

Stormwater Management Program (SWMP)

Town of Wareham

54 Marion Road MA 02571

EPA NPDES Permit Number MAR041168

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)

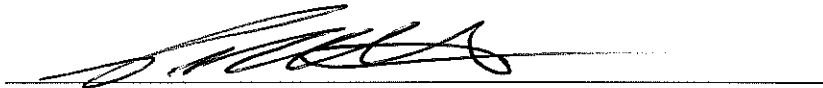
☒ Publicly available at the website below

<https://wareham.ma.us/stormwater>

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

Printed Name

Signature



Date

[Click Here for Revisions](#)

Background

Stormwater Regulation

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

Permit Program Background

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

Stormwater Management Program (SWMP)

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

Town Specific MS4 Background (optional)

Small MS4 Authorization

The NOI was submitted on Sep 27, 2018

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

<https://www.wareham.ma.us/stormwater>

Authorization to Discharge was granted on Mar 5, 2019

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

<https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit>

Stormwater Management Program Team

SWMP Team Coordinator

Name	Mr. Kenneth Buckland	Title	Dir. of Planning and Community Dev.
Department	Planning Department		
Phone Number	508-291-3100 x6500	Email	kbuckland@wareham.ma.us
Responsibilities	Primary MS4 Program Manager and Coordinator		

SWMP Team

Name	Mr. David Menard	Title	Director of Municipal Maintenance
Department	Municipal Maintenance Department		
Phone Number	508-295-5300	Email	dmenard@wareham.ma.us
Responsibilities	Supervisor for the maintenance, repair, and upgrade of the stormwater management system.		

Name	Mr. David Pichette	Title	Conservation Administrator
Department	Conservation Office		
Phone Number	508-291-3100 x6505	Email	dpichette@wareham.ma.us
Responsibilities	Site inspections, review of permit applications, provide recommendations to the Conservation Commission.		

Name	Robert M. Ethier	Title	Director of Public Health
Department	Health Department		
Phone Number	508-291-3100 x3198	Email	rethier@wareham.ma.us
Responsibilities	Enforcement of Title V and local Board of Health regulations.		

Name	Derek Sullivan	Title	Town Administrator
Department	Administration		
Phone Number	508-291-3100 x3110	Email	dsullivan@wareham.ma.us
Responsibilities	Set up public informational meetings. Assist with interdepartmental coordination. Investigate funding sources and procure funds for implementation of the program.		

Name	Robert Rogers	Title	Project Engineer
Department	G.A.F. Engineering, Inc.		
Phone Number	508-295-6600	Email	rrogers@gaf-eng.com
Responsibilities	Assist in the preparation of the SWMP. Prepare design plans and submit permit applications for planned improvements to the stormwater management system.		

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:

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
Shell Point	22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Coastal 2	19	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Butler Cove (95-77, Cat 5)	3	<input 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"/>	
Buttermilk Bay (95-01, Cat 5)	8	<input 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"/>	FC
Sand Pond (95127, Cat 3)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Dicks Pond (95038, Cat 3)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mill Pond (95105, Cat 4c)	37	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-Native Aquatic Plants
Cedar Pond	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Glen Charlie Pond (95061, Cat 2)	27	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
White Island Pond (95166, Cat 4a)	16	<input type="checkbox"/>	<input checked="" 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"/>	Non-Native Aquatic Plants
Broad and Muddy Cove	35	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Union Pond	16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weweantic River (95-02, Cat 2)	75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weweantic River (95-05, Cat 5)	87	<input 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"/>	FC
Sippican River	8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sippican River (95-07, Cat 4a)	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FC

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
Rose Brook	105	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Horseshoe Pond (95075, Cat 3)	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blackmore Pond (95015, Cat 3)	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Parker Mills Pond (95115, Cat 5)	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Non-native aquatic plants
Wankinco River (95-50, Cat 4a)	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FC
Agawam River (95-28, Cat 3)	21	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Agawam River (95-29, Cat 5)	57	<input 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"/>	Amm (unionized), FC, WET
Beaverdam Creek (95-53, Cat 5)	20	<input 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"/>	FC
Cedar Island Creek (95-52, Cat 4a)	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FC
Wareham River (95-03, Cat 5)	50	<input 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"/>	FC
Broad Marsh River (95-49, Cat 4a)	51	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FC
Crooked Neck River (95-51, Cat 4a)	25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FC
Coastal 1	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Onset Bay (95-02, Cat 5)	8	<input 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"/>	FC
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<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)

- ☐ 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):

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

MCM 1

Public Education and Outreach

Permit Part 2.3.2

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

Examples and Templates:

EPA's Stormwater Education Toolbox

MassDEP's Stormwater Outreach Materials

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

BMP: Public Education

BMP Number (Optional) 1.1

Document Name and/or Web Address: Pollution Prevention for Businesses

Description:

This is a two page pamphlet targeting business owners. The topics consist of: What is Pollution Prevention? Why is Pollution Prevention Important? What are the Business Benefits of Using Pollution Prevention? How Can a Business Start Using Pollution Prevention?

