Stormwater Management Program (SWMP)

Town of Wilmington

121 Glen Road, Wilmington, MA 01887

EPA NPDES Permit Number MAR04123

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

https://www.wilmingtonma.gov/public-works/stormwater-management/pages/ms4-permit

"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	Paul M. Alunni, PE, Town Engineer	
Signature	Pami	Date Jun 27, 2019
Revisions		
Printed Name	Paul M. Alunni, PE, Town Engineer	
Signature	Pathi	Date Sep 27, 2023
	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)

This Stormwater Management Plan has been completed for the Town of Wilmington, MA in accordance with the Massachusetts Municipal Separate Storm Sewer System (MS4) General Permit. This MS4 General Permit authorizes stormwater to discharge under the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) Phase II final rule in compliance with the Clean Water Act (CWA) and the Massachusetts Clean Waters Act (MCWA).

Since 2003, in accordance with the first and now expired NPDES Phase II MS4 Program, the Town of Wilmington has continually implemented stormwater management programs to address known impairments and improve the quality of surface water within regulated areas.

In 2006, the Town completed a Comprehensive Water Resources Management Plan (CWRMP) that provided a general evaluation of the stormwater conditions town-wide and identified areas where water quality and

quantity impacts from stormwater runoff were greatest.

Following the completion of the CWRMP, the Town initiated a Drainage System Master Plan. This plan consisted of mapping and field investigations of the Town's drainage system. The Department of Public Works (DPW) conducted Global Positioning System (GPS) survey of the entire drainage system as well as inspected drain manholes and catch basin structures to document structural features and condition. Key outfalls were identified and targeted for dry weather flow observations. Outfalls where flow was detected were tested in accordance with EPA guidelines to determine if the potential for illicit discharges upstream existed.

This existing information formed the foundation for compliance with the current NPDES Phase II MS4 permit, and requisite Stormwater Management Report; particularly mapping requirements. The Town has since purchased a GPS unit, and hired a full-time GIS manager to ensure data is collected accurately and made available in a user-friendly format (i.e. on-line mapping).

Stormwater Best Management Practices (BMPs) owned by the municipality have been field located, mapped, and inspected. Maintenance to BMPs is expected to commence in July of 2019 and be on-going.

Local Bylaws and Ordinances were passed in 2007, and again in 2009, in accordance with the expired permit aimed at removal and prevention of Illicit Discharges, and Stormwater Management Development/ Redevelopment standards, respectively. The Town is currently working toward updating the local stormwater bylaw (by July 1, 2020) to comply with the provisions of the current MS4 permit.

The Town's DPW Operations Manager coordinates town-wide programs for Street Sweeping, Catch Basin Cleaning, Winter Road Maintenance. Current terms of this permit related to these items have been reviewed with the appropriate personnel.

Small MS4 Authorization

The NOI was submitted on Sep 21, 2018

The NOI can be found at the following (document name or web address): www.wilmingtonma.gov/public-works/stormwater-management

Authorization to Discharge was granted on Feb 14, 2019

The Authorization Letter can be found (document name or web address): www.wilmingtonma.gov/public-works/stormwater-management

Stormwater Management Program Team

SWMP Team Coordinator

Name	Paul M. Alunni, PE	Title	Town Engineer		
Department	Department of Public Works Engineering Division				
Phone Number	978-658-4499	Email palunni@wilmingtonma.gov			
Responsibilities	Project Manager, Lead Contact.				
SWMP Team					
Name	Matthew Spurr	Title	Assistant Town Engineer		
Department	Department of Public Works Eng	gineering Division			
Phone Number	978-658-4499	Email mspurr@wi	lmingtonma.gov		
Responsibilities	ities Data Collection and Inspections				
Name	Hai Lam	Title	Assistant Town Engineer		
Department	Department of Public Works Eng	gineering Division			
Phone Number	978-658-4499	Email hlam@wilm	ningtonma.gov		
Responsibilities	BMP Inspections				
Name	Jerry Lawrenson	Title	Operations Manager		
Department	Department of Public Works				
Phone Number	978-658-4481	Email jlawrenson@	wilmingtonma.gov		
Responsibilities	Manages Operation and Mainten	ance of Public Infra	astructure		

	Γ				
Name	Cameron Lynch	Title Conservation Agent			
Department	Department of Planning and Conservation				
Phone Number	978-658-8238 Email clynch@wilmingtonma.gov				
Responsibilities	^s Endangered Species Act, National Historic Preservation Act, Outfall Sampling for IDDE Program Compliance, and assistance with existing BMP maintenance.				
Name	Shelly Newhouse	Title Director of Public Health			
Department	Health Department				
Phone Number	978-658-4298	Email boh@wilmingtma.gov			
Responsibilities	Assistance with IDDE Program	n, and Pet Waste Disposal Program			
Name	Christopher Sullivan	Title Animal Control Officer			
Department	Wilmington Police Department	t			
Phone Number	978-658-7988	Email csullivan@wpd.org			
Responsibilities	Pet Waste Control and Bird Co	ngregation			
Name	Valerie Gingrich	Title Director of Planning and Conservation			
Department	Planning and Conservation				
Phone Number	978-658-8238	Email vgingrich@wilmingtonma.gov			
Responsibilities	Local Bylaw and Regulation re	equirements.			
Name	Anthony LaVerde	Title GIS Coordinator			
Department	Engineering Division of DPW				
Phone Number	978-658-4499	Email alaverde@wilmingtonma.gov			

Responsibilities Data Collection, Spatial Data input, GIS Mapping, and reco	ord tracking through People-forms.
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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 segme OR

