# **Stormwater Management Program (SWMP)**

## Town of Holden

1196 Main St MA 01520

EPA NPDES Permit Number MAR041121

# Certification

monitoring rep person describ accordance wi	epresentative (Optional): All reports, including SWPPPs, inspection reports ports, reports on training and other information required by this permit must be ed in Appendix B, Subsection 11.A or by a duly authorized representative of th Appendix B, Subsection 11.B. If there is an authorized representative to sit a signed and dated written authorization.	be signed by a that person in
Attache	d to this document (document name listed below)	
☐ Publicly	available at the website below	
supervision in evaluated the i those persons of knowledge and	r penalty of law that this document and all attachments were prepared under accordance with a system designed to assure that qualified personnel properl information submitted. Based on my inquiry of the person or persons who madirectly responsible for gathering the information, the information submitted is belief, true, accurate, and complete. I am aware that there are significant person information, including the possibility of fine and imprisonment for knowing the peter Lukes.	y gathered and mage the system, or is, to the best of my nalties for
T TIMES OF T VOLUME		
Signature	Date	
Revisions		
Printed Name		
Signature	Date	

Click Here for Revisions

## **Background**

### **Stormwater Regulation**

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

## **Permit Program Background**

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

### **Stormwater Management Program (SWMP)**

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

## Town Specific MS4 Background (optional)

The Town of Holden has obtained coverage under the 2016 Massachusetts Small MS4 General Permit on
April 5, 2019, which replaced the Town's 2003 Small MS4 General Permit.

## **Small MS4 Authorization**

The NOI was submitted on	October 1, 2018				
The NOI can be found at th	e following (docum	ent name or web	address):		
https://www.holdenma.gov/	department-of-publ	ic-works/pages/st	tormwater-in	formation	
Authorization to Discharge	was granted on Ap	oril 5, 2019			
The Authorization Letter ca	n be found (docume	ent name or web a	address):		
https://www.holdenma.gov/	department-of-publ	ic-works/pages/st	tormwater-in	formation	

# **Stormwater Management Program Team**

## **SWMP Team Coordinator**

Name	Patrick Wood		Title	Civil Engineer						
Department	Department of Public Works									
Phone Number	(508) 210-5550 Email pwood@holdenma.gov									
Responsibilities	Ensure day to day activities and Permit	d reporting of	f the SW	MP are carried out as required in the						
SWMP Team										
Name	John Woodsmall		Title	Director of Public Works						
Department	Department of Public Works									
Phone Number	508-210-5550 Email jwoodsmall@holdenma.gov									
Responsibilities	Oversee the direction and compliance with the SWMP									
Name	Isabel McCauley		Title	Senior Civil Engineer						
Department	Department of Public Works									
Phone Number	508-210-5550	Email	cauley@	holdenma.gov						
Responsibilities	Provide support and guidance t	for compliance	ce with th	ne SWMP						
Name	Pamela Harding		Title	Director of Planning and Development						
Department	Planning and Development Off	fice								
Phone Number	508-210-5550	Email pha	rding@h	oldenma.gov						
Responsibilities	Provide support and help ensur 3 and 5	re compliance	e with sto	ormwater management policies of MCM						

Name	Glenda Williamson		Title	Conservation Agent						
Department	Planning and Development Office									
Phone Number	508-210-5550 Email gwilliamson@holdenma.gov									
Responsibilities	Provide support and help ensure compliance with stormwater management policies of MCM 4									
Name	Danielle Edmands		Title	Board of Health Agent						
Department	Planning and Development Office	ce								
Phone Number	508-210-5542 Email edmandsd@worcesterma.giv									
Responsibilities	Provide support and help ensure 3	compliance v	with sto	ormwater management policies of MCM						

Add SWMP Member

# **Receiving Waters**

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

UK
----

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
Poor Farm Brook (81-52)	8										
Chaffin Pond 81017	17										Non-native plants
Dawson Pond 81028	9										Non-native plants
Chaffins Brook (81-33)	19										
Unionville Pond 81143	8										Eurasian Water Milfoil, Myriophyllum spicatum
Warren Tannery Brook (81-53)	9										
Asnebumskit Brook (81-56)	25										Chronic aquatic toxicity
Quinapoxet River (81-32)	7										Low flow alterations
Unnamed trib to Asnebumskit Bk crossing Brookside Dr	2										
Unnamed trib to Warren Tannery Bk through cemetery	4										
Wetland area north of LowellAve & tribs	1										
Unnamed trib to Chaffins Brook crossing Chapel Street	7										
Bailey Road Pond/Bryant Pond	8										