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Building Permitting and Enforcement

Measurable Goal(s):

Post the document on the web site and provide handouts at the Building Department service counter.

Message Date(s): July 1, 2019

BMP: Public Education

BMP Number (Optional) 1.2

Document Name and/or Web Address: Stormwater Management for Small Businesses

Description:

This is a two page pamphlet directed at small businesses. Topics include Storm Drain Stenciling, Property Maintenance Tips, How to Dispose of Hazardous Waste, and Reminders for Restaurants.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to the business community.

Message Date(s): July 1, 2019

BMP: Public Education

BMP Number (Optional) 1.3

Document Name and/or Web Address: What you can do as a Developer

Description:

This is a one page pamphlet directed at developers which lists innovative development practices such as site development selection, use of LID practices, concerns related to cost, cold weather, drinking water, and public safety.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to the developers in the community.

Message Date(s): July 1, 2019

BMP: Public Education

BMP Number (Optional) 1.4

Document Name and/or Web Address: General Construction and Site Supervision Stormwater Tips

Description:

This is a pamphlet prepared by the Department of Conservation and Recreation. It focuses on the need to plan in advance to prevent pollution and lists Best Management Practices and good housekeeping techniques to prevent discharges from construction sites.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to developers and general contractors.

Message Date(s): July 1, 2019

BMP: Public Participation

BMP Number (Optional) 1.5

Document Name and/or Web Address: Public Meeting

Description:

Invite members of the Industrial Zone property owners to a public meeting to present the Town's Stormwater

Management Plan and educate them on the things that they can do to prevent pollution and improve existing surface water quality.

Targeted Audience: Industrial facilities

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Set up and conduct the meeting in 2019.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.6

Document Name and/or Web Address: Displays/Posters/Kiosks

Description:

Provide educational materials of a size that can be posted in cafeterias, meeting rooms, and common areas in Industrial facilities to inform the employees of their responsibilities to improve runoff conditions at work.

Targeted Audience: Industrial facilities

Responsible Department/Parties: Building Permitting and Enforcement

Measurable Goal(s):

Produce the posters and provide to the Industrial community.

Message Date(s): July 1, 2019

BMP: Public Education

BMP Number (Optional) 1.7

Document Name and/or Web Address: Public Meeting

Description:

Advertise and hold a public meeting to discuss the Town's Stormwater Management Program. Receive public input regarding problem areas and successful improvements. Provide educational materials related to dog waste, hazardous materials disposal, lawn fertilization, etc.

Targeted Audience: Residents

Responsible Department/Parties: Town Manager

Measurable Goal(s):

Conduct at least one public meeting with the Board of Selectmen to discuss the MS4 permit requirements and what each individual resident can do to improve stormwater runoff in Wareham.

Message Date(s):

BMP: Public Education**BMP Number (Optional)** 1.8**Document Name and/or Web Address:** What you can do as a Citizen**Description:**

This is a pamphlet produced by the EPA which informs residents of things they can do around the home to improve surface water characteristics.

Targeted Audience: Residents**Responsible Department/Parties:** Planning/zoning Department**Measurable Goal(s):**

Post the document on the web page and distribute to the residents.

Message Date(s):

BMP: Public Education**BMP Number (Optional)** 1.9**Document Name and/or Web Address:** Stormwater Pollution Prevention for Industrial Sites**Description:**

This is a pamphlet produced by DEP directed at Industrial site owners which provides guidance on erosion prevention, dust control, illicit discharge prevention, etc.

Targeted Audience: Industrial facilities**Responsible Department/Parties:** Planning/zoning Department**Measurable Goal(s):**

Post the document on the web site and provide to the industrial community.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.10

Document Name and/or Web Address: Dog Waste and Surface Water Quality

Description:

This is a pamphlet prepared by MassDEP and DCR to inform the public of the importance of picking up after their pets and the damage dog waste can do to the environment.

