FOR COMMENT

Stormwater Management Plan

MA MS4 General Permit Requirements

EPA NPDES Permit Number: MAR041063

Prepared for:
Stoughton, Massachusetts

June 2019

Natalie M. Pommersheim
Senior Project Scientist

Environmental Partners GROUP
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Certification

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

☐ Attached to this document (document name listed below)

☐ Publicly available at the website below

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

Printed Name: Robin Muksian Grimm, Town Manager

Signature: 

Date: 6/27/19

Small MS4 Authorization

The NOI was submitted on September 18, 2018

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

https://www3.epa.gov/region1/npdes/stormwater/ma/tms4noi/stoughton.pdf

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Authorization to Discharge was granted on June 4, 2019

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

https://www3.epa.gov/region1/npdes/stormwater/ma/tms4noi/stoughton-auth.pdf

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

VIA EMAIL

June 4, 2019

Marc J. Tisdelle
Interim Town Manager

And;

Marc J. Tisdelle, P.E.
Town Engineer
Town Hall
10 Pearl Street
Stoughton, MA. 02072
mtisdelle@stoughton-ma.gov

Re: National Pollutant Discharge Elimination System Permit ID #: MAR041063, Town of Stoughton

Dear Marc J. Tisdelle, P.E.:

The 2016 NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems in Massachusetts (MS4 General Permit) is a jointly issued EPA-MassDEP permit. Your Notice of Intent (NOI) for coverage under this MS4 General Permit has been reviewed by EPA and appears to be complete. You are hereby granted authorization by EPA and MassDEP to discharge stormwater from your MS4 in accordance with the applicable terms and conditions of the MS4 General Permit, including all relevant and applicable Appendices. This authorization to discharge expires at midnight on **June 30, 2022.**

For those permittees that certified Endangered Species Act eligibility under Criterion C in their NOI, this authorization letter also serves as EPA's concurrence with your determination that your discharges will have no effect on the listed species present in your action area, based on the information provided in your NOI.

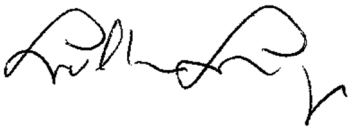
As a reminder, your first annual report is due by **September 30, 2019** for the reporting period from May 1, 2018 through June 30, 2019.

Information about the permit and available resources can be found on our website: https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit. Should you have any questions regarding this permit please contact Newton Tedder at tedder.newton@epa.gov or (617) 918-1038.

Sincerely,

Thelma Murphy, Chief
Stormwater and Construction Permits Section
Office of Ecosystem Protection
United States Environmental Protection Agency, Region 1

and;



Lealdon Langley, Director
Wetlands and Wastewater Program
Bureau of Water Resources
Massachusetts Department of Environmental Protection

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1. BACKGROUND

1.1 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.

1.2 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.

1.3 Stormwater Management Plan (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 permittee’s 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 house keeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized. The hyperlinks provided in Appendix A offer additional information and supporting documents related to the MS4 Permit and the aforementioned minimum control measures.

1.4 Town Specific MS4 Background

The Town must give special consideration to and meet eligibility requirements for their discharges to be able to apply for coverage under the General Permit. Eligibility will be determined based on three categories: Endangered Species Act, National Historic Preservation Act, and Water Quality Impaired Waters. The Town must establish that discharges from its storm drain system do not adversely impact endangered species, critical habitats, and historic properties in order to be covered by the General Permit. Furthermore, the Town must identify all receiving waters that have been classified as Water Quality Impaired Waters by the MA DEP. The Town of Stoughton and its surrounding water bodies are shown on *Figure 1: System Locus*. The Stoughton Notice of Intent (NOI) for coverage under the Small MS4 General Permit was submitted to EPA and MassDEP on September 18, 2018. A copy of the NOI is provided in Appendix B.

2. SWMP COMPONENTS

2.1 Parties Involved in Implementation

The Town has not yet created/staffed a stormwater management position. Alternatively, the Town has established a Stormwater Committee. The members of the Stoughton stormwater committee are listed in the table below. This committee has prioritized detailed goals and concerns regarding the implementation of a stormwater program.

Name	**Title**	**Department**
Marc J. Tisdelle	Town Engineer	Engineering Department
Thomas Fitzgerald	Director of Public Works	Department of Public Works
Craig Horsfall	Assistant Town Engineer	Engineering Department
John Charbonneau	Town Planner	Planning Board
Thomas McGrath	Building Commissioner	Building Department
James Conlon	Environmental Affairs Officer	Engineering Department
Lawrence Perry	Town Sanitarian	Board of Health
Paul Giffune	Town Facilities Manager	Building Department
Joyce Husseini	Schools Facilities Manager	School Committee
*Additional Members**		

A schedule has been developed in effort to comply with the NPDES Permit requirements and timelines as currently established. The schedule is attached as Appendix C.

2.2 Documentation Regarding Endangered Species

In order to comply with part 1.9.1 of the NPDES Permit, the Town has attached documentation in Appendix D supporting Stoughton's eligibility determination of Criterion C with regard to federal Endangered and Threatened Species and Critical Habitat Protection. Criterion C states that "the stormwater discharges and discharge related

activities will have “no affect” on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service (USFWS).” USFWS provided a letter in place of a concurrence letter for informal consultation.

The attachments in Appendix D include the aforementioned letter, as well as the results of the IPaC environmental review process. Using the IPaC environmental review process, one endangered species is within Stoughton’s boundaries: the Northern Long-Eared Bat. The Northern Long-Eared Bat does not have critical habitats designated within the Town, and the MS4 Permit will not adversely affect the species.

2.3 Documentation Regarding Historic Properties

The Town has attached documentation in Appendix E supporting their eligibility determination regarding Historic Properties, in compliance with part 1.9.2 of the Permit. This document, Appendix D of the Massachusetts General MS4 Permit, includes information supporting Stoughton’s determination as Criterion A, stating that the discharges do not have the potential to cause effects on historic properties.

Historic site considerations will be evaluated further as part of the design/permitting of new/retrofit BMPs proposed for implementation as part of MS4 compliance. Regarding the National Historic Preservation Act, under 36 CFR 800, this facility is an existing facility authorized by the previous Permit, and is not undertaking any activity involving subsurface land disturbance less than 1 acre. This MS4 Permit will have "no potential to cause effects," in accordance with 36 CFR 800.3(a)(1).

2.4 Documentation Regarding Discharges

Attached in Appendix F is the documentation for tracking any new or increased discharges granted by MassDEP in compliance with part 2.1.2 of the Permit. Increased discharges refer to increased pollutant loading(s) through the MS4 to waters of the US or to impaired waters listed in categories 5 or 4b on the Massachusetts Integrated Report of waters, pursuant to the Clean Water Act. The Permit states that “any authorization of an increased discharge by MassDEP shall be incorporated into the permittee’s SWMP.”

At this time, the Town of Stoughton has no new and/or increased discharges. Stoughton will document any new and/or increased discharges, including any newly located outfall beyond what was listed in the NOI, any new constructed outfall, or any new development increasing flow to existing MS4 outfall structures. These discharges will be documented on the form provided in Appendix F and will include project specific information regarding best management practices implemented for those discharges. A sample discharges form is provided in Appendix F.

2.5 Sanitary Sewer Overflow (SSO) Inventory

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. The verbal notification should be followed up 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. Upon notification of any SSO or septic overflow, the Stoughton Board of Health will take these appropriate measures to comply with Permit requirements.

As of March 2019, there are no known SSOs or septic overflows that discharge to the MS4. An inventory of all known locations where SSOs have discharged to the MS4 will be maintained by the Town, if any are found. This inventory shall include SSOs resulting from inadequate conveyance capacities, or where interconnectivity of the storm and sanitary sewer infrastructure allows for interconnection of flow between the systems. A sample inventory form is provided in Appendix G and includes the following information:

1. Location (approximate street crossing/address and receiving water, if any);
2. A clear statement of whether the discharge entered a surface water directly or entered the MS4;
3. Date(s) and time(s) of each known SSO occurrence (i.e., beginning and end of any known discharge);
4. Estimated volume(s) of the occurrence;
5. Description of the occurrence indicating known or suspected cause(s);
6. Mitigation and corrective measures completed with dates implemented; and
7. Mitigation and corrective measures planned with implementation schedules.

2.6 IDDE Program

The Town's IDDE plan will be developed during the first year of the new permit (i.e., by June 30, 2019). The IDDE program is detailed in section 3.3 of Minimum Control Measures. The Town's Stormwater Management and Erosion Control Bylaw and current Illicit Discharge Bylaw are provided in Appendix H.

2.7 Sediment and Erosion Control Procedures

Written procedures for the Town's site inspections and enforcement of sediment and erosion control procedures in accordance with part 2.3.5 of the Permit, Construction Site Stormwater Runoff Control, are detailed in sections 3.4 and 3.5 of Minimum Control Measures. This information includes the party responsible for site inspections and implementation of procedures.

2.8 Public Drinking Water Supply Sources Protection

The Town has developed practices in effort to avoid or minimize impacts to surface public drinking water supply sources. These efforts are detailed in Minimum Control Measures section 3.6, Good House Keeping and Pollution Prevention. The Town plans to prioritize the enforcement of existing stormwater pollution prevention plans.

2.9 Activities to Monitor Discharges

The Town will identify any discharges within public drinking water supply source areas and give priority to outfall inspections and screening required of the Minimum Control Measures in section 3.0.

2.10 Annual Program Evaluation

To comply with part 4.1 of the Permit, the Town annually self-evaluates compliance with the terms and conditions of the Permit and submits each self-evaluation as part of

the Fiscal Year annual report. The 2018 NPDES Phase II Small MS4 General Permit Annual Report is attached as Appendix I.

3. MINIMUM CONTROL MEASURES

In an effort to reduce pollutants and comply with part 2.3 of the Permit, the Town focuses on the following minimum control measures. These sections describe the Town's practices to comply with each control measure, the responsible person(s) or party of each practice, and the goal(s) for each BMP of each control measure.

3.1 Public Education and Outreach

The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area, further detailed in section 4.2. The ultimate objective of a public education program, permit part 2.3.2, is to increase knowledge and change behavior of the public so that the pollutants in stormwater are reduced.

The Town implemented a public education program as required by the 2003 permit and will continue that program and make the necessary adjustments to meet the additional requirements of the 2016 permit.

The program must include the education of the following four audiences: 1. residents, 2. businesses, institutions (churches, hospitals), and commercial facilities, 3. developers (construction), and 4. industrial facilities.

3.1.1 Background

The Town has made efforts to incorporate stormwater information into classroom education in Middle and High Schools through presentations by the Engineering Department. During these presentations and seminars, materials are distributed to raise awareness of stormwater issues and maintenance practices. The Engineering Department has also developed a stormwater video called "After the Storm" which has aired on local access television. The Public Works Department works to stencil catch basins and check and re-paint them as necessary while inspecting overall conditions of

the catch basins in town. Signs and posters have also been displayed with outreach material written specifically for different types of audiences, including “No-Dumping” signs in all major watershed areas. On Earth Day, the Conservation Commission gives educational presentations to generate public awareness for preventing non-point source pollution in the watershed. The Conservation Commission also works to educate the public on the stormwater benefits of rain barrels and compost generators for storing roof runoff and reducing the volume of solid waste.

Stoughton continues to participate in the Neponset Stormwater Partnership, though which the Town has been able to provide design and survey for stormwater improvements. The Public Works and Engineering Departments also attend multiple stormwater presentations on an annual basis to educate the staff on the MS4 permit requirements. The Town Engineering Department also worked to create an aquifer protection map and educate staff on low impact design of new developments. The Town will present the stormwater bylaw for public review at a future Town Meeting to make revisions and updates for the new permit requirements.

3.1.2 Best Management Practices

I. Distribution of a minimum of two educational messages over the permit term to the required audiences, as listed below.
   A. Residents
      1. Maintain stormwater website with hyperlinks to stormwater related bylaws.
         a) https://ecode360.com/12489816
      2. Keep outreach materials at Library and Town Hall and publish on stormwater website, utilizing materials from the DEP, EPA, and relevant stormwater collaborative.
      3. Consider creating a Town Resident Notification System for stormwater alerts.
      4. Distribute New Resident packets to residents within Wetland Protection Areas.
      5. Distribute pet waste control information to residents when they (re)apply for a pet license.
      6. Install educational boards/signs in parks, public open space, near wetlands, etc.
      7. Continue to perform presentations and provide school materials to Stoughton High School and O’Donnell Middle School.
   B. Businesses, Institutions, and Commercial Facilities

1. Include information in permit materials and make available on stormwater website and at Town Hall.
2. Make information available on stormwater website and at Town Hall.
3. Distribute information to septic maintenance contractors.

C. Developers (Construction)
1. Include stormwater information materials as appendix to building and site plan review permit applications.
2. Make information available on stormwater website and at Town Hall.
3. Distribute information to developers based on zoning and property use.

D. Industrial Facilities
1. Distribute stormwater information to industrial groups based on zoning and property use.
2. Make information available on stormwater website and at Town Hall.

3.2 Public Involvement and Participation

The objective of the public involvement and participation control measure, permit part 2.3.3., is for the Town to provide the public with opportunities to engage in activities that promote good stormwater practices. The public must also be given the chance to review the Stormwater Management Plan (SWMP) and its implementation.

3.2.1 Background

Stoughton has created a Stormwater Committee to identify and develop plans to mitigate stormwater problem areas in town. The Town holds a household hazardous waste day each year, and provides opportunities for residents to dispose of unwanted prescriptions to protect the environment. The Ames Pond Citizens Committee and Harris Pond Citizen Committee were formed to increase awareness of the nutrient problems in these ponds and mitigate these nutrient pollutions. The Board of Health (BOH) has made efforts to educate the public on preventing groundwater contamination by maintenance of on-site sewage disposal. In addition, the BOH has developed programs for removing mercury from the municipal solid waste stream, and implementing a program to replace failed septic systems.

3.2.2 Best Management Practices

I. Public Review
   A. Stormwater Management Plan Review (SWMP)
      1. Make SWMP available at least annually for public review.
      2. Create and use Stormwater Website to publish SWMP and annual reports. Website should contain a space for electronically soliciting public comments (e.g. stormwater specific e-mail, message board, etc.)
         a) Make physical copy available at Town Hall, Library, Department of Public Works, etc.

II. Public Participation
   A. Participate in local stormwater groups/associations (e.g. Neponset River Watershed Association, Harris Pond Citizen Committee, Ames Pond Citizens Committee).
   B. Maintain/Acquire membership with local stormwater/water quality committees (e.g. Stormwater Advisory Committee).
   C. Continue to host hazardous waste collection days.
   D. Continue to hold Town clean-up days with various groups
   E. Stormwater Hotline
      1. Establish a stormwater hotline and publish contact information on stormwater website in order to solicit complaints, questions, etc.

3.3 Illicit Discharge Detection and Elimination (IDDE) Program

The Town shall put an IDDE program, permit part 2.3.4, into place in order to find and eliminate non-stormwater discharge sources to its MS4 system. Procedures shall be implemented to fix any prevalent issues in the Town's storm sewer system. As identified in the Notice of Intent (NOI), attached in Appendix B, the following 220 outfall structures listed in the table below discharge within the Town of Stoughton's MS4 area. These outfall structures are displayed on *Figure 2: MS4 Urbanized Areas*.

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
Ames Long Pond (MA62001)	12	☐	☐	☐	☐	☐	☐	☒	☐	☐	Non-Native Aquatic Plants, Aquatic Plants (Macrophytes)
Beaver Brook	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	Aquatic Macroinvertebrate Bioassessments
Beaver Meadow Brook (MA73-20)	13	☐	☐	☒	☐	☐	☐	☐	☐	☐	

Briggs Pond (MA62021)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Dorchester Brook	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Dry Pond	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
East Branch Neponset River	31	☐	☐	☒	☐	☐	☐	☐	☒	☐	Aquatic Macroinvertebrate Bioassessments, Fecal Coliform, DDT, PCB in Fish Tissue
Lovett Brook (MA62-46)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Plain Street Pond	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Steep Hill Brook (MA73-18)	16	☐	☐	☐	☐	☐	☐	☐	☒	☐	(TMDL taken from Massachusetts 2016 List of Impaired Waters)
Town Pond (MA73056)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	Non-Native Aquatic Plants
Woods Pond (MA73055)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	Non-Native Aquatic Plants
Unnamed Pond near Three Swamp Brook (42.14348, -71.06517)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Pond near Woods Pond (42.11081, -71.11629)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary near Dorchester Brook (42.10344, -71.08098)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary near Woods Pond (42.11013, -71.10934)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Ames Long Pond (42.09003, -71.13424)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Ames Long Pond (42.10058, -71.13084)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary To Beaver Brook (42.14530, -71.08055)	11	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12766, -71.07440)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.13174, -71.08156)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12881, -71.07807)	8	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12501, -71.08639)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.10906, -71.08463)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.11375, -71.08459)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.11762, -71.08405)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Meadow Brook (42.14060, -71.11240)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Brockton Reservoir (42.12119, -71.07132)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Dorchester Brook (42.11301, -71.09610)	6	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Dry Pond (41.111852, -71.133584)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Queset Brook (42.07672, -71.13212)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Steep Hill Brook (MA73-32) (42.13416, -71.13259)	9	☐	☐	☐	☐	☐	☒	☐	☒	☐	Aquatic Macroinvertibrate Bioassessments, Low pH
Unnamed Tributary to Steep Hill Brook (42.11858, -71.10726)	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Steep Hill Brook (42.12042, -71.11649)	6	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Town Pond (42.11410, -71.12355)	11	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Town Pond (42.10567, -71.11967)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary (42.15792, -71.06823)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Beaver Brook (42.15518, -71.08070)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Beaver Brook (42.12118, -71.07754)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Three Swamp Brook (42.15629, -71.06474)	12	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Beaver Meadow Brook (42.14179, -71.09929)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Lovett Brook (42.11384, -71.06507)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Lovett Brook (42.10794, -71.06107)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	

3.3.1 Background

The Town has made extensive efforts towards illicit discharge detection and elimination. Stormwater mapping on existing drain facilities in Town has been completed, along with inspections on drainage structures and verification of connectivity. GIS software for this stormwater mapping data has been developed and maintained by the town's GIS Administrator. This system has streamlined the DPW's work for closed circuit TV inspections of areas with suspect water quality. The GIS inspection data has also provided information on outfall dry weather flow, which was important in developing the outfall sampling program. All MS4 outfalls have been identified.

An IDDE bylaw for in field inspections of utility tie-ins was developed and approved, and continues to be enforced by the Engineering Department, Board of Health and Public Works Department. The Board of Health has made ongoing efforts to eliminate illicit discharges including the enforcement of Public and Semi-Public swimming pool back wash discharge regulations, enforcement of the commercial and industrial hazardous waste floor drain regulations, and enforcement of the hazardous waste groundwater protection bylaw. There are several stormwater improvement design projects in progress, including the Park Street sewer extension, Cedar Hill Golf Course drainage improvements, and curb and berm installation on Canton Street. The DPW also performs stormwater infrastructure replacements or repairs as needed. In 2017 – 2018, the Town continued with the Neponset Stormwater Partnership and provided in-house survey and design as part of the awarded 319 Stormwater Grant through the Neponset River Valley Association for stormwater improvements at Gibbons Elementary School. Additionally, the Town was awarded a DEP Stormwater Grant for 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/West Street intersection).

A hydraulic study of the sanitary sewer system and inspections of land that is subject to flooding has been in progress by the Engineering Department, and will continue to be an ongoing effort. The IDDE bylaw will be presented at a future Town Meeting for revisions to meet the requirements of the new permit.

3.3.2 Best Management Practices

I. Legal Authority
   A. The IDDE program shall include the existing Town legal authority to prohibit illicit discharges; investigate suspected illicit discharges; eliminate illicit discharges, including discharges from properties not owned by or controlled by the MS4 that discharge into the MS4 system; and implement appropriate enforcement procedures and actions. Adequate legal authority consists of a currently effective ordinance, by-law, or other regulatory mechanism. For permittees authorized by the MS4-2003 permit, the ordinance, by-law, or other regulatory mechanism was a requirement of the MS4-2003 permit and was required to be effective by May 1, 2008. For new permittees the ordinance, by-law, or other regulatory mechanism shall be in place within 3 years of the permit effective date.

II. SSO Inventory
   A. Develop SSO Inventory Database within one year of effective permit date that logs historical SSOs that have occurred in the last five years, as discussed in further detail in section 2.5.

III. Storm Sewer System Map
   A. Update map within two years of effective date of permit and complete full system map ten years after effective date of permit.
      1. Make an electronic and physical copy of the map available to the public via the stormwater website and Town Hall.
      2. Map/verify 10% of system per year during permit years 1-10.
         a) Phase I will be focused on during Years 1 and 2, while Phase II will be focused on during Years 3 thru 10.
      3. Integrate system map updates with planned utility expansion projects.
      4. Cross reference drainage information to ensure mapping is as accurate as possible.
      5. Map/verify country drainage – (e.g. scuppers), in addition to outfall pipes.

IV. Written IDDE Program Development
   A. Develop and complete written IDDE program within one year of effective permit date. The IDDE program and permit attachments will be available within the Town Hall at 10 Pearl Street, Stoughton, MA 02072.
      1. The written plan will include but is not limited to the following:
         a) Outline of responsibilities
         b) Storm sewer map with locations of known outfalls, including information on relevant connectivity data gaps
         c) Systematic procedure/protocol to detect and eliminate illicit Discharges
         d) Assessment/ranking of catchments (based on complaints, past water quality data, adjacent failing septic/sewer systems, density, surrounding area, TMDL surface waters)
         e) Tracking mechanism to evaluate and report on the overall

effectiveness of the IDDE program.

V. Implement IDDE Program
   A. Implement catchment investigations according to program and permit conditions within 15 months of effective permit date.
      1. Continue to enforce IDDE bylaw.
      2. Draft and implement stormwater management regulations.
      3. Coordinate water quality monitoring through dry weather screening
         a) The water quality monitoring practice should involve inspections for illicit discharge detection.

VI. Employee Training
   A. Coordinate annual stormwater training and incorporate with training required in Section 6.2.IV.B.

VII. Dry Weather Screening
   A. Conduct screening in accordance with outfall screening procedure and permit conditions, within three years of effective permit date.
      1. Screen 25% of outfalls per year during permit years 2-5.

VIII. Conduct Wet Weather Screening
   A. Conduct screening in accordance with outfall screening procedure and permit conditions and as determined by dry weather screening results, within ten years of effective permit date.
   B. To identify areas with higher potential for illicit connections, the permittee shall identify the presence of any of the following System Vulnerability Factors (SVFs):
      1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages;
      2. Common or twin-invert manholes serving storm and sanitary sewer alignments;
      3. Common trench construction serving both storm and sanitary sewer alignments;
      4. Crossings of storm and sanitary sewer alignments where the sanitary system is shallower than the storm drain system;
      5. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
      6. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints;
      7. Areas formerly served by combined sewer systems;
      8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.