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

https://www.mapsonline.net/wilmingtonma/ms4.html

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	
MA83-18 Shawsheen River (Outfall ID #15022-1 to 15022-7)	7								\boxtimes		Fe
MA83-18 Shawsheen River (Outfall ID #15025-1 to 15025-6)	6								\boxtimes		Fe
MA83-18 Shawsheen River (Outfall ID #15027-1 to 15027-8)	8								\boxtimes		Fe
MA83-18 Shawsheen River (Outfall ID #15041-1 to 15041-16)	16										Fe
MA83005 Fosters Pond (Outfall ID #15043-1 to 15043-5)	5										M
MA92-04 Tributary (Mill Brook) to Maple Meadow Brook (Outfall ID# 17001-1 to 17001-8)	8										
MA92-04 Tributary (Sawmill Brook) to Maple Meadow Brook(Outfall ID#17004-1 to 17004-19)	19										
MA92-04 Tributary (lower Mill Br.) to Maple Meadow Brook(Outfall ID#17005-1 to 17005-64)	64										
MA92-04 Maple Meadow Brook (Outfall ID #17006-1 to 17006-8)	8										
MA92-05 Lubbers Brook (upper) (Outfall ID #17007-1 to 17007-75)	75								\boxtimes		
MA92-05 Lubbers Brook (lower) (Outfall ID #17008-1 to 17008-77)	77								\boxtimes		

MA92059 Sliver Lake (Outfall ID #17008-78 to 17008-82)	5						D
MA92-06 Ipswich River (Outfall ID #17012-1 to 17012-25)	25		\boxtimes				M
MA92-08 Martins Brook (Outfall ID #17019-1 to 17019-61)	61		\boxtimes				A Fe
MA71-01 Aberjona River (Outfall ID #19104-1 tp 19104-4)	4						A M S

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)					
Publicly available at the website listed below					
Under what criterion did permittee determine eligibility for ESA?					
\Box Criterion A \Box Criterion B \boxtimes Criterion C					
Under what criterion did permittee determine eligibility for Historic Properties?					
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$					

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 EPA MS4 permit requires compliance with the Federal Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA) to ensure permitted activities and infrastructure do not adversely affect ESA-listed species or NHPA-listed properties. Because we are currently permitting existing infrastructure that was approved under the previous MS4 permit, Wilmington meets MS4 permit eligibility criteria for both. As part of the eligibility criteria, future work subject to the MS4 permit, including installation of structural BMPs and construction and/or installation of control measures that involve subsurface BMPs, will need to be screened in order to ensure ESA-listed species or NHPA-listed properties are not adversely impacted.

The only ESA-listed species currently in Wilmington is the threatened Northern Long-Eared Bat (NLEB), which is listed throughout Massachusetts; as such, the Town of Wilmington meets eligibility Criterion C. Future activities subject to the MS4, such as installation of structural BMPs, will be screened to determine if tree removal is required, and if they are proposed within specified distances of any "known" NLEB maternity roost trees or hibernacula as mapped by the Natural Heritage and Endangered Species Program (NHESP). Streamlined consultation under the 4(d) rule or formal consultation with the USFWS will be initiated as needed. Each screening will also confirm whether regulatory procedures and requirements have changed, and whether new species have been ESA-listed by the USFWS in the Town of Wilmington. If either of these occur, Wilmington will consult with the USFWS as required to ensure compliance. Information that will be reviewed as part of the screening process includes, but is not limited to:

NHESP NLEB Website (mapped "known" roost trees and hibernacula): https://www.mass.gov/service-details/ the-northern-long-eared-bat

USFWS NLEB Website (4(d) rule and flow chart for federal projects): https://www.fws.gov/midwest/ endangered/mammals/nleb/

USFWS New England Field Office (current ESA-listed species): https://www.fws.gov/newengland/ EndangeredSpec-NEListedSpecies.htm

USFWS IPaC (map to identify ESA-listed species in an area): https://ecos.fws.gov/ipac/

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):

All existing facilities in Wilmington were authorized by the previous MS4 permit; as such, consultation with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other tribal representatives is not currently required for MS4 coverage. The EPA has determined that discharges of constituents confined to existing channels, outfalls, or natural drainage areas do not have the potential to cause impact to historical properties. Therefore, Wilmington meets eligibility Criterion A. Any construction and/or installation of control measures that involve subsurface disturbance of less than one acre of land will be screened to ensure historic properties are not impacted and/or they are in compliance with written agreements with the SHPO, THPO, or other tribal representatives. Consultation with the SHPO, THPO, and other tribal representatives for these types of future activities will be initiated as required to ensure compliance. Information that will be reviewed as part of the screening process includes, but is not limited to:

National Park Service (NPS) National Registry of Historic Places Database: https://www.nps.gov/nr/research/ MHC Massachusetts Cultural Resource Information System (MACRIS): http://mhc-macris.net/

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: <u>https://www.epa.gov/</u>npdes-permits/stormwater-tools-new-england#peo

BMP: Public Education

BMP Number (Optional) **1A**

Document Name and/or Web Address: Pet Waste Brochure

Description:

General information regarding proper disposal of pet waste.

Targeted Audience: Residents

Responsible Department/Parties: Engineering Division, and Animal Control Officer

Measurable Goal(s):

Reduce pet waste in catch basins, and reduce pollutant discharges to receiving waters

Message Date(s): Mailed to residents with with quarterly water bill (May 2019)

BMP: Public Education

BMP Number (Optional) **1B**

Document Name and/or Web Address: Pet Waste Brochure

Description:

Reduce pet waste in catch basins, and reduce pollutant discharges to receiving waters.

Targeted Audience: Residents in the Lt. Buck Drive area

Responsible Department/Parties: Engineering Division and Animal Control Officer

Measurable Goal(s):

During catch basin cleaning, DPW personnel reported a catch basin "full" of pet waste baggies on Lt. Buck Drive. The baggies were removed and disposed of by DPW. The Engineering Division with the assistance of the Animal Control Officer used GIS mapping to identify a cluster of residences in that area to educate with a pet waste brochure. Engineering Division has visited the catch basin since and it has been clear of any baggies. The Animal Control Officer also posted the brochure to the Town's Facebook and Twitter pages.