Targeted Audience: Residents

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site. Distribute to dog owners when licenses are renewed.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.11

Document Name and/or Web Address: Going Green with Storm Water

Description:

This is a pamphlet prepared by Mass Audubon which encourages homeowners to plant Rain Gardens.

Targeted Audience: Residents

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to residents.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.12

Document Name and/or Web Address: Stormwater Pollution Education: Fertilizing the Lawn

Description:

This is a pamphlet prepared by MassDEP which describes the negative impacts to water quality due to fertilizers.

Targeted Audience: Residents

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to the residents.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.13

Document Name and/or Web Address: Pollution Prevention for Businesses

Description:

This is a pamphlet prepared by MassDEP to inform businesses on ways in which they can minimize pollution.

Targeted Audience: Businesses, institutions and commercial facilities

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to the business community.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.14

Document Name and/or Web Address: Be a Beneficial Lake Effect: Protecting your Lake from Pollution

Description:

This is a pamphlet prepared by MassDEP about reducing nutrients and bacteria which can enter lakes and ponds via stormwater runoff.

Targeted Audience: Residents

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to residents.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.15

Document Name and/or Web Address: Stormwater Pollution Prevention Guide for Homeowners

Description:

This pamphlet includes guidance on dog waste, lawn & garden, home products, car washing, automotive repair, and swimming pools.

Targeted Audience: Residents

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Post the document on the web site and distribute to the residents.

Message Date(s):

BMP: Public Education

BMP Number (Optional) 1.16

Document Name and/or Web Address: Do Your Part. Be Septic Smart

Description:

This document is produced by the EPA to educate homeowners on the various ways they can reduce the flow to a septic system as well as proper maintenance.

Targeted Audience: Residents

Responsible Department/Parties:

Measurable Goal(s):

Message Date(s):

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) 2.1

Location of Plan and/or Web Address:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Public Participation in Stormwater Management Program Development

BMP Number (Optional) 2.2

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Public Participation

BMP Number (Optional) 2.3

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Public Participation

BMP Number (Optional) 2.4

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Public Participation

BMP Number (Optional) 2.5

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Public Participation

BMP Number (Optional) 2.6

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

List the call in number on the web page.

BMP: Public Participation

BMP Number (Optional) 2.7

Document Name and/or Web Address: Stormwater Committee

Description:

Maintain an appointed Stormwater Committee and post the minutes and agendas of the meetings.

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Continue to appoint a Stormwater Committee.

BMP: Public Participation

BMP Number (Optional) 2.8

Document Name and/or Web Address: Cleanups - Roadside/General

Description:

Schedule a Town sponsored roadside cleanup day and provide vehicles and equipment for collection and disposal of refuse.

Responsible Department/Parties: MMD Operations

Measurable Goal(s):

Schedule at least one cleanup day.

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) 3.1

Completed (by May 1, 2008) ☐

Ordinances Link or Reference: Illicit Discharge and Connection Stormwater Ordinance

Department Responsible for Enforcement: Planning and Zoning Department

BMP: Sanitary Sewer Overflow (SSO) Inventory

BMP Number (Optional) 3.2

Completed (by year 1) ☒

Document Name and/or Web Address: <https://wareham.ma.us/stormwater>

Description:

A listing of the SSO Inventory is provided.

Responsible Department/Parties: Wareham Sewer 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:

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

The EPA contacts are:

EPA New England (617) 918-1510
5 Post Office Square
Boston, MA 02109

BMP: Map of Storm Sewer System

BMP Number (Optional) 3.3

Phase I Completed ☐
(by year 2)

Phase II Completed ☐
(by year 10)

Document Location and/or Web Address: <https://wareham.ma.us/stormwater>

Description:

The maps are available for viewing on the town's Stormwater Web Site. The maps are updated periodically.

Responsible Department/Parties: [Planning/zoning Department](#)

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) 3.4

Written Document Completed (by year 1) ☒

Document Name and/or Web Address: [Illicit Discharge Detection and Elimination \(IDDE\) Plan](#)

Description:

This document establishes the procedures for detecting and eliminating discharges to the Town's stormwater system and receiving waters.

Responsible Department/Parties: [Planning/zoning Department](#)

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:

<https://wareham.ma.us/stormwater>

BMP: Employee Training

BMP Number (Optional) 3.5

Description:

Train employees in the detection of illicit discharges and water sampling.

Responsible Department/Parties: MMD Operations/Sewer Department

Measurable Goal(s):

Training occurs annually.