IX. Conduct ongoing screening upon completion of the IDDE program.

X. IDDE Regulations
   A. Continue to eliminate illicit discharge violations.

3.4 Construction Site Stormwater Runoff Control

The Town must implement a program focused on controlling stormwater runoff from construction sites. The program shall minimize or eliminate erosion on site and maintain the site so that the sediment is not transported in stormwater or allowed to discharge to a water of the U.S. through the permittee's MS4, as stated in part 2.3.5 of the Permit.

3.4.1 Background

The Town enforces submittal of Stormwater Pollution Prevention Plans for all projects greater than one acre in size, and a comprehensive review of all construction documents. For projects less than one acre in size, the Town performs a comprehensive stormwater review to ensure compliance with local and state stormwater requirements. All site development plans are required to provide proper erosion controls and comply with the DEP Stormwater Management Regulations. The Conservation Commission works to reduce non-point source pollution by implementing a vegetated buffer area on construction activities. In order to make site inspections more efficient, the Engineering Department created stormwater inspection applications to upload all inspection data to the GIS system and store that information based on the location of the inspection.

3.4.2 Best Management Practices

I. Site Inspection and Enforcement of Erosion and Sediment Control (ESC) Measures Procedures
   A. Complete written procedures of site inspections and enforcement procedures within one year of effective date of the permit.
      1. Recommend standards and practices for town inspection procedures. Seek input from relevant town groups (e.g. Conservation Commission, Public Works Department, Building Department, etc.)
      2. Develop inspection form that includes ESC measures and integrate them with existing Town forms.

II. Site Plan Review Procedures
   A. Complete written procedures of site plan review and begin implementation within one year of the effective date of the Permit.
      1. Include site plan review workflow chart with permit applications.

2. Review current Town procedure regarding when a Construction General Permit (CGP) is needed.

III. Erosion and Sediment Control Ordinance
   A. Adoption of requirements for construction operators to implement a sediment and erosion control program within one year of the effective date of the Permit.
      1. Set limit of 5,000 SF before project requires inspection by Town official.
         a) Coordinate limits and requirements with fill/extraction permits.
      2. Update all Town forms with erosion and sediment control checklist.
      3. Continue to implement Soil and Erosion Control bylaw.
      4. Continue to monitor all construction activities within the Town of Stoughton for erosion and sediment control issues.

IV. Waste Control
   A. Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes within one year of the effective date of the Permit.
      1. Incorporate into Town's general conditions for building permit and/or site plan review.
      2. Review and modify Town bylaw to meet new requirements.

V. Pre-Construction/Coordination Meetings
   A. Continue GIS mapping and develop protocol for submitting as-builts electronically.

3.5 Post Construction Stormwater Management in New Development and Redevelopment

The objective of an effective post construction stormwater management program, part 2.3.6 of the Permit, 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.

3.5.1 Background

The town's Stormwater Committee has drafted revised bylaws to include the required changes on post-construction stormwater management practices. Each project is reviewed prior to construction and post-construction operation and maintenance manuals are required to be submitted prior to project approval. The post-construction bylaws are also being presented at Town Meetings for revisions to better meet requirements of the new permit.

3.5.2 Best Management Practices

I. Post-Construction Ordinance
   A. The permittee shall develop or modify, as appropriate, an ordinance or other regulatory mechanism within two years of the effective date of the permit.

II. As-Built Plans For On-Site Stormwater Control
   A. Require submission of electronic data for as-built drawings (e.g. PDF, AutoCAD, GIS) within two years of completed construction.
      1. O&M certification should include contact and contract information for contractors that perform O&M on the private BMPs.

III. Inventory and Priority Ranking of MS4-Owned Properties That May Be Retrofitted with BMPs
   A. Conduct detailed inventory of MS4 owned properties and rank for retrofit potential within four years of permit effective date.
      1. Inventory Town parcels for existing stormwater BMPs and identify opportunities for GI/LID retrofits.
         a) Include schools, parks, recreation facilities, police/fire/EMS, libraries, public works, and town administrative offices.

IV. Allow Green Infrastructure
   A. Within four years of permit effective date, develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
      1. Review bylaws and applications in order to incorporate green infrastructure and low impact development language as needed.
      2. Educate the public on green infrastructure through existing BMP retrofits/demonstration projects.

V. Street Design and Parking Lot Guidelines
   A. Within four years of permit effective date, 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
      1. Publish street design and parking lot guidelines on stormwater website.

VI. Ensure any stormwater controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality.
   A. Within two years of permit effective date, adopt, amend, or modify regulation mechanisms to meet permit requirements.
      1. Review rules and regulations and modify as needed. Include evaluation of subdivision/redevelopment requirements for long-term operations and management of private BMPs.
      2. Continue to implement Post-Construction Site Runoff Control Bylaw.
      3. Continue to require submission of long term O&M pollution prevention plans for all development greater than an acre.
      4. Continue to enforce asbestos removal bylaw.
      5. Continue to enforce lead paint removal bylaw.

6. Continue to enforce compliance with local Conservation and Stormwater bylaws and regulations.

VII. Monitor construction impacts on amount of impervious surfaces

1. Record pre/post-construction changes to amount of impervious surface.
    a) Require submittal of impervious area data with as-built records.
        (1) Projects should report quantities of impervious area pre and post-construction, along with the net increase/decrease of impervious area.

3.6 Good House Keeping and Pollution Prevention for Permittee Owned Operations

The objective of this control measure, part 2.3.7 of the Permit, states that the permittee shall implement an operations and maintenance program for Town-owned operations that shall focus on preventing or reducing pollutant runoff and protecting water quality from Town operations.

3.6.1 Background

Catch basin cleaning, street sweeping and swale maintenance are all performed by the DPW to reduce stormwater pollution. The DPW also ensures that all hazardous materials are stored inside, and a “no exposure” rating from EPA was obtained. To eliminate inflow and infiltration, the DPW is constantly fixing all sewer pipe lines with leakage issues.

The Conservation Commission requires pesticide-free landscaping practices as a special requirement in the Orders of Conditions, and the Commission also developed a Hydro-raking Program to mitigate the extensive exotic vegetation problem at Ames Long Pond. A SPCC plan was developed by the DPW in 2014 for the Highway Garage. The DPW is also in the process of formalizing operations and techniques for catch basin cleaning, street sweeping and winter road maintenance. The Stormwater bylaw will be presented at Town Meeting for approval of meeting the new permit requirements and public outreach.

3.6.2 Best Management Practices

I. Implement written O&M procedures for parks and open spaces, buildings and facilities, and vehicles and equipment within two years of permit effective date.
   A. Develop standards of practice for O&M of each public facility and combine in Town O&M Manual.

II. Maintain and update inventory all permittee-owned parks and open spaces, buildings and facilities (including their storm drains), and vehicles and equipment within two years of permit effective date.
   A. Develop a capital improvement plan that deals with flooding prevention measures and water quality improvements.
      1. Coordinate implementation with Section 5.2.II

III. Establish and implement program for repair and rehabilitation of MS4 infrastructure within two years of permit effective date.
   A. Inspect assets and assess condition to develop program
   B. Review annual budget to set aside funding.

IV. Stormwater Pollution Prevention Plan (SWPPP) for Maintenance Garages, Transfer Stations and Other Waste-Handling Facilities
   A. Develop plan within two years of permit effective date.
   B. Schedule annual employee training.
      1. Continue to look into workshop and speaking opportunities and seek formal training for all departments
   C. Develop an asset management system to process complaints, permits, inspections, and maintenance.
   D. Continue to implement recycling standards and requirements.

V. Catch Basin Cleaning
   A. Develop and maintain an annual cleaning schedule.
   B. Develop electronic data collection system for tracking, inspection, and maintenance.
      1. Update catch basin cleaning services RFP requirements to require electronic data collection that is compatible with the Town's GIS and asset management system.

VI. Street Sweeping Program
   A. Continue to implement street sweeping program, sweeping streets a minimum of once annually in the spring.
   B. Include number of miles of streets cleaned per year, and volume or mass or material removed in each annual stormwater report (rural and uncurbed exceptions apply).

VII. Road Salt use Optimization Program/Winter Road Maintenance
   A. Continue working on salt reduction strategies.
      1. Continue to develop and implement winter road maintenance procedures including use and storage of salt and sand
      2. Continue to minimize the use of salts and ensure that snow is not disposed into water ways.
      3. Calibrate spreaders to reduce salt use.

VIII. Inspections and maintenance of stormwater treatment structures.
   A. Establish and implement inspection and maintenance procedures for annual inspections/maintenance.

IX. Norfolk County Mosquito Control Project

1. Coordinate annual meeting with Control Project Staff to discuss potential stormwater impacts from mosquito control applications and potential BMP retrofits that can minimize standing water in catch basins (e.g. leaching structures)

X. Massachusetts Department of Transportation

1. Coordinate annual meeting with MassDOT District 5 Staff to discuss stormwater system interconnections, common receiving waters, and opportunities for collaboration.

4. WATER QUALITY BASED REQUIREMENTS

In compliance with the Clean Water Act (CWA), each state must administer a program to monitor and assess the quality of its surface water and ground water. Section 305(b) process of the CWA entails assessing each use for rivers, lakes, and coastal waters, and causes and sources of impairment are identified wherever possible. Section 303(d) of the CWA along with the regulations at 40 CFR 130.7 requires states to identify those water bodies that are not expected to meet surface water quality standards (SWQS) after the implementation of technology based controls, and prioritize them for the development of Total Maximum Daily Loads (TMDLs). A TMDL establishes the maximum amount of a pollutant that may be introduced into a water body and still ensure attainment and maintenance of water quality standards. The 303(d) *List of Impaired Waters* (303(d) List) lists each water body in one of the following five categories:

1) Unimpaired and not threatened for all designated uses;
2) Unimpaired for some uses and not assessed for others;
3) Insufficient information to make assessments for any uses;
4) Impaired or threatened for one or more uses, but not requiring the calculation of a TMDL; or
5) Impaired or threatened for one or more uses and requiring a TMDL.

Waters listed in Category 5 constitute the 303(d) List and are to be reviewed and approved by the EPA. An abbreviated version of *Table 1: Impaired Waters, TMDLs and Impairments* is shown below, and is also represented in Appendix B, the Notice of Intent. The MS4 area and Town watersheds are shown on *Figure 3: Town Watersheds*, and an overall map of the Town of Stoughton's stormwater system is attached as *Figure 4: Stormwater System Map*.

Category	Name	Segment ID	Impairment Cause
5 - "Water Requiring a TMDL"	**Beaver Meadow Brook**	MA73-20	Oxygen, Dissolved
	Unnamed Tributary	MA73-32	Acquatic Macroinvertebrate Bioassessments
			Escherichia Coli
			pH, Low
			Phosphorus (Total)
	Ames Long Pond	MA62001	(Non-Native Aquatic Plants*)
			Aquatic Plants (Macrophytes)
			Turbidity

4.1 Background

These requirements aim to improve and mitigate stormwater water quality impairments. The Town of Stoughton has 112 outfalls located within the Boston Harbor: Neponset Watershed, 92 outfalls located within the Taunton River Watershed, and 16 outfalls located within the Boston Harbor: Weymouth & Weir Watershed. This program will focus on impaired waters requiring a TMDL (Category 5) in the Taunton River Watershed and the Boston Harbor: Neponset Watershed, shown on *Figure 3*.

There are three (3) Category 5 water segments in Stoughton requiring a TMDL.

1) Beaver Meadow Brook (MA73-20) is a 3.3 mile segment, which outlets from Glenn Echo Pond, impaired due to dissolved oxygen. This segment has also had detections of fecal coliform bacteria.

2) A one mile segment of Unnamed Tributary (MA73-32) from the outlet of Town Pond to the confluence of Steep Hill Brook has impairments for aquatic macroinvertebrate bioassessments, E. coli, pH (low), and total phosphorus. Both Beaver Meadow Brook and the Unnamed Tributary are located within the Boston Harbor: Neponset Watershed.

3) Ames Long Pond (MA62001), located within the Taunton Watershed, has TMDL requirements for aquatic plants and turbidity impairments. This waterbody, MA62001, is approximately 87.7 acres. Turbidity impairment requires the Town to adhere to requirements in part B of Appendix H of the Permit. Turbidity requirements, and requirements that apply to solids, oil and grease, or metals impairments, are listed below (Section 4.2.2).

The Taunton River Watershed has a watershed-wide EPA approved TMDL requirement for pathogens. This impairment requires Stoughton to follow the requirements listed below to mitigate pathogen discharges to the MS4. The Town should prioritize sampling their 92 outfalls within the Taunton River Watershed for bacteria and pathogens. These bacteria and pathogen requirements also apply to the outfalls discharging to the Neponset River, as well as the nine (9) outfalls discharging to the

Unnamed Tributary (MA73-32). These water bodies are impaired due to bacteria and pathogens as well.

In addition to the Taunton River Watershed bacteria and pathogen requirements, all discharges in the Taunton River Watershed must also be tested for Nitrogen and the Town must adhere to requirements listed in part I of Appendix H of the Permit.

The Unnamed Tributary (MA73-32) is also impaired due to phosphorus. The nine (9) outfalls in Stoughton which discharge to this water body should are subject to the phosphorus requirements listed below, and should be prioritized for phosphorus sampling.

There are 16 outfalls in Town that are located within the Boston Harbor: Weymouth & Weir Watershed. This watershed has a watershed-wide EPA approved TMDL requirement for pathogens. This impairment requires Stoughton to follow the requirements listed for pathogens below to mitigate contaminated discharges to the MS4. The Town should also focus sampling these 16 outfalls for pathogens.

There are 112 outfalls in Town that are located within the Boston Harbor: Neponset Watershed. This watershed has a watershed-wide EPA approved TMDL requirement for bacteria. This impairment requires Stoughton to follow the requirements listed for bacteria below to mitigate contaminated discharges to the MS4. The Town should also focus sampling these 112 outfalls for bacteria.

4.2 Permit Requirements

4.2.1 Public Education and Outreach

a. Nitrogen

- Distribute an annual message in the spring (April/May) timeframe that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers.
- Distribute an annual message in the summer (June/July) timeframe encouraging the proper management of pet waste, including noting any existing ordinances where appropriate.

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

b. Phosphorus
   - Distribute an annual message in the spring (March/April) timeframe that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers.
   - Distribute an annual message in the summer (June/July) timeframe encouraging the proper management of pet waste, including noting any existing ordinances where appropriate.
   - Distribute an annual message in the fall (August/September/October) timeframe encouraging the proper disposal of leaf litter.
   - Deliver an annual message on each of these topics, unless the permittee determines that one of more of these issues is not a significant contributor of phosphorus to discharges from the MS4.

c. Bacteria
   - Distribute an annual message that encourages the proper management of pet waste, including noting any existing ordinances where appropriate.
   - Disseminate educational materials to dog owners at the time of issuance or renewal of dog license, or other appropriate time.
   - Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria or pathogens.

4.2.2 Stormwater Management in New Development and Redevelopment

a. Nitrogen
   - Include a requirement that new development and redevelopment stormwater management BMPs be optimized for nitrogen removal.
   - Retrofit inventory and priority ranking under 2.3.6.1.b shall include consideration of BMPs to reduce nitrogen discharges.

b. Phosphorus
   - Include a requirement that new development and redevelopment stormwater management BMPs be optimized for phosphorus removal.
   - Retrofit inventory and priority ranking under 2.3.6.1.b shall include consideration of BMPs that infiltrate stormwater where feasible.

c. Solids
   - Incorporate designs that allow for shutdown and containment where appropriate to isolate the system in the event of an emergency spill or unexpected event.
   - Require any stormwater management system designed to infiltrate stormwater on commercial or industrial sites to provide the level of pollutant removal equal to or

greater than the level of pollutant removal provided through the use of biofiltration of the same volume of runoff to be infiltrated, prior to infiltration.

4.2.3 Good House Keeping and Pollution Prevention

a. Nitrogen

- Establish requirements for use of slow release fertilizers on permittee owned property currently using fertilizer, in addition to reducing and managing fertilizer use as provided in 2.3.7.1
- Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.
- 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, once in the spring (following winter activities such as sanding) and at least once in the fall (September 1 - December 1; following leaf fall).

b. Phosphorus

- Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.
- 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, once in the spring (following winter activities such as sanding) and at least once in the fall (September 1 - December 1; following leaf fall).

c. Solids

- Increase street sweeping frequency of all municipal owned streets and parking lots to a schedule determined by the permittee to target areas with potential for high pollutant loads.
- Prioritize inspection and maintenance for catch basins to ensure that no sump shall be more than 50 percent full. Each annual report shall include the street sweeping schedule determined by the permittee to target high pollutant loads.

4.2.4 Illicit Discharge Detection and Elimination

a. Bacteria

- Implement the illicit discharge program required by the Permit. Catchments draining to any water body impaired for bacteria or pathogens shall be designated either Problem Catchments or HIGH priority in implementation of the IDDE program.

4.2.5 Additional Requirements (Nitrogen and Phosphorus)

a. Nitrogen

- Within four years of the permit effective date the permittee shall complete a Nitrogen Source Identification Report. The report shall include the following elements:
  - Calculation of total MS4 area draining to the water quality limited water segments or their tributaries, incorporating updated mapping of the MS4 and catchment delineations produced pursuant to part 2.3.4.6
  - All screening and monitoring results pursuant to part 2.3.4.7.d, targeting the receiving water segment(s)
  - Impervious area and DCIA for the target catchment
  - Identification, delineation, and prioritization of potential catchments with high nitrogen loading
  - Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment
- The final Nitrogen Source Identification Report shall be submitted to EPA as part of the year 4 annual report.
- Within five years of the permit effective date, the permittee shall 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 permittee shall provide a listing of planned structural BMPs and a plan and schedule for implementation in the year 5 annual report.
- The permittee shall plan and install a minimum of one structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries within six years of the permit effective date. The demonstration project shall be installed targeting a catchment with high nitrogen load potential.
- The permittee shall install the remainder of the structural BMPs in accordance with the plan and schedule provided in the year 5 annual report.
- 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 permittee shall document 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 in each annual report.

b. Phosphorus

- Within four years of the permit effective date the permittee shall complete a Phosphorus Source Identification Report. The report shall include the following elements:
    - Calculation of total MS4 area draining to the water quality limited water segments or their tributaries, incorporating updated mapping of the MS4 and catchment delineations produced pursuant to part 2.3.4.6
    - All screening and monitoring results pursuant to part 2.3.4.7.d, targeting the receiving water segment(s)
    - Impervious area and DCIA for the target catchment
    - Identification, delineation, and prioritization of potential catchments with high phosphorus loading
    - Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment, including the removal of impervious areas
- The final Phosphorus Source Identification Report shall be submitted to EPA as part of the year 4 annual report.
- Within five years of the permit effective date, the permittee shall 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 permittee shall provide a listing of planned structural BMPs and a plan and schedule for implementation in the year 5 annual report.
- The permittee shall plan and install a minimum of one structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries within six years of the permit effective date. The demonstration project shall be installed targeting a catchment with high phosphorus load potential.
- The permittee shall install the remainder of the structural BMPs in accordance with the plan and schedule provided in the year 5 annual report.
- Any structural BMPs listed in Table 3 of Attachment 3 to Appendix F 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 permittee shall document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report.

At any time during the permit term, the Town may be relieved of additional requirements in Parts I, II, III and V of Appendix H when it is in compliance with the Permit requirements.

TABLE 1

IMPAIRED WATERS, TMDLS AND IMPAIRMENTS

Town of Stoughton, Massachusetts

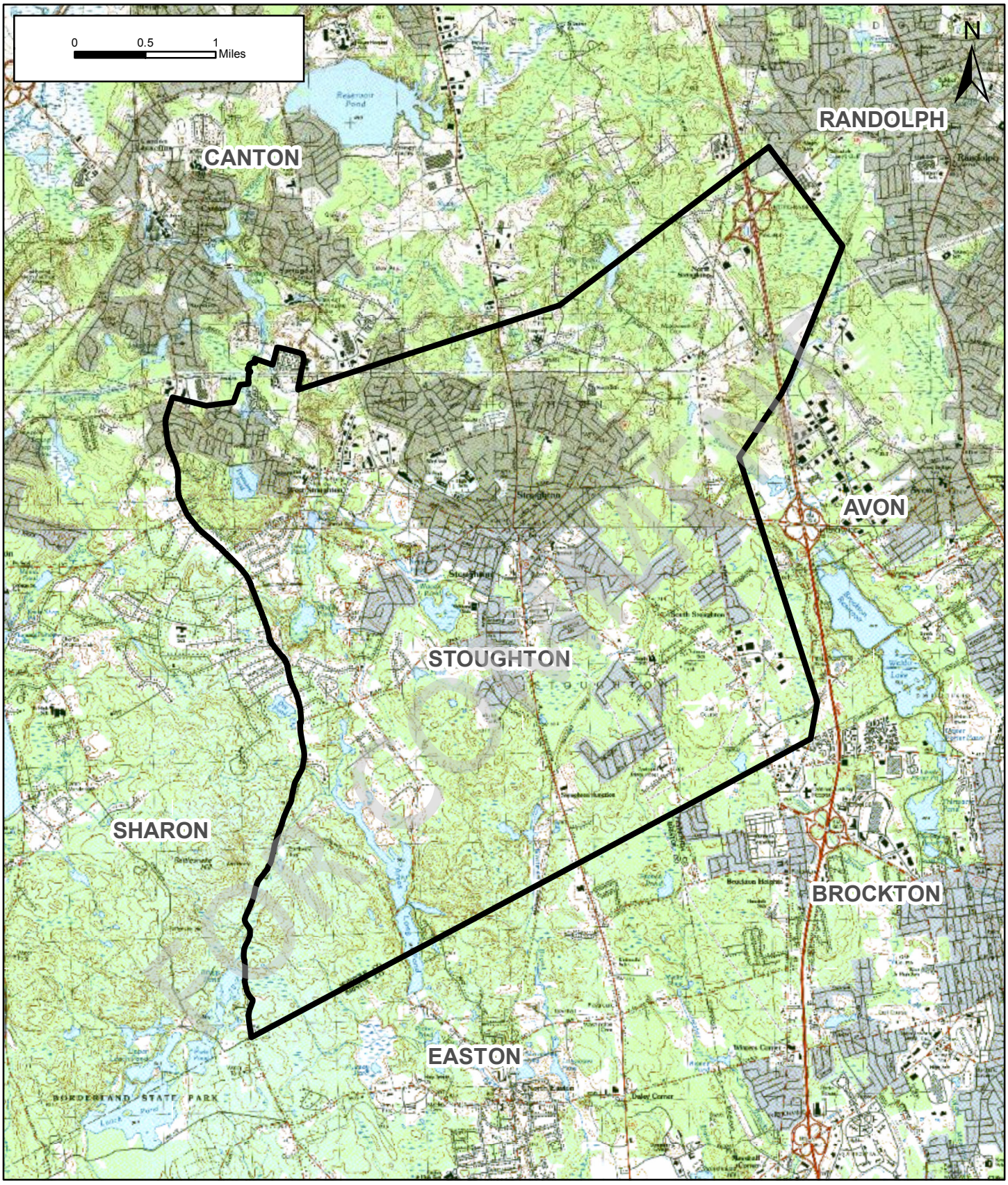
Massachusetts Year 2014 Integrated List of Waters

