and use of salt/deicers.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

The Engineering department will leverage the educational materials provided by MyRWA and post on Facebook and Twitter and track the number of views and likes. The number of times the information is shown on the City's cable channel will be recorded.

To be released in December 2019 and June 2021 (at a minimum). Additionally, the City will distribute an annual message in the spring (May/June) regarding fertilizers, an annual message in the summer (June/July) regarding the proper disposal of pet waste, and an annual

**Message Date(s):** message in the fall (August/September/October) regarding the disposal of leaf litter per the requirements for surrounding impaired waterbodies (further info included in the section below titled "TMDLs and Water Quality Limited Waters").

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**BMP: Implement Public Education Program and Educational Messages to Developers**

**BMP Number (Optional)** MCM 1-3

**Document Name and/or Web Address:**

**Description:**

Make information available to developers and contractors via the City's website. Include general information on stormwater management and targeted releases of information on topics such as erosion and sediment control and green stormwater infrastructure.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

The Engineering Department will make the materials available on the City's website and on Citizenseve, the City's portal used for permit applications. The number of downloads will be tracked.

**Message Date(s):**

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**BMP: Implement Public Education Program and Educational Messages to Industrial Facilities**

**BMP Number (Optional)** \_\_\_\_\_

**Document Name and/or Web Address:**

**Description:**

The City of Somerville does not have any Industrial Facilities in MS4 areas of the city.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date(s):**

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**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Document Name and/or Web Address:**

**Description:**

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date(s):**

---

**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Document Name and/or Web Address:**

**Description:**

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date(s):**

---

**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Document Name and/or Web Address:**

**Description:**

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date(s):**

**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Document Name and/or Web Address:**

**Description:**

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**Message Date(s):**

Add BMP

**MCM 2**  
**Public Involvement and Participation**  
Permit Part 2.3.3

**Objective:** The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP.

**BMP: Public Review of Stormwater Management Program**

**BMP Number (Optional)** MCM 2-1

**Location of Plan and/or Web Address:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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**BMP: Public Participation in Stormwater Management Program Development**

**BMP Number (Optional)** MCM 2-2

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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**BMP: Shoreline/Waterbody Cleanups**

**BMP Number (Optional)** MCM-3

**Document Name and/or Web Address:**

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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**BMP: Investigation of a Stormwater Enterprise Fund**

**BMP Number (Optional)** MCM 2-4

**Document Name and/or Web Address:**

**Description:**

The City is currently at the early stages of investigating the potential for implementing a Stormwater Enterprise Fund.

**Responsible Department/Parties:**

**Measurable Goal(s):**

In Years 2-4 of the permit the City will continue investigations of a Stormwater Enterprise Fund and will create a Stormwater Task Force to help the City with investigating the creation of this fund. Additionally a consultant will be brought on board to research different funding structure scenarios and to provide educational materials to the public about stormwater.

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# MCM 3

## Illicit Discharge Detection and Elimination (IDDE) Program

Permit Part 2.3.4

**Objective:** The permittee shall implement an IDDE program to systematically find and eliminate illicit sources of non-stormwater discharges to its municipal separate storm sewer system and implement procedures to prevent such discharges.

**Examples and Templates:**

[IDDE Program Template and SOPs](#)

Other templates relevant to IDDE can be found here: <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#idde>

**BMP: IDDE Legal Authority**

**BMP Number (Optional)** 3-1

**Completed** (by May 1, 2008)

**Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

**BMP: Sanitary Sewer Overflow (SSO) Inventory**

**BMP Number (Optional)** 3-2

**Completed** (by year 1)

**Document Name and/or Web Address:**

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**SSO Reporting:**

In the event of an overflow or bypass, a notification must be reported within 24 hours by phone to MassDEP, EPA, and other relevant parties. Follow up the verbal notification with a written report following MassDEP's Sanitary Sewer Overflow (SSO)/Bypass notification form within 5 calendar days of the time you become aware of the overflow, bypass, or backup.

