

# **Stormwater Management Program (SWMP)**

Town of Brookline

EPA NPDES Permit Number MAR041075

# 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     *Mel A. Kleckner*    

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)

# Small MS4 Authorization

The NOI was submitted on

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

---

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	Jay Hersey, P.E.	Title	Environmental Engineer
Department	Department of Public Works/Engineering & Transportation Division		
Phone Number	617-264-6467	Email	jhersey@brooklinema.gov
Responsibilities	Oversee various aspects of the Stormwater Management Program including; conducting inspections, sampling, monitoring, submitting reports, and other required tasks under the 2016 Permit		

## SWMP Team

Name	Robert King, P.E.	Title	Director of Engineering & Transportation
Department	Department of Public Works/Engineering & Transportation Division		
Phone Number	617-730-2138	Email	rking@brooklinema.gov
Responsibilities	In charge of funding capital improvements projects. Also responsible for compliance under the Town's Stormwater By-law. Conduct site plan review and approval		

---

Name	Fred Russell, P.E.	Title	Director of Water & Sewer
Department	Department of Public Works/Water & Sewer Division		
Phone Number	617-730-2174	Email	frussell@brooklinema.gov
Responsibilities	In charge of funding the Stormwater Management Program along with the Operations and Maintenance Program. Stormwater By-law compliance. Conduct site plan review and approval.		

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:

The Department of Public Works/Engineering Division maintains a complete list of outfalls/interconnections. Numbers in the table below include outfalls/interconnections for each receiving water segment. Table does not include interconnections with flows into Brookline from other municipalities. Also see attached Town of Brookline Discharge Locations list attached to this plan.

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
Charles River (MA72-36)	13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Charles River (MA72-38)	9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Muddy River (MA72-11)	10	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Sawmill Brook (MA72-23)	10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Jamaica Pond (MA72052)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<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"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>									

[Click here to lengthen table](#)

# 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)

December 12, 2016 USFWS Ipac Report  
No change in historic property list since the 2003 MS4 Permit

- Publicly available at the website listed below

---

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

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):

Not Applicable (NA)

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):

NA



# 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:Public Education**

**BMP Number (Optional) 1** \_\_\_\_\_

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

**Description:**

Maintain/update existing Stormwater Webpage, infoline, Facebook, videos, links to other stormwater sites like "Think Blue Massachusetts". Place flyers at Town Hall.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

Track responses to educational messages, hits on website, and emails.

**Message Date(s):**

---

**BMP:Public Education**

**BMP Number (Optional) 2** \_\_\_\_\_

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

**Description:**

Maintain/update existing Stormwater Webpage, infoline, Facebook, videos, links to other stormwater sites like "Think Blue Massachusetts". Place flyers at Town Hall.

**Targeted Audience:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

Track responses to educational messages, hits on website, and emails.

**Message Date(s):**

---

**BMP:Public Education**

**BMP Number (Optional) 3** \_\_\_\_\_

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

**Description:**

Maintain/update existing Stormwater Webpage, infoline, Facebook, videos, links to other stormwater sites like "Think Blue Massachusetts". Place flyers at Town Hall.

**Targeted Audience:** Developers (construction)

**Responsible Department/Parties:** Engineering

**Measurable Goal(s):**

Track responses to educational messages, hits on website, and emails.

**Message Date(s):** Annually in June

---

**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:** Industrial facilities

**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)** 1 \_\_\_\_\_

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

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

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

**BMP Number (Optional)** 2 \_\_\_\_\_

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

**BMP: [BMP name here]**

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

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

Add BMP



# 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) 1** \_\_\_\_\_

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

**Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

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

**BMP Number (Optional) 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>
---	---

---

**BMP: Map of Storm Sewer System**

**BMP Number (Optional)** 3 \_\_\_\_\_

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

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

**Document Location and/or Web Address:** On file at DPW/Engineering

**Description:**

Maps are maintained by DPW. Due to security reasons maps are not available online.

**Responsible Department/Parties:** Engineering

**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.

---

**BMP: IDDE Program**

**BMP Number (Optional)** 4 \_\_\_\_\_

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

**Document Name and/or Web Address:** Comprehensive IDDE Plan on file at DPW/Engineering

**Description:**

DPW has been working under an EPA approved IDDE Plan since 2005. DPW continues to follow this approved plan. Annual Progress Reports are submitted to the EPA.

**Responsible Department/Parties:** Engineering

**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:**

Inventory and screening results can be obtained through DPW/Engineering Division.

---

**BMP: Employee Training**

**BMP Number (Optional)** 5 \_\_\_\_\_

**Description:**

IDDE work is performed by the Engineering Staff.

**Responsible Department/Parties:** Engineering

**Measurable Goal(s):**

Training occurs on an annual or as needed basis.