Impaired Waters

Category	Name	Segment ID	Description	Size	Units	Impairment Cause	EPA TMDL NO.	Comments
5 - "Water Requiring a TMDL"	**Beaver Meadow Brook**	MA73-20	Outlet of Glenn Echo Pond, Stoughton, to the inlet of Bolivar Pond, Canton.	3.3	MILES	Oxygen, Dissolved		
	Unnamed Tributary	MA73-32	From the outlet of Town Pond, Stoughton to the confluence with Steep Hill Brook, Stoughton.	1	MILES	Acquatic Macroinvertebrate Bioassessments		
						Escherichia Coli	54860	
						pH, Low		
						Phosphorus (Total)		
	Ames Long Pond	MA62001	Stoughton/Easton	87.694	ACRES	(Non-Native Aquatic Plants*)		
						Aquatic Plants (Macrophytes)		
						Turbidity		
						*TMDL not required (Non-pollutant)		

FIGURE 1

SYSTEM LOCUS



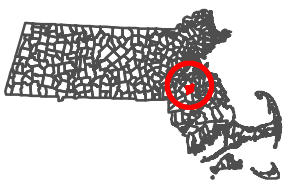


Figure 1
System Locus
Stoughton, Massachusetts

Environmental Partners

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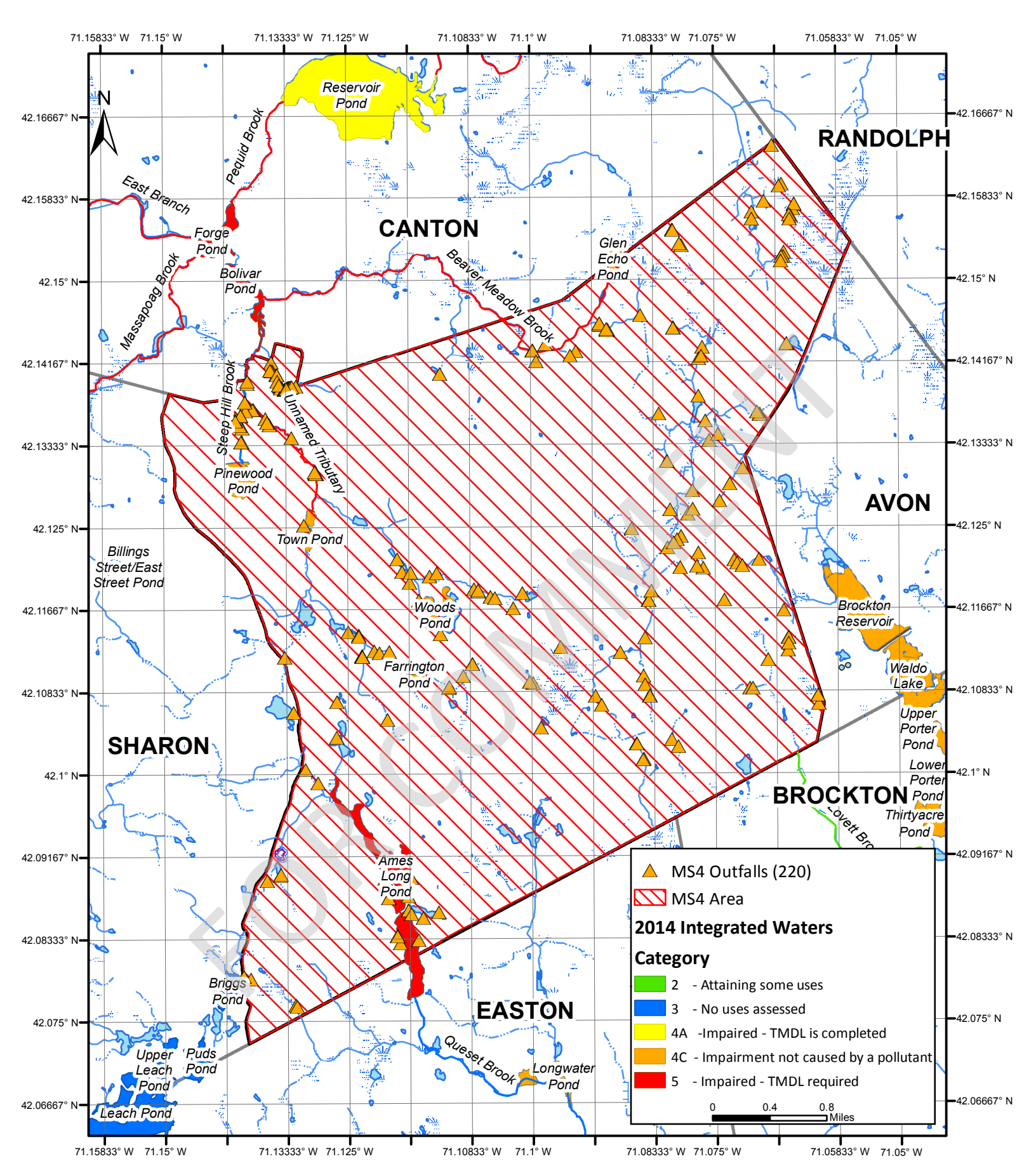
FIGURE 2

MS4 URBANIZED AREAS



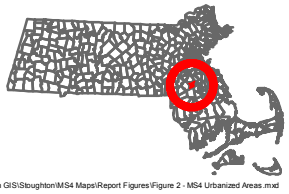


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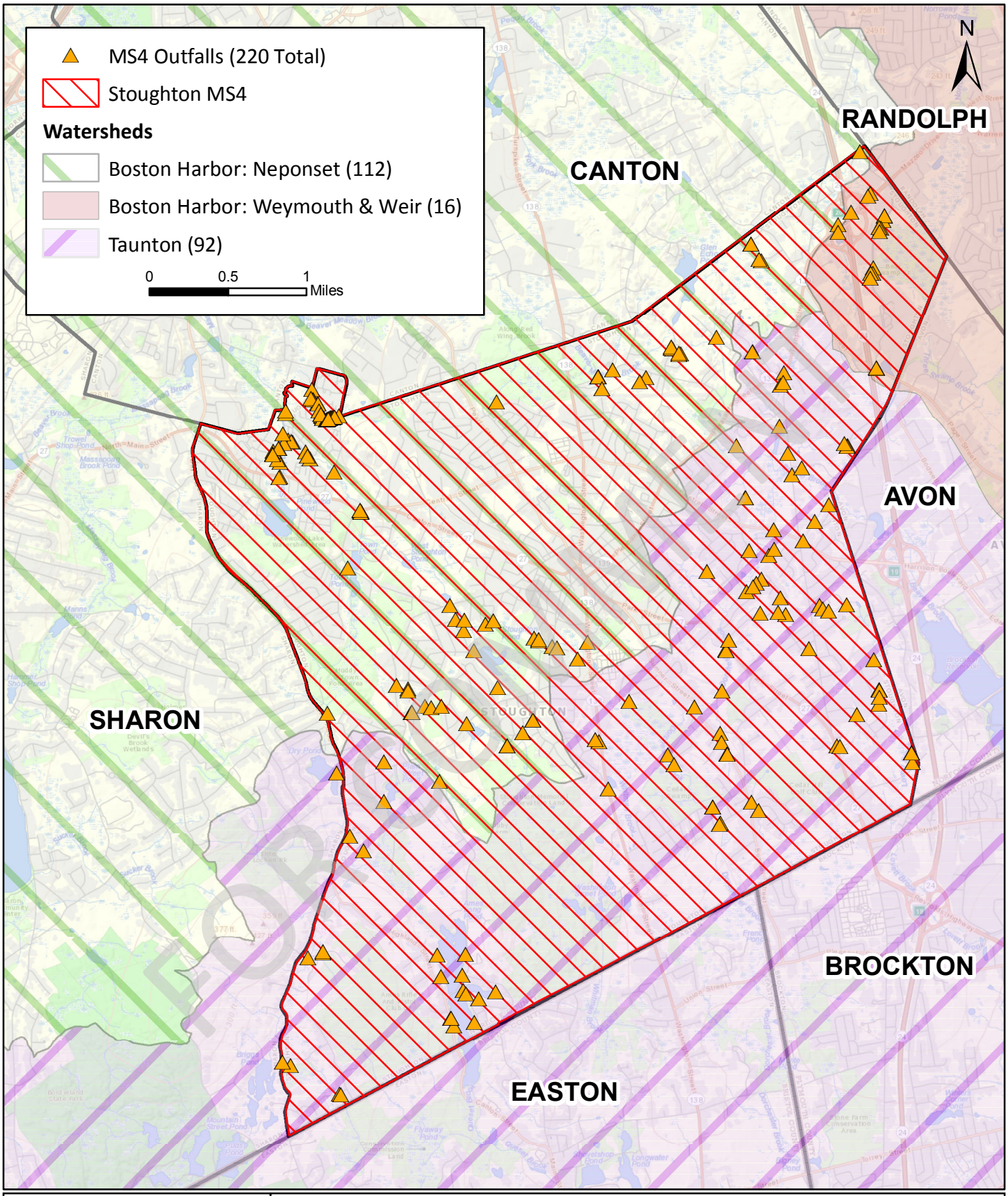
Figure 2
MS4 Urbanized Areas
Stoughton, Massachusetts

Environmental Partners

FIGURE 3

TOWN WATERSHEDS



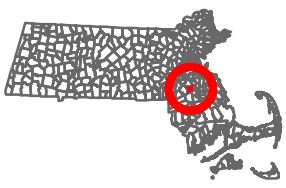


Figure 3
Outfalls by Watershed
Stoughton, Massachusetts

Environmental Partners

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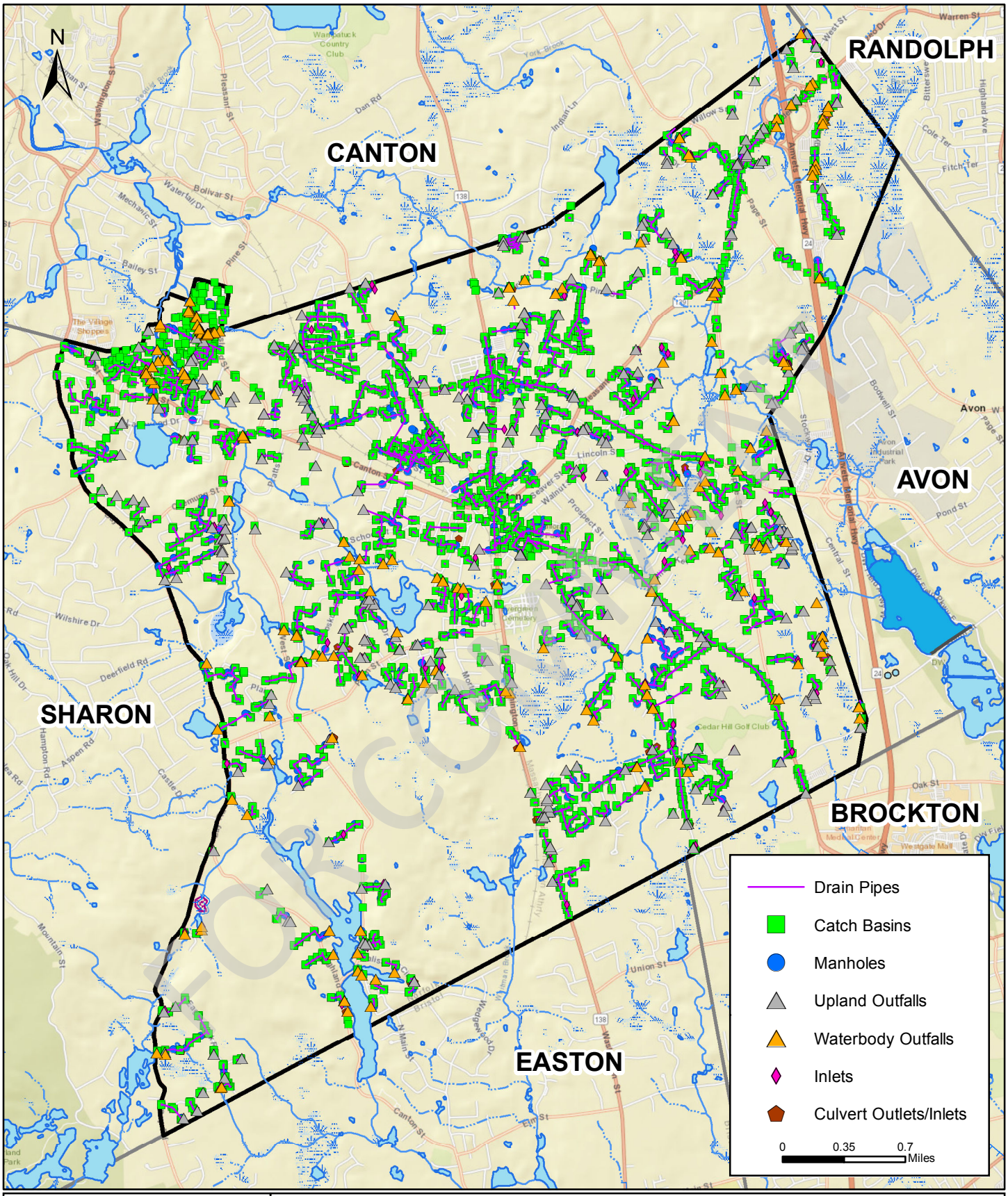
FIGURE 4

STORMWATER SYSTEM MAP



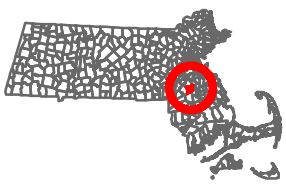


Figure 4
Stormwater System
Stoughton, Massachusetts

J:\Town GIS\Stoughton\MS4 Maps\Report Figures\Figure 4 - Stormwater System.mxd

APPENDIX A

MA MS4 HYPERLINKS AND REFERENCES

MA MS4 General Permit Hyperlinks

EPA MA MS4 Permit: https://www.epa.gov/npdes-permits/massachusetts-small-ms4-general-permit

DEP Permit Information:
http://www.mass.gov/eea/agencies/massdep/water/wastewater/stormwater.html#8

Town Hyperlink:
https://www.stoughton.org/news/1

MCM 1: Public Education and Outreach

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

MCM 3: Illicit Discharge Detection and Elimination (IDDE) Program

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

MCM 4: Construction Site Stormwater Runoff Control

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

MCM 5: Post Construction Stormwater Management in New Development and Redevelopment

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

MCM 6: Good House Keeping and Pollution Prevention for Permittee Owned Operations

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/stormwatertools-new-england#gh

APPENDIX B

NOTICE OF INTENT

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part I: General Conditions

General Information

Name of Municipality or Organization: Stoughton State: MA

EPA NPDES Permit Number (if applicable): MAR041063

Primary MS4 Program Manager Contact Information

Name: Marc J. Tisdelle, P.E. Title: Town Engineer

Street Address Line 1: Town Hall

Street Address Line 2: 10 Pearl Street

City: Stoughton State: MA Zip Code: 02072

Email: mtisdelle@stoughton-ma.gov Phone Number: (781) 341-1300

Fax Number: (781) 341-1086

Other Information

Stormwater Management Program (SWMP) Location (web address or physical location, if already completed): Engineering Office, 10 Pearl Street, Stoughton, MA; www.stoughton.org/engineering office/pages/stormwater-information

Eligibility Determination

Endangered Species Act (ESA) Determination Complete? Yes Eligibility Criteria (check all that apply): ☐ A ☐ B ☒ C

National Historic Preservation Act (NHPA) Determination Complete? Yes Eligibility Criteria (check all that apply): ☒ A ☐ B ☐ C

☑ Check the box if your municipality or organization was covered under the 2003 MS4 General Permit

MS4 Infrastructure (if covered under the 2003 permit)

Estimated Percent of Outfall Map Complete? *(Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit)* 100%

If 100% of 2003 requirements not met, enter an estimated date of completion (MM/DD/YY):

Web address where MS4 map is published:

If outfall map is unavailable on the internet an electronic or paper copy of the outfall map must be included with NOI submission (see section V for submission options)

www.mapsonline.net/stoughtonma/new_public_site.html

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? *(Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit)* Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): 05/24/06

Construction/Erosion and Sediment Control (ESC) Authority Adopted? *(Part II,III,IV or V, Subpart B.4.(a.) of 2003 permit)* Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): 05/24/06

Post- Construction Stormwater Management Adopted? *(Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)* Yes

Effective Date or Estimated Date of Adoption (MM/DD/YY): 05/24/06

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part II: Summary of Receiving Waters

Please list the waterbody segments to which your MS4 discharges. For each waterbody segment, please report the number of outfalls discharging into it and, if applicable, any impairments.

Massachusetts list of impaired waters: *Massachusetts 2014 List of Impaired Waters-* http://www.mass.gov/eea/docs/dep/water/resources/07v5/14list2.pdf

Check off relevant pollutants for discharges to impaired waterbodies (see above 303(d) lists) without an approved TMDL in accordance with part 2.2.2.a of the permit. List any other pollutants in the last column, if applicable.

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
Ames Long Pond (MA62001)	12	☐	☐	☐	☐	☐	☐	☒	☐	☐	Non-Native Aquatic Plants, Aquatic Plants (Macrophytes)
Beaver Brook	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	Aquatic Macroinvertebrate Bioassessments
Beaver Meadow Brook (MA73-20)	13	☐	☐	☒	☐	☐	☐	☐	☐	☐	
Bolivar Pond (MA73005)	1	☐	☐	☐	☐	☐	☐	☒	☐	☐	
Briggs Pond (MA62021)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Dorchester Brook	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Dry Pond	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
East Branch Neponset River	31	☐	☐	☒	☐	☐	☐	☐	☒	☐	Aquatic Macroinvertebrate Bioassessments, Fecal Coliform, DDT, PCB in Fish Tissue
Lovett Brook (MA62-46)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Plain Street Pond	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Steep Hill Brook (MA73-18)	16	☐	☐	☐	☐	☐	☐	☐	☒	☐	(TMDL taken from Massachusetts 2016 List of Impaired Waters)
Town Pond (MA73056)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	Non-Native Aquatic Plants
Woods Pond (MA73055)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	Non-Native Aquatic Plants
Unnamed Pond near Three Swamp Brook (42.14348, -71.06517)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Pond near Woods Pond (42.11081, -71.11629)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary near Dorchester Brook (42.10344, -71.08098)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary near Woods Pond (42.11013, -71.10934)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Ames Long Pond (42.09003, -71.13424)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	

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
Unnamed Tributary to Ames Long Pond (42.10058, -71.13084)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary To Beaver Brook (42.14530, -71.08055)	11	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12766, -71.07440)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.13174, -71.08156)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12881, -71.07807)	8	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.12501, -71.08639)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.10906, -71.08463)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.11375, -71.08459)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Brook (42.11762, -71.08405)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Beaver Meadow Brook (42.14060, -71.11240)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Brockton Reservoir (42.12119, -71.07132)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Dorchester Brook (42.11301, -71.09610)	6	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Queset Brook (42.07672, -71.13212)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Steep Hill Brook (MA73-32) (42.13416, -71.13259)	9	☐	☐	☐	☐	☐	☒	☐	☒	☐	Aquatic Macroinvertibrate Bioassessments, Low pH
Unnamed Tributary to Steep Hill Brook (42.11858, -71.10726)	7	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Steep Hill Brook (42.12042, -71.11649)	6	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Town Pond (42.11410, -71.12355)	11	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Tributary to Town Pond (42.10567, -71.11967)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	

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
Unnamed Tributary (42.15792, -71.06823)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Beaver Brook (42.15518, -71.08070)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Beaver Brook (42.12118, -71.07754)	5	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Three Swamp Brook (42.15629, -71.06474)	12	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Beaver Meadow Brook (42.14179, -71.09929)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Lovett Brook (42.11384, -71.06507)	4	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near Lovett Brook (42.10794, -71.06107)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
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		☐	☐	☐	☐	☐	☐	☐	☐	☐	

Click to lengthen table

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary

Identify the Best Management Practices (BMPs) that will be employed to address each of the six Minimum Control Measures (MCMs). For municipalities/organizations whose MS4 discharges into a receiving water with an approved Total Maximum Daily Load (TMDL) and an applicable waste load allocation (WLA), identify any additional BMPs employed to specifically support the achievement of the WLA in the TMDL section at the end of part III.