<p>The MassDEP contacts are: Northeast Region (978) 694-3215 205B Lowell Street Wilmington, MA 01887 Central Region (508) 792-7650 8 New Bond Street Worcester, MA 01606 Southeast Region (508) 946-2750 20 Riverside Drive Lakeville, MA 02347 Western Region (413) 784-1100 436 Dwight Street Springfield, MA 01103 24-hour Emergency Line 1-888-304-1133</p>	<p>The EPA contacts are: EPA New England (617) 918-1510 5 Post Office Square Boston, MA 02109</p>
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**BMP: Map of Storm Sewer System**

**BMP Number (Optional)** 3-3

**Phase I Completed**   
(by year 2)

**Phase II Completed**   
(by year 10)

**Document Location and/or Web Address:**

**Description:**

Continue to update existing Stormwater Management Map to address permit requirements and continue to update during IDDE program implementation.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Map 100% of outfalls and receiving waters, open channel conveyances, interconnections with other MS4s and other storm sewer systems, municipally-owned stormwater treatment structures, waterbodies identified by name and indication of all use impairments, and initial catchment delineations within 2 years of the permit's effective date. Map 100% of outfall spatial locations, pipes, manholes, catch basins, refined catchment delineations, municipal sanitary sewer system (if available), and municipal combined sewer system (if applicable) within 10 years of the permit's effective date.

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**BMP: IDDE Program**

**BMP Number (Optional)** 3-4

**Written Document Completed** (by year 1)

**Document Name and/or Web Address:**

**Description:**

The City will be working with a consultant to formalize our IDDE program in Permit Year 2. The City has actively been performing investigations related to IDDE and will be performing sewer and drain rehabilitations in the coming year. The City will formalize the plan for these efforts moving forward to comply with the MS4 General Permit requirements in Permit Year 2.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Conduct 100% of outfall screening on High and Low Priority Outfalls within 3 years of the permit's effective date. Complete catchment investigations for 100% of the Problem Outfalls within 7 years of the permit's effective date. Complete 100% of all catchment investigations within 10 years of the permit's effective date.

**The outfall/interconnection inventory and initial ranking and the dry weather outfall and interconnection screening and sampling results can be found:**

**BMP: Employee Training**

**BMP Number (Optional)** 3-5

**Description:**

The City will implement a formal Employee Training program as part of development of the IDDE Plan to be created in Year 2 of the permit and executed in Year 3.

**Responsible Department/Parties:** Water & Sewer

**Measurable Goal(s):**

Train employees involved in the IDDE program about the program including how to recognize illicit discharges and SSOs.

**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Completed**

**Document Name and/or Web Address:** \_\_\_\_\_

**Description:**

\_\_\_\_\_

**Responsible Department/Parties:** \_\_\_\_\_

**Measurable Goal(s):**

\_\_\_\_\_

Add BMP

# MCM 4

## Construction Site Stormwater Runoff Control

### Permit Part 2.3.5

**Objective:** The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on site so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.

**Examples and Templates:**

Examples and templates relevant to MCM 4, including model ordinances and site inspection templates, can be found here: <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#csrc>

**BMP: Sediment and Erosion Control Ordinance**

**BMP Number (Optional)** 4-1

**Completed** (by May 1, 2008)

**Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

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**BMP: Site Plan Review Procedures**

**BMP Number (Optional)** 4-2

**Written procedures completed** (by year 1)

**Document Name and/or Web Address:**

**Description:**

The City's Site Construction Permit have been formalized. Currently, the City does review plans submitted for any development projects. For the current projects over 1 acre in the City's MS4 areas, those projects all fall in the Assembly Square area and are required to comply with the NPDES Construction General Permit which does require a SWPPP. The City has formalized procedures to inspect and enforce these BMPs on construction site as part of the Site Construction Permit.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Conduct site plan review of 100% of projects according to the procedures outlined above.