Message Date(s): August 6, 2018

BMP:Public Education

BMP Number (Optional) **1C**

Document Name and/or Web Address: Good Housekeeping including Fertilizer Use Brochure, and Proper Fertilizer Use Presentation posted on Web page: www. wilmingtonma.gov/public-works/stormwater-management

Description:

Brochure and publicly made available presentation discussing the proper use of fertilizers per MDAR regulations to ultimately reduce excess nutrients to the Town's water-bodies.

Targeted Audience: Businesses, Institutions, and Commercial Facilities

Responsible Department/Parties: Operations Manager of the Department of Public Works

Measurable Goal(s):

Reduction of nutrients to water-bodies.

Message Date(s): November 2019

BMP: Public Education

BMP Number (Optional) **1D**

Document Name and/or Web Address: Good Housekeeping for Industrial Facilities

Description:

General information regarding good housekeeping practices for equipment repair and storage, storage of materials, waste disposal, and storage of de-icing materials

Targeted Audience: Industrial Facilities

Responsible Department/Parties: Department of Planning and Conservation with Engineering Division

Measurable Goal(s):

Promote good housekeeping practices, non-structural BMPs, and reduce potential for pollutant discharge from LUHPPLs

Message Date(s): February 2020

BMP: Public Education

BMP Number (Optional) **1E**

Document Name and/or Web Address: Erosion and Sediment Control Display at Town Hall

Description:

Properly Manage Erosion and Sediment Control from Construction Sites; and proper Operation and Maintenance of existing facilities.

Targeted Audience: Developers

Responsible Department/Parties: Department of Planning and Conservation and Engineering Division.

Measurable Goal(s):

Reduction in sediment discharge to the MS4 and overall pollutant reduction to resource areas through properly functioning stormwater management systems.

Message Date(s): July 2021

BMP:Public Education

BMP Number (Optional) **1F**

Document Name and/or Web Address: Local Public Service Announcement (Wilmington Public Access)

Description:

General Information regarding water quality and protection of natural resources

Targeted Audience: Residents

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Reduce potential for illegal dumping, protection of drain inlets, and increase awareness of outfall discharges.

Message Date(s): December 2021

BMP:[BMP name here] Public Education

BMP Number (Optional) **1G**

Document Name and/or Web Address: Operation and Maintenance + Long Term Pollution Prevention Plan Brochure

Description:

Implementation of Operation and Maintenance of existing stormwater systems and establishing a Long Term Pollution Prevention Plan.

Targeted Audience: Industrial Facilities

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Reduction in Pollutant Discharge to resource areas.

Message Date(s): July 2022

BMP:[BMP name here]

BMP Number (Optional) **1H**

Document Name and/or Web Address: Long Term Pollution Prevention Plan

Description:

Long Term Pollution Prevention Planning - Fertilizer Management, snow/de-icing management, proper waste management, proper storage of materials, overall good housekeeping practices.

Targeted Audience: Businesses, Institutions, and Commercial Facilities

Responsible Department/Parties: Engineering Division and Planning and Conservation Department

Measurable Goal(s):

Reduce potential for pollutant (nutrients, sodium, sediment, and trash) discharge to the MS4 system and resource areas

Message Date(s): December 2022

BMP:Public Education

BMP Number (Optional) 11

Document Name and/or Web Address: Workshop

Description:

Workshop to discuss the objectives of the Town's local Stormwater Management regulations, the State Policy, and EPA's Construction General Permit.

Targeted Audience: Developers

Responsible Department/Parties: Engineering Division, Planning and Conservatoin

Measurable Goal(s):

Increase education of properly managing stormwater runoff from development sites, the benefits to Low Impact Development design, and ideas on low-cost retrofit of existing stormwater management systems.

Message Date(s): July 2023

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) **2A**

Location of Plan and/or Web Address:	121 Glen Road, Room 7 (Engineering Division), Wilmington MA;
	or online at:
	www.wilmingtonma.gov/public-works/stormwater-management

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Stormwater Management Plan is publicly available.

BMP: Public Participation in Stormwater Management Program Development

BMP Number (Optional) **2B**

Description:

Provide Link on website to post public comments

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Annual public input provided.

BMP: [BMP name here]

BMP Number (Optional) **2**C

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

Posted IDDE information, and fertilizer use presentation on-line with interactive quizzes to "test your knowledge".

Responsible Department/Parties: Operations Manager of DPW, and Engineering Division.

Measurable Goal(s):

Educates, and promotes public participation - also quiz results can be used as a metric for the effectiveness of distributed educational materials (MCM 1).

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: <u>https://www.epa.gov/</u>npdes-permits/stormwater-tools-new-england#idde

BMP: IDDE Legal Authority

BMP Number (Optional) 3A	Completed (by May 1, 2008)
Ordinances Link or Reference:	www.wilmingtonma.gov/sites/wilmingtonma/files/uploads/ illicit_discharge_bylaw_0.pdf
Department Responsible for En	forcement: Board of Health

BMP: Sanitary Sewer Overflow (SSO) Inventory

BMP Number (Optional) 3B

Completed (by year 1) \boxtimes

Document Name and/or Web Address: SSO Inventory Spreadsheet located at www.wilmingtonma.gov/ sites/wilmingtonma/public-works/stormwater-management

Description:

Five-Year SSO history has been documented in spreadsheet format - available at the above web address.

Responsible Department/Parties: Business and Utility Manager (DPW), Health Department

Measurable Goal(s):

Annually track and report the following SSO information: the location; a clear statement of whether the discharge entered a surface water directly or entered the MS4; date(s) and time(s) of each known SSO occurrence; estimated volume(s) of the occurrence; description of the occurrence indicating known or suspected cause(s); mitigation and corrective measures completed with dates implemented; and mitigation and corrective measures planned with implementation schedules. Update inventory as needed.

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.