For each MCM, list each existing or proposed BMP by category and provide a brief description, responsible parties/departments, measurable goals, and the year the BMP will be employed (public education and outreach BMPs also requires a target audience). **Use the drop-down menus in each table or enter your own text to override the drop down menu.**

MCM 1: Public Education and Outreach

BMP Media/Category (enter your own text to override the drop down menu)	**BMP Description**	**Targeted Audience**	**Responsible Department/Parties** (enter your own text to override the drop down menu)	**Measurable Goal**	**Beginning Year of BMP Imple-mentation**
Brochures/Pamphlets	Distribution of a minimum of two (2) educational messages over the permit term	Residents	DPW Operations, Engineering, Neponset River Watershed Association	Continue to circulate information of stormwater pollution awareness and pet waste management	2018
Brochures/Pamphlets	Distribution of a minimum of two (2) educational messages over the permit term	Businesses, Institutions and Commercial Facilities	DPW Operations, Engineering, Neponset River Watershed Association	Continue to circulate information of stormwater pollution awareness	2018
Brochures/Pamphlets	Distribution of a minimum of two (2) educational messages over the permit term	Developers (construction)	DPW Operations, Engineering, Neponset River Watershed Association	Continue to circulate information of stormwater pollution awareness	2018
Brochures/Pamphlets	Distribution of a minimum of two (2) educational messages over the permit term	Industrial Facilities	DPW Operations, Engineering, Neponset River Watershed Association	Continue to circulate information of stormwater pollution awareness	2018
Web Page	Maintain stormwater website; Provide outreach materials on website; Consider creating a Town Resident Notification System for stormwater alerts (e.g. severe weather, flooding)	Residents	DPW Operations, Engineering, Neponset River Watershed Association	Continue to maintain stormwater website	2018

Web Page	Maintain stormwater website; Provide outreach materials on website; Consider creating a Town Resident Notification System for stormwater alerts (e.g. severe weather, flooding)	Businesses, Institutions and Commercial Facilities	DPW Operations, Engineering, Neponset River Watershed Association	Continue to maintain stormwater website	2018
Web Page	Maintain stormwater website; Provide outreach materials on website; Consider creating a Town Resident Notification System for stormwater alerts (e.g. severe weather, flooding)	Developers (construction)	DPW Operations, Engineering, Neponset River Watershed Association	Continue to maintain stormwater website	2018
Web Page	Maintain stormwater website; Provide outreach materials on website; Consider creating a Town Resident Notification System for stormwater alerts (e.g. severe weather, flooding)	Industrial Facilities	DPW Operations, Engineering, Neponset River Watershed Association	Continue to maintain stormwater website	2018
School Curricula/Programs	Classroom Education	Residents	Engineering, Neponset River Watershed Association	1. Stormwater presentation to Middle and High Schools 2. Provide Schools with Stormwater Materials	2018
Special Events/Festivals/Fairs	Household haz. waste/used oil collection	Residents	DPW Operations, Engineering	Continue to host annual household hazardous waste collection events at O'Donnell Middle School	2018

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 2: Public Involvement and Participation

BMP Categorization	Brief BMP Description (enter your own text to override the drop down menu)	Responsible Department/Parties (enter your own text to override the drop down menu)	Additional Description/ Measurable Goal	Beginning Year of BMP Implementation
Public Review	SWMP Review	Engineering	Allow annual review of stormwater management plan and posting of stormwater management plan on website	2018
Public Participation	SWMP Review	Engineering	Allow public to comment on stormwater management plan annually	2018
Public Participation	Hotline/webline - reporting problems/violations	DPW Operations, Neponset River Watershed Association	Publish contact on stormwater for soliciting complaints, questions, etc.	2018
Public Review	Stormwater Committee/Task Force	Board of Selectmen	Created Stormwater Committee consisting of members of PWD, Engineering and Conservation Commission Department. Major focus to identify stormwater related problem areas in Town and develop game plan for correcting problem and to comply with EPA requirements.	2018
Public Review	Review NOI	Engineering	Stormwater goals prioritized and published	2018
Public Participation	Household haz. waste/used oil collection	Board of Health, Conservation Commission, Public Works Dept.	Hold household hazardous waste collection day per year	2018
Public Participation	Public Hearing / Meetings Posted	Town Manager, Board of Selectmen, Planning Board, Zoning Board of Appeals, Cc	Information on public meetings posted in accordance with MGL Section 23B	2018

Public Participation	Neponset River Watershed Association Membership	Engineering, Neponset River Watershed Association	Attend several meetings per year and collaborate with other towns on MS4 matters	2018
Public Participation	Harris Pond Citizen Committee (Pinewood Lake Association)	Conservation Commission	Form committee to increase awareness and support to restore Harris Pond	2018
Public Participation	Ames Pond Citizens Committee	Conservation Commission	Form committee to increase awareness and support to restore Ames Long Pond	2018

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP Categorization (enter your own text to override the drop down menu)	**BMP Description**	**Responsible Department/Parties** (enter your own text to override the drop down menu)	**Measurable Goal** (all text can be overwritten)	**Beginning Year of BMP Imple-mentation**
SSO inventory	Develop SSO inventory in accordance of permit conditions	DPW Operations	Complete within 1 year of effective date of permit	2018
Storm sewer system map	Create map and update during IDDE program completion	Engineering	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	2018
Written IDDE program	Create written IDDE program	Engineering	Complete within 1 year of the effective date of permit and update as required	2018
Implement IDDE program	Implement catchment investigations according to program and permit conditions	Engineering	Complete 10 years after effective date of permit	2018
Employee training	Train employees on IDDE implementation	DPW Operations	Train annually	2018
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	DPW Operations, Engineering	Complete 3 years after effective date of permit	2018
Conduct wet weather screening	Conduct in accordance with outfall screening procedure	Engineering	Complete 10 years after effective date of permit	2018
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	Engineering	Complete ongoing outfall screening upon completion of IDDE program	2018
IDDE Ordinance/Bylaw	Make updated revisions to IDDE Bylaw language	Engineering	Continue to implement and enforce IDDE bylaw, and make revisions as necessary.	2018

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 4: Construction Site Stormwater Runoff Control

BMP Categorization (enter your own text to override the drop down menu or entered text)	**BMP Description**	**Responsible Department/Parties** (enter your own text to override the drop down menu)	**Measurable Goal** (all text can be overwritten)	**Beginning Year of BMP Implementation**
Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures	Stormwater Committee, Engineering Dept., Conservation Commission	Complete within 1 year of the effective date of permit	2018
Site plan review	Complete written procedures of site plan review and begin implementation	Engineering Dept, Planning Board, Conservation Commission	Complete within 1 year of the effective date of permit	2018
Erosion and Sediment Control	Adoption of requirements for construction operators to implement a sediment and erosion control program	Engineering Dept, Conservation Commission	Complete within 1 year of the effective date of permit	2018
Waste Control	Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes	Engineering Dept, Planning Board, Conservation Commission, Board of Health	Complete within 1 year of the effective date of permit	2018
Construction Ordinance/Bylaw	Make updated revisions to ESC Bylaw language	Engineering Dept, Planning Board, Conservation Commission	Continue to implement and enforce construction ordinance and make revisions as necessary.	2018

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

BMP Categorization (enter your own text to override the drop down menu or entered text)	**BMP Description**	**Responsible Department/Parties** (enter your own text to override the drop down menu)	**Measurable Goal** (all text can be overwritten)	**Beginning Year of BMP Implementation**
As-built plans for on-site stormwater control	The procedures to require submission of as-built drawings and ensure long term operation and maintenance will be a part of the SWMP	Engineering, Planning Board, Conservation Commission	Require submission of as-built plans for completed projects	2018
Target properties to reduce impervious areas	Identify at least 5 permittee-owned properties that could be modified or retrofitted with BMPs to reduce impervious areas and update annually	Engineering, Planning Board, Conservation Commission	Complete 4 years after effective date of permit and report annually on retrofitted properties	2018
Allow green infrastructure	Develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist	Engineering, Planning Board, Conservation Commission	Complete 4 years after effective date of permit and implement recommendations of report	2018
Street design and parking lot guidelines	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.	Engineering, Planning Board, Conservation Commission	Complete 4 years after effective date of permit and implement recommendations of report	2018

Ensure any stormwater controls or management practices for new development and redevelopment meet the retention or treatment requirements of the permit and all applicable requirements of the Massachusetts Stormwater Handbook	Adoption, amendment, or modification of a regulatory mechanism to meet permit requirements	Engineering, Planning Board, Conservation Commission	Complete 2 years after effective date of permit	2018
Monitoring	Monitor construction impacts on amount of impervious surfaces	Engineering, Planning Board, Conservation Commission	Record pre/post-construction changes to amount of impervious surface	2018
Post-Construction Ordinance/Bylaw	Make updated revisions to Post-Construction Management Bylaw language	Engineering, Planning Board, Conservation Commission	Update Bylaw within 2 years of effective permit date	2018

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

MCM 6: Municipal Good Housekeeping and Pollution Prevention

BMP Categorization (enter your own text to override the drop down menu or entered text)	**BMP Description**	**Responsible Department/Parties** (enter your own text to override the drop down menu)	**Measurable Goal** (all text can be overwritten)	**Beginning Year of BMP Implementation**
O&M procedures	Create written O&M procedures including all requirements contained in 2.3.7.a.ii for parks and open spaces, buildings and facilities, and vehicles and equipment	DPW Operations, Engineering	Completed	
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory	DPW Operations, Engineering	Complete 2 years after effective date of permit and implement annually	2018
Infrastructure O&M	Establish and implement program for repair and rehabilitation of MS4 infrastructure	DPW Construction, Engineering	Completed	
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for maintenance garages, transfer stations, and other waste-handling facilities	DPW Operations, Conservation Committee	Complete and implement 2 years after effective date of permit	2018
Catch basin cleaning	Establish schedule for catch basin cleaning such that each catch basin is no more than 50% full and clean catch basins on that schedule	DPW Operations	Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually	2018
Street sweeping program	Sweep all streets and permitee-owned parking lots in accordance with permit conditions	DPW Operations	Sweep all streets and permitee-owned parking lots once per year in the spring	2018
Road salt use optimization program	Establish and implement a program to minimize the use of road salt	DPW Operations	Implement salt use optimization during deicing season	2018

Inspections and maintenance of stormwater treatment structures	Establish and implement inspection and maintenance procedures and frequencies	DPW Operations	Inspect and maintain treatment structures at least annually	2018
O&M Program (General)	Coordinate annual meetings with Norfolk County Mosquito Control to discuss stormwater impacts from mosquito control applications and minimizing standing water in catch basins	DPW Operations, Board of Health, Conservation Commission	Annual meetings	2018
O&M Program (General)	Coordinate meetings with District 5 DOT to discuss stormwater objectives within Town	Engineering, DPW Operations	Annual meetings	2019

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Total Maximum Daily Load (TMDL) Requirements

Use the drop-down menus to select the applicable TMDL, action description to meet the TMDL requirements, and the responsible department/parties. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

Applicable TMDL	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
Taunton River Watershed (Bacteria/Pathogen)	Adhere to requirements in part A.III of Appendix F	DPW Operations
Neponset River Addendum (Bacteria/Pathogen)	Adhere to requirements in part A.III of Appendix F	DPW Operations
Neponset River (Bacteria/Pathogen)	Adhere to requirements in part A.III of Appendix F	DPW Operations

Notice of Intent (NOI) for coverage under Small MS4 General Permit

Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Requirements Related to Water Quality Limited Waters

Use the drop-down menus to select the pollutant causing the water quality limitation and enter the waterbody ID(s) experiencing excursions above water quality standards for that pollutant. Choose the action description from the dropdown menu and indicate the responsible party. If no options are applicable, or more than one, **enter your own text to override drop-down menus.**

Pollutant	Waterbody ID(s)	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
E. Coli	Unnamed Tributary (MA73-32)	Adhere to requirements in part III of Appendix H	Engineering
Phosphorus	Unnamed Tributary (MA73-32)	Adhere to requirements in part II of Appendix H	Engineering
Turbidity	Ames Long Pond (MA62001), Bolivar Pond (MA73005)	Adhere to requirements in part V of Appendix H	Engineering
Nitrogen	All discharges in the Taunton River Watershed	Adhere to requirements in part I of Appendix H	Engineering

Part IV: Notes and additional information

Use the space below to indicate the part(s) of 2.2.1and 2.2.2 that you have identified as not applicable to your MS4 because you do not discharge to the impaired water body or a tributary to an impaired water body due to nitrogen or phosphorus. Provide all supporting documentation below or attach additional documents if necessary. Also, provide any additional information about your MS4 program below.

Attachments:
Figure - MS4 Outfalls
USFWS Correspondence

The outfalls included in Part II: Summary of Receiving Waters were selected based on a 100 foot distance from any waters of the U.S. Coordinates listed under unnamed water segments are based on the NAD 1983 StatePlane Massachusetts FIPS 2001 (US Feet) Coordinate System, and are listed as latitude/longitude in decimal degrees.

Regarding the ESA section 7 consultation, I agree that the MS4 Permit will not adversely affect the Northern Long-eared Bat.

Under 36 CFR 800, this facility is an existing facility authorized by the previous Permit, and is not undertaking any activity involving subsurface land disturbance less than 1 acre. This MS4 Permit will have "no potential to cause effects", in accordance with 36 CFR 800.3 (a)(1).

Part V: Certification

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 gather and evaluate 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, I certify that 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.

Name: Title:

Signature: Date:

[To be signed according to Appendix B, Subparagraph B.11, Standard Conditions]

Note: When prompted during signing, save the document under a new file name

APPENDIX C

PERMIT SCHEDULE

Phase II MS4 Permit
Schedule Outline
Town of Stoughton, Massachusetts
June 2019

July 2018 – MS4 Permit effective date to coincide with start of FY19

- **September 29, 2018** – Submit Updated NOI (within 90 days)

July 2019 – Items due within 1 year of effective date

- Submit Updated Stormwater Management Plan
- Written IDDE Plan, identify catchments contributing to areas with High Priority
- Additional Mapping – update stormwater system GIS (as needed)
- Ongoing Outfall Sampling (wet & dry) / Inspections / Update Mapping
- Develop O&M for facilities
- Inventory Facilities
- Education/Outreach – Two educational messages to each of the 4 audiences over 5 years
- Additional Education/Outreach (*x3 for Impaired Water Requirements*)
    - Bacteria TMDL: Targeting Dog Waste / Septic Systems for– Beaver Meadow Brook
    - Nitrogen: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Taunton River Watershed
    - Phosphorus: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Beaver Meadow Brook, Unnamed Tributary MA73-32
- Property Management for Nitrogen – fertilizer use, leaf litter, street sweeping (2x per year)*
- Property Management for Phosphorus – grass cuttings, leaf litter, street sweeping (2x per year)**
- Public Participation
- Annual Training

July 2020 – Items due within 2 years of effective date

- SWPPP for Appropriate Facilities
- SPCC Plan where appropriate
- Parks Maintenance Plan
- Ongoing Outfall Sampling (wet & dry) / Inspections / Update Mapping
- Updated Ordinance for Nitrogen*
- Updated Ordinance for Phosphorus**
- Education/Outreach – Two educational messages to each of the 4 audiences over 5 years
- Additional Education & Outreach (*x3 for Impaired Water Requirements*)
    - Bacteria TMDL: Targeting Dog Waste / Septic Systems for– Beaver Meadow Brook
    - Nitrogen: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Taunton River Watershed

    - Phosphorus: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Beaver Meadow Brook, Unnamed Tributary MA73-32
- Public Participation
- Annual Training

July 2021 – Items due within 3 years of effective date

- Revisions to Stormwater Bylaw - Construction Site Stormwater Runoff Control
- Draft regulations to promote green infrastructure – Post-Construction Management
- Ongoing Outfall Sampling (wet & dry) / Inspections / Update Mapping
- Education/Outreach – Two educational messages to each of the 4 audiences over 5 years
- Additional Education & Outreach (*x3 for Impaired Water Requirements*)
    - Bacteria TMDL: Targeting Dog Waste / Septic Systems for– Beaver Meadow Brook
    - Nitrogen: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Taunton River Watershed
    - Phosphorus: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Beaver Meadow Brook, Unnamed Tributary MA73-32
- Public Participation
- Annual Training

July 2022 – Items due within 4 years of effective date

- Revisions to Stormwater Bylaw - Construction Site Stormwater Runoff Control
- Draft regulations to reduce impervious cover – Post-Construction Management
- Ongoing Outfall Sampling (wet & dry) / Inspections / Update Mapping
- Nitrogen Source Identification Report*Phosphorous Source Identification Report*
- Education/Outreach – Two educational messages to each of the 4 audiences over 5 years
- Additional Education & Outreach (*x3 for Impaired Water Requirements*)
    - Bacteria TMDL: Targeting Dog Waste / Septic Systems for– Beaver Meadow Brook
    - Nitrogen: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Taunton River Watershed
    - Phosphorus: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Beaver Meadow Brook, Unnamed Tributary MA73-32
- Public Participation
- Annual Training

July 2023 – Permit Length (5 years)

- Inventory/Priority Ranking of LID retrofits on Town-Owned Property – Post-Construction Management
- System development for tracking Impervious Area – Post-Construction Management
- Ongoing Outfall Sampling (wet & dry) / Inspections / Update Mapping
- Evaluate all Properties for BMPs – Nitrogen removal* and Phosphorous Removal

- Plan and Scheduled for BMPs - Nitrogen removal* and Phosphorous Removal
- Education/Outreach – Two educational messages to each of the 4 audiences over 5 years
- Additional Education & Outreach (*x3 for Impaired Water Requirements*)
    - Bacteria TMDL: Targeting Dog Waste / Septic Systems for– Beaver Meadow Brook
    - Nitrogen: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Taunton River Watershed
    - Phosphorus: Targeting Fertilizer, Grass Clippings, Dog Waste and Leaf Litter – Beaver Meadow Brook, Unnamed Tributary MA73-32
- Public Participation
- Annual Training

**Additional requirements for Water Quality Assessment are required due to documented nitrogen impairments in the Taunton River Watershed. (see Appendix H, section I.)*

***Additional requirements for Water Quality Assessment are required due to documented phosphorus impairments in Beaver Meadow Brook, and Unnamed Tributary MA73-32. (see Appendix H, section II.)*

APPENDIX D

ENDANGERED SPECIES AND CRITICAL HABITATS PROTECTION DOCUMENTS

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 8, 2018

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm (accessed January 2018)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact David Simmons of this office at 603-227-6425 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

In Reply Refer To: July 18, 2018
Consultation Code: 05E1NE00-2018-SLI-2425
Event Code: 05E1NE00-2018-E-05633
Project Name: Stoughton MS4

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-2425

Event Code: 05E1NE00-2018-E-05633

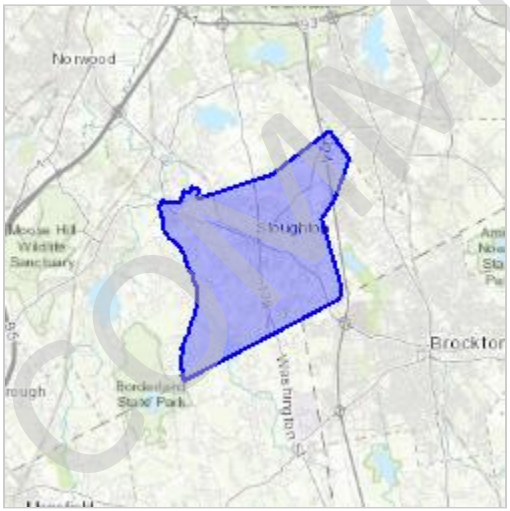
Project Name: Stoughton MS4

Project Type: ** OTHER **

Project Description: Stoughton Stormwater

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.118409409500146N71.10159863597366W



Counties: Bristol, MA | Norfolk, MA | Plymouth, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9045

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

APPENDIX E

MA MS4 GENERAL PERMIT - APPENDIX D - HISTORIC PROPERTIES DOCUMENTS

Appendix D
National Historic Preservation Act Guidance

Background

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of Federal "undertakings" on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. The term federal "undertaking" is defined in the NHPA regulations to include a project, activity, or program of a federal agency including those carried out by or on behalf of a federal agency, those carried out with federal financial assistance, and those requiring a federal permit, license or approval. See 36 CFR 800.16(y). Historic properties are defined in the NHPA regulations to include prehistoric or historic districts, sites, buildings, structures, or objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within such properties. See 36 CFR 800.16(1).

EPA's issuance of a National Pollutant Discharge Elimination System (NPDES) General Permit is a federal undertaking within the meaning of the NHPA regulations and EPA has determined that the activities to be carried out under the general permit require review and consideration, in order to be in compliance with the federal historic preservation laws and regulations. Although individual submissions for authorization under the general permit do not constitute separate federal undertakings, the screening processes provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has included a screening process for applicants to identify whether properties listed or eligible for listing on the National Register of Historic Places are within the path of their discharges or discharge-related activities (including treatment systems or any BMPs relating to the discharge or treatment process) covered by this permit.

Applicants seeking authorization under this general permit must comply with applicable, State, Tribal, and local laws concerning the protection of historic properties and places and may be required to coordinate with the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO) and others regarding effects of their discharges on historic properties.

Activities with No Potential to Have an Effect on Historic Properties

A determination that a federal undertaking has no potential to have an effect on historic properties fulfills an agency's obligations under NHPA. EPA has reason to believe that the vast majority of activities authorized under this general permit will have no potential effects on historic properties. This permit typically authorizes discharges from existing facilities and requires control of the pollutants discharged from the facility. EPA does not anticipate effects on historic properties from the pollutants in the authorized discharges. Thus, to the extent EPA's issuance of this general permit authorizes discharges of such constituents, confined to existing channels, outfalls or natural drainage areas, the permitting action does not have the potential to cause effects on historical properties.

In addition, the overwhelming majority of sources covered under this permit will be facilities that are seeking renewal of previous permit authorization. These existing dischargers should have already addressed NHPA issues in the previous general permit as they were required to certify that they were either not affecting historic properties or they had obtained written agreement from

the applicable SHPO or THPO regarding methods of mitigating potential impacts. To the extent this permit authorizes renewal of prior coverage without relevant changes in operations the discharge has no potential to have an effect on historic properties.

Activities with Potential to Have an Effect on Historic Properties

EPA believes this permit may have some potential to have an effect on historic properties the applicant undertakes the construction and/or installation of control measures that involve subsurface disturbance that involves less than 1 acre of land. (Ground disturbances of 1 acre or more require coverage under the Construction General Permit.) Where there is disturbance of land through the construction and/or installation of control measures, there is a possibility that artifacts, records, or remains associated with historic properties could be impacted. Therefore, if the applicant is establishing new or altering existing control measures to manage their discharge that will involve subsurface ground disturbance of less than 1 acre, they will need to ensure (1) that historic properties will not be impacted by their activities or (2) that they are in compliance with a written agreement with the SHPO, THPO, or other tribal representative that outlines all measures the applicant will carry out to mitigate or prevent any adverse effects on historic properties.

Examples of Control Measures Which Involve Subsurface Disturbance

The type of control measures that are presumptively expected to cause subsurface ground disturbance include:

- Dikes
- Berms
- Catch basins, drainage inlets
- Ponds, bioretention areas
- Ditches, trenches, channels, swales
- Culverts, pipes
- Land manipulation; contouring, sloping, and grading
- Perimeter Drains
- Installation of manufactured treatment devices

EPA cautions applicants that this list is non-inclusive. Other control measures that involve earth disturbing activities that are not on this list must also be examined for the potential to affect historic properties.

Certification

Upon completion of this screening process the applicant shall certify eligibility for this permit using one of the following criteria on their Notice of Intent for permit coverage:

> **Criterion A**: The discharges do not have the potential to cause effects on historic properties.

Criterion B: A historic survey was conducted. The survey concluded that no historic properties are present. Discharges do not have the potential to cause effects on historic properties.

Criterion C: The discharges and discharge related activities have the potential to have an effect on historic properties, and the applicant has obtained and is in compliance with a written agreement with the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (TPHO), or other tribal representative that outlines measures the applicant will carry out to mitigate or prevent any adverse effects on historic properties.

Authorization under the general permit is available only if the applicant certifies and documents permit eligibility using one of the eligibility criteria listed above. Small MS4s that cannot meet any of the eligibility criteria in above must apply for an individual permit.

Screening Process

Applicants or their consultant need to answer the questions and follow the appropriate procedures below to assist EPA in compliance with 36 CFR 800.

Question 1: Is the facility an existing facility authorized by the previous permit or a new facility and the applicant is not undertaking any activity involving subsurface land disturbance less than an acre?

YES - The applicant should certify that fact in writing and file the statement with the EPA. This certification must be maintained as part of the records associated with the permit.
The applicant should certify eligibility for this permit using Criterion A on their Notice of Intent for permit coverage. The applicant does not need to contact the state Historic Commission. Based on that statement, EPA will document that the project has "no potential to cause effects" (36 CFR 800.3(a)(1)). There are no further obligations under the Section 106 regulations.

NO- Go to Question 2.

Question 2: Is the property listed in the National Register of Historic Places or have prior surveys or disturbances revealed the existence of a historic property or artifacts?

NO - The applicant should certify that fact in writing and file the statement with the EPA. This certification must be maintained as part of the records associated with the permit.
The applicant should certify eligibility for this permit using Criterion B on their Notice of Intent for permit coverage. The applicant does not need to contact the state Historic Commission. Based on that statement, EPA will document that the project has "no potential to cause effects" (36 CFR 800.3(a)(1)). There are no further obligations under the Section 106 regulations.