**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) 1** \_\_\_\_\_

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

**Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

---

**BMP: Site Plan Review Procedures**

**BMP Number (Optional) 2** \_\_\_\_\_

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

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

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

**BMP Number (Optional) 3** \_\_\_\_\_

**Completed (by year 1)**

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

**BMP:[BMP name here]**

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

**Completed**

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

Add BMP

# **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) 1** \_\_\_\_\_

**Completed (by year 2)**

**Town Ordinances Link or Reference:**

**Department Responsible for Enforcement:**

---

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

**BMP Number (Optional) 2** \_\_\_\_\_

**Completed (by year 4)**

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

**BMP: Green Infrastructure Report**

**BMP Number (Optional) 3** \_\_\_\_\_

**Completed (by year 4)**

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

---

**BMP: List of Municipal Retrofit Opportunities**

**BMP Number (Optional)** 4 \_\_\_\_\_

**Completed (by year 4)**

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

**Description:**

Engineering will review and establish a list of possible sites for retrofit opportunities.

**Responsible Department/Parties:**

**Measurable Goal(s):**

The list is completed by (DATE) and updated as needed.

**BMP:[BMP name here]**

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

**Completed**

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

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) 1 \_\_\_\_\_

Written Document Completed (by year 2)

Document Name and/or Web Address: See Town of Brookline/APWA Manual Chapter 19 for Parks, Grounds, and Forestry Procedures

**Description:**

DPW/Parks and Open Space Division will prepare and update O&M procedures.

Responsible Department/Parties: DPW/Parks and Open Space Division

**Measurable Goal(s):**

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

**Properties List (Optional):**

---

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

BMP Number (Optional) 2 \_\_\_\_\_

Written Document Completed (by year 2)

Document Name and/or Web Address: See Town of Brookline/APWA Manual Chapter 18 for Equipment and Fleet Management

**Description:**

O&M Procedures in place for all fueling facilities. Spill Kits are stationed at all facilities. Employees are trained to cleanup spills. Storage Tanks are tested by an independent contractor. Fuel supplies are from outside vendor that have their own spill response plans

Responsible Department/Parties: DPW & Building Department

**Measurable Goal(s):**

SOP listed above on 100% of buildings and facilities are in place.

**Properties List (Optional):**

---

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

**BMP Number (Optional)** 3 \_\_\_\_\_

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

**Document Name and/or Web Address:** See Town of Brookline/APWA Manual Chapter 18 for Equipment and Fleet Management Procedures

**Description:**  
DPW/Highway, Sanitation, and Fleet Maintenance will prepare O&M procedures. DPW services more than 370 pieces of equipment.

**Responsible Department/Parties:** DPW/Highway Division

**Measurable Goal(s):**  
Implement the SOP listed above for 100% of vehicles and equipment according to the above document.

**Properties List (Optional):**  
\_\_\_\_\_

## **INFRASTRUCTURE**

### **BMP: Infrastructure Operations and Maintenance Procedures**

**BMP Number (Optional)** 4 \_\_\_\_\_

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

**Document Name and/or Web Address:** See Town of Brookline/APWA Manual Chapter 27 for Stormwater and Flood Management Procedures

**Description:**  
DPW/Engineering will prepare and update O&M procedures as needed.

**Responsible Department/Parties:** Engineering

**Measurable Goal(s):**  
100% of infrastructure is maintained to ensure proper function in accordance with the procedures above.

### **BMP: Catch Basin Cleaning Program**

**BMP Number (Optional)** 5 \_\_\_\_\_

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

**Document Name and/or Web Address:** See Town of Brookline/APWA Manual Chapter 27 for Stormwater and Flood Management Procedures

**Description:**  
DPW/Water & Sewer Division is responsible for catch basin cleaning program. 80% of all the catch basins

are typically cleaned every year. Every basin is cleaned at least once in side of two years. There are 3,296 catch basins in Brookline.

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

**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 \_\_\_\_\_

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

**Document Name and/or Web Address:** See Town of Brookline/APWA Manual Chapter 25 for Street Cleaning Procedures

**Description:**

DPW/Highway & Sanitation Division is responsible for street sweeping program. Non-commercial/non-arterial streets are swept every 7 to 10 days. Commercial/arterial or other critical streets are swept 3 nights per week. There are approximately 10,300 lane miles in Brookline.

**Responsible Department/Parties:** DPW/Highway Division

**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)** 7 \_\_\_\_\_

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

**Document Name and/or Web Address:** See Town of Brookline/APWA Manual Chapter 26 for Snow and Ice Control Procedures

**Description:**

DPW/Highway Division is responsible for winter road maintenance program. DPW maintains approximately 250 miles of roadway, 40 miles of sidewalk, 10 Public Schools, and 20 municipal lots. DPW no longer uses sand on roadways. The Highway Division uses a brine solution to pre-treat roadways and then salt as needed during storm events to keep road surfaces from freezing.

**Responsible Department/Parties:** DPW/Highway Division

**Measurable Goal(s):**

Evaluate at least one salt/chloride alternative for use in the municipality. See note above regarding the use of a brine solution to pre-treat roadway surfaces.