Unnamed trib to Bailey Road Pond/Bryant Pond Crossing Powers Road	4										
Unnamed trib to Indian Lake crossing Holden St	6										
Unnmaed trib to Indian Lake adjacent to Edgewood Dr	5										
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
Tatnuck Brook upstream of Holden Res 1	6										
Trout Brook (81-26)	2										
Unnamed trib to Wetland area adjacent to I90 crossing Shrewsbury	6										
Unnamed trib to Indian Lake adjacent to Nelson	2										
Unnamed trib to Indian Like crossing Parker	2										
Unnamed trib to Wachusett Res adjacent to Juniper	1										
Eagle Lake	1										Non-native plants

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.

Attach	iments:
$\boxtimes$	The results of Appendix C U.S. Fish and Wildlife Service endangered species screening determination
$\boxtimes$	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:
$\boxtimes$	Attached to this document (document names listed below)
	ESA Determination Letter, NHPA Determination Letter
$\boxtimes$	Publicly available at the website listed below
	https://www.holdenma.gov/department-of-public-works/pages/stormwater-information
Under	what criterion did permittee determine eligibility for ESA?
☐ Cri	terion A
— Under	what criterion did permittee determine eligibility for Historic Properties?
	terion A
	v add any additional measures for structural controls that you're required to do through consultation with Fish and Wildlife Service (if applicable):
None	
	y add any additional measures taken to avoid or minimize adverse impacts on places listed, or eligible for g, on the NRHP, including any conditions imposed by the SHPO or THPO (if applicable):
None	

# 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: <a href="https://www.epa.gov/npdes-permits/stormwater-tools-new-england#peo">https://www.epa.gov/npdes-permits/stormwater-tools-new-england#peo</a>

BMP: Social Media Post/Flyer	
BMP Number (Optional) 1	
Document Name and/or Web Address: https://www.holdenma.gov/department-of-public-works/pages/stormwater-information	
Description:	
Share a Think Blue Massachusetts Pet Waste Disposal Message or Website	
Targeted Audience: Residents	
Responsible Department/Parties: DPW, Town Manager Office	
Measurable Goal(s):	
Track # of followers, views, likes, comments and shares.	
Message Date(s): 2018	
BMP: Social Media Post/Flyer  BMP Number (Optional) 2	
<b>Document Name and/or Web Address:</b> https://www.holdenma.gov/department-of-public-works/pages/stormwater-information	
Description:	
Share a Think Blue Massachusetts Proper Waste Disposal Message or Website	
Targeted Audience: Businesses, Institutions and Commercial Facilities	
Responsible Department/Parties: DPW, Town Manager Office	
Measurable Goal(s):	
Track # of followers, views, likes, comments and shares.	
Message Date(s): 2018	
BMP: Social Media Post/Flyer	
BMP Number (Optional) 3	

<b>Document Name and/or Web Address:</b>	https://www.holdenma.gov/department-of-public-works/pages/stormwater-information
<b>Description:</b>	
•	on and Sediment Controls Message or Website
Targeted Audience: Developers (constru	uction)
Responsible Department/Parties: DPW.	, Town Manager Office
Measurable Goal(s):	
Track # of followers, views, likes, commo	ents and shares.
Message Date(s): 2019	
BMP: Social Media Post/Flyer	
BMP Number (Optional) 4	
<b>Document Name and/or Web Address:</b>	https://www.holdenma.gov/department-of-public-works/pages/ stormwater-information
<b>Description:</b>	
Share a Think Blue Massachusetts Fleet M	Management Message or Website
Targeted Audience: Industrial Facilities	
Responsible Department/Parties: DPW.	, Town Manager Office
Measurable Goal(s):	
Track # of followers, views, likes, commo	ents and shares.
Message Date(s): 2019	
BMP: Social Media Post/Flyer	
BMP Number (Optional) 5	
Document Name and/or Web Address:	https://www.holdenma.gov/department-of-public-works/pages/stormwater-information