YES - The applicant or their consultant should prepare a complete information submittal to the SHPO. The submittal consists of:

- Completed Project Notification Form- forms available at http://www.sec.state.ma.us/mhc/mhcform/formidx.htm;

- USGS map section with the actual project boundaries clearly indicated; and
- Scaled project plans showing existing and proposed conditions.

(1) Please note that the SHPO does not accept email for review. Please mail a paper copy of your submittal (Certified Mail, Return Receipt Requested) or deliver a paper copy of your submittal (and obtain a receipt) to:

State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Blvd.
Boston MA 02125.

(2) Provide a copy of your submittal and the proof of MHC delivery showing the date MHC received your submittal to:

NPDES Permit Branch Chief
US EPA Region 1 (OEP06-1)
5 Post Office Square, Suite 100
Boston MA 02109-3912.

The SHPO will comment within thirty (30) days of receipt of complete submittals, and may ask for additional information. Consultation, as appropriate, will include EPA, the SHPO and other consulting parties (which includes the applicant). The steps in the federal regulations (36 CFR 800.2 to 800.6, etc.) will proceed as necessary to conclude the Section 106 review for the undertaking. **The applicant should certify eligibility for this permit using Criterion C on their Notice of Intent for permit coverage.**

APPENDIX F

NEW OR INCREASED DISCHARGES

New or Increased Discharges **Stoughton, MA**					
Location	Description	Proposed Use	Area	Contributing Area to MS4	BMP
Example St	Housing Community	Residence	27 acres	9 acres	Stormceptor unit and detention pond

**Example of what would be written for a new or increased discharge

APPENDIX G

SSO INVENTORY

Sanitary Sewer Overflow (SSO) Inventory

Stoughton, MA

Location	Discharge Location	Is Discharge Entering MS4? (Y/N)	Date/Time of SSO Occurance	Estimated Volume of SSO Occurance	Known/Suspected Cause	Mitigation Measures Completed	Mitigation Implementation Date	Mitigation Measures Planned	Mitigation Implementation Schedule
Example St	Enters into Woods Pond	Yes	August 4, 2016 9:00 AM - August 5, 2016 3:00 PM	1,200 gallons	Illicit resident connection	Illicit connection removed	August 8, 2016		

**Example of what would be written for a new or increased discharge

APPENDIX H

CURRENT STORMWATER BYLAW

Chapter 159

STORMWATER MANAGEMENT

GENERAL REFERENCES

Groundwater protection -- See Ch. 107.

Hazardous waste -- See Ch. 113.

Streets and sidewalks -- See Ch. 162.

Water -- See Ch. 188.

Wetlands protection -- See Ch. 191.

Zoning -- See Ch. 191.

Conservation Commission -- See Ch. 287.

§ 159-1. Objectives.

A. Increased and contaminated stormwater runoff is a major cause of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater; contamination of drinking water supplies; alteration or destruction of aquatic and wildlife habitat; and flooding.

B. Regulation of illicit connections and discharges to the municipal storm drain system is necessary for the protection of Stoughton's water bodies and groundwater, and to safeguard the public health, safety, welfare and the environment.

C. The harmful impacts of soil erosion and sedimentation are the impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater; contamination of drinking water supplies; alteration or destruction of aquatic and wildlife habitat; flooding; and overloading or clogging of municipal catch basins and storm drainage systems.

D. Increased and contaminated stormwater runoff associated with developed land uses and the accompanying increase in impervious surface are major causes of impairment of water quality and flow in lakes, ponds, streams, rivers, wetlands and groundwater.

E. The objectives of this bylaw are:

(1) To prevent pollutants from entering Stoughton's municipal separate storm sewer system (MS4);

(2) To prohibit illicit connections and unauthorized discharges to the MS4;

(3) To require the removal of all such illicit connections;

(4) To comply with state and federal statutes and regulations relating to stormwater discharges; and

(5) To establish the legal authority to ensure compliance with the provisions of this bylaw through inspection, monitoring, and enforcement;

(6) To require practices that eliminate soil erosion and sedimentation and control the volume and rate of stormwater runoff resulting from land disturbance activities;

(7) To promote infiltration and the recharge of groundwater;

(8) To ensure that soil erosion and sedimentation control measures and stormwater runoff control practices are incorporated into the site planning and design process and are implemented and maintained;

(9) To require practices to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(10) To require practices to control the flow of stormwater from new and redeveloped sites into the Stoughton storm drainage system in order to prevent flooding and erosion;

(11) To protect groundwater and surface water from degradation;

(12) To ensure adequate long-term operation and maintenance of structural stormwater best management practices so that they work as designed.

§ 159-2. Definitions.

For the purposes of this bylaw, the following shall mean:

ABUTTER — The owner(s) of land abutting the activity.

AGRICULTURE — The normal maintenance or improvement of land in agricultural or aquacultural use, as defined by the Massachusetts Wetlands Protection Act and its implementing regulations.

ALTERATION OF DRAINAGE CHARACTERISTICS — Any activity on an area of land that changes the water quality, force, direction, timing or location of runoff flowing from the area. Such changes include: change from distributed runoff to confined, discrete discharge; change in the volume of runoff from the area; change in the peak rate of runoff from the area; and change in the recharge to groundwater on the area.

APPLICANT — Any person, individual, partnership, association, firm, company, corporation, trust, authority, agency, department, or political subdivision, of the commonwealth or the federal government to the extent permitted by law, requesting a soil erosion and sediment control permit for proposed land-disturbance activity.

AUTHORIZED ENFORCEMENT AGENCY — The Stoughton Board of Selectmen, acting as Drain Commissioners (hereafter the Board), its employees or agents designated to enforce this bylaw.

BEST MANAGEMENT PRACTICE (BMP) — An activity, procedure, restraint, or structural improvement that helps to reduce the quantity or improve the quality of stormwater runoff.

CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) — A certified specialist in soil erosion and sediment control. This certification program, sponsored by the Soil and Water Conservation Society in cooperation with the American Society of Agronomy, provides the public with evidence of professional qualifications.

CLEAN WATER ACT — The Federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.) as hereafter amended.

CLEARING — Any activity that removes the vegetative surface cover.

CONSTRUCTION AND WASTE MATERIALS — Excess or discarded building or site materials, including but not limited to concrete truck washout, chemicals, litter and sanitary waste, at a construction site that may adversely impact water quality.

DEVELOPMENT — The modification of land to accommodate a new use or expansion of use, usually involving construction.

DISCHARGE OF POLLUTANTS — The addition from any source of any pollutant or combination of pollutants into the municipal storm drain system or into the waters of the United States or commonwealth from any source.

DISTURBANCE OF LAND — Any action that causes a change in the position, location, or arrangement of soil, sand, rock, gravel or similar earth material.

EROSION — The wearing away of the land surface by natural or artificial forces such as wind, water, ice, gravity, or vehicle traffic and the subsequent detachment and transportation of soil particles.

EROSION AND SEDIMENTATION CONTROL PLAN — A document containing narrative, drawings and details developed by a qualified professional engineer (PE) or a certified professional in erosion and sediment control (CPESC) which includes best management practices or equivalent measures designed to control surface runoff, erosion and sedimentation during preconstruction and construction-related land disturbance activities.

ESTIMATED HABITAT OF RARE WILDLIFE AND CERTIFIED VERNAL POOLS — Habitats delineated for state-protected rare wildlife and certified vernal pools for use with the Wetlands Protection Act Regulations (310 CMR 10.00) and the Forest Cutting Practices Act Regulations (304 CMR 11.00).

GROUNDWATER — Water beneath the surface of the ground.

ILLICIT CONNECTION — A surface or subsurface drain or conveyance which allows an illicit discharge into the municipal storm drain system,

including without limitation sewage, process wastewater, or wash water, and any connections from indoor drains, sinks, or toilets, regardless of whether said connection was previously allowed, permitted, or approved before the effective date of this bylaw.

ILLICIT DISCHARGE — Direct or indirect discharge to the municipal storm drain system that is not composed entirely of stormwater, except as exempted in § 157-7. The term does not include a discharge in compliance with an NPDES Storm Water Discharge Permit or a surface water discharge permit, or resulting from fire-fighting activities exempted pursuant to § 159-7D of this bylaw.

IMPERVIOUS SURFACE — Any material or structure on or above the ground that prevents water infiltrating the underlying soil. Impervious surface includes without limitation roads, paved parking lots, sidewalks, and rooftops.

LAND-DISTURBING ACTIVITY — Any activity that causes a change in the position or location of soil, sand, rock, gravel, or similar earth material.

MASSACHUSETTS ENDANGERED SPECIES ACT — MGL c. 131A and its implementing regulations at 321 CMR 10.00 which prohibit the taking of any rare plant or animal species listed as endangered, threatened, or of special concern.

MASSACHUSETTS STORMWATER MANAGEMENT POLICY — The policy issued by the Department of Environmental Protection, and as amended, that coordinates the requirements prescribed by state regulations promulgated under the authority of the Massachusetts Wetlands Protection Act MGL c. 131, § 40, and Massachusetts Clean Waters Act MGL c. 21, §§ 23 through 56. The policy addresses stormwater impacts through implementation of performance standards to reduce or prevent pollutants from reaching water bodies and control the quantity of runoff from a site.

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OR MUNICIPAL STORM DRAIN SYSTEM — The system of conveyances designed or used for collecting or conveying stormwater, including any road with a drainage system, street, gutter, curb, inlet, piped storm drain, pumping facility, retention or detention basin, natural or man-made or altered drainage channel, reservoir, and other drainage structure that together comprise the storm drainage system owned or operated by the Town of Stoughton.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGE PERMIT — A permit issued by United States Environmental Protection Agency or jointly with the state that authorizes the discharge of pollutants to waters of the United States.

NON-STORMWATER DISCHARGE — Discharge to the municipal storm drain system not composed entirely of stormwater.

OPERATION AND MAINTENANCE PLAN — A plan setting up the functional, financial and organizational mechanisms for the ongoing operation and maintenance of a stormwater management system to insure that it continues to function as designed.

OUTFALL — The point at which stormwater flows out from a point source discernible, confined and discrete conveyance into waters of the commonwealth.

OUTSTANDING RESOURCE WATERS (ORWs) — Waters designated by the Massachusetts Department of Environmental Protection as ORWs. These waters have exceptional sociologic, recreational, ecological and/or aesthetic values and are subject to more stringent requirements under both the Massachusetts Water Quality Standards (314 CMR 4.00)[1] and the Massachusetts Stormwater Management Standards. ORWs include vernal pools certified by the Natural Heritage Program of the Massachusetts Department of Fisheries and Wildlife and Environmental Law Enforcement, all Class A designated public water supplies with their bordering vegetated wetlands, and other waters specifically designated.

OWNER — A person with a legal or equitable interest in property.

PERSON — An individual, partnership, association, firm, company, trust, corporation, agency, authority, department or political subdivision of the commonwealth or the federal government, to the extent permitted by law, and any officer, employee, or agent of such person.

POINT SOURCE — Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged.

POLLUTANT — Any element or property of sewage, agricultural, industrial or commercial waste, runoff, leachate, heated effluent, or other matter, whether originating at a point or nonpoint source, that is or may be introduced into any sewage treatment works or waters of the commonwealth. Pollutants shall include without limitation:

A. Paints, varnishes, and solvents;

B. Oil and other automotive fluids;

C. Nonhazardous liquid and solid wastes and yard wastes;

D. Refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordnances, accumulations and floatables;

E. Pesticides, herbicides, and fertilizers;

F. Hazardous materials and wastes; sewage, fecal coliform and pathogens;

G. Dissolved and particulate metals;

H. Animal wastes;

I. Rock, sand, salt, soils;

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1. Editor's Note: The Massachusetts Surface Water Quality Standards.

J. Construction wastes and residues; and

K. Any noxious or offensive matter of any kind.

PRECONSTRUCTION — All activity in preparation for construction.

PRIORITY HABITAT OF RARE SPECIES — Habitats delineated for rare plant and animal populations protected pursuant to the Massachusetts Endangered Species Act and its regulations.

PROCESS WASTEWATER — Water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any material, intermediate product, finished product, or waste product.

RECHARGE — The process by which groundwater is replenished by precipitation through the percolation of runoff and surface water through the soil.

REDEVELOPMENT — Development, rehabilitation, expansion, demolition or phased projects that disturb the ground surface or increase the impervious area on previously developed sites.

RUNOFF — Rainfall, snowmelt, or irrigation water flowing over the ground surface.

SEDIMENT — Mineral or organic soil material that is transported by wind or water, from its origin to another location; the product of erosion processes.

SEDIMENTATION — The process or act of deposition of sediment.

SLOPE — The incline of a ground surface expressed as a ratio of horizontal distance to vertical distance.

SOIL — Any earth, sand, rock, gravel, or similar material.

STABILIZATION — The use, singly or in combination, of mechanical, structural, or vegetative methods, to prevent or retard erosion.

STORMWATER — Stormwater runoff, snowmelt runoff, and surface water runoff and drainage.

STORMWATER MANAGEMENT PLAN — A plan required as part of the application for a Stormwater Management Permit. See § 159-9.

STRIP — Any activity which removes the vegetative ground surface cover, including tree removal, clearing, grubbing, and storage or removal of topsoil.

SURFACE WATER DISCHARGE PERMIT — A permit issued by the Department of Environmental Protection (DEP) pursuant to 314 CMR 3.00 that authorizes the discharge of pollutants to waters of the commonwealth of Massachusetts.

TOXIC OR HAZARDOUS MATERIAL OR WASTE — Any material, which because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately

or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment. Toxic or hazardous materials include any synthetic organic chemical, petroleum product, heavy metal, radioactive or infectious waste, acid and alkali, and any substance defined as toxic or hazardous under MGL c. 21C and c. 21E and the regulations at 310 CMR 30.000 and 310 CMR 40.0000.

TSS — Total suspended solids.

VERNAL POOLS — Temporary bodies of freshwater which provide critical habitat for a number of vertebrate and invertebrate wildlife species.

WASTEWATER — Any sanitary waste, sludge, or septic tank or cesspool overflow, and water that during manufacturing, cleaning or processing comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product or waste product.

WATERCOURSE — A natural or man-made channel through which water flows or a stream of water, including a river, brook or underground stream.

WATERS OF THE COMMONWEALTH — All waters within the jurisdiction of the commonwealth, including, without limitation, rivers, streams, lakes, ponds, springs, impoundments, estuaries, wetlands, appropriational waters, and groundwater.

WETLAND RESOURCE AREA — Areas specified in the Massachusetts Wetlands Protection Act MGL c. 131, § 40, and in the Town of Stoughton Wetlands Protection Bylaw.

WETLANDS — Tidal and nontidal areas characterized by saturated or nearly saturated soils most of the year that are located between terrestrial (land-based) and aquatic (water-based) environments, including freshwater marshes around ponds and channels (rivers and streams), brackish and salt marshes; common names include marshes, swamps and bogs.

§ 159-3. Authority.

This bylaw is adopted under the authority granted by the Home Rule Amendment of the Massachusetts Constitution and the Home Rule Procedures Act, and pursuant to the regulations of the federal Clean Water Act found at 40 CFR 122.34.

§ 159-4. Responsibility for administration.

The Board shall administer, implement and enforce this bylaw. Any powers granted to or duties imposed upon the Board may be delegated in writing by the Board to employees or agents of the Board.

§ 159-5. (Reserved)

§ 159-6. Regulations.

The Board may promulgate rules and regulations to effectuate the purposes of this bylaw. Failure by the Board to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

§ 159-7. Discharges to the municipal storm drain system.

A. Applicability. This bylaw shall apply to flows entering the municipally owned storm drainage system.

B. Prohibited activities.

(1) Illicit discharges. No person shall dump, discharge, cause or allow to be discharged any pollutant or non-stormwater discharge into the municipal separate storm sewer system (MS4), into a watercourse, or into the waters of the commonwealth.

(2) Illicit connections. No person shall construct, use, allow, maintain or continue any illicit connection to the municipal storm drain system, regardless of whether the connection was permissible under applicable law, regulation or custom at the time of connection.

(3) Obstruction of municipal storm drain system. No person shall obstruct or interfere with the normal flow of stormwater into or out of the municipal storm drain system without prior written approval from the Board.

C. Exemptions.

(1) Discharge or flow resulting from fire-fighting activities.

(2) The following non-stormwater discharges or flows are exempt from the prohibition of non-stormwaters provided that the source is not a significant contributor of a pollutant to the municipal storm drain system:

(a) Waterline flushing;

(b) Flow from potable water sources;

(c) Springs;

(d) Natural flow from riparian habitats and wetlands;

(e) Diverted stream flow;

(f) Rising groundwater;

(g) Uncontaminated groundwater infiltration as defined in 40 CFR 35.2005(20), or uncontaminated pumped groundwater;

(h) Water from exterior foundation drains, footing drains (not including active groundwater dewatering systems), crawl space pumps, or air-conditioning condensation;

(i) Discharge from landscape irrigation or lawn watering;

(j) Water from individual residential car washing;

(k) Discharge from dechlorinated swimming pool water (less than one ppm chlorine), provided the water is allowed to stand for one week prior to draining and the pool is drained in such a way as not to cause a nuisance;

(l) Discharge from street sweeping;

(m) Dye testing, provided verbal notification is given to the Board prior to the time of the test;

(n) Non-stormwater discharge permitted under an NPDES permit or a surface water discharge permit, waiver, or waste discharge order administered under the authority of the United States Environmental Protection Agency or the Department of Environmental Protection, provided that the discharge is in full compliance with the requirements of the permit, waiver, or order and applicable laws and regulations; and

(o) Discharge for which advanced written approval is received from the Board as necessary to protect public health, safety, welfare or the environment.

D. Emergency suspension of storm drainage system access. The Board may suspend municipal storm drain system access to any person or property without prior written notice when such suspension is necessary to stop an actual or threatened discharge of pollutants that presents imminent risk of harm to the public health, safety, welfare or the environment. In the event any person fails to comply with an emergency suspension order, the authorized enforcement agency may take all reasonable steps to prevent or minimize harm to the public health, safety, welfare or the environment.

E. Notification of spills. Notwithstanding other requirements of local, state or federal law, as soon as a person responsible for a facility or operation, or responsible for emergency response for a facility or operation, has information of or suspects a release of materials at that facility or operation resulting in or which may result in discharge of pollutants to the municipal drainage system or waters of the commonwealth, the person shall take all necessary steps to ensure containment and cleanup of the release. In the event of a release of oil or hazardous materials, the person shall immediately notify the municipal Fire and Police Departments. In the event of a release of nonhazardous material, the reporting person shall notify the authorized

enforcement agency no later than the next business day. The reporting person shall provide to the authorized enforcement agency written confirmation of all telephone, facsimile or in-person notifications within three business days thereafter. If the discharge of prohibited materials is from a commercial or industrial facility, the facility owner or operator of the facility shall retain on site a written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

F. Transitional provisions. Residential property owners shall have 30 days from the effective date of the bylaw to comply with its provisions, provided good cause is shown for the failure to comply with the bylaw during that period.

§ 159-8. Stormwater management and land disturbance.

A. Applicability.

(1) This bylaw shall apply to all activities that result in disturbance of one or more acres of land that drains to the municipal separate storm sewer system.

(2) Except as authorized by the Board in a land disturbance permit or as otherwise provided in this bylaw, no person shall perform any activity that results in disturbance of an acre or more of land. Normal maintenance and improvement of land in agricultural or aquacultural use, as defined by the Wetlands Protection Act regulation 310 CMR 10.4, are exempt. In addition, as authorized in the Phase II small MS4 general permit for Massachusetts, stormwater discharges resulting from the above activities that are subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Storm Water Management Policy as reflected in an order of conditions issued by the Conservation Commission are exempt from compliance with this bylaw.

B. Responsibility for administration.

(1) The Board shall administer, implement and enforce this bylaw. Any powers granted to or duties imposed upon the Board may be delegated in writing by the Board to its employees or agents.

(2) Waiver. The Board may waive strict compliance with any requirement of this bylaw or the rules and regulations promulgated hereunder, where:

(a) Such action is allowed by federal, state and local statutes and/or regulations;

(b) Is in the public interest; and

(c) Is not inconsistent with the purpose and intent of this bylaw.

(3) Rules and regulations. The Board may adopt and periodically amend rules and regulations to effectuate the purposes of this bylaw. Failure by the Board to promulgate such rules and regulations shall not have the effect of suspending or invalidating this bylaw.

C. Permits and procedures.

(1) Application. A completed application for a land disturbance permit shall be filed with the Board. A permit must be obtained prior to the commencement of land-disturbing activity that may result in the disturbance of an area of one acre or more. The land disturbance permit application package shall follow the procedures outlined in the Site Plan Review Bylaw (available at the Stoughton Engineering Department).

(2) Entry. Filing an application for a permit grants the Board or its agent permission to enter the site to verify the information in the application and to inspect for compliance with permit conditions.

(3) Other boards. The Board shall notify the Town Clerk of receipt of the application and shall give one copy of the application package to each of the other relevant boards. The submission of a site plan review application shall be considered as a valid submission under this bylaw.

(4) Public hearing. The public hearing required in the Site Plan Review Bylaw shall be considered sufficient satisfaction of this requirement. In the event the proposed project does not require site plan review, the Board shall hold a public hearing within 21 days of the receipt of a complete application and take final action within 21 days from the time of closure of the public hearing, unless such time is extended by agreement between the applicant and the Board. Notice of the public hearing shall be given by publication and by first-class mailing to abutters at least seven days prior to the hearing. The Board shall make the application available for inspection by the public during business hours at the Town Hall, 10 Pearl Street.

(5) Information requests. The applicant shall submit all additional information requested by the Board to issue a decision on the application.

(6) Action by the Board. The Board may:

(a) Approve the land disturbance permit application and issue a permit if it finds that the proposed plan will protect water resources and meets the objectives and requirements of this bylaw;

(b) Approve the land disturbance permit application and issue a permit with conditions, modifications or restrictions that

the Board determines are required to ensure that the project will protect water resources and meets the objectives and requirements of this bylaw;

(c) Disapprove the land disturbance permit application and deny the permit if it finds that the proposed plan will not protect water resources or fails to meet the objectives and requirements of this bylaw.

(7) Failure of the Board to take final action. Failure of the Board to take final action upon an application within the time specified above shall be deemed to be approval of said application. Upon certification by the Town Clerk that the allowed time has passed without the Board action, the land disturbance permit shall be issued by the Board.

(8) Fee structure. Each application must be accompanied by the appropriate application fee as established by the Board. Applicants shall pay review fees as determined by the Board sufficient to cover any expenses connected with the public hearing and review of the land disturbance permit application before the review process commences. The Board is authorized to retain a registered professional engineer or other professional consultant to advise the Board on any or all aspects of the application.