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

**BMP Number (Optional)** 8 \_\_\_\_\_

**Completed** (by year 1)

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

**Description:**

**Responsible Department/Parties:**

**Measurable Goal(s):**

**BMP: SWPPP**

**BMP Number (Optional)** 9 \_\_\_\_\_

**Completed** (by year 2)

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

**Description:**

**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:**

<https://www.brooklinema.gov/483/Stormwater-Information>

## Year 2 Annual Report

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

<https://www.brooklinema.gov/483/Stormwater-Information>

## Year 3 Annual Report

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

<https://www.brooklinema.gov/483/Stormwater-Information>

## 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
Muddy River (MA72-11)	Pathogens	<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:

See IDDE Plan.

### *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:

Think Blue link on Stormwater Website. Post messages on Facebook.

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:

Think Blue link on Stormwater Website. Post messages on Facebook.

---

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:

There are only few houses that have septic systems in Brookline. The Town will reach out to those property owners to let them know about proper septic system maintenance. The Town will also post a message annually on Facebook.

# Chloride

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Sawmill Brook (MA72-23)	Chloride	<input type="button" value="+"/> <input type="button" value="-"/>

## Annual Requirements Beginning Year 1

### *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))*

-----

Include an annual message in November/December to private road salt applicators and commercial industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

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

See winter de-icing procedures in prior section. Brookline uses brine solution and salt to treat roadways. The Sawmill Brook Starts in Brookline and then flows through Newton then Boston before it drains into the Charles River.

## Requirements Due by Year 3

-----

Develop a Salt Reduction Plan

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

Brookline already has a salt reduction plan in place through the use of brine as a de-icing material. DPW will review procedures to see if there can be any additional measures to reduce salt in the Sawmill Brook Watershed Area.

## Requirements Due by Year 4

-----

Continue implementation of the Salt Reduction Plan

## Requirements Due by Year 5

-----

Fully implement the Salt Reduction Plan

# 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
Charles River (MA72-36)	Oil & Grease/PAH	<input type="button" value="+"/> <input type="button" value="-"/>
Charles River (MA72-38)	Oil & Grease/PAH	<input type="button" value="+"/> <input type="button" value="-"/>
Muddy River (MA72-11)	Oil & Grease/PAH	<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:

See IDDE Plan.

### *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:

See housekeeping section for sweeping procedures.

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:

See housekeeping section for catch basin cleaning procedures.

### 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:

Stormwater management systems on commercial properties will be assessed during the site plan review process and include in emergency spill measures in O&M plans. There is no industry in Brookline.

# Phosphorus

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

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Charles River (MA72-36)	Phosphorus	<input type="button" value="+"/> <input type="button" value="-"/>
Sawmill Brook (MA72-23)	Phosphorus	<input type="button" value="+"/> <input type="button" value="-"/>
Muddy River (MA72-11)	Phosphorus	<input type="button" value="+"/> <input type="button" value="-"/>
Charles River (MA72-38)	Phosphorus	<input type="button" value="+"/> <input type="button" value="-"/>

### Annual Requirements Beginning Year 1

#### *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:

<https://www.brooklinema.gov/DocumentCenter/View/19389/TBM-Lawn-Care-Flyer-Brookline>.  
 Flyer also on Facebook.

-----  
 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:

<https://www.brooklinema.gov/483/Stormwater-Information>. Link to "Think Blue Website". Also post flyer on Facebook.

-----  
 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:

<https://www.brooklinema.gov/483/Stormwater-Information>. Town also has yard waste collection program. For more informations see: <https://www.brooklinema.gov/1262/Yard-Waste>.



[Empty box]

*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:

See housekeeping section for street sweeping procedures.

-----  
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:

DPW has procedures in place. Grass cuttings and leaf litter are collected and disposed of offsite. See Town yard waste collection program: <https://www.brooklinema.gov/1262/Yard-Waste>.

*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 phosphorus discharges

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

Town will conduct inventory and priority ranking to include consideration of BMPs to reduce phosphorus discharges. Typically, most park renovation projects include the implementation of infiltration practices to reduce phosphorus discharges.

*Phosphorus 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:

Town will inventory, assess, and estimate phosphorus removal from existing BMPs.

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:

Add phosphorus removal component to site plan requirements.

Requirements Due by Year 4

-----  
Complete a Phosphorus Source Identification Report

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

To be determined (TBD)

*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:

Town will conduct inventory and priority ranking to include consideration of BMPs to reduce phosphorus discharges. Typically, most park renovation projects include the implementation of infiltration practices to reduce phosphorus discharges.

Requirements Due by Year 5

*Potential Structural BMPs*

-----  
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:

TBD

-----  
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:

TBD

# Charles River Watershed Phosphorus TMDL

<b>PCP Phase</b>	<b>Document Location</b>
I (completed by year 5)	
II (completed by year 10)	
III (completed by year 15)	