BMP:[BMP name here]

BMP Number (Optional) _____

Completed ☐

Document Name and/or Web Address: _____

Description:

Responsible Department/Parties: _____

Measurable Goal(s):

Add BMP

MCM 4

Construction Site Stormwater Runoff Control

Permit Part 2.3.5

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

Examples and Templates:

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

BMP: Sediment and Erosion Control Ordinance

BMP Number (Optional) 4.1

Completed (by May 1, 2008) ☒

Ordinances Link or Reference: Zoning Article 10, 12, 15

Department Responsible for Enforcement: Planning/zoning Department

BMP: Site Plan Review Procedures

BMP Number (Optional) 4.2

Written procedures completed (by year 1) ☒

Document Name and/or Web Address: Zoning By-Law Article 15: Site Plan Review

Description:

This zoning section establishes the procedures and filing requirements for Site Plan Review.

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

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

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

BMP Number (Optional) 4.3

Completed (by year 1) ☒

Document Name and/or Web Address: Construction Site Inspection

Description:

Provides an outline of a Construction Inspection Program and lists procedures for conducting inspections at construction sites.

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

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

BMP: Site Inspections of Constructed BMPs

BMP Number (Optional) 4.4

Completed ☒

Document Name and/or Web Address: Inspecting Constructed Best Management Practices

Description:

This is a standard operating procedure document which lists the requirements for proper inspection and maintenance of 8 commonly constructed BMPs.

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Provide the guidance and inspection forms to the Town's consultant and employees charged with performing the inspections.

BMP: Site Inspections of Constructed BMPs

BMP Number (Optional) 4.5

Completed ☒

Document Name and/or Web Address: Inspection Report

Description:

This is an inspection report form for use while following the procedures outlined in BMP 4.4 above. The report is formatted for use with all of the 8 typical stormwater quality and control BMPs.

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Require use of the report by employees and consultants tasked with performing and documenting inspections.

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) 5.1

Completed (by year 2) ☒

Town Ordinances Link or Reference: Zoning Article 10 & 12, Standard Special Condition for Site Plan Rev.

Department Responsible for Enforcement: Planning/zoning Department, Conservation Commission

BMP: Street Design and Parking Lot Guidelines Report

BMP Number (Optional) 5.2

Completed (by year 4) ☐

Document Name and/or Web Address:

Description:

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Recommendations are implemented by July 2021 with progress reported annually.

BMP: Green Infrastructure Report

BMP Number (Optional) 5.3

Completed (by year 4) ☐

Document Name and/or Web Address:

Description:

Responsible Department/Parties: Planning/zoning Department

Measurable Goal(s):

Recommendations are implemented by July 2021 with progress reported annually.

BMP: List of Municipal Retrofit Opportunities

BMP Number (Optional) 5.4

Completed (by year 4) ☐

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: [BMP name here]

BMP Number (Optional) 5

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) 6.1

Written Document Completed (by year 2) ☒

Document Name and/or Web Address: Parks and Open Space Management, <https://wareham.ma.us/stormwater>

Description:

This document provides a listing of the Parks and Open Spaces, their maintenance requirements, and personnel responsible for maintenance activities.

Responsible Department/Parties: MMD Operations, Dept. of Natural Resources

Measurable Goal(s):

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

Properties List (Optional):

The list of properties is included in the referenced management document.

BMP: Buildings and Facilities Operations and Maintenance Procedures

BMP Number (Optional) 6.2

Written Document Completed (by year 2) ☐

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

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

Properties List (Optional):

BMP: Vehicles and Equipment Operations and Maintenance Procedures

BMP Number (Optional) 6.3

Written Document Completed (by year 2) ☒

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

Properties List (Optional):

INFRASTRUCTURE

BMP: Infrastructure Operations and Maintenance Procedures

BMP Number (Optional) 6.4 **Written Procedure Completed (by year 2)** ☐

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

BMP: Catch Basin Cleaning Program

BMP Number (Optional) 6.5 **Written Procedure Completed (by year 1)** ☒

Document Name and/or Web Address:

Description:

Responsible Department/Parties:

Measurable Goal(s):

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

BMP: Street Sweeping Program

BMP Number (Optional) 6.6

Written Procedure Completed (by year 1) ☒

Document Name and/or Web Address: Sweeping Streets and Parking Lots

Description:

This Standard Operating Procedure provides guidance and documentation for the Town's street sweeping activities.

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

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

BMP: Winter Road Maintenance Program

BMP Number (Optional) 6.7

Written Procedure Completed (by year 1) ☒

Document Name and/or Web Address: Snow Removal and De-Icing

Description:

This Standard Operating Procedure provides guidance and documentation of the Town's snow clearing activities.