Description:	
Share a Think Blue Massachusetts Yard Care Message or Website	
Targeted Audience: Residents	
Responsible Department/Parties: DPW, Town Manager Office	
Measurable Goal(s):	
Track # of followers, views, likes, comments and shares.	
Message Date(s): 2020	
BMP: Social Media Post/Flyer  BMP Number (Optional) 6	
Document Name and/or Web Address: https://www.holdenma.gov/department-of-public-works/pages/stormwater-information	
Description:	
Share a Think Blue Massachusetts Lawn/Landscaping Care BMPs Message or Website	
Targeted Audience: Businesses, Institutions and Commercial Facilities, Industrial Facilities	
Responsible Department/Parties: DPW, Town Manager Office	
Measurable Goal(s):	
Track # of followers, views, likes, comments and shares.	
Message Date(s): 2020	
BMP: Social Media Post/Flyer	
BMP Number (Optional) 7	
<b>Document Name and/or Web Address:</b> https://www.holdenma.gov/department-of-public-works/pages/stormwater-information	
Description:	
Share a Think Blue Massachusetts Green Infrastructure/LID Message or Website	

Targeted Audience: Deve	elopers (construction)
Responsible Department/	Parties: DPW, Town Manager Office
Measurable Goal(s):	
Track # of followers, views	s, likes, comments and shares.
Message Date(s): 2021	
BMP: Social Media Post/F	Flyer
BMP Number (Optional)	8
<b>Document Name and/or V</b>	Web Address: https://www.holdenma.gov/department-of-public-works/pages/stormwater-information
Description:	
Share a Think Blue Massac	chusetts Lawn/Landscaping Care BMPs message or website
Targeted Audience: Indus	strial facilities
Responsible Department/	Parties: DPW, Town Manager Office
Measurable Goal(s):	
Track # of followers, views	s, likes, comments and shares.
Message Date(s): 2021	
BMP: Meeting	
BMP Number (Optional)	9
<b>Document Name and/or V</b>	Web Address: https://www.centralmastormwater.org/
<b>Description:</b>	
Continue Implementation of Massachusetts Regional Sto	of Regional Municipal Stormwater Management Program through the Central cormwater Coalition.
Targeted Audience: Gene	eral Public
Responsible Department/	Parties: DPW, Planning Board, Conservation Commission

Measurable Goal(s):
Identify appropriate sources of funding assistance and apply for assistance implementing the program.
Message Date(s): 2018
BMP: Community Development  BMP Number (Optional) 10
Document Name and/or Web Address: https://www.centralmastormwater.org/
Description:
Collaborate with Local Groups to Promote Stormwater Management
Targeted Audience: General Public
Responsible Department/Parties: DPW, Board of Selectmen

**Measurable Goal(s):** 

Assist in the trails and greenways improvements in collaboration with Wachusett Greenways to protect water quality and public recreation.

Message Date(s): 2019

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 Number (Optional) 11 **Location of Plan and/or Web Address:** https://www.holdenma.gov/department-of-public-works/pages/ stormwater-information Responsible Department/Parties: DPW, Town Manager **Measurable Goal(s):** Stormwater Management Plan is publicly available. Allow review and comment section to track questions and involvement BMP: Public Participation in Stormwater Management Program Development BMP Number (Optional) 12 **Description:** Engage Public during annual SWMP public hearing. Responsible Department/Parties: DPW, Board of Selectmen **Measurable Goal(s):** Allow public to comment on stormwater management plan and provide signature sheet to track public involvement. **BMP:** Utilize Enviroscape Model to Explain Stormwater BMP Number (Optional) 13 **Document Name and/or Web Address: NA Description:** Utilize Enviroscape Model to explain stormwater. **Responsible Department/Parties:** DPW **Measurable Goal(s):** Display Enviroscape at 2 Annual Town Festivals and/or special occasions, document number of people attending event, and track flyers that were distributed.

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

# BMP Number (Optional) 14 **Document Name and/or Web Address:** https://www.centralmastormwater.org/ **Description:** Continue involvement in the Central Massachusetts Regional Stormwater Coalition. Responsible Department/Parties: DPW - Engineering **Measurable Goal(s):** Attend meetings and continue participation. **BMP: ThinkBlue Holden Hashtag Contest BMP Number** (Optional) **Document Name and/or Web Address:** https://www.thinkbluemassachusetts.org/thinkblueholden **Description:** #ThinkBlueHolden Contest. Residents take a photo of an approved SW topic, and share it to Facebook with a hashtag tagging the town's social media account. At the end, entries at random are chosen for prizes. Responsible Department/Parties: DPW - Engineering **Measurable Goal(s):** Track the photos and participants in the contest.