(9) Project changes. The permittee, or their agent, must notify the Board in writing of any change or alteration of a land-disturbing activity authorized in a land disturbance permit before any change or alteration occurs. If the Board determines that the change or alteration is significant, based on the design requirements listed in § 159-8C(10)(b) and accepted construction practices, the Board may require that an amended land disturbance permit application be filed and a public hearing held. If any change or alteration from the land disturbance permit occurs during any land-disturbing activities, the Board may require the installation of interim erosion and sedimentation control measures before approving the change or alteration.

(10) Erosion and sediment control plan.

(a) The erosion and sediment control plan shall contain sufficient information to describe the nature and purpose of the proposed development, pertinent conditions of the site and the adjacent areas, and proposed erosion and sedimentation controls. The applicant shall submit such material as is necessary to show that the proposed development will comply with the design requirements listed in Subsection C(10)(b) below.

(b) The design requirements of the erosion and sediment control plan are:

[1] Minimize total area of disturbance;

[2] Sequence activities to minimize simultaneous areas of disturbance;

[3] Minimize peak rate of runoff in accordance with the Massachusetts Stormwater Policy;

[4] Minimize soil erosion and control sedimentation during construction, provided that prevention of erosion is preferred over sedimentation control;

[5] Divert uncontaminated water around disturbed areas;

[6] Maximize groundwater recharge;

[7] Install and maintain all erosion and sediment control measures in accordance with the manufacturer's specifications and good engineering practices;

[8] Prevent off-site transport of sediment;

[9] Protect and manage on- and off-site material storage areas (overburden and stockpiles of dirt, borrow areas, or other areas used solely by the permitted project are considered a part of the project); comply with applicable federal, state and local laws and regulations, including waste disposal, sanitary sewer or septic system regulations, and air quality requirements, including dust control;

[10] Prevent significant alteration of habitats mapped by the Massachusetts Natural Heritage and Endangered Species Program as endangered, threatened or of special concern, estimated habitats of rare wildlife and certified vernal pools, and priority habitats of rare species from the proposed activities;

[11] Institute interim and permanent stabilization measures, which shall be instituted on a disturbed area as soon as practicable but no more than 14 days after construction activity has temporarily or permanently ceased on that portion of the site;

[12] Properly manage on-site construction and waste materials; and

[13] Prevent off-site vehicle tracking of sediments.

(11) Erosion and sediment control plan content. The plan shall contain the information required by the Site Plan Review Bylaw.

(12) Inspection and site supervision.

(a) Preconstruction meeting. Prior to starting clearing, excavation, construction, or land-disturbing activity the applicant, the applicant's technical representative, the general contractor or any other person with authority to make changes to the project shall meet with the Board to review the permitted plans and their implementation.

(b) Board inspection. The Board or its designated agent shall make inspections as hereinafter required and shall either approve that portion of the work completed or shall notify the permittee wherein the work fails to comply with the land disturbance permit as approved. The permit and associated plans for grading, stripping, excavating, and filling work, bearing the signature of approval of the Board, shall be maintained at the site during the progress of the work. In order to obtain inspections, the permittee shall notify the Board at least two working days before each of the following events:

[1] Erosion and sediment control measures are in place and stabilized;

[2] Site clearing has been substantially completed;

[3] Rough grading has been substantially completed;

[4] Final grading has been substantially completed;

[5] Close of the construction season; and

[6] Final landscaping (permanent stabilization) and project final completion.

(c) Permittee inspections. The permittee or his/her agent shall conduct and document inspections of all control measures no less than weekly, or as specified in the permit, and prior to and following anticipated storm events. The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for maintenance or additional control measures. The permittee or his/her agent shall submit monthly reports to the Board or designated agent in a format approved by the Board.

(d) Access permission. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Board, its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this bylaw and may make or cause to be made such examinations, surveys or sampling as the Board deems reasonably necessary to determine compliance with the permit.

(13) Surety. the Board may require the permittee to post, before the start of land disturbance activity, a surety bond, irrevocable letter of credit, cash, or other acceptable security. The form of the bond shall be approved by Town Counsel and be in an amount deemed sufficient by the Board to ensure that the work will be completed in accordance with the permit. If the project is phased, the Board may release part of the bond as each phase is completed in compliance with the permit, but the bond may not be fully released until the Board has received the final report as required by § 159-8C(14) and issued a certificate of completion.

(14) Final reports. Upon completion of the work, the permittee shall submit a report (including certified as-built construction plans) from a professional engineer (PE), surveyor, or certified professional in erosion and sediment control (CPESC), certifying that all erosion and sediment control devices, and approved changes and modifications, have been completed in accordance with the conditions of the approved permit. Any discrepancies should be noted in the cover letter.

(15) Certificate of completion. The issuing authority will issue a letter certifying completion upon receipt and approval of the final reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this bylaw.

§ 159-9. Postconstruction stormwater management of new developments and redevelopments.

A. Applicability. No person may undertake a construction activity, including clearing, grading and excavation, that results in a land disturbance that will disturb equal to or greater than one acre of land or will disturb less than one acre of land but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one acre of land draining to the Stoughton municipal separate storm sewer system without a permit from the Board. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity or the original purpose of the site.

B. Exemptions.

(1) Normal maintenance and improvement of land in agricultural use as defined by the Wetlands Protection Act regulation 310 CMR 10.4;

(2) Maintenance of existing landscaping, gardens or lawn areas associated with a single-family dwelling;

(3) The construction of fencing that will not substantially alter existing terrain or drainage patterns;

(4) Construction of utilities other than drainage (gas, water, electric, telephone, etc.) which will not alter terrain or drainage patterns;

(5) As authorized in the Phase II small MS4 general permit for Massachusetts, stormwater discharges resulting from the activities identified in § 159-8A that are wholly subject to jurisdiction under the Wetlands Protection Act and demonstrate compliance with the Massachusetts Storm Water Management Policy as reflected in an order of conditions issued by the Conservation Commission are exempt from compliance with this bylaw.

C. Permits and procedure.

(1) The application for a stormwater management permit shall consist of submittal of a stormwater management plan to the Board. This stormwater management plan shall contain sufficient information for the Board to evaluate the environmental impact, effectiveness, and acceptability of the measures proposed by the applicant for reducing adverse impacts from stormwater. The plan shall be designed to meet the Massachusetts Stormwater Management Standards as set forth in Subsection C(2) of this section and DEP Stormwater Management Handbook Volumes I and II. The stormwater management plan shall fully describe the project in drawings, and narrative. It shall represent as-built conditions on the site being permitted and shall contain the following information:

(a) A locus map;

(b) The existing zoning and land use at the site;

(c) The location(s) of existing easements;

(d) The location of existing utilities;

(e) The site's final topography with contours at two-foot intervals;

(f) The site hydrology;

(g) A description and delineation of existing stormwater conveyances, impoundments, and wetlands on and adjacent to the site or into which stormwater flows;

(h) A delineation of one-hundred-year floodplains, if applicable;

(i) The existing vegetation and ground surfaces with runoff coefficients;

(j) A drainage area map showing postconstruction watershed boundaries, drainage area and stormwater flow paths;

(k) A description and drawings of all components of the drainage system, including:

[1] Locations, cross sections, and profiles of all brooks, streams, drainage swales and their method of stabilization;

[2] All measures for the detention, retention or infiltration of water;

[3] All measures for the protection of water quality;

[4] The structural details for all components of the proposed drainage systems and stormwater management facilities;

[5] Notes on drawings specifying materials used, construction specifications, and typicals.

(l) Location of buildings or other structures, impervious surfaces, and drainage facilities, if applicable;

(m) A maintenance schedule for the on-site drainage facilities;

(n) Any other information requested by the Board.

(2) Standards.

(a) Projects shall meet the standards of the Massachusetts Stormwater Management Policy, which currently are as follows:

[1] No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the commonwealth.

[2] Stormwater management systems must be designed so that postdevelopment peak discharge rates do not exceed predevelopment peak discharge rates.

[3] Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the postdevelopment site should approximate the annual recharge rate from the predevelopment or existing site conditions, based on soil types.

[4] For new development, stormwater management systems must be designed to remove 80% of the average annual load (postdevelopment conditions) of total suspended solids (TSS). It is presumed that this standard is met when:

[a] Suitable nonstructural practices for source control and pollution prevention are implemented;

[b] Stormwater management best management practices (BMPs) are sized to capture the prescribed runoff volume; and

[c] Stormwater management BMPs are maintained as designed.

[5] Stormwater discharges from areas with higher potential pollutant loads require the use of specific stormwater management BMPs (see Stormwater Management Volume I: Stormwater Policy Handbook). The use of infiltration practices without pretreatment is prohibited.

[6] Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas (see Stormwater Management Volume I: Stormwater Policy Handbook). Critical areas are outstanding resource waters (ORWs), shellfish beds, swimming beaches, cold-water fisheries and recharge areas for public water supplies.

[7] Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable. However, if it is not practicable to meet all the standards, new (retrofitted or expanded) stormwater management systems must be designed to improve existing conditions.

[8] Erosion and sediment controls must be implemented to prevent impacts during disturbance and construction activities.

[9] All stormwater management systems must have an operation and maintenance plan to ensure that systems function as designed.

(b) When one or more of the standards cannot be met, an applicant may demonstrate that an equivalent level of environmental protection will be provided.

D. Operation and maintenance plans. An operation and maintenance plan (O&M plan) is required at the time of application for all projects. The maintenance plan shall be designed to ensure compliance with the permit, this bylaw and that the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, are met in all seasons and throughout the life of the system. The Board shall make the final decision of what maintenance option is appropriate in a given situation. The Board will consider natural features, proximity of site to water bodies and wetlands, extent of impervious surfaces, size of the site, the types of stormwater management structures, and potential need for ongoing maintenance activities when making this decision. The operation and maintenance plan shall remain on file with the Board, attached to the stormwater management plan, and shall be an ongoing requirement. The O&M Plan shall include:

(1) The name(s) of the owner(s) for all components of the system.

(2) Maintenance agreements that specify:

(a) The names and addresses of the person(s) responsible for operation and maintenance.

(b) The person(s) responsible for financing maintenance and emergency repairs.

(c) A maintenance schedule for all drainage structures, including swales and ponds.

(d) A list of easements with the purpose and location of each.

(e) The signature(s) of the owner(s).

(3) Stormwater management easement(s).

(a) Stormwater management easements shall be provided by the property owner(s) as necessary for:

[1] Access for facility inspections and maintenance.

[2] Preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the one-hundred-year storm event.

[3] Direct maintenance access by heavy equipment to structures requiring regular cleanout.

(b) The purpose of each easement shall be specified in the maintenance agreement signed by the property owner.

(c) Stormwater management easements are required for all areas used for off-site stormwater control, unless a waiver is granted by the Board.

(d) Easements shall be recorded with the Norfolk County Registry of Deeds prior to issuance of a certificate of completion by the Board.

E. Changes to operation and maintenance plans.

(1) The owner(s) of the stormwater management system must notify the Board of changes in ownership or assignment of financial responsibility.

(2) The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of this bylaw by mutual agreement of the Board and the responsible parties. Amendments must be in writing and signed by all responsible parties. Responsible parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility.

F. Surety. The Board may require the permittee to post, before the start of land disturbance or construction activity, a surety bond, irrevocable

letter of credit, cash, or other acceptable security. The form of the bond shall be approved by Town Counsel and be in an amount deemed sufficient by the Board to ensure that the work will be completed in accordance with the permit. If the project is phased, the Board may release part of the bond as each phase is completed in compliance with the permit, but the bond may not be fully released until the Board has received the final inspection report as required by § 159-8C(14) and issued a certificate of completion.

G. Inspections. The Board shall inspect the project site at the following stages:

(1) Initial site inspection: prior to approval of any plan.

(2) Erosion control inspection: to ensure erosion control practices are in accord with the filed plan.

(3) Bury inspection: prior to backfilling of any underground drainage or stormwater conveyance structures.

(4) Final inspection.

(a) After the stormwater management system has been constructed and before the surety has been released, the applicant must submit a record plan detailing the actual stormwater management system as installed. The Board shall inspect the system to confirm its as-built features. This inspector shall also evaluate the effectiveness of the system in an actual storm. If the inspector finds the system to be adequate he shall so report to the Board, which will issue a certificate of completion.

(b) If the system is found to be inadequate by virtue of physical evidence of operational failure, even though it was built as called for in the stormwater management plan, it shall be corrected by the permittee before the performance guarantee is released. If the permittee fails to act, the Town may use the surety bond to complete the work. Examples of inadequacy shall be limited to errors in the infiltrative capability, errors in the maximum groundwater elevation, failure to properly define or construct flow paths, or erosive discharges from basins.

H. Waivers.

(1) The Board may waive strict compliance with any requirement of this bylaw or the rules and regulations promulgated hereunder, where;

(a) Such action is allowed by federal, state and local statutes and/or regulations,

(b) Is in the public interest; and

(c) Is not inconsistent with the purpose and intent of this bylaw.

(2) Any applicant may submit a written request to be granted such a waiver. Such a request shall be accompanied by an explanation or documentation supporting the waiver request and demonstrating that strict application of the bylaw does not further the purposes or objectives of this bylaw.

(3) All waiver requests shall be discussed and voted on at the public hearing for the project.

(4) If, in the Board's opinion, additional time or information is required for review of a waiver request, the Board may continue a hearing to a date certain announced at the meeting. In the event the applicant objects to a continuance or fails to provide requested information, the waiver request shall be denied.

I. Certificate of completion. The Board will issue a letter certifying completion upon receipt and approval of the final inspection reports and/or upon otherwise determining that all work of the permit has been satisfactorily completed in conformance with this bylaw.

J. Town acceptance of drainage and stormwater structures and systems. When a developer requests the Town to accept a drainage system, stormwater management system, and/or a detention basin for a subdivision of three or more housing units, or for a commercial/ industrial land development of one acre or larger, the Town shall have the option to refuse or accept it. If the Town accepts the basin or system, a contribution to the Stormwater Management Revolving Fund shall be made which shall be equal to $1,000 for each drainage/ stormwater management system and $2,500 for every acre or portion thereof in the detention basins to compensate the Town for ongoing maintenance. The minimum contribution for any system or basin, regardless of size, shall be $5,000.

§ 159-10. Enforcement.

The Board or an authorized agent of the Board shall enforce this bylaw, regulations, orders, violation notices, and enforcement orders, and may pursue all civil and criminal remedies for such violations.

A. Civil relief. If a person violates the provisions of this bylaw, regulations, permit, notice, or order issued thereunder, the Board may seek injunctive relief in a court of competent jurisdiction restraining the person from activities which would create further violations or compelling the person to perform abatement or remediation of the violation.

B. Orders.

(1) The Board or an authorized agent of the Board may issue a written order to enforce the provisions of this bylaw or the regulations thereunder, which may include:

(a) Elimination of illicit connections or discharges to the MS4;

(b) Performance of monitoring, analyses, and reporting;

(c) That unlawful discharges, practices, or operations shall cease and desist; and

(d) Remediation of contamination in connection therewith.

(2) If the enforcing person determines that abatement or remediation of contamination is required, the order shall set forth a deadline by which such abatement or remediation must be completed. Said order shall further advise that, should the violator or property owner fail to abate or perform remediation within the specified deadline, the Town may, at its option, undertake such work, and expenses thereof shall be charged to the violator.

(3) Within 30 days after completing all measures necessary to abate the violation or to perform remediation, the violator and the property owner will be notified of the appropriations incurred by the Town, including administrative appropriations. The violator or property owner may file a written protest objecting to the amount or basis of appropriations with the Board within 30 days of receipt of the notification of the appropriations incurred. If the amount due is not received by the expiration of the time in which to file a protest or within 30 days following a decision of the Board affirming or reducing the appropriations, or from a final decision of a court of competent jurisdiction, the appropriations shall become a special assessment against the property owner and shall constitute a lien on the owner's property for the amount of said appropriations. Interest shall begin to accrue on any unpaid appropriations at the statutory rate provided in MGL c. 59, § 57, after the 31st day at which the appropriations first become due.

C. Criminal penalty. Any person who violates any provision of this bylaw, regulation, order or permit issued thereunder shall be punished by a fine of not more than $100. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

D. Noncriminal disposition. As an alternative to criminal prosecution, the Town of Stoughton may elect to utilize the noncriminal disposition procedure set forth in MGL c. 40, § 21D. The Board, or its authorized agent, shall be the enforcing person. The penalty for the first violation shall be $100. The penalty for the second violation shall be $200. The penalty for the third and subsequent violations shall be $300. Each day or part thereof that such violation occurs or continues shall constitute a separate offense.

E. Entry to perform duties under this bylaw. To the extent permitted by state law, or if authorized by the owner or other party in control of the property, the Board, its agents, officers, and employees may enter upon privately owned property for the purpose of performing their duties under this bylaw and regulations and may make or cause to be made such examinations, surveys or sampling as the Board deems reasonably necessary.

F. Appeals. The decisions or orders of the Board shall be final. Further relief shall be to a court of competent jurisdiction.

G. Remedies not exclusive. The remedies listed in this bylaw are not exclusive of any other remedies available under any applicable federal, state or local law.

§ 159-11. Severability.

The provisions of this bylaw are hereby declared to be severable. If any provision, paragraph, sentence, or clause of this bylaw or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this bylaw.

APPENDIX I

2018 ANNUAL REPORT SELF EVALUATION

ANNUAL EVALUATION FOR YEARS 1 -5+

Municipality/Organization:	**Town of Stoughton, Massachusetts**
EPA NPDES Permit Number:	**MAR041063**
MassDEP Transmittal Number:	**W-035130**
Annual Report Number & Reporting Period:	**Year 15** **May 1, 2017 – April 30, 2018**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2018)

Part I. General Information

Contact Person: Craig A. Horsfall, P.E. Title: Interim Town Engineer

Telephone #:. 781.232.9264 Email: chorsfall@stoughton-ma.gov

Mailing Address: 10 Pearl Street, Stoughton, MA 02072

Certification:

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 gather and evaluate 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.

Signature:

Printed Name: Marc J. Tisdelle

Title: Interim Town Manager

Date: April 25, 2018

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Part II. Self-Assessment

The Town has been working diligently for the last several years to comply with the current stormwater permit. As you will see in the following report, we believe we have been successful completing and progressing on many of our goals.

For the current fiscal year, the following major tasks have been completed:

1. Town Meeting approved $50,000 in Stormwater Coordination Funds.
2. Continuation of Outfall Sampling Program of 17 outfalls.
3. Continuation of Town-wide Connectivity Mapping to include all missing information and gaps in the MS4 Stormwater Infrastructure.
4. Preparation of Stormwater Management Plan (SWMP) for upcoming permit compliance.
5. Preparation of the Notice of Intent for FY18
6. Staff GPS Field Training
7. Continued subscription with the Neponset Stormwater Partnership (Annual Fee)
8. GIS Mapping and Updates (internally and on Staff website)
9. Performed Herbicide Treatment for Harris Pond
10. Performed Vegetation Study for Albert's Pond
11. Perform a Household Hazardous Waste Day
12. Perform electronic stormwater inspections that are linked to the GIS system
13. Public Education to Town Officials and Children on various stormwater issues.
14. Maintenance of Stormwater System (Catch basins, outfalls, etc.)

Additional Town funds have been utilized to complete the following items:

1. Provided in-kind match of survey and engineering services and construction materials of $99,440 for Stormwater improvements at the Gibbons Elementary School as a part of the 319 Non-Point Source Pollution Grant Program
2. Provided in-kind match of survey and engineering services of approximately $4,540 toward the MassDEP Stormwater Recharge Grant for stormwater improvements at the Dawe Elementary School.
3. Provide survey services for the generation of a Topographic Survey Plan to be used for the design of the replacement of an existing stone culvert on South Street. A consultant has been hired to analyze the existing culvert and design an appropriate replacement.
4. Maintenance of Stormwater System

Among other efforts, the Town of Stoughton has continued to focus efforts on the control measures that were slated for the entire permit term that include enforcing the Storm Water By-Law, enforcing the Illicit Discharge By-Law, performing continuous construction inspections, enforcing the submittal of Stormwater Pollution Prevention Plans for all projects greater than 1 acre in size, and a comprehensive review of all construction documents. For projects less than one acre in size (single lot construction, commercial development), the Town performs a comprehensive stormwater review to ensure compliance with local and state stormwater requirements. All site development plans are required to provide proper erosion controls. All

commercial site development is required to comply with the Department of Environmental Protection's Stormwater Management Regulations. Town staff performs inspections on construction projects to ensure all work being performed is in compliance with the approved plans. Additionally, the Public Works Department regularly monitors, cleans and inspects the catch basins and roadway surfaces in Town.

This past year we continued with the Neponset Stormwater Partnership. Additionally, we have continued to provide in-house survey and design as part of the awarded 319 Stormwater Grant through the Neponset River Valley Association for stormwater improvements at a Town-owned property (elementary school).

Additionally, with a great amount of help from the Neponset Stormwater Partnership, we applied for and were awarded a DEP Stormwater Grant for 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street intersection). The Town has provided in-house survey and soil evaluations as part of the in-kind match.

The remaining portions of this report list many more Best Management Practices conducted by the Town of Stoughton. Over the permit term, Stoughton has completed or progressed on many of our goals. The Town acknowledges that there are many more goals to accomplish and will continue to meet these goals.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
1.1	Classroom Education	Engineering Dept. & Stormwater Tech Committee	1. Stormwater presentation to Middle and High Schools 2. Provide Schools with Stormwater materials.	Permit Term Ongoing Ongoing	Presentations were made to Middle School during Years 2 and 3. In Year 5, the Engineering Department provided schools with stormwater materials to incorporate with materials. In Year 8, Engineering Department conducted one day seminar at the High School Science Class. Continue to perform presentations and provide school materials. Continue to improve and enhance materials.
1.2	Prepare Stormwater Video	Engineering Dept. & Stormwater Tech Committee	1. Air "After the Storm" video on local access television. 2. Present video in Local TV	Years 4-5 Year 9	Two appearances in stormwater forums (summer 2007, one in fall 2007); "After the Storm" aired on local cable access television in spring 2008. Present video on television.
1.3	Stencil specified storm drains	Public Works Dept.	Identified individual watersheds and stencil catch basins	Year 2-4 Year 6 Year 10	Catch Basins Stenciled (Year 2-4); Complete. Stencils were checked and re-painted as necessary during Year 6. All catch basins' stencil condition was evaluated to determine the stencil condition and need.
1.4	Create Stormwater Fliers/ Posters/ Pamphlets	Engineering Dept. & Stormwater Tech Committee	Install stormwater posters and brochures in public buildings	Year 3 – Ongoing Year 10-13 Year 12 - 14	1. Stormwater posters continue to be displayed in Town Hall. 2. Brochures are available at Town Hall, Library, PWD. 3. Working with NepRWA in creating new outreach material written specifically for different types of audience per the new draft permit. 4. Provided updated children stormwater materials (brochures, posters, and coloring books) at Town Hall, Library and DPW.