The MassDEP contacts are:	The EPA contacts are:
Northeast Region (978) 694-3215	EPA New England (617) 918-1510
205B Lowell Street	5 Post Office Square
Wilmington, MA 01887	Boston, MA 02109
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	

BMP: Map of Storm Sewer System

Document Location and/or Web Address: https://www.mapsonline.net/wilmingtonma/ms4.html

Description:

All MS4 outfalls within the Town of Wilmington have been field survey located and mapped accordingly on the Town's GIS mapping platform. A GIS mapping site has been created for public viewing at www. mapsonline.net/wilmingtonma/ms4. Also included on the map are the receiving waters and their corresponding sub-watershed boundary (subwatershed boundary ID numbers correlate to the MassGIS data layer numbering system). The Town of Wilmington has developed a complete Drainage System Master Plan, which includes the GPS located, GIS mapping of the Town's entire drainage system. This includes topography, stormwater BMPs (i.e. existing retention basins, and infiltration basins), catch basins, drain manholes, and pipe network system. The Town has also mapped the entire sanitary sewer system, complete with rim and invert data based on record as-built drawings. Given the relatively young age of the Town's Sewer System (c.1970s to present), record information was found to be very accurate.

Action items to be complete before end of Year 2 include: Waterbodies identified by name and indication of all use impairements, and initial IDDE catchment delineations will be mapped and posted on the publicly viewable GIS map.

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Map 100% of outfalls and receving 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) **3D**

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

The Town has written an IDDE Program (posted at link above) to systematically find and eliminate sources of non-stormwater discharges to our municipal separate storm sewer system (MS4) and prescribe procedures to prevent such discharges from occurring.

Responsible Department/Parties: Engineering Division, Operations Division, Business and Utility Manager,

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:

Initial outfall inventory is posted online at www.wilmingtonma.gov/public-works/stormwater-management

BMP: Employee Training

BMP Number (Optional) **3E**

Description:

Annual IDDE training is available to all employees involved in the IDDE program. This training will at a minimum include information on how to identify illicit discharges and SSOs and includes additional training specific to the functions of particular personnel and their function within the framework of the IDDE program. Training records are maintained in Appendix E. The frequency and type of training will be included in the annual report.

Responsible Department/Parties: DPW Operations Manager

Measurable Goal(s):

Training occurs annually in November/December.

BMP:Employee Training

BMP Number (Optional) 3F

Document Name and/or Web Address:

Completed 🖂

Description:

Started annual training for DPW Personnel regarding salt reduction program, and benefits of pre-wetting and use of Magnesium Chloride. Training occurred on December 14, 2022 and included 32 DPW labor and operations personnel.

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

Reduce the amount of rock salt used and spread more efficiently.

BMP:Rain Barrel Program

BMP Number (Optional) **3G**

Completed 🖂

Document Name and/or Web Address:

Description:

Town coordinated with the Wilmington Apple (local newspaper) to advertise rain barrels at a discounted rate. The article provided education on the benefits of rain barrels (rainwater harvesting).

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

By June 17, 2023, the Town sold 45 Rain Barrels.

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: <u>https://www.epa.gov/npdes-permits/stormwater-tools-new-england#csrc</u>

BMP: Sediment and Erosion Control Ordinance

BMP Number (Optional) 4A	Completed (by May 1, 2008)
Ordinances Link or Reference:	www.wilmingtonma.gov/sites/wilmingtonma/files/pages/
	comprehensive_stormwater_management_bylaw_revised_atm_2016.pdf

Department Responsible for Enforcement: Department of Planning and Conservation

BMP: Site Plan Review Procedures

BMP Number (Optional) **4B**

Written procedures completed (by year 1)

Document Name and/or Web Address: https://www.wilmingtonma.gov/sites/wilmingtonma/files/uploads/ annual_town_meeting_may_5_2018.pdf

Description:

Site plan review is required for any project where a building is to be constructed or externally modified, altered or enlarged. Site Plan Review is also required for any change in use including when parking is changed or expanded. The Town of Wilmington Comprehensive Stormwater Management Bylaw (Bylaw) requires a Stormwater Management Permit for any project that must undergo Site Plan Review, except for a change of use where the exterior of the site is not changed, and except for a site plan amendment that does not impact the function of the stormwater management system on the site.

Site Plan Review requires a public hearing with the Planning Board, ensuring that the public is able to comment on proposed projects and submit information to the Town. Pre-construction meetings are required through Site Plan Review as a standard permit condition.

All requirements of the Bylaw and Regulations apply to projects undergoing Site Plan Review. All of the inspection procedures contained in the Regulations and outlined in the previous Sections would apply. Additionally, Section 12 of the Regulations requires perpetual inspection and maintenance:

Responsible Department/Parties: Department of Planning and Conservation

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) **4C**

Completed (by year 1) \boxtimes

Document Name and/or Web Address: https://www.wilmingtonma.gov/sites/wilmingtonma/files/uploads/ complete stormwater regulations 2018 - unsigned.pdf

Description:

Section 11 of the Town of Wilmington Comprehensive Stormwater Management Regulations (Regulations) contain the following procedures for site inspection and enforcement:

SECTION 11. CONSTRUCTION INSPECTIONS

11.1 CONSTRUCTION COMMENCEMENT

11.1.1 NOTICE OF CONSTRUCTION COMMENCEMENT - The applicant must notify the Planning Board 14 days prior to the commencement of construction. In addition, the applicant must notify the Planning Board 14 days prior to construction of critical components of any stormwater management facility.

11.1.2 PRE-CONSTRUCTION MEETING - The Planning Board shall require, unless waived by the Planning Board, a pre-construction meeting prior to starting clearing, excavation, construction or land disturbing activity by the permittee. The permittee's technical representative, the general contractor or any other person with authority to make changes to the project, shall meet with the Board or its representative to review construction sequencing and the permitted plans and their implementation.

11.2 STORMWATER MANAGEMENT SYSTEM CONSTRUCTION INSPECTION

11.2.1 The applicant or its authorized representative is responsible for performing stormwater management system construction inspections. At the discretion of the Planning Board, the Planning Board or its agent will monitor the stormwater management system construction. All inspections shall be documented and, as required written reports shall be prepared in accordance with engineering division practices.