BMP: Continue Involvement in the Central Massachusetts Regional Stormwater Coalition

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: <a href="https://www.epa.gov/npdes-permits/stormwater-tools-new-england#idde">https://www.epa.gov/npdes-permits/stormwater-tools-new-england#idde</a>

## **BMP: IDDE Legal Authority**

BMP Number (Optional)		<b>Completed</b> (by May 1, 2008) ⊠
Ordinances Link or Reference:	Meeting June 29, 2020 (repla	Management Bylaw, Approved at Town aced Article XXV - Illicit Discharge Control) department-of-public-works/pages/stormwater-
Department Responsible for En	forcement: DPW, Planning	Board
BMP: Sanitary Sewer Overflow	(SSO) Inventory	
BMP Number (Optional) 15		<b>Completed</b> (by year 1) ⊠
Document Name and/or Web A	ddress: "SSO Inventory - Ho of the Town of Hold	olden, MA" as issued in the most recent version len IDDE Plan
Description:		
Maintain SSO inventory in accord	lance of permit conditions.	
Responsible Department/Partie	DPW, Board of Health, Co	onservation Commission
Measurable Goal(s):		
discharge entered a surface water occurrence; estimated volume(s)	directly or entered the MS4; of the occurence; description d corrective measures comple	location; a clear statement of whether the date(s) and time(s) of each known SSO of the occurrence indicating known or eted with dates implemented; and mitigation and Indate 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:
Central Region (508) 792-7650	EPA New England (617) 918-1510
8 New Bond Street	5 Post Office Square
Worcester, MA 01606	Boston, MA 02109

**BMP: Map of Storm Sewer System** Phase I Completed **Phase II Completed** BMP Number (Optional) 16 (by year 2) (by year 10) **Document Location and/or Web Address:** Refer to Appendix B "Storm System Map" of the Town of Holden IDDE Plan **Description:** Create map and update during IDDE program completion. **Responsible Department/Parties:** DPW **Measurable Goal(s):** Map 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 outfalls 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) 17 Written Document Completed (by year 1)  $\boxtimes$ **Document Name and/or Web Address:** Illicit Discharge Detection and Elimination (IDDE) Plan https://www.holdenma.gov/department-of-public-works/pages/ stormwater-information **Description:** Created written IDDE program. Implement catchment investigations according to program and permit conditions. Conduct dry weather and wet weather screening as necessary. **Responsible Department/Parties:** DPW **Measurable Goal(s):** Conduct outfall screening on High and Low Priority Outfalls within 3 years of the permit's effective date. Complete catchment investigations of the Problem Outfalls within 7 years of the permit's effective date. Complete 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:

Table 5-1 "Outfall Inventory and Priority Ranking Matrix" of the Town of Holden IDDE Plan

# BMP Number (Optional) 18 **Description:** Train employees on IDDE implementation. Responsible Department/Parties: DPW, Board of Health, Conservation Commission, Planning and Developm **Measurable Goal(s):** Training occurs between March and May annually. See training record signature sheet in appendix E of IDDE Plan **BMP: Implement IDDE program** BMP Number (Optional) 19 **Completed Document Name and/or Web Address:** The Town of Holden Illicit Discharge Detection and Elimination (IDDE) Plan **Description:** Developed written procedures for catchment investigations. Upon finding evidence of an IDDE, catchment investigations for the associated outfall shall begin. The data collected from the catchment investigation shall be reported in each annual report. Dry weather inspections will begin with Key Junction Manholes that will be systematically inspected and sampled (only if flow is present) to determine the source of the IDDE. If result indicate a potential IDDE or SSO, upstream investigations will continue. If no evidence is found, the investigation is considered complete. Investigations of key junction manholes will be completed by year 10. See "The Town of Holden Illicit Discharge Detection and Elimination (IDDE) Plan" for more information and details Responsible Department/Parties: DPW **Measurable Goal(s):** Complete 10 years after effective date of permit **BMP: Conduct dry weather screening** BMP Number (Optional) 20 **Completed Document Name and/or Web Address:** Conduct dry weather screening