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

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

BMP: Stormwater Treatment Structures Inspection and Maintenance Procedures

BMP Number (Optional) 6.8

Completed (by year 1) ☒

Document Name and/or Web Address: Inspecting Constructed Best Management Practices

Description:

This Standard Operating Procedure provides guidance on the inspection and maintenance of Stormwater Treatment BMPs including proprietary structures.

Responsible Department/Parties: DPW Operations

Measurable Goal(s):

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

BMP: SWPPP

BMP Number (Optional) 6.9

Completed (by year 2) ☒

Document Name and/or Web Address: <https://wareham.ma.us/stormwater>

Description:

Municipal department heads, directors, and superintendents are directed to review the Town's SWMP and implement the relevant BMPs and procedures applicable to the facility for which they are responsible.

Responsible Department/Parties: Planning/zoning Department, Town Administration, School Department

Measurable Goal(s):

Develop and implement SWPPPs for 100% of facilities.

BMP:

BMP Number (Optional) 6.10

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:

Notice of Intent (NOI) dated 9-28-18 / <https://www.wareham.ma.us>

Year 2 Annual Report

Document Name and/or Web Address:

Year 3 Annual Report

Document Name and/or Web Address:

Year 4 Annual Report

Document Name and/or Web Address:

Year 5 Annual Report

Document Name and/or Web Address:

Year X Annual Report

Document Name and/or Web Address:

Add a Year

TMDLs and Water Quality Limited Waters

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

Impairment(s)

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

TMDL(s)

In State:

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

Out of State:

- ☐ Bacteria and Pathogen ☐ Metals ☐ Nitrogen ☐ Phosphorus

Clear Impairments and TMDLs

Bacteria/Pathogens

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
(1) Weweantic River		<input type="checkbox"/> + <input type="checkbox"/> -
(2) Wankinco River		<input type="checkbox"/> + <input type="checkbox"/> -
(3) Wareham River		<input type="checkbox"/> + <input type="checkbox"/> -
(4) Buttermilk Bay		<input type="checkbox"/> + <input type="checkbox"/> -
(5) Onset Bay		<input type="checkbox"/> + <input type="checkbox"/> -
(6) Sippican River		<input type="checkbox"/> + <input type="checkbox"/> -
(7) Cedar Island Creek		<input type="checkbox"/> + <input type="checkbox"/> -
(8) Crooked River		<input type="checkbox"/> + <input type="checkbox"/> -
(9) Agawam River		<input type="checkbox"/> + <input type="checkbox"/> -

Annual Requirements Beginning Year 1

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

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

3.1, 3.2, 3.4, 3.5

Public Education and Outreach

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

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

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

1.8, 1.10

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

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

1.8, 1.10

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:

1.8, 1.14, 1.16

Nitrogen

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Agawam River		<input type="checkbox"/> + <input type="checkbox"/> -
Wareham River		<input type="checkbox"/> + <input type="checkbox"/> -
Weweantic River		<input type="checkbox"/> + <input type="checkbox"/> -

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 fertilizers

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

1.12, 1.14, 1.15

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

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

1.7, 1.10

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

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

1.7, 1.8, 1.15

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Establish requirements for the use of slow release fertilizers on permittee owned property currently using fertilizer, in addition to reducing and managing fertilizer use as provided in part 2.3.7.1

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

1.12, 1.14, 1.15

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:

1.15

Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

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

6.6

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 nitrogen 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 nitrogen removed in mass per year by the BMP is found in the following document or website and is updated yearly at a minimum:

<https://www.wareham.ma.us/stormwater>

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 nitrogen removal

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

Zoning By-Laws Article 15, sections 212.2, 212.3, 430, 440

Requirements Due by Year 4

Complete a Nitrogen Source Identification Report

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

Stormwater Management in New Development and Redevelopment

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs 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:

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 Nitrogen 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:

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:

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Phosphorus

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)	TMDL Name (if applicable)	Add/Delete Row
Parker Mills Pond		<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:

1.8, 1.12, 1.14

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

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

1.8, 1.10

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

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

1.8, 1.14, 1.15

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

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

6.6

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

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

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:

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:

Requirements Due by Year 2

Stormwater Management in New Development and Redevelopment

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

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

Requirements Due by Year 4

Complete a Phosphorus Source Identification Report

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

Stormwater Management in New Development and Redevelopment

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

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

Requirements Due by Year 5

Potential Structural BMPs

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:

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:

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