---

**BMP: Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures**

**BMP Number (Optional)** 4-3

**Completed** (by year 1)

**Document Name and/or Web Address:**

**Description:**

The City's Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures have been formalized as part of the Site Construction Permit.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed.

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**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Completed**

**Document Name and/or Web Address:**

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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# MCM 5

## Post Construction Stormwater Management in New Development and Redevelopment

Permit Part 2.3.6

**Objective:** The objective of an effective post construction stormwater management program is to reduce the discharge of pollutants found in stormwater to the MS4 through the retention or treatment of stormwater after construction on new or redeveloped sites and to ensure proper maintenance of installed stormwater controls.

**Examples and Templates:**

Examples and templates relevant to MCM 5, including model ordinances and bylaw review templates and guidance can be found here: <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#pcsm>

**BMP: Post-Construction Ordinance**

**BMP Number (Optional)** 5-1

**Completed** (by year 2)

**Town Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

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**BMP: Street Design and Parking Lot Guidelines Report**

**BMP Number (Optional)** 5-2

**Completed** (by year 4)

**Document Name and/or Web Address:**

**Description:**

Within 4 years of adoption of the 2016 MS4 General Permit, the City will issue a report assessing low impact development options as part of street and parking lot projects. As part of Somervision 2020 and Somervision 2040, the City is committed to improving transportation experiences for the most vulnerable users: pedestrians, transit riders, and bicyclists. Low impact development will be explored and recommendations and scheduling of projects will be included in this report.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Complete assessment and implement recommendations of the report where feasible.

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**BMP: Green Infrastructure Report**

**BMP Number (Optional)** 5-3

**Completed** (by year 4)

**Document Name and/or Web Address:**

**Description:**

The City will develop a report assessing any City regulations that may prohibit the use of green roofs, infiltration practices, and water harvesting devices, and if such regulations are found to exist, the City will determine what hinders the use of these practices and what changes need to be made to allow them.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Complete assessment and implement any recommendations of the report.

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**BMP: List of Municipal Retrofit Opportunities**

**BMP Number (Optional)** 5-4

**Completed** (by year 4)

**Document Name and/or Web Address:**

**Description:**

The City will identify a minimum of 5 City-owned properties that could be modified to include BMPs to reduce the frequency, volume, and pollutant loads of stormwater discharges in MS4 areas of the City.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Complete assessment and implement identified BMPs where feasible.

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**BMP:[BMP name here]**

**BMP Number (Optional)** \_\_\_\_\_

**Completed**

**Document Name and/or Web Address:**

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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Add BMP

# MCM 6

## Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Permit Part 2.3.7

**Objective:** The permittee shall implement an operations and maintenance program for permittee-owned operations that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned operations.

**Examples and Templates:**

Examples and templates relevant to MCM 6, including SOP templates for catch basin cleaning, street sweeping, vehicle maintenance, parks and open space management, winter deicing, and Stormwater Pollution Prevention Plans can be found here: <https://www.epa.gov/npdes-permits/stormwater-tools-new-england#gh>

## PERMITTEE OWNED FACILITIES

### BMP: Parks and Open Spaces Operations and Maintenance Procedures

BMP Number (Optional) 6-1

Written Document Completed (by year 2)

Document Name and/or Web Address:

**Description:**

The City will develop procedures to minimize impacts to surrounding waterbodies from City-owned parks and open spaces. Note: The City did plan to develop this in the Spring of 2020, but COVID-19 related items have diverted staff attention elsewhere. This plan will be developed in Year 3 of the permit.

Responsible Department/Parties: Parks Department (DPW), OSPCD, Engineering

**Measurable Goal(s):**

Implement the SOP listed above on 100% of the parks and open spaces.