**BMP: Employee Training** 

Description:	
Conduct in accordance with outfall screening procedure and permit requirements.	
Responsible Department/Parties: DPW	
Measurable Goal(s):	
Complete 3 years after effective date of permit	
BMP:Conduct wet weather screening	
BMP Number (Optional) 21	Completed
BMP Number (Optional) 21  Document Name and/or Web Address: Conduct wet weather screening	Completed
	Completed
Document Name and/or Web Address: Conduct wet weather screening	Completed
Document Name and/or Web Address: Conduct wet weather screening  Description:  Conduct in accordance with outfall screening procedure and permit requirements.	Completed
Document Name and/or Web Address: Conduct wet weather screening  Description:	Completed
Document Name and/or Web Address: Conduct wet weather screening  Description:  Conduct in accordance with outfall screening procedure and permit requirements.  Responsible Department/Parties: DPW	Completed

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: <a href="https://www.epa.gov/npdes-permits/stormwater-tools-new-england#csrc">https://www.epa.gov/npdes-permits/stormwater-tools-new-england#csrc</a>

## **BMP: Sediment and Erosion Control Ordinance**

BMP Number (Optional) 22	Completed (by May 1, 2008) ⊠	
Ordinances Link or Reference:	Article XXIV - Stormwater Management Bylaw, Approved at Town Meeting June 29, 2020 (replaced Article XXV - Illicit Discharge Control) https://www.holdenma.gov/department-of-public-works/pages/stormwater-information	
Department Responsible for Enforcement: DPW, Planning Board		
BMP: Site Plan Review Procedu	<u>ires</u>	
BMP Number (Optional) 23	Written procedures completed (by year 1) ⊠	
Document Name and/or Web A	ddress: Construction Site Stormwater Runoff Control Program Procedures	
<b>Description:</b>		
Complete written procedures of s Permits and Plans.	ite plan review and begin implementation. Review all Land Disturbance	
Responsible Department/Partie	s: DPW, Planning Board, Conservation Committee	
Measurable Goal(s):		
	cts according to the procedures outlined above. Measurable goal will be to nd Disturbance Permits, which include developments greater than 20,000 sq.	
<b>BMP: Site Inspections and Enfo</b>	orcement of Sediment and Erosion Control Measures Procedures	
BMP Number (Optional) 24	Completed (by year 1) ⊠	
Document Name and/or Web A	ddress: Construction Site Stormwater Runoff Control Program Procedures	
<b>Description:</b>		
	ite inspections and enforcement procedures. Conduct site inspections of all ontrol and Land Disturbance permits (conducted in 2020).	
Responsible Department/Partie	s: DPW, Conservation Agent, Planning Agent	
Measurable Goal(s):		
· · · · · · · · · · · · · · · · · · ·	ned in the above document and take enforcement actions as needed.	

#### **BMP:Erosion and Sediment Control**

<b>BMP</b>	Number	(Optional)	22A

**Completed**  $\boxtimes$ 

**Document Name and/or Web Address:** Article XXIV - Stormwater Management Bylaw, Approved at Town Meeting June 29, 2020 (replaced Article XXV - Illicit Discharge Control)

https://www.holdenma.gov/department-of-public-works/pages/ stormwater-information

#### **Description:**

Adoption of requirements for construction operators to implement a sediment and erosion control program.

Responsible Department/Parties: DPW, Planning Board, Conservation Committee

#### **Measurable Goal(s):**

Complete within 1 year of the effective date of permit.

#### **BMP:Waste Control**

BMP Number (Optional) 25

Completed  $\boxtimes$ 

**Document Name and/or Web Address:** Article XXIV - Stormwater Management Bylaw, Approved at Town Meeting June 29, 2020 (replaced Article XXV - Illicit Discharge Control)

> https://www.holdenma.gov/department-of-public-works/pages/ stormwater-information

#### **Description:**

Requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes will be included int he Towns updated Subdivision Rules and Regulation. Requirements have also been included into the Construction Site Stormwater Runoff Control Plan.

Responsible Department/Parties: DPW, Planning Board, Conservation Committee, Board of Health

#### **Measurable Goal(s):**

Include requirements listed above into the Construction Site Stormwater Runoff Control Plan within 1 year of the effective date of permit. Requirements will be included in the next revision of the Town Subdivision Regulations.

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: <a href="https://www.epa.gov/npdes-permits/stormwater-tools-new-england#pcsm">https://www.epa.gov/npdes-permits/stormwater-tools-new-england#pcsm</a>

## **BMP: Post-Construction Ordinance** BMP Number (Optional) 26 Completed (by year 2) Town Ordinances Link or Reference: Subdivision Rules and Regulations (90% draft) and the Stormwater Management Rules and Regulations (75% draft) DPW, Con. Com., Planning Board, Dept. Planning & **Department Responsible for Enforcement:** Development BMP: Street Design and Parking Lot Guidelines Report BMP Number (Optional) 27 Completed (by year 4) **Document Name and/or Web Address: Description:** Develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if changes to design standards for streets and parking lots can be modified to support low impact design options. Responsible Department/Parties: DPW, Planning and Development **Measurable Goal(s):** Work with the CMRSWC to develop the Street and Parking Lot Guidelines Report **BMP: Green Infrastructure Report** BMP Number (Optional) 28 **Completed** (by year 4) **Document Name and/or Web Address: Description:** Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist. Responsible Department/Parties: DPW, Planning and Development **Measurable Goal(s):** Work with the CMRSWC to develop the Street and Parking Lot Guidelines Report

## **BMP: List of Municipal Retrofit Opportunities**

BMP Number (Optional) 29	<b>Completed</b> (by year 4)
Document Name and/or Web Address:	
<b>Description:</b>	
Identify at least 5 permittee-owned prope impervious areas and update annually.	rties that could be modified or retrofitted with BMPs to reduce
Responsible Department/Parties: DPW	
Measurable Goal(s):	
Create the list by 2022 and updated as nec	eded.
BMP:As-built Plans for On-site Stormy	vater Control
BMP Number (Optional) 30	Completed
Document Name and/or Web Address:	Subdivision Rules and Regulations (90% draft) and the Stormwater Management Rules and Regulations (75% draft)
<b>Description:</b>	
The procedures to require submission of a will be a part of the SWMP.	as-built drawings and ensure long term operation and maintenance
Responsible Department/Parties:	
Measurable Goal(s):	
reviews and any project defined as Major	pleted projects are required for all subdivision plans, site plan , under the Land Disturbance Permit. Requirements and Procedures and Regulations for Stormwater Management Rules and Regulations.
BMP:New development and redev. mee	et retention/treatment requirments of permit & MA SW Handbo
BMP Number (Optional) 31	Completed
<b>Document Name and/or Web Address:</b>	Subdivision Rules and Regulations (90% draft) and the Stormwater Management Rules and Regulations (75% draft)
<b>Description:</b>	
Adoption, amendment, or modification of	f a regulatory mechanism to meet permit requirements

Responsible Department/Parties:	DPW, Con. Com., Planning Board, Department of Planning and Development
Measurable Goal(s):	
Complete 2 years after effective date	e of permit

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: <a href="https://www.epa.gov/npdes-permits/stormwater-tools-new-england#gh">https://www.epa.gov/npdes-permits/stormwater-tools-new-england#gh</a>

### PERMITTEE OWNED FACILITIES

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

BMP Number (Optional) 32A	<b>Written Document Completed</b> (by year 2) ⊠
Document Name and/or Web Address:	SOP 19: Operations and Maintenance of Parks and Open Spaces
<b>Description:</b>	
Create written O&M procedures including	ng requirements contained in 2.3.7.a.ii for parks and open spaces.
Responsible Department/Parties: DPW	/, Recreation Department
Measurable Goal(s):	
Implement the SOP listed above for the p	parks and open spaces.
Properties List (Optional):	
See Table "Inventory of Municipal Parks	s and Open Spaces" in SOP 19.
BMP: Buildings and Facilities Operation  BMP Number (Optional) 32B	ons and Maintenance Procedures  Written Document Completed (by year 2) ⊠
Divir (Optional) 32B	written Document Completed (by year 2)
Document Name and/or Web Address:	SOP 20: Operations and Maintenance of Municipal Buildings and Facilities
Description:	
Create written O&M procedures including	ng requirements contained in 2.3.7.a.ii for buildings and facilities.
Responsible Department/Parties: DPW	7
Measurable Goal(s):	
Implement the SOP listed above for build	dings and facilities.
Properties List (Optional):	
See Table "Inventory of Municipal Build	lings and Facilities" in SOP 20.
BMP: Vehicles and Equipment Operat	tions and Maintenance Procedures
BMP Number (Optional) 32C	Written Document Completed (by year 2) ⊠

Document Name and/or Web Address:	SOP 21: Operations and Maintenance of Municipal Vehicles and Equipment
<b>Description:</b>	
Create written O&M procedures including	g requirements contained in 2.3.7.a.ii for vehicles and equipment.
Responsible Department/Parties: DPW	, Recreation Dept, Light Dept, PSB, WRSD.
Measurable Goal(s):	
Implement the SOP listed above for vehice	cles and equipment according to the above document.
Properties List (Optional):	
See Table "Inventory of Municipal Vehic	les and Equipment" in SOP 21.
INFRASTRUCTURE	
BMP: Infrastructure Operations and M	<u>Iaintenance Procedures</u>
BMP Number (Optional) 33	<b>Written Procedure Completed</b> (by year 2) ⊠
Document Name and/or Web Address:	Municipal Stormwater Infrastructure
	Operation and Maintenance Plan
Description:	· 1 1 1 1 1 CMGA : C
Establish and implement program for repa	air and rehabilitation of MS4 infrastructure.
Responsible Department/Parties: DPW	
Measurable Goal(s):	
Infrastructure is maintained to ensure pro	per function in accordance with the procedures above.
BMP: Catch Basin Cleaning Program	
BMP Number (Optional) 34	<b>Written Procedure Completed</b> (by year 1) ⊠
Document Name and/or Web Address:	Municipal Stormwater Infrastructure Operation and Maintenance Plan
<b>Description:</b>	

Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full and clean catch basins on that schedule.

Responsible Department/Parties: DPW		
Measurable Goal(s):		
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) 35	<b>Written Procedure Completed</b> (by year 1) ⊠	
Document Name and/or Web Address:	Municipal Stormwater Infrastructure Operation and Maintenance Plan	
<b>Description:</b>		
Sweep streets and permitee-owned parking	ng lots in accordance with permit conditions.	
Responsible Department/Parties: DPW	T	
Measurable Goal(s):		
	rking lots in accordance with the schedule listed in the O&M Plan.	
BMP: Winter Road Maintenance Progr	<u>ram</u>	
BMP Number (Optional) 36	Written Procedure Completed (by year 1) ⊠	
Document Name and/or Web Address:	Municipal Stormwater Infrastructure Operation and Maintenance Plan	
Description:		
Establish and implement a program to mi	nimize the use of road salt.	
Responsible Department/Parties: DPW	7	
Measurable Goal(s):		
The Operation and Maintenance Plan will and an evaluation of salt/chloride alternat	l be established within one year of the effective date of the permit tive for use in the municipality will be evaluated. Continue use of of EPA and/or Pacific Northwest Snow-fighters Safer Choice.	
BMP: Stormwater Treatment Structure	es Inspection and Maintenance Procedures	
BMP Number (Optional) 37	Completed (by year 1) ⊠	

Document Name and/or Web Address:	Municipal Stormwater Infrastructure Operation and Maintenance Plan
<b>Description:</b>	
Establish and implement inspection and r	naintenance procedures and frequencies.
Responsible Department/Parties: DPW	7, Planning & Development
Measurable Goal(s):	
Inspect and maintain treatment structures	to ensure proper function.
BMP: SWPPP	
BMP Number (Optional) 38	<b>Completed</b> (by year 2) ⊠
Document Name and/or Web Address:	Stormwater Pollution Prevention Plan (SWPPP) - Adams Road DPW Garage Facility, 87 Adams Road Holden, MA
<b>Description:</b>	
Create SWPPPs for maintenance garages	, transfer stations, and other waste-handling facilities.
Responsible Department/Parties: DPW	7
Measurable Goal(s):	
Develop and implement SWPPPs for the date of the permit	Adams Road DPW Garage Facility within 2 years of the effective
BMP:Inventory All Permittee-owned P	arks, Open Spaces, Buildings, Facilities, Vehicles and Equipment
BMP Number (Optional) 39	<b>Completed</b> ⊠
Document Name and/or Web Address:	See SOP 19, 20 and 21
<b>Description:</b>	
Create Inventory.	
Responsible Department/Parties: DPW	, Light Dept, Police and Fire, WRSD

## **Measurable Goal(s):**

Complete 2 years after effective date of permit and implement annually.

Add BMP

# **Annual Evaluation**

Year 1 Annual Report	
Document Name and/or Web Address:	
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:	
Document Name and/of 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