11.2.2 The applicant or its authorized representative shall inspect the project site at the following stages, at a minimum:

11.2.2.1 Initial Site Inspection: prior to any installations.

11.2.2.2 Stormwater Management System Inspection: An inspection will be made of the completed stormwater management system, prior to backfilling of any underground drainage or stormwater conveyance structures.

11.2.2.3 Inspection of subgrade: after backfilling.

11.2.2.4 Final Inspection

11.2.3 AS-BUILT PLANS - After the stormwater management system has been constructed and before the surety has been released, all applicants are required to submit to the Planning Board actual "as built" plans for any stormwater management facilities or practices after final construction is completed and must be certified by a Professional Engineer. As built plans shall be full size plans, which reflect the "as built" conditions, including all final grades, developed by a Professional Engineer registered in the Commonwealth of Massachusetts. All changes to project design should be recorded in red ink on plans to define changes made. All work deleted, corrections in elevations, and changes in materials, should be shown on the as built drawings.

11.3 EROSION AND SEDIMENT CONTROL INSPECTION

11.3.1 To ensure erosion control practices are in accord with the filed Erosion and Sediment Control Plan,

Erosion Control Inspections will be conducted by the applicant or its authorized representative at least once every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater from the start of construction until the site is permanently stabilized. The permittee is required to notify the Planning Board of any change in inspection frequency, including termination of inspections due to site stabilization.

11.3.2 Inspections must be conducted by qualified personnel (provided by the operator or cooperatively by multiple operators). "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

11.3.3 Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the storm water conveyance system. Sedimentation and erosion control measures identified in the Erosion and Sediment Control Plan must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

11.3.4 For each inspection required above, an inspection form must be completed and kept on-site, or submitted to the Planning Board upon request. The form must include the following information, at a minimum:

- 11.3.4.1 The inspection date
- 11.3.4.2 Names, titles, and qualifications of personnel making the inspection
- 11.3.4.3 Weather information and a description of any discharges occurring at the time of the inspection.

11.3.4.4 Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred.

- 11.3.4.5 Location(s) of discharges of sediment or other pollutants from the site
- 11.3.4.6 Location(s) of BMPs that need to be maintained
- 11.3.4.7 Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location
- 11.3.4.8 Location(s) where additional BMPs are needed that did not exist at the time of inspection
- 11.3.4.9 Corrective action required including any changes to the SWPPP necessary and implementation dates
- 113.4.10 Corrective actions performed

11.3.5 A record of each inspection and of any actions taken must be retained for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the construction project or site complies with this permit.

11.3.6 All erosion and sediment control measures and other protective measures identified in the Erosion and Sediment Control Plan must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event whenever practicable to maintain the continued effectiveness of storm water controls.

11.3.7 If existing BMPs need to be modified or if additional BMPs are necessary for any reason,

implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.

11.4 INADEQUACY OF STORMWATER MANAGEMENT SYSTEM OR EROSION AND SEDIMENT CONTROLS

11.4.1 If the stormwater management system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Stormwater Management Plan, it shall be corrected by the applicant before the Stormwater Certificate of Completion is released. If the applicant fails to act, the Planning Board may use the surety bond to complete the work.

11.4.2 If the erosion and sediment control system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the Erosion and Sediment Control Plan, it shall be corrected by the applicant upon notice. If the Planning Board determines that there is a failure to comply with the erosion and sediment control plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order shall be issued until any violations are corrected and all work previously completed has received approval by the Planning Board.

11.4.3 If the Planning Board determines that there is a failure to comply with the stormwater management plan, the property owner shall be notified in writing of the nature of the violation and the required corrective actions. A Stop Work Order shall be issued until any violations are corrected and all work previously completed has received approval by the Planning Board.

2.3.5.iii. Requirements for construction site sediment and erosion control program Section 6.13 of the Town of Wilmington Comprehensive Stormwater Management Regulations (Regulations) requires the submission of an Erosion and Sediment Control Plan. Required plan contents are specified in Appendix C of the Regulations, and Additional Criteria for Erosion and Sediment Control are detailed in Appendix F.

6.13 EROSION AND SEDIMENT CONTROL PLAN

6.13.1 An Erosion and Sediment Control Plan is required at the time of application for all projects. Plan Approval by the Planning Board is required prior to any site altering activity. The plan shall be designed to ensure compliance with the Permit, these Regulations, and if applicable, the NPDES General Permit for Storm Water Discharges from Construction Activities. In addition, the plan shall ensure that the Massachusetts Surface Water Quality Standards (314 CMR 4.00) are met in all seasons.

6.13.2 If a project requires a Stormwater Pollution Prevention Plan (SWPPP) per the NPDES General Permit for Construction Activities, the Board may require the applicant to submit a copy of the SWPPP or the permit file number.

6.13.3 EROSION AND SEDIMENT CONTROL PLAN CONTENTS - The Erosion and Sediment Control Plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed in Section 8.0.

Required contents of the Erosion and Sediment Control Plan are provided in the Appendices Section of the Regulations.

APPENDIX C: EROSION AND SEDIMENT CONTROL PLAN CONTENTS

The Erosion and Sediment Control Plan shall include, at a minimum:

1. A general location map with enough detail to identify the location of the construction site and waters of the United States within one mile of the site.

- 2. Legible site map, showing the entire site, identifying at a minimum:
- a. Direction(s) of storm water flow and approximate slopes anticipated after major grading activities
- b. Areas of soil disturbance and areas that will not be disturbed
- c. Locations of all structural and nonstructural erosion and sediment control measures and BMPs;
- d. Locations where stabilization practices are expected to occur
- e. Locations for storage of materials, waste, vehicles, equipment, soil, snow and other potential pollutants
- f. Locations of bodies of water, including wetland
- g. Locations where stormwater discharges to a surface water (include all roads, drains and other structures that could carry stormwater to a wetland or other water body, on or offsite)

h. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply

i. Location of any storm water discharge associated with industrial activity other than construction at the site.

3. Stamp and signature of a Professional Engineer (PE) licensed in the Commonwealth of Massachusetts to certify that the Stormwater Management Plan is in accordance with the criteria established in the Stormwater Management Bylaw and these Regulations.