**Properties List (Optional):**

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### BMP: Buildings and Facilities Operations and Maintenance Procedures

BMP Number (Optional) 6-2

Written Document Completed (by year 2)

Document Name and/or Web Address:

**Description:**

The City will develop procedures to minimize impacts to surrounding waterbodies from City-owned buildings and facilities. Note: The City did plan to develop this in the Spring of 2020, but COVID-19 related items have diverted staff attention elsewhere. This plan will be developed in Year 3 of the permit.

Responsible Department/Parties: Buildings and Grounds (DPW), Capital Projects & Planning

**Measurable Goal(s):**

Implement the SOP listed above on 100% of buildings and facilities.

**Properties List (Optional):**

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### BMP: Vehicles and Equipment Operations and Maintenance Procedures

BMP Number (Optional) 6-3

Written Document Completed (by year 2)

**Document Name and/or Web Address:**

**Description:**

The City will develop procedures to minimize impacts to surrounding waterbodies from City-owned vehicle and equipment storage areas, if applicable. Note: The City did plan to develop this in the Spring of 2020, but COVID-19 related items have diverted staff attention elsewhere. This plan will be developed in Year 3 of the permit.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Implement the SOP listed above for 100% of vehicles and equipment according to the above document.

**Properties List (Optional):**

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## INFRASTRUCTURE

### BMP: Infrastructure Operations and Maintenance Procedures

**BMP Number (Optional)** 6-4

**Written Procedure Completed (by year 2)**

**Document Name and/or Web Address:**

**Description:**

The City will formalize the procedures undertaken to maintain MS4 infrastructure. Note: The City did plan to develop this in the Spring of 2020, but COVID-19 related items have diverted staff attention elsewhere. This plan will be developed in Year 3 of the permit.

**Responsible Department/Parties:**

**Measurable Goal(s):**

100% of infrastructure is maintained to ensure proper function in accordance with the procedures above.

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### BMP: Catch Basin Cleaning Program

**BMP Number (Optional)** 6-5

**Written Procedure Completed (by year 1)**

**Document Name and/or Web Address:**

**Description:**

The City has developed a Catch Basin Cleaning program that optimizes routine inspections, cleaning, and maintenance of catch basins per the requirements outlined in the MS4 General Permit.

**Responsible Department/Parties:** Water & Sewer, Engineering

**Measurable Goal(s):**

All catch basins are cleaned in accordance to the document above such that no catch basin is more than 50% full at any given time.

**BMP: Street Sweeping Program**

**BMP Number (Optional)** 6-6

**Written Procedure Completed (by year 1)**

**Document Name and/or Web Address:** www.somervillema.gov/stormwater

**Description:**

Main streets are swept weekly in the City between mid April and the end of November. Side streets are swept every two weeks between between mid April and the end of November.

**Responsible Department/Parties:** DPW

**Measurable Goal(s):**

Annually sweep 100% of all streets and 50% of all municipal parking lots in accordance with the schedule listed above.

**BMP: Winter Road Maintenance Program**

**BMP Number (Optional)** 6-7

**Written Procedure Completed (by year 1)**

**Document Name and/or Web Address:** www.somervillema.gov/stormwater

**Description:**

The City will investigate methods and alternative materials for use in winter road maintenance.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Evaluate at least one salt/chloride alternative for use in the municipality.

**BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures**

**BMP Number (Optional)** 6-8

**Completed (by year 1)**

**Document Name and/or Web Address:**

**Description:**

The City will develop Stormwater Treatment Structures inspection and maintenance procedures. Note: The City did plan to develop this in the Spring of 2020, but COVID-19 related items have diverted staff attention elsewhere. This plan will be developed in Year 3 of the permit.

**Responsible Department/Parties:**

**Measurable Goal(s):**

Inspect and maintain 100% of treatment structures to ensure proper function.

**BMP: SWPPP**

**BMP Number (Optional)** \_\_\_\_\_

**Completed (by year 2)**

**Document Name and/or Web Address:**

**Description:**

The City does not own or operate any maintenance garages, public works yards, transfer stations, or other waste handling facilities in its MS4 areas.

**Responsible Department/Parties:**

**Measurable Goal(s):**

**BMP:**

**BMP Number (Optional)** \_\_\_\_\_

**Completed**

**Document Name and/or Web Address:**

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

Add BMP

# Annual Evaluation

## Year 1 Annual Report

Document Name and/or Web Address:

www.somervillema.gov/Stormwater

## Year 2 Annual Report

Document Name and/or Web Address:

## Year 3 Annual Report

Document Name and/or Web Address:

## Year 4 Annual Report

Document Name and/or Web Address:

## Year 5 Annual Report

Document Name and/or Web Address:

## Year X Annual Report

Document Name and/or Web Address:

Add a Year

# TMDLs and Water Quality Limited Waters

Select the applicable Impairment(s) and/or TMDL(s).

## **Impairment(s)**

- Bacteria/Pathogens     Chloride     Nitrogen     Phosphorus  
 Solids/oil/grease (hydrocarbons)/metals

## **TMDL(s)**

*In State:*

- Assabet River Phosphorus     Bacteria and Pathogen     Cape Cod Nitrogen  
 Charles River Watershed Phosphorus     Lake and Pond Phosphorus

*Out of State:*

- Bacteria and Pathogen     Metals     Nitrogen     Phosphorus

Clear Impairments and TMDLs

# Bacteria/Pathogens

## Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Alewife Brook		<input type="button" value="+"/> <input type="button" value="-"/>
Mystic River		<input type="button" value="+"/> <input type="button" value="-"/>

### Annual Requirements Beginning Year 1

-----

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

3-4

### *Public Education and Outreach*

*(Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information))*

-----

Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

1-1, 1-2

-----

Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

1-1

-----

Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

NA for Somerville.

# Solids, Oil and Grease (Hydrocarbons), or Metals

## Combination of Impaired Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Alewife Brook		<input type="button" value="+"/> <input type="button" value="-"/>
Mystic River		<input type="button" value="+"/> <input type="button" value="-"/>

### Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

3-4

### *Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule to target areas with potential for high pollutant loads

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

6-6

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

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

6-5

### Requirements Due by Year 2

#### *Stormwater Management in New Development and Redevelopment*

-----  
Stormwater management systems designed on commercial and industrial land use area draining to the water quality limited water body shall incorporate designs that allow for shutdown and containment where appropriate to isolate the system in the event of an emergency spill or other unexpected event

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

5-1
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# Phosphorus

## Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Alewife Brook		<input type="button" value="+"/> <input type="button" value="-"/>
Mystic River		<input type="button" value="+"/> <input type="button" value="-"/>

### Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

3-4

### *Public Education and Outreach*

*(Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information))*

Distribute 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

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

1-1, 1-2

Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

1-1, 1-2

-----  
Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

1-1, 1-2

*Good Housekeeping and Pollution Prevention for Permittee Owned Operations*

-----  
Increase 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)

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

6-6

-----  
Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

6-1

*Stormwater Management in New Development and Redevelopment*

-----  
Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs to reduce nitrogen discharges

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

5-1

*Nitrogen Reduction Tracking BMP*

-----  
Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the permittee or its agents shall be tracked and the permittee shall estimate the phosphorus removal by the BMP consistent with Attachment 1 to Appendix H.

The BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in pass per year by the BMP is found in the following document or website and is updated yearly at a minimum:

Requirements Due by Year 2

*Stormwater Management in New Development and Redevelopment*

-----  
The requirement for adoption/amendment of the permittee's ordinance or other regulatory mechanism shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for phosphorus removal

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

Requirements Due by Year 4

-----  
Complete a Phosphorus Source Identification Report

The document name (if attached) and/or web address is/are:

*Stormwater Management in New Development and Redevelopment*

-----  
Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs that infiltrate stormwater where feasible

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

Requirements Due by Year 5

*Potential Structural BMPs*

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Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.d.ii or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

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Complete a listing of planned structural BMPs and a plan and schedule for implementation

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are: