

Part I: General Conditions

General Information

Name of Municipality or Organization: State:

EPA NPDES Permit Number (if applicable):

Primary MS4 Program Manager Contact Information

Name: Title:

Street Address Line 1:

Street Address Line 2:

City: State: Zip Code:

Email: Phone Number:

Fax Number:

Other Information

Stormwater Management Program (SWMP) Location (web address or physical location, if already completed):

Eligibility Determination

Endangered Species Act (ESA) Determination Complete?

Eligibility Criteria (check all that apply): ☐ A ☒ B ☐ C

National Historic Preservation Act (NHPA) Determination Complete?

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? 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)

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? Effective Date or Estimated Date of Adoption (MM/DD/YY):

Construction/Erosion and Sediment Control (ESC) Authority Adopted? Effective Date or Estimated Date of Adoption (MM/DD/YY):

Post- Construction Stormwater Management Adopted? Effective Date or Estimated Date of Adoption (MM/DD/YY):

Part II: Summary of Receiving Waters

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

[illegible]

[illegible]

[illegible]

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 Wetlands near Stetson Pond (42.02513, -70.82192)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near West Chandler Pond (42.04678, -70.78501)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands near West Chandler Pond (42.03816, -70.79258)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Little Pudding Brook (42.06993, -70.79933)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Lower Chandler Pond (42.03687, -70.76391)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to North River (42.10355, -70.78931)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Oldham Pond (42.07418, -70.84199)	2	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Pudding Brook (42.08508, -70.78279)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Rocky Run (42.08769, -70.84053)	3	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to Tubbs Meadow Brook (42.03910, -70.81607)	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Unnamed Wetlands to West Chandler Pond (42.03885, -70.78395)	26	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
		☐	☐	☐	☐	☐	☐	☐	☐	☐	
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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 Implementation
Brochures/Pamphlets	Publish outreach materials; Incorporate stormwater alerts into Water Smart system; Distribute New Resident Packets within Wetland Protection Areas; Distribute pet waste control information	Residents	DPW, Board of Health	Distribute at least two educational messages within the permit term (5 Years)	2018
Brochures/Pamphlets	Publish outreach materials; Distribute information to septic maintenance contractors; Include information in permit application materials	Businesses, Institutions and Commercial Facilities	DPW, Board of Health,	Distribute at least two educational messages within the permit term (5 Years)	2018
Brochures/Pamphlets	Publish outreach materials; Distribute information to septic maintenance contractors; Include information in permit application materials	Developers (construction)	DPW, Board of Health	Distribute at least two educational messages within the permit term (5 Years)	2018

Displays/Posters/Kiosks	Publish outreach materials; Distribute information on industrial groups based on zoning and property use	Industrial Facilities	DPW, Board of Health	Distribute at least two educational messages within the permit term (5 Years)	2018
Web Page	Develop stormwater website; Develop stormwater-specific social media account; Consider creating Resident Stormwater Alert System; Utilize materials publicly available from DEP, EPA, and North & South Rivers Watershed Associations	Residents	DPW, Board of Health, NSRWA	Create/continue to maintain stormwater website	2018
Web Page	Develop stormwater website; Develop stormwater-specific social media account; Utilize materials publicly available from DEP, EPA, and North & South Rivers Watershed Associations	Businesses, Institutions and Commercial Facilities	DPW, NSRWA	Create/continue to maintain stormwater website	2018
Web Page	Develop stormwater website; Utilize materials publicly available from DEP, EPA, and North & South Rivers Watershed Associations	Developers (construction)	DPW, NSRWA	Create/continue to maintain stormwater website	2018

[illegible]

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

Part III: Stormwater Management Program Summary (continued)

MCM 2: Public Involvement and Participation

[illegible]

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 Implementation
SSO inventory	Develop SSO inventory in accordance of permit conditions	DPW	Complete within 1 year of effective date of permit	2018
Storm sewer system map	Create map and update during IDDE program completion	DPW	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	DPW	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	DPW	Complete 10 years after effective date of permit	2018
Employee training	Train employees on IDDE implementation	DPW	Train annually	2018
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	DPW	Complete 3 years after effective date of permit	2018
Conduct wet weather screening	Conduct in accordance with outfall screening procedure	DPW	Complete 10 years after effective date of permit	2018
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	DPW	Complete ongoing outfall screening upon completion of IDDE program	2018
IDDE Ordinance/Bylaw	Enforce IDDE bylaw	DPW, Board of Health, Conservation Commission	The Town will continue to enforce the IDDE bylaw	2018

[illegible]

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	DPW, Planning Board, Zoning Board, Consultant	Complete within 1 year of the effective date of permit	2018
Site plan review	Complete written procedures of site plan review and begin implementation	DPW, Planning Board, Zoning Board	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	DPW, Planning Board, Zoning Board	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	DPW, Planning Board, Zoning Board	Complete within 1 year of the effective date of permit	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	DPW, Planning Board, Zoning Board	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	DPW, Planning Board, Zoning Board	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	DPW, Planning Board, Zoning Board	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.	DPW, Planning Board, Zoning Board	Complete 4 years after effective date of permit and implement recommendations of report	2018

[illegible]

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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	Complete and implement 2 years after effective date of permit	2018
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory	DPW	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	Complete 2 years after effective date of permit	2018
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for maintenance garages, transfer stations, and other waste-handling facilities	DPW	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	Clean catch basins on established schedule and report number of catch basins cleaned and volume of material moved annually	2019
Street sweeping program	Sweep all streets and permittee-owned parking lots in accordance with permit conditions	DPW	Sweep all streets and permittee-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	Implement salt use optimization during deicing season	2018

[illegible]

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.**

[illegible]

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.**

[illegible]

Part IV: Notes and additional information

Use the space below to indicate the part(s) of 2.2.1 and 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

Figure: Outfalls by Watershed

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, nor the Plymouth Redbelly Turtle in the MS4 area. An MS4 Project Review Request Letter has been mailed to U.S. Fish and Wildlife Service on August 16, 2018 and was delivered on August 17, 2018. Once the ESA Determination is approved by USFWS, I will resubmit the first page of this NOI with the ESA Determination marked as Complete.

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).

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:

Edwin J. Thorne

Digitally signed by Edwin J. Thorne
Date: 2018.09.20 10:17:59 -04'00'

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

NOI Submission

Please submit the form electronically via email using the "Submit by Email" button below or send in a CD with your completed NOI. You may also print and submit via mail using the address below if you choose not to submit electronically. The outfall map required in Part I of the NOI (if applicable) can be submitted electronically as an email attachment OR as a paper copy.

Permittees that choose to submit their NOI electronically by email or by mailing a CD with the completed NOI form to EPA, will be able to download a partially filled Year 1 Annual Report at a later date from EPA.

Submit by Email

Submit by email using this button. Or, send an email with attachments to: stormwater.reports@epa.gov

Save