4. Description of the following in narrative, calculations or drawings, as appropriate:

a. Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including dedicated off-site borrow and fill areas

b. All pollution control measures (structural and non-structural BMPs) that will be implemented as part of the construction activity to control pollutants in storm water discharges. Appropriate control measures must be identified for each major construction activity and the operator responsible for the implementation of each control measure must also be identified

c. The intended sequence and timing of activities that disturb soils at the site and the general sequence during the construction process in which the erosion and sediment control measures will be implemented

d. Structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Placement of structural practices in floodplains must be avoided to the degree practicable

e. Interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible and that disturbed portions of the site are stabilized. Use of impervious surfaces for stabilization should be avoided

f. Construction and waste materials expected to be stored on-site with updates as appropriate, including a descriptions of controls, including storage practices, to minimize exposure of the materials to storm water, and spill prevention and response practices

g. Measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust

h. Measures to prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under Section 404 of the Clean Water Act

i. Pollutant sources from areas other than construction and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges

j. All allowable sources of non-storm water discharges listed in [Section xx of the Town of Wilmington Bylaw] except for flows from fire fighting activities, that are combined with storm water discharges associated with construction activity at the site. Non-storm water discharges should be eliminated or reduced to the extent feasible. The Erosion and Sediment Control plan must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

5. An Operation and Maintenance Schedule for structural and non-structural measures, interim grading, and material stockpiling areas.

APPENDIX F: EROSION AND SEDIMENT CONTROL ADDITIONAL CRITERIA

All erosion and sediment controls for all projects subject to a Stormwater Management Permit (SMP) shall comply with the following performance criteria unless otherwise provided for in the Regulations.

1. General Erosion and Sediment Control Criteria

The following are the minimum General Erosion and Sediment Control Criteria:

a. Minimize total area of disturbance and minimize unnecessary clearing and grading from all construction sites. Clearing and grading shall only be performed within areas needed to build the project, including structures, utilities, roads, recreational amenities, post-construction stormwater management facilities, and related infrastructure.

b. Whenever practicable and feasible, construction shall be phased to limit disturbance to only one area of active construction at a time. Future phases shall not be disturbed until construction of prior phases is complete and the land area is stabilized. Mass clearings and grading of the entire site shall be avoided.

c. Interim and permanent stabilization measures shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site.

d. Steep slopes shall be protected from erosion by limiting clearing of these areas in the first place or, where grading is unavoidable, by providing special techniques to prevent upland runoff from flowing down a steep slope and through immediate stabilization to prevent gullying. Offsite runoff shall be diverted from highly erodible soils and steep slopes to stable areas.

e. Perimeter sediment controls shall be applied to retain or filter concentrated runoff from disturbed areas to trap or retain sediment before it leaves a construction site. Uncontaminated water shall also be diverted around disturbed areas.

f. Sediment trapping and settling devices shall be employed to trap and/or retain suspended sediments and allow time for them to settle out in cases where perimeter sediment controls (e.g., silt fence and hay bales) are deemed to be ineffective in trapping suspended sediments on-site. Sediment basins shall also be used to minimize peak rate of runoff in accordance with the Massachusetts Stormwater Standards.

g. Off-site transport of sediment, including off-site vehicle tracking, shall be prevented.

h. Dust and debris shall be controlled at the site.

i. On and off-site material storage areas, including construction and waste materials, shall be properly protected and managed.

2. Specific Erosion and Sediment Control Criteria

The following are the minimum Specific Erosion and Sediment Control Criteria:

a. Prior to any land disturbance activities commencing on the site, the applicant or its agent shall physically mark limits of no land disturbance on the site with tape, signs, or orange construction fence, so that workers

can see the areas to be protected. The physical markers shall be inspected daily.

b. Appropriate erosion and sediment control measures shall be installed prior to soil disturbance. Measures shall be taken to control erosion within the project area. Sediment in runoff water shall be trapped and retained within the project area. Wetland areas and surface waters shall be protected from sediment.

c. Erosion and Sediment Control measures shall be installed and maintained in accordance with the manufacturer's specifications and good engineering practices.

d. Sediment shall be removed once the volume reaches $\frac{1}{4}$ to $\frac{1}{2}$ the height of a hay bale or sedimentation fence shows signs of failure.

e. BMPs to be used for infiltration after construction shall not be used as BMPs during construction unless otherwise approved by the Board. Many infiltration technologies are not designed to handle the high concentrations of sediments typically found in construction runoff, and thus must be protected from construction related sediment loadings.

f. Soil stockpiles must be stabilized or covered at the end of each workday. Stockpile side slopes shall not be greater than 2:1. All stockpiles shall be surrounded by sediment controls.

g. Disturbed areas remaining idle for more than 14 days shall be stabilized with seeding, wood chips bark mulch, tarpaulins, or any other approved methods.

h. For active construction areas such as borrow or stockpile areas, roadway improvements and areas within 50 feet of a building under construction, a perimeter sediment control system shall be installed and maintained to contain soil.

i. A tracking pad shall be constructed at all entrance/exist points of the site to reduce the amount of soil carried onto roadways and off the site.

j. On the cut side of roads, ditches shall be stabilized immediately with rock riprap or other non-erodible liners, or where appropriate, vegetative measures.

k. Permanent seeding shall be undertaken in the spring from March through May, and in late summer and early fall from August to October 15. During the peak summer months and in the fall after October 15, when seeding is found to be impractical, an appropriate temporary mulch shall be applied. Permanent seeding may be undertaken during the summer if plans provide for adequate mulching and watering.

1. All slopes steeper than 3:1 (h:v, 33.3%), as well as perimeter dikes, sediment basins or traps, and embankments must, upon completion, be immediately stabilized with sod, seed and anchored straw mulch, or other approved stabilization measures. Areas outside of the perimeter sediment control system must not be disturbed.

m. Temporary sediment trapping devices must not be removed until permanent stabilization is established in all contributory drainage areas.

n. All temporary erosion and sediment control measures shall be removed after final site stabilization. Disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within 30 days of removal.

Responsible Department/Parties: Department of Planning and Conservation with technical assistance from th

Measurable Goal(s):

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

BMP:Construction Site Control of Waste Materials

Document Name and/or Web Address: https://www.wilmingtonma.gov/sites/wilmingtonma/files/uploads/ complete_stormwater_regulations_2018_-_unsigned.pdf

Description:

2.3.5.iv. Requirements for construction site control of wastes

Appendix C Section 2.e requires the that the locations for storage of materials, waste, vehicles, equipment, soil, snow and other potential pollutants be shown on the Erosion and Sediment Control Plan. Appendix C Section 4 requires a narrative, calculations or drawings describing the following:

f. Construction and waste materials expected to be stored on-site with updates as appropriate, including a descriptions of controls, including storage practices, to minimize exposure of the materials to storm water, and spill prevention and response practices

g. Measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust

h. Measures to prevent the discharge of solid materials, including building materials, to waters of the United States, except as authorized by a permit issued under Section 404 of the Clean Water Act

i. Pollutant sources from areas other than construction and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges

Appendix F Section 1.i requires that on and off-site material storage areas, including construction and waste materials, shall be properly protected and managed.

Responsible Department/Parties: Department of Planning and Conservation

Measurable Goal(s):

Ensure that construction site materials and waste are being stored and disposed of properly.

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: <u>https://www.epa.gov/npdes-permits/stormwater-tools-new-england#pcsm</u>

allowable when site conditions are appropriate.

BMP Number (Optional) **5**C

BMP: Green Infrastructure Report

Responsible Department/Parties: Department of Planning and Conservation, and the Engineering Division

The Town of Wilmington will develop a report assessing existing local regulations to determine the feasibility

Document Name and/or Web Address: to be completed and uploaded to Town's website by c.2023

of making, at a minimum, L.I.D. practices (i.e. green roofs, pervious pavement, rainwater harvesting)

Measurable Goal(s):

Description:

Report was completed in Spring of 2022 (Year 4)

BMP: List of Municipal Retrofit Opportunities

Completed (by year 4) \boxtimes

BMP :	Post-Construction	Ordinance

BMP Number (Optional) 5A	Completed (by year 2)
Town Ordinances Link or References	Update to local stormwater bylaw & regulations to be posted on-line by end of Year 2
Department Responsible for Enforce	ment: Planning and Conservation
BMP: Street Design and Parking Lot	<u>Guidelines Report</u>
BMP Number (Optional) 5B	Completed (by year 4)
Document Name and/or Web Addres	s: to be completed and uploaded to Town's website by c.2023
Description:	
The Town of Wilmington will develop other local requirements that affect the	a report assessing current street design and parking lot guidelines, and creation of impervious cover.
Responsible Department/Parties: Dep	partment of Planning and Conservation and the Engineering Division
Measurable Goal(s):	
Report was completed in Spring of 202	2 (Year 4)

Document Name and/or Web Address: to be completed and uploaded to Town's website by c.2023

Description:

The Town shall identify a minimum of 5 permittee-owned properties that could potentially be modified or retrofitted with BMPs designed to reduce the frequency, volume, and pollutant loads of stormwater discharges to and from its MS4 through the reduction of impervious area.

Responsible Department/Parties: Engineering Division, with the Department of Planning and Conservation.

Measurable Goal(s):

Identification was completed in Spring of 2022 (Year 4)

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 Pollutoin Prevention Plans can be found here: <u>https://www.epa.gov/npdes-permits/stormwater-tools-new-england#gh</u>

PERMITTEE OWNED FACILITIES

BMP: Parks and Open Spaces Operations and Maintenance Procedures

BMP Number (Optional) **6A**

Written Document Completed (by year 2)

Document Name and/or Web Address: to be completed and uploaded to Town's website by July 1, 2020.

Description:

Establish procedures for use, storage, and disposal of pesticides, herbicides, and fertilizers. Establish pet waste handling collection and disposal locations (only where pets are allowed). Place signage regarding proper disposal of pet waste. Establish procedures for trash management. Establish procedures to address erosion or poor vegetative cover. Establish procedures to address waterfowl congregation areas.

Responsible Department/Parties: Operations Manager, DPW, and the Engineering Division

Measurable Goal(s):

SOP was completed in Spring of 2020 (Year 2)

Properties List (Optional):

BMP: Buildings and Facilities Operations and Maintenance Procedures

BMP Number (Optional) **6B**

Written Document Completed (by year 2)

Document Name and/or Web Address: to be completed and uploaded to Town's website by July 1, 2020.

Description:

Evaluate the use, storage, and disposal of petroleum products or other pollutants. Provide training to employees as necessary on proper handling of petroleum products and ensure that Spill Prevention Plans are in place, and coordinate said plan with the WFD. Develop management procedures for dumpsters. Establish procedures and implement parking lot sweeping program.

Responsible Department/Parties: Public Buildings Superintendent, and Engineering Division

Measurable Goal(s):

SOP was completed in Spring of 2020 (Year 2)

Properties List (Optional):

BMP: Vehicles and Equipment Operations and Maintenance Procedures

Document Name and/or Web Address: to be completed and uploaded to Town's website by July 1, 2020.

Description:

Establish procedures for the storage of permittee vehicles (i.e. vehicles with leaks shall be stored indoors. Evaluate car washing protocol. Evaluate fueling areas for improvements to prevent pollutant discharge.

Responsible Department/Parties: Operations Manager, DPW, and Engineering Division

Measurable Goal(s):

SOP was completed in Spring of 2020 (Year 2)

Properties List (Optional):

INFRASTRUCTURE

BMP: Infrastructure Operations and Maintenance Procedures

BMP Number (Optional) **6D**

Written Procedure Completed (by year 2)

Document Name and/or Web Address: to be completed and uploaded to Town's website by July 1, 2020.

Description:

The Town of Wilmington will establish a written program detailing the activities and procedures for maintaining MS4 infrastructure in a timely manner, aimed at reducing or eliminating the discharge of pollutants from the MS4.

Responsible Department/Parties: Engineering Division, with assistance from DPW Operations.

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) **6E**

Written Procedure Completed (by year 1)

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

Written plan for optimizing catch basin cleaning, inspections, and scheduling. Established schedule with a goal that frequency of routine cleaning will ensure that no catch basin will be more than 50% full.

Responsible Department/Parties: Engineering Division, and DPW Operations.

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) 6F

Written Procedure Completed (by year 1)

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

Established procedures for street sweeping.

Responsible Department/Parties: Highway Division, with record keeping assistance from Engineering Divis

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) 6G

Written Procedure Completed (by year 1)

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

Developed procedures for use and storage of salt and sand, minimize use of salt and prohibit snow from being directly disposed into waters of the US.

Responsible Department/Parties: Highway Division, with record keeping assistance from Engineering Divis

Measurable Goal(s):

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

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

Document Name and/or Web Address: www.wilmingtonma.gov/public-works/stormwater-management

Description:

Inspected all stormwater structures (excluding catch basins), and program maintenance as necessary.

Responsible Department/Parties:

Measurable Goal(s):

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

BMP: SWPPP

BMP Number (Optional) **6I**

Completed (by year 2) \boxtimes

Document Name and/or Web Address: to be completed and uploaded to Town's website by July 1, 2020.

Description:

The Town of Wilmington Engineering Division will develop SWPPP for the Town's Maintenance Garage and Storage Yard (135 Andover Street), and yard waste center (on Old Main Street).

Responsible Department/Parties: Engineering Division

Measurable Goal(s):

Developed and currently implementing SWPPPs for facilities listed above in "Description".

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:

Town of Wilmington - Annual Report Year 1 - Final located at 121 Glen Road, Room 7, Wilmington MA

Year 2 Annual Report

Document Name and/or Web Address:

Town of Wilmington - Annual Report Year 2 - Final located at 121 Glen Road, Room 7, Wilmington MA

Year 3 Annual Report

Document Name and/or Web Address:

Town of Wilmington - Annual Report Year 3 - Final located at 121 Glen Road, Room 7, Wilmington MA

Year 4 Annual Report

Document Name and/or Web Address:

Town of Wilmington - Annual Report Year 4 - Final located at 121 Glen Road, Room 7, Wilmington MA

Year 5 Annual Report

Document Name and/or Web Address:

Town of Wilmington - Annual Report Year 4 - Final located at 121 Glen Road, Room 7, Wilmington MA

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).

Г

Impai	<u>rment(s)</u>			
	Bacteria/Pathogens	🛛 Chloride	🗌 Nitrogen	🖂 Phosphorus
	Solids/oil/grease (hydro	carbons)/metals		
TMD	L <u>(s)</u>			
In State	2.			
] Assabet River Phosph	orus 🛛 🖾 Bact	teria and Pathogen	n 🗌 Cape Cod Nitrogen
] Charles River Watersh	ned Phosphorus	Lake and F	Pond Phosphorus
Out of L	State:			
	Bacteria and Pathogen	Metals	🗌 Nitrogen	Phosphorus
		Clear Im	pairments and TM	1DLs

Bacteria/Pathogens

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Shawsheen River (MA83-18)	Bacteria	+ -

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:

3C, 3D.

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:

1A

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:

A pet waste brochure has been ordered and will be given to the Town Clerk for distribution to dog owners at time of issuance or renewal of dog licenses during the week of July 1, 2019.

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:

A "Septic System Maintenance for Homeowners" door hanger was ordered on June 25th and will be distributed to homeowners by the Engineering Division during the week of July 1, 2019, to the 800+ homes served by privately owned on-site sewage disposal systems in the Shawsheen River watershed area.

Chloride

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
		+ -

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:

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: Chloride was added by MassDEP in 2022 to the Aberjona River. Year 5 will be the first year the Town is able to distribute messages accordingly.

Requirements Due by Year 3

Develop a Salt Reduction Plan

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

The Town developed a Salt Reduction Program in FY12. This document has been posted on the Towns Website at https://www.wilmingtonma.gov/public-works/stormwater-management/pages/ms4-permit

Requirements Due by Year 4

Continue implementation of the Salt Reduction Plan

Requirements Due by Year 5

Fully implement the Salt Reduction Plan

Phosphorus

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Aberjona River (MA71-01)	Impaired (P)	+ -

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:

3C, 3D.

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:

Since 2017, the Town of Wilmington's Department of Public Works Operations Manager, has given three (3) presentations, and gave an interview on WCTV, discussing state fertilizer regulations and proper soil turf management. The presentation is posted on the Town's Website along with a short quiz encouraging visitors to test their knowledge. A separate brochure has been created and distributed to property owners in the Aberjona River watershed area as required.

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:

The pet waste brochure has been distributed in the Aberjona River Watershed as required

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

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

A brochure encouraging proper disposal of leaf litter will be distributed to property owners within the Aberjona River Watershed by October 15, 2019.

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 BMP No. 6F

of leaf litter

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:

Only a very small area of Town is located within the Aberjona River Watershed. The Permitee does not own any developed land within the boundary of this watershed.

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:

Only a very small area of Town is located within the Aberjona River Watershed. The Permitee does not own any developed land within the boundary of this watershed.

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:

N/A

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:

See BMP No. 5A. Update to local stormwater bylaw & regulations were taken to Town Meeting in April/May 2020 and approved.

Requirements Due by Year 4

Complete a Phosphorus Source Identification Report

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

Document is located on the Town's website.

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:

Only a very small area of Town is located within the Aberjona River Watershed. The Permitee does not own any developed land within the boundary of this watershed.

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:

Only a very small area of Town is located within the Aberjona River Watershed. The Permitee does not own any developed land within the boundary of this watershed.

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:

Only a very small area of Town is located within the Aberjona River Watershed. The Permitee does not own any developed land within the boundary of this watershed.