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1.5	Educational signage at high-use recreational areas	Conservation Commission, Recreation Dept., Public Works Dept.	Install signage at Town beach	Year 8	Install signage at Town beach. Maintain signs as needed.
1.6	"No-Dumping" Signs	Conservation Commission, Public works Dept.	Installing "No-Dumping" Signs in all major watershed areas	Year 8-9	Signs were installed in all major watershed areas. Fixing and reinstalling damaged signs.
1.7	Earth Day	Conservation Commission, Public Works Dept.	Generate public awareness to prevent non-point source pollution in the water shed and water conservation	Year 6-Ongoing	Educational presentations by qualified environmental professional. Fliers and brochures provided by DEP were handed out. Mass division of fish and wild life provided information on protecting vernal resources areas.
1.8	Collecting and storing of roof generated runoff for domestic irrigation (Rain Barrel)	Conservation Commission	Educating public to collect and store roof runoff for on site irrigation and ground water replenishment.	Ongoing Ongoing	Educate public of the benefit for collecting and storing roof generated runoff for domestic irrigation. Sold about 100 units. Continue to sell rail barrels and educate public.
1.9	Compost Generator	Conservation Commission	Reduce the volume of solid waste by generating compost to improve vegetated cover in yards in the watershed to reduce sediment / nutrient deposition and pollution of surface water bodies and streams	Year 8-9 Year 14	Educate public of the compost generator and benefits of having non chemical fertilization for yards that will improve vegetation and eliminate pollution to the ground water. Sold about 50 units.
1.10	Stormwater Presentation to DPW Staff	Engineering Dept/ Public Works Dept.	Educate DPW staff to become more knowledgeable on the MS4 Permit requirements	Year 11 Year 12	Educated the PWD employees on the current requirements of the MS4 Permit, areas of Town covered by Permit, and general BMP maintenance and record keeping. Date of presentation 2/12/14. Educated the PWD employees on the current requirements of the MS4 Permit, areas of Town covered by Permit, and general BMP maintenance and record keeping. Presentation by EPG/ SERSG group through the CIC Grant. Date of presentations 8/13/14.

1.11	Applied for Community Innovation Challenge Collaborative Grant through the Neponset River Watershed Association Grant awarded to group April 2014.	Engineering Dept	Implementation of completed Tasks 1-8	Year 11- Year 12	Collaborative Tasks Task 1: Regional Stormwater Collaborative • Establish a regional collaborative • Future work plan priorities • Webpage for collaborative materials Task 2: Education/ Public Participation Materials • Prepare model SWMP covering outreach/ public participation • Prepare outreach materials targeting commercial/ industrial • Expand regional outreach website covering residential. Task 3: Analysis of IDDE Requirements/ Model SWMP Language • Prepare model language for IDDE section of required SWMP • Map/ data table summary for receiving water status • Report initial assessment/ rankings of catchments Task 4: Bylaw Evaluation • Stormwater by-law evaluation worksheet/ checklist • Report recommending by-law revisions for communities Task 5: Prelim Eval & Ranking of Parcel and Roadway retrofits • Rank town-owned parcels and roads for potential retrofits Task 6: Good Housekeeping Tools • Assemble standard operating procedures (SOPS) • Prepare stormwater pollution prevention plan template Task 7: Evaluate Regional O&M Database for Private Permit Conditions Task 8: Stormwater Financing Pilot
1.12	Applied for Southeastern Stormwater Collaborative Grant through the Southeastern Regional Services Group (SERSG) Grant awarded to group April 2014.	Engineering Dept	Implementation of completed Tasks 1-3	Year 11 – Year 12	Collaborative Tasks Task 1: Initiate development of a Training Session and DVD/ CD. Task 2: Development of an educational website Task 3: Prepare template RFP for General Consulting Services

1.13	Applied for 319 Grant Application trough the Neponset River Watershed Association Grant not award to Stoughton Applied for 319 Grant Application trough the Neponset River Watershed Association Grant Awarded Survey & Design Phase	Engineering Dept	Not Applicable	Year 11 Year 13 Year 14 Year 15	The grant would provide supplemental funding to the Town to construction stormwater BMP's on and near a school site in Town. The Town was going to provide in-house engineering design and construction to match grant funding. The grant was not awarded to the Stoughton. The Stoughton Engineering Department has completed a Topographic Survey of the Project, completed Soil Evaluations, and has begun preparing Design Plans. Design Plans and construction specifications were completed. The project was publically bid and was awarded to Green Acres Landscape and Construction co. Inc. Construction began in the fall of 2017 and will be 100% complete in the spring of 2018.
1.14	Stormwater Presentation	Engineering Department, PWD	Attended Seminar	Year 11	Attended Stormwater Presentation by the Environmental Partners Group at a Plymouth County Highway Association meeting. Presentation was on the current and projected MS4 Permit requirements.
1.15	Stormwater Training	Eng Dept, PWD, Planning, BOH, Conservation, Building	Attended Training	Year 12	Stormwater training on MS4 Permit Management and Compliance for Town Department Heads. Presentation through the SERSG CIC Grant on 11/19/14.
1.16	Stormwater Seminar	Engineering Dept	Attended Seminar	Year 12	Stormwater seminar on MS4 Permit Management and Compliance. EPA presented on DRAFT stormwater permit requirements for the next term. Date: 8/7/2014

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1.17	Applied for Community Innovation Challenge Collaborative Grant through the Neponset River Watershed Association Grant awarded to group April 2015	Engineering Dept	Implementation of Tasks	Year 12	Scope of Work not yet determined.
1.18	Create Aquifer Protection Map	Engineering Dept.	Create Aquifer Map	Year 13	We hired a consultant to create a new aquifer map to reflect current wells, watersheds, and environmentally sensitive areas.
1.19	Low Impact Design Education to Town Employees	Engineering Dept.	Educate staff on various types of LID techniques	Year 13 & Year 14	Recommend and perform technical reviews for all LID designs proposed on new and re-development projects in Town.
1.20	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14 Year 15	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We recently got awarded the grant. The Stoughton Engineering Department is providing in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared. Soil evaluations and survey services were completed for the Dawes School site. A topographic base plan was generated by the Engineering Department staff for the design of stormwater improvements.
1.21	Presentation	Engineering Department	Complete presentation	Year 14	Presentation to Board of Selectmen and Finance Committee to justify $50,000 in Engineering Budget for Stormwater Coordination
1.22	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
1.23	Neponset Stormwater Partnership Membership	Engineering Department	Join Partnership	Year 14 Year 15	We joined the Neponset Stormwater Partnership. We attend several meetings a year and collaborate with other towns on MS4 matters. Membership in the Neponset Stormwater Partnership is on-going.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
2.1	Create Stormwater Committee	Selectmen	Creation of Stormwater Committee	Year 1-2	Created Stormwater Committee consisting of members of PWD, Engineering and Conservation Commission Department. Major focus to identify stormwater related problem areas in Town and develop game plan for correcting problem and to comply with EPA requirements.
2.2	Review NOI	Technical Committee	Stormwater goals prioritized and published	Year 1-2	Technical committee Mission Statement; Complete.
2.3	Stormwater Committee creates Technical Committee	Stormwater Committee	Technical Committee meetings	Year 2 Year 4	Create of Committee. Town Meeting Article passed; Complete.
2.4	Technical Committee Rules and Regulations	Technical Committee	Publication of Rules and Regulations	Year 2-3	HAZMAT and Stormwater Bylaws are published in "Code of Town of Stoughton" and are available on Town's website. Complete.
2.5	Household Hazardous Waste Day	Board of Health, Conservation Commission, Public Works Dept.	Hold household hazardous waste collection day per year	Ongoing Year 11 Year 14	Household hazardous waste days held every year. We held two HazMat Collection Days We held a HazMAT Collection Day and have another one planned.
2.6	Public Hearing / Meetings Posted	Town Manager / Board of Selectmen	Information on public meetings posted in accordance with MGL Section 23B	Ongoing	Public meeting information has continued to be posted in accordance with MGL Section 23B.
2.7	Ames Pond Citizens Committee	Conservation Commission	Form committee to increase awareness and support to restore Ames Long Pond	Year 5	Committee formed to increase awareness of nutrient problem at Ames Pond. Information published on Town website. Committee sponsor and support efforts to mitigate nutrient pollution of Ames pond.
2.8	Harris Pond Citizen Committee (Pinewood Lake Association)	Conservation Commission	Form committee to increase awareness and support to restore Harris Pond	Year 7-9	Committee formed to increase awareness of nutrient problem at Harris Pond. Information published on Town website. Committee sponsor and support efforts to mitigate nutrient pollution of Harris pond.

2.9	Outdated/Unwanted Prescription Program	Board of Health	Provide an opportunity for residents to dispose of these materials to protect the environment. Plan to hold it twice a year	Year 7-10	Outdated/Unwanted Prescription Program was held in October. OASIS group helped out.
2.10	Prepared and distribute handout on installation and Maintenance of On-Site Sewage disposal Systems	Board of Health	Educate the public to prevent contamination to the environment and ground water	Year 8 - Ongoing	Educating the public, owners and operators of septic tanks by handing out informational materials.
2.11	Developing and implementing program for removing mercury from the Municipal solid waste stream	Conservation Commission, Board of Health, Public Works Dept.	Developing and implementing program to eliminate elements and mercury from municipal solid waste stream	Year 8– Ongoing	1. A program was developed and implemented. 2. Continue to monitor existing program effectiveness and implementation.
2.12	Implementing and Maintaining the Septic Betterment Program	Board of Health	Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond	Year 8-Ongoing	Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas.
2.13	Presentation by the Town Engineer to Board of Selectmen and Finance Committee	Engineering Department	Presentation by the Town Engineer to Board of Selectmen and Finance Committee	Year 11 – Year 14	Presented to Board of Selectmen and Finance Committee on the use and need of the Engineering Department Operating Budget to include a Stormwater Coordination budget line item in order to comply with MS4 permit conditions. Presented 5-year plan. BOS and FC approved. Town Meeting approved.
2.14	Promote Use of LID Techniques into Site Development Plans	Engineering Dept.	Continue to promote the use of LID Techniques into Site Development Plans	Year 11 – Ongoing	The Engineering Department performs Technical Reviews for the Planning Board and Conservation Commission. Conformance of design to the local by-laws, regulations, and the DEP Stormwater Management Regulations is of Top Prioirty during the review. We consider the use of LID techniques for all stormwater designs.
2.15	Begin Preparation of Notice of Intent and Stormwater Management Plan	Engineering Dept.	Complete Preparation of NOI and SMP	Year 14 Year 15	In preparation of the new permit, we hired our consultants to aid the Town in preparing a revised NOI and SMP. Consultant has prepared NOI and SMP.

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2.16	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.
2.17	Harris Pond Invasive Plant Treatment	Conservation Commission	Treat pond for invasive species	Year 14	Hired Consultant to analyze Harris Pond for herbicide treatment for invasive plant control. Pond will be treated within the next year for removal of invasive species.
2.18	Neponset Stormwater Partnership Membership	Engineering Department	Join Partnership	Year 14 Year 15	We joined the Neponset Stormwater Partnership. We attend several meetings a year and collaborate with other towns on MS4 matters. Membership in the Neponset Stormwater Partnership is on-going. Additionally, we have expanded our contracted service with the Partnership to include Educational Mailing and School outreach (5th grade and High School)

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
3.1	Map existing drain facilities in Stoughton (catch basins, manholes, BMP's, outfalls)	Engineering Dept.	1. GPS Locate Manholes and Catch Basins.	Year 5	1. Many outfalls locations have been mapped using GPS units. Data has been incorporated into the Town-wide GIS to form a stormwater data layer.
			2. Evaluate the current visual condition.	Year 1-4	2. Approximate locations of many catch basins and manholes were incorporated into the GIS database based upon aerial photographs.
			3. Field Verify Record Drawings	Year 7- Ongoing	3. Continue to gather information and GPS locations on all outfalls in Town.
			4. Prepare Town wide Drainage Connectivity Map	Year 9-10	4. Awarded contract to consulting firm to obtain accurate GPS locations for all catch basins and drain manholes. Each structure will be visually evaluated, categorized and captured. The data will then be incorporated into the Town-wide GIS to form a stormwater data layer with exact coordinate locations.
				Year 10-11	5. Awarded contract to consulting firm to gather all the available data for the storm water structures and create the stormwater network connectivity based on the available engineering record drawing – Phase II.
				Year 10-11	6. Awarded contract to consulting firm to field verify 200 structures' data – Phase II.
				Year 11 -12	7. Field Verification of digitized stormwater infrastructure from Record Plans. Consultant will provide updated geo-database with field verification of approximately 800 structures.
				Year 11- 12	8. Supplement the data compiled from record drawings by collecting internal data from structures (catch basins/ manholes) to provide structure condition, connectivity, and additional attribute data for approximately 2,200 structures that did not have drainage information from the record drawings.
				Year 12-15	9. Continue Connectivity Mapping. Field verify and inspect additional outfalls
				Year 14-15	10. Continue Connectivity Mapping for problem areas with missing information.

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3.2	Create software application for flow direction determination	Engineering Dept.	Begin mapping outfalls and generate stormwater data layer for Town-wide GIS; research drainage system modeling options	Year 4- Onging	Hired GIS Coordinator – some data entry from existing plans completed (Year 4). Researched purchase of prepared stormwater system modeling software. Mapped all stormwater outfalls that were visual. Complete
3.3	Perform closed circuit TV inspection of suspect areas	Public Works Dept.	Inspect and correct problem areas in drainage network	Year 2-6 Year 6- Ongoing Ongoing	All drains Inspected. Replaced failed drainage on Ross Avenue. Cleaned sediment from Red Wing Brook (York Street area). South Street culvert repair, Gay Street equalization pipe, School Street equalization pipe, Replace drains on West Street. Approximately half of the Town's public drains have been inspected. Additional areas continued to be completed as necessary to investigate flow restrictions or failures. Continuously inspecting. Damaged pipes are repaired immediately.
3.4	Create and Enforce Illicit Connection By-Law	Engineering Dept., Board of Health, Public Works Dept.	1. Pass By-Law at Annual Town Meeting. 2. Enforce By-Law.	Years 3-4 Ongoing Ongoing	Illicit Discharge Detection and Elimination By-Law created, approved and adopted. Completed. 1. Inspection in field during utility tie-ins and during project reviews (residential, subdivision, site plan review). 2. Continue to enforce By-law.
3.5	Information Distributed on Proper Waste Management	Engineering Dept., Board of Health, Public Works Dept.	1. Provide targeted information regarding proper hazardous waste material disposal directly to local businesses. 2. Ensure compliance with local HAZMAT regulations.	Ongoing Year 2-5, 9-10	Continue to provide information to local businesses on proper hazardous waste material disposal. (ongoing) Provided brochures from Northeast Waste Management to local businesses, auto body shops, etc.; all related businesses are regulated by the Town's HAZMAT bylaw with oversight by Board of Health.
3.6	Outfall Screening & Monitoring	Engineering Dept., Technical Committee	Perform inspection of known outfalls	Year 5-8 Ongoing	1. During GPS of outfalls structures, collected data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. 2. Continue to develop the list of outfalls requiring further investigation regarding the potential for illicit discharge.
3.7	Draft Stormwater Action Plan	Stormwater Committee, Engineering Dept.	10 Year Plan for Stormwater Management	Year 4	Established revolving fund, passed by-law, enforced erosion control, completed several improvement projects, perform inspections, etc. Complete.

3.8	Public and Semi-Public swimming pool back wash discharge	Board of Health	1. Ensure that back wash water is discharged properly in pre-approved location so it does not contaminate the ground water. 2. Enforce current by-law requirements.	Ongoing	Continue to enforce Public and Semi-Public swimming pool back wash discharge regulations and bylaw.
3.9	Floor Drain Regulation	Board of Health, Engineering Dept.	Enforce the commercial and industrial hazardous waste floor drain regulations.	Ongoing	Enforcing the commercial and industrial hazardous waste floor drain regulations to prevent the discharge of hazardous waste and other pollutants from industrial and commercial establishments to surface and ground water resources.
3.10	Hazardous Waste Ground water protection bylaw	Board of Health	Enforce the Hazardous Waste Groundwater Protection By-law	Ongoing	Continue to enforce the Hazardous Waste Ground water protection bylaw to preserve and maintain existing and potential groundwater supply and groundwater recharge.
3.11	Gay Street Drainage Improvements	Engineering Dept., Public Works Dept.	Survey, Design, and Construct Improvements	Year 8 Year 8	1. Engineering Department surveyed and designed improvement plans in enhance flood storage and water quality for problem area. New grading, deep sump catch basins, re-paved roadway. 2. PWD constructed project. Project is complete.
3.12	Bay Street Culvert	Engineering Dept., Public Works Dept.	Survey, Design, and Construct Improvements	Year 8	Installed large culvert, deep sump catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues.
3.13	Central Street sewer extension	Engineering Dept., Public Works Dept.	Eliminate contamination caused by sewerage system in Central Street	Year 8	Design and implement sewer extension in Central Street that replaced failed septic tanks that were contaminating the ground water due to soil factor. Project is completed.
3.14	Installing Curbs and Berms	Engineering Dept., Public Works Dept.	Eliminate contamination by installing street curbs and berms to contain runoff	Year 8-9 Ongoing	Installed approximately 9,000 l.f of curbing in Canton Street. Continuously repairing curbs and berms in need of repair in roads and town owned sites.
3.15	Implementing and Maintaining the Septic Betterment Program	Board of Health	Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond	Year 8 - Ongoing	Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas.
3.16	Pratt's Court Culvert	Engineering Dept., Public Works Dept.	Design and Install new culverts	Year 9-10	Installing culverts, deep catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues.

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3.17	Sewer extension in Park Street	Engineering Dept., Public Works Dept.	Eliminate contamination caused by septic systems in southern part of Park Street	Ongoing	Design of sewer extension in southern part of Park St, Campanelli Parkway, Shuman Ave, Tenth St and southern part of Turnpike Street. This will reduce contamination to the groundwater aquifer due to the high number of failed septic systems in the area.
3.18	Drainage Improvements to Cedar Hill Golf Course	Engineering Dept., Public Works Dept.	1. Survey subject area. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements.	Year 9-10 Year 9-10 Ongoing	1. Engineering Department has completed a topographic survey of the area. 2. Engineering Department has completed the design plans to improve runoff issues associated with the Cedar Hill Golf Course. 3. PWD will construct the drainage improvements.
3.19	Stormwater Infrastructure Repairs	Public Works Dept.	Repair Infrastructure as needed	Year 9 – Ongoing Year 12 Year 13 Year 15	Repair or replace catch basin in need of repair. Year 11: CB's: Walnut Court, Parkview Avenue Flared End: Powell Street Year 12 Outfall: Plain Drive (new rip rap, clear vegetation, clean channel) Repaired various catch basin, manhole, and pipes Installed connection for existing dry-wells on Ewing Drive to drainage system on Charles Ave. Ext.
3.20	Site Plan Review/ Subdivision Control	Engineering Dept, Planning Board, Conservation Commission	1. Enforce site plan review procedures.	Ongoing	1. Continue to enforce Site Plan Review By-law procedures. 2. Require Erosion and Sediment Control Plan for all projects. 3. Monitor site plans for illicit connections.
3.21	ID all MS4 outfalls	Engineering Dept. / GIS	Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics	Year 3-5	Most outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge.
3.22	Upgrade sewer system	PWD, Engineering	Eliminate all known sewer issues of existing infrastructure	Ongoing	1. Design and implement new sewer connections and extensions when feasible. 2. Constantly evaluating town system for future upgrades or repairs. 3. Engineering Department inspects all sewer connections. 4. Many pipes are being lined to reduce infiltration and inflow issues.

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3.23	Establish Town wide Sewer Priority Plan	Engineering, PWD	Create Townwide Sewer Priority Plan	Year 12 – Year 13	Update and build upon previous 1980's Sewer Needs Analysis. Goal of the plan is to analyze all remaining areas of Town without sewer and set a priority ranking to further implement sewer expansion in Town. Town Meeting has approved funds June of 2014. Project is completed and endorsed by the BOS.
3.24	Inspect Isolated Lands subject to Flooding	Engineering	Inspect Isolated Lands subject to flooding	Year 11 - Ongoing	Environmental Affairs Officer continues to inspect ILSF's and potential vernal pools for possible contamination from stormwater runoff.
3.25	Outfall Inspection	Engineering, Public Works Dept	Complete Report on findings	Year 12 – Year 13 Year 13 –14 Year 13-14	Inspect condition of additional outfalls verified by as-built plan digitization. Inspect and screen 134 remaining potential outfalls Prepare geodatabase with inspected structures and coordinate updates to the Town's internal GIS and PeopleGIS Staff mapping system.
3.26	Perform Hydraulic Study of Sanitary Sewer System	Engineering Dept.	Complete Hydraulic Study	Year 13-14	Town's consultant is performing a hydraulic study with metering. This will help to Town to fully understand the existing capacity of the system. The possibility of potential future overflows, if any, will result from this analysis.
3.27	ID additional MS4 outfalls	Engineering Dept.	Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics	Year 13-14	We located more outfalls. Outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, etc. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge.
3.28	Map gaps in drainage connectivity	Engineering Dept.	Map gaps in drainage connectivity	Year 13-14	Continue to build the MS4 GIS data to map connectivity and direction of flow for drainage pipes in areas with missing information. Integrate data with internal GIS and PeopleGIS website.
3.29	Ames Pond Sampling Program through the Taunton River Watershed	Conservation Commission	Test Samples for nutrients, TSS, Fecal Coliform, and other parameters	Year 13	Results were evaluated and yielded that the Ames Pond Watershed runoff was not indicative of a problem with NPS.
3.30	Enforcement Orders	Environmental Affairs Officer	Issue Enforcement Orders/ Mitigation of Illicit Discharge	Year 13	Issuance Enforcement Order and Required Mitigation for: 1. Failing Septic System at #1333 Park Street 2. Failing Septic System at #1165 Park Street 3. Insufficient Construction Site Runoff Control for a large subdivision project off of Kelsey Drive 4. Insufficient Construction Site Runoff Control for large hotel site
3.31	Establish Cesspool Failure Regulation	Board of Health	Enforce Regulation	Year 13-Year 14	The Board of Health now requires all cesspools to be upgraded when a house sells no matter what conditions the system is in. A new compliant Title V system must be constructed.

3.32	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.
3.33	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.
3.34	Outfall Inspection	Engineering Department	Complete Inspection	Year 14	Re-inspect condition, material, size, flow connectivity, photograph, and headwall for 199 previously mapped outfalls.
3.35	Outfall Sampling	Engineering Department	Complete Sampling	Year 14	Continued Outfall Sampling Program of 75 outfalls.
3.36	Outfall Sampling	Engineering Department	Complete Sampling	Year 15	Continued Outfall Sampling Program of 22 outfalls.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
4.1	Selection of Town owned BMP's	Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission	Establish and Publish standards	Year 3 Year 4 Year 5 – Ongoing	1. Established and published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review.

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4.2	Selection of Stormwater Management Measures & Guidelines	Technical Committee, Engineering Dept., Conservation Commission	Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects)	Years 2-4 Ongoing	1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures; 3. Stormwater and Conservation By-law approved at Town Meeting and several orders issued by Conservation Committee (Year 4). Complete. 4. Permit is required for new construction. 5. Continue to review all development to ensure compliance with the by-laws and regulations.
4.3	Technical Committee creates Stormwater Erosion Guidelines	Technical Committee	Publish guidelines	Year 2	Publish standards (Year 2-3), By-law approved at Town Meeting (Year 4). Complete.
4.4	Enforcement of Wetlands and Environmental Regulations	Engineering Dept., Conservation Commission	Enforced during all construction	Year 4-9 Ongoing	Enforced during all construction by Conservation Commission (Year 2-3), enforcement orders issued, fines imposed (Year 5); No enforcement orders were issued and no fines were imposed during Year 7. Continue to enforce Wetland Regulations.
4.5	Require Construction Period Pollution Plan for all subdivisions and commercial development >1 acre	Engineering Dept. , Planning Board, Conservation Commission	Require submittal of Construction Period Pollution Prevention Plan in accordance with the EPA General Permit for Construction Activities for all projects >1 acre	Ongoing	1. Review all Construction Period Pollution Plans for compliance with EPA General Permit for Construction Activities. 2. Perform periodic inspections to ensure compliance with General Permit.
4.6	Require Erosion Control Measures on all projects	Conservation Commission, Engineering Dept.	Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects)	Ongoing	1. Enforced by Conservation Commission and Engineering Department during all construction activities. 2. Require Erosion Control plan for all applicable projects. 3. Stormwater By-law and Conservation By-laws established and continue to be enforced. 4. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures. 5. Continue to enforce By-laws and compliance with DEP Stormwater Management Regulations.

4.7	Vegetated Buffer	Conservation Commission	Reduce nonpoint source pollution in watershed of drainage and surface runoff	Ongoing	Enforced by Conservation Commission during all construction activities
4.8	Site Plan Review/ Subdivision Control	Engineering Dept, Planning Board, Conservation Commission	1. Enforce site plan review procedures.	Ongoing	Continue to enforce Site Plan Review By-law procedures.
4.9	Erosion Control & Stormwater Site Inspections during Construction	Engineering Dept, Conservation Commission	Perform weekly site inspections on all previously permitted projects to help eliminate sediment conveyance to drainage facilities, public area, and wetland resource areas.	Ongoing	1. Continue to inspect construction projects for compliance with approved site plans and By-laws; 2. Implemented inspection program consistent with bylaw and regulations. 3. Monitor and record all issues.
4.10	Enforcement Orders	Environmental Affairs Officer	Issue Enforcement Orders/ Mitigation of Illicit Discharge	Year 13 Year 14	Issuance Enforcement Order and Required Mitigation for: 1. Insufficient Construction Site Runoff Control for a large subdivision project off of Kelsey Drive 2. Insufficient Construction Site Runoff Control for large hotel site 3. Issued another Enforcement Order for Insufficient Construction Site Runoff Control for a large subdivision project off of Kelsey Drive
4.11	Create Stormwater Inspection Tablet Application	Engineering Department	Utilize Inspection Application	Year 13	We perform weekly inspection on all construction sites using this application. The form gets automatically uploaded to our GIS system and is stored based on the location of the inspection.
4.12	Perform Electronic Site Inspections	Engineering Department	Use Inspection Application	Year 14-Ongoing	Continue to utilize electronic application to perform periodic stormwater inspections for private and public construction projects.

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
5.1	Technical Committee to educate Planning Board & ZBA	Technical Committee	Identify Needed changes in existing Rules and Regulations/By-Laws	Year 3-4	By-Law approved. Complete.
5.2	Draft required changes	Stormwater Committee	Creation of new By-Laws	Year 3-4	By-Law approved; Complete.
5.3	Ongoing Review of Stormwater Impact	Engineering Dept, Stormwater Committee, Conservation Commission	Each project to be reviewed prior to construction	Year 5 - Ongoing	Engineering staff on Stormwater Committee continue to participate in comprehensive development site plan review prior to project approval. Ongoing.
5.4	Required Deed restrictions	Boards	Ensure long term maintenance by property owner	Year 4- Ongoing	All new site development in Stoughton continues to require post construction stormwater management with operation and maintenance manuals submitted prior to project approval. Ongoing
5.5	Require Long Term Operation and Maintenance & Pollution Prevention Plans for all subdivisions and commercial development >1 acre	Engineering Dept. , Planning Board, Conservation Commission	1. Require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. 2. Review plans for compliance with local, state, and federal regulations. 3. Ensure long term maintenance by property owner.	Ongoing Year 5-Ongoing Year 4-Ongoing	1. Continue to require submittal of Long Term Operation and Maintenance Plan & Pollution Prevention Plan. 2. Continue to review plans for compliance with local, state, and federal regulations. 3. Require Deed Restrictions for future projects referencing Long Term Operation & Maintenance Plan for drainage facilities.
5.6	Asbestos Removal	Board of Health	Enforce asbestos removal regulations and by-law	Ongoing	Enforcing asbestos removal regulations and bylaw.
5.7	Lead paint Removal	Board of Health	Enforcing lead paint removal regulations and bylaw	Ongoing	Enforcing Lead paint removal regulations and bylaw.

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5.8	Drainage Improvements to Cedar Hill Golf Course	Engineering Dept., Public Works Dept.	1. Survey subject area. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements.	Year 9 Year 9-10 Ongoing	1. Engineering Department has completed a topographic survey of the area. 2. Engineering is currently designing a plan to improve runoff issues associated with the Cedar Hill Golf Course. 3. Once designed, the PWD will construct the drainage improvements.
5.9	Selection of Stormwater Management Measures & Guidelines	Technical Committee, Engineering Dept., Conservation Commission	Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects)	Years 2-4, Ongoing	1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures. 3. Stormwater and Conservation By-law approved at Town Meeting (Year 4). Complete. Several orders issued by Conservation Committee. 4. Continue to review all development to ensure compliance with the by-laws and regulations.
5.10	Vegetated Buffer	Conservation Commission	Reduce nonpoint source pollution in watershed of drainage and surface runoff	Ongoing	Enforced by Conservation Commission during all construction activities
5.11	Collecting and storing of roof generated runoff for domestic irrigation (Rain Barrel)	Conservation Commission	Educating public to collect and store roof runoff for on site irrigation and ground water replenishment. Plans to increase awareness next year by doubling the sale	Year 8 – 9 Ongoing	Educate public of the benefit for collecting and storing roof generated runoff for domestic irrigation. Sold about 100 units. Continue to sell rain barrels and educate public about benefits.
5.12	Gay Street Drainage Improvements	Engineering Dept., Public Works Dept.	Survey, Design, and Construct Improvements	Year 8 Year 8	1. Engineering Department surveyed and designed improvement plans in enhance flood storage and water quality for problem area. New grading, deep sump catch basins, re-paved roadway. 2. PWD constructed project. Project is complete.
5.13	Bay Street Culvert	Engineering Dept., Public Works Dept.	Survey, Design, and Construct Improvements	Year 8	Installed large culvert, deep sump catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues.
5.14	Installing Curbs and Berms	Engineering Dept., Public Works Dept	Eliminate contamination by installing street curbs and berms to contain runoff	Year 8-9 Ongoing	Installed approximately 9,000 l.f of curbing in Canton Street. Continuously repairing curbs and berms in need of repair in roads and town owned sites.

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5.15	Pratt's Court Culvert	Engineering Dept., Public Works Dept	Design and Install new culverts	Year 9-10	Installing culverts, deep catch basins, providing infiltration and replicating wetlands to improve hydraulic and hydrologic issues.
5.16	Drainage Improvements to Cedar Hill Golf Course	Engineering Dept., Public Works Dept	1. Survey subject area. 2. Create Design Plans to remedy runoff issue. 3. PWD to construct improvements.	Year 9-10 Year 9-10 Projected to be Year 10	1. Engineering Department has completed a topographic survey of the area. 2. Engineering is currently designing a plan to improve runoff issues associated with the Cedar Hill Golf Course. Water quality and increased infiltration will be incorporated into design. 3. Once designed, the PWD will construct the drainage improvements.
5.17	Create listing of "Hot Spot" drainage areas in Town	Public Works Dept.	1. Create listing of "Hot Spot" drainage areas in Town. 2. Clean Catch Basins and Roadway Sweeping more often. Monitor closely.	Year 9 - Ongoing	1. PWD has created list of these areas. 2. PWD clean catch basin and sweeps roadways in these areas more often and than other areas.
5.18	Operation & Maintenance Plan Enforcement	Engineering, Planning Board, Conservation Commission	Require recording of OM Plan for all applicable developments	Year 11 – Ongoing	Standard condition of approval shall be to record approved Long Term Operation and Maintenance Plan in all Planning Board and Conservation Commission approvals. Proof of recording shall be submitted to Town.
5.19	Phase 1 Dam Safety Inspection	Engineering Dept.	Inspect Two (2) Town Owned Dams for deficiencies	Year 13	Inspected and created report for Two(2) Town Owned Dams: 1. Town Pond Dam 2. Woods Pond Dam
5.20	Low Impact Design Education to Town Employees	Engineering Dept.	Educate staff on various types of LID techniques	Year 13 & Year 14	Recommend and perform technical reviews for all LID designs proposed on new and re-development projects in Town.
5.21	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14 Year 15	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We were awarded the grant. The Stoughton Engineering Department has provided in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared.
5.22	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law to address the requirements of the new permit. Public Outreach will be required.

5.23	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
6.1	Catch Basin Cleaning	Public Works Dept.	Clean all catch basins in Town at least twice per year to prevent excess Total Suspended Solids for entering drainage system	Ongoing	1. All catch basins in the Urbanized Area have been cleaned in the past year but most are cleaned two times per year. Some basins more frequently cleaned based on need. 2. PWD maintains records of catch basin cleaning.
6.2	Regular Street Sweeping	Public Works Dept.	Sweep all town roads at least twice per year to prevent excess sediment and TSS from entering storm system	Ongoing	All streets are swept twice per year (Spring and Fall). Problem areas are swept more frequently. Sidewalks and also swept.
6.3	Basin/Swale Maintenance	Public Works Dept.	Maintain all town owned basins and swales	Ongoing	Continue to maintain all town owned basins and swales as needed.
6.4	Inside storage of Hazardous Materials	Public Works Dept., Board of Health	No hazardous material leaks or spills	Ongoing	Fire Department licenses all business handling hazardous materials. Board of Health enforces Aquifer Protection By-Law. New Public Works Garage exceeds standards, has fully updated SPCC plan which is adhered to. All hazardous materials are stored inside.
6.5	Obtain "No exposure" rating from EPA for Multi-Sector General	Public Works Dept., Fire Dept.	Obtain "No exposure" rating from EPA	Ongoing	"No exposure" rating obtained. Complete. Maintain "No Exposure" rating.
6.6	Pesticide-free landscaping practices	Conservation Commission	Require pesticide-free landscaping practices as special requirement in Orders of Conditions	Permit Term	Require Pesticide-free landscaping practices as special requirement in Orders of Conditions.
6.7	Municipal Employee Training	Public Works Dept.	Provide two training sessions to Municipal employees	Year 5	Conducted two training sessions for municipal employees. Topics included NPDES Phase II Stormwater program requirements, the Town's stormwater management plan. Illicit discharge detection and elimination and good house keeping practices. Aired video "After the Storm" for all employees at Town Hall. Complete.

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6.8	Ames Long Pond Hydro-raking Program	Conservation Commission	Examine the feasibility of management of an extensive exotic vegetation problem in Stoughton Ponds.	Year 6 Year 9-10	Performed aesthetic pond raking project with oversight by NHESP and other agencies, and turbidity monitoring. Remove the invasive vegetated overgrowth with special machinery to transport the material off-site to local agriculture operations for composite and organic soil fortification to reduce chemical contamination of drainage runoff in the watershed. Complete. Article submitted to 2011 Annual Town Meeting for purchasing the Hydro Rake.
6.9	Fixing leaking or damaged Sewer Pipe lines	Public Works Dept.	Eliminating I & I	Ongoing	All Sewer Pipe lines are being captured to detect any leakage to be eliminated and fixed. PWD constantly fixing various lines in Stoughton.
6.10	Outdated/Unwanted Prescription Program	Board of Health	Provide an opportunity for residents to dispose of these materials to protect the environment.	Ongoing	Program is held every year.
6.11	Maintain and remove exotic invasive vegetation problems in east basin of Ames Long Pond	Conservation Commission	Developing program for removing an extreme overgrowth of exotic invasive aquatic vegetation	Year 8-9	Developing program for removing an extreme overgrowth of exotic invasive aquatic vegetation for the east basin of Ames Long Pond.
6.12	Inside storage of mercury	Public Works Dept.	Eliminate mercury pollution in Town Facilities.	Year 8 - ongoing	A specialized storage shed was built for mercury and other heavy material.
6.13	Site Plan Review/ Subdivision Control	Engineering Dept, Planning Board, Conservation Commission	Update Site Plan Review procedures to be consistent with other by-laws.	Year 9	Update Site Plan Review stormwater procedures to be consistent with other by-laws.
6.14	By-law/ Regulation Review	Engineering Dept, Conservation Commission, Planning Board, Public Works Dept.	1. Constantly evaluating regulations for improvement. 2. Evaluate and review current Stormwater By-Laws and regulations 3. Evaluate and review Stormwater related By-Laws and regulations	Ongoing Year 10-11 Year 10-11	Constantly evaluating regulations and by-laws for consistency and improvement. Working with NepRWA to evaluate the current stormwater By-Law and regulation and incorporate any needed regulations to comply with the new proposed stormwater permit. Working with NepRWA and all involved Town departments to evaluate other departments' By-Laws or regulations that are stormwater related
6.15	Stencil specified storm drains	Public works Dept.	Identified individual watersheds and stencil catch basins.	Year 2-4 Year 6	Catch Basins Stenciled. Complete. Stencils were checked and re-painted as necessary during Year 6.

6.16	Compost Generator	Conservation Commission	Reduce the volume of solid waste by generating compost to improve vegetated cover in yards in the watershed to reduce sediment / nutrient deposition and pollution of surface water bodies and streams	Year 8-9	Educate public of the compost generator and benefits of having non chemical fertilization for yards that will improve vegetation and eliminate pollution to the ground water. Sold about 50 units.
6.17	Implementing and Maintaining the Septic Betterment Program	Board of Health	Replacing failed septic systems, and trying to obtain additional funding to continue the program for next year and beyond	Year 8 -9	Replacing of individual septic systems. The program has grown up to offer Sewer Connection for many individuals as an alternative of replacing existing septic system. There has been a substantial increase in septic repair and upgrade applications. This has helped to eliminate ground water contamination in these areas.
6.18	Selection of Town owned BMP's	Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission	Establish and Publish standards	Year 3 Year 4 Year 5 – Ongoing	1. Established and published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review.
6.19	Selection of Stormwater Management Measures & Guidelines	Technical Committee, Engineering Dept., Conservation Commission	Enforce compliance with local Conservation and Stormwater By-laws and DEP Stormwater Management Regulations via project reviews (Conservation, Site Plan Review, Subdivision Projects)	Years 2-4 Ongoing	1. Enforced during all construction by Conservation Committee and Engineering Department. 2. Subdivision and Site Plan Review reference DEP Stormwater Management Regulations for compliance procedures; 3. Stormwater and Conservation By-law approved at Town Meeting and several orders issued by Conservation Committee (Year 4). Complete. 4. Permit is required for new construction. 5. Continue to review all development to ensure compliance with the by-laws and regulations.

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6.20	Town Owned Facility Inspections	Engineering Dept.	Perform inspections and prepare report summarizing findings and recommendations	Year 11 Contract Awarded to Consultant Year 12	Evaluation of existing procedures & recommend corrective action/ measures on the following for 16 Town Owned facilities: 1. Indoor/ outdoor storage & disposal of solid & hazardous waste as it effects stormwater runoff. Inventory floor drains & storage maintenance of permittee-owned vehicles. 2. Spill Prevention Plans, if needed. 3. Employee training methods 4. Dumpster & other waste management measures. 5. Storage of permittee-owned vehicles 6. Fueling areas owned by the permittee 7. Vehicle washing Services are underway.
6.21	Spill Prevention Control and Countermeasure Plan (SPCC) for Highway Garage	Public Works Dept.	Prepare SPCC Plan for Highway Garage	Year 11 – Year 12	SPCC Plan will be prepared for the Highway Garage in accordance with Tier 1 EPA template. Inspect site conditions and interview site managers. Completed in Year 12.
6.22	Formalize Catch Basin Cleaning Optimization Program	Public Works Dept.	Implement Plan	Year 12 - Ongoing	Evaluate current practices and techniques. Prepare report formalizing a catch basin cleaning optimization program custom to Stoughton.
6.23	Formalize Street Sweeping Program	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Evaluate current practices and techniques. Prepare report formalizing a Street Sweeping Program custom to Stoughton.
6.24	Formalize Winter Road Maintenance Procedures	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Evaluate current practices and techniques. Formalize Winter Road Maintenance Procedures
6.25	Inspection & Maintenance Plan	Public Works Dept.	Implement Plan	Year 12 – Ongoing	Creation of Inspection/ Maintenance frequencies and procedures for the various types of structural stormwater BMP's (i.e. swales, retention/detention basins, etc.) that the Town maintains.
6.26	Parks & Open Space Operation & Maintenance Plan	Public Works Dept., Recreation Dept.	Implement Plan	Year 12 – Ongoing	Creation of Operation and Maintenance procedures for the proper use, storage and disposal of pesticides, herbicides and fertilizers, including minimizing the use of these products.
6.27	Ames Pond Lake Management Plan	Conservation Commission	Implement Plan	Year 12- Year 13	Hire a consultant to establish a Lake Management Plan for Ames Pond. An article has been presented for the upcoming Town Meeting for the funding to prepare and implement the plan.
6.28	Vegetation Management Program in Town Lakes and Ponds	Conservation Commission	Implement Plans	Year 13 Year 15- Ongoing	This management will commence with a mitigation program of the resulting re-occurring organic sedimentation in Harris's Pond (Pinewood Lake). Performed Vegetation Study of Albert's Pond

6.29	Phase 1 Dam Safety Inspection	Engineering Dept.	Inspect Two (2) Town Owned Dams for deficiencies	Year 13	Inspected and created report for Two(2) Town Owned Dams: 3. Town Pond Dam 4. Woods Pond Dam
6.30	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
6.31	Perform Electronic Site Inspections	Engineering Department	Use Inspection Application	Year 14-Ongoing	Continue to utilize electronic application to perform periodic stormwater inspections for private and public construction projects.
6.32	GPS Field Training	Engineering Department	Complete Training	Year 14	Hired Consultant to train the Engineering Department on how to inspect and collect data using the Town's GPS equipment.
6.33	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.
6.34	Revise Stormwater Catchments and Connectivity Map	Engineering Department	Complete Revisions	Year 14	We received revised information from our consultants and have updated our Town GIS System to include the changes.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Duration	Progress on Goal(s) – Permit Year 10
7.1	ID all MS4 outfalls	Engineering Dept.	Continue to screen outfalls for data inventory, outfall condition, dry weather flow and flow characteristics	Year 3-5	Most outfall structures have been screened to collect data to create comprehensive database on outfalls. Data collected included structure type/material, presence of dry weather flow, flow characteristics, presence of sediment, et. Develop listing of outfalls requiring further investigation regarding the potential for illicit discharge.
7.2	Find source of pollutant loading	Engineering Dept.	Monitor state listing of impaired waters, adjust stormwater management plan accordingly	Year 4-5	There are no currently established TMDLs for receiving waters within the Town of Stoughton. Complete.
7.3	Mitigate pollutant loading	Technical committee and Stormwater committee	Monitor state listing of impaired waters, adjust stormwater management plan accordingly	Year 5	There are no currently established TMDLs for receiving waters within the Town of Stoughton. Complete.

7.4	Identify sites for BMP's	Engineering Dept.	Produce plans identifying potential sites	Year 8-9	Working with Neponset River Watershed Association to identify the sites and select BMPs suited for each site.
7.5	Designing and constructing BMP	Engineering Dept., Public Works Dept., School	Applying for a grant to design and construct BMP	Year 10-11	Applying for grant to design and construct a low impact BMP at school site based on previous study that was completed on Year 9.
7.6	Vegetated Buffer	Conservation Commission	Reduce nonpoint source pollution in watershed of drainage and surface runoff	Ongoing	Enforced by Conservation Commission during all construction activities
7.7	Selection of Town owned BMP's	Technical Committee, Engineering Dept., Public Works Dept., Conservation Commission	Establish and Publish standards	Year 3 Year 4 Year 5 – Ongoing	1. Established and published standards. Complete. 2. Applied to new development under site plan review By-Law (IKEA, Target, Page Place) 3. Enforce use of BMP's during site plan review.
7.8	Applied for 319 Grant Application trough the Neponset River Watershed Association Grant Awarded Construction	Engineering Dept	Complete Grant	Year 13 Year 14 Year 15	The grant would provide supplemental funding to the Town to construction stormwater BMP's on and near a school site in Town located within the Steep Hill Brook Watershed. The Town is going to provide in-house engineering design and construction to match grant funding. Engineering Department performed topographic survey, soil evaluations, and has begun Design Plans. Design complete, construction of project complete Spring 2018.
7.9	Applied for DEP SWWMI Stormwater Grant	Engineering Dept.	Complete Tasks in Grant	Year 14	We applied for a Stormwater Grant that funds 30% Stormwater Improvement Design Plans for three sites in Stoughton (Dawes School, Hansen School, and Central/ West Street Intersection). We were awarded the grant. The Stoughton Engineering Department is providing in-kind services for topographic land survey and soil evaluations. Design Plans are currently being prepared.
7.10	Require Private Projects to Implement Low Impact Design Features and/ or Enhanced Stormwater Treatment	Engineering Department	N/A	Year 14 - Ongoing	The Engineering Department performs technical drainage reviews for the Planning Board and Conservation Commission. We require projects implement Low Impact Design features, Infiltration Basins and Water Quality Units to treat at least the first flush of runoff (>1").

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7.11	Revise By-law for new Permit	Engineering Department	Town Meeting to approve By-law	Year 14 - Ongoing	In Preparation of the New Permit in July, we have started looking at revising our existing Stormwater By-law address the requirements of the new permit. Public Outreach will be required.

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Part IV. Summary of Information Collected and Analyzed

No data has been collected or analyzed yet.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2011 through March 31, 2012)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	($)	
Total program expenditures since beginning of permit coverage	($)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to	Reviewing Existing	Draft in

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	Phase II	Authorities	Drafted	Review	Adopted
Regulatory Mechanism Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)	**Response**
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

(Preferred Units) Response

Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and $)	
Complaints/concerns received from public **	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or per basin contract rate **	($/hr or $ per basin)	
• Disposal cost**	($)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	

• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	
• Disposal cost**	($)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

(Preferred Units) Response

Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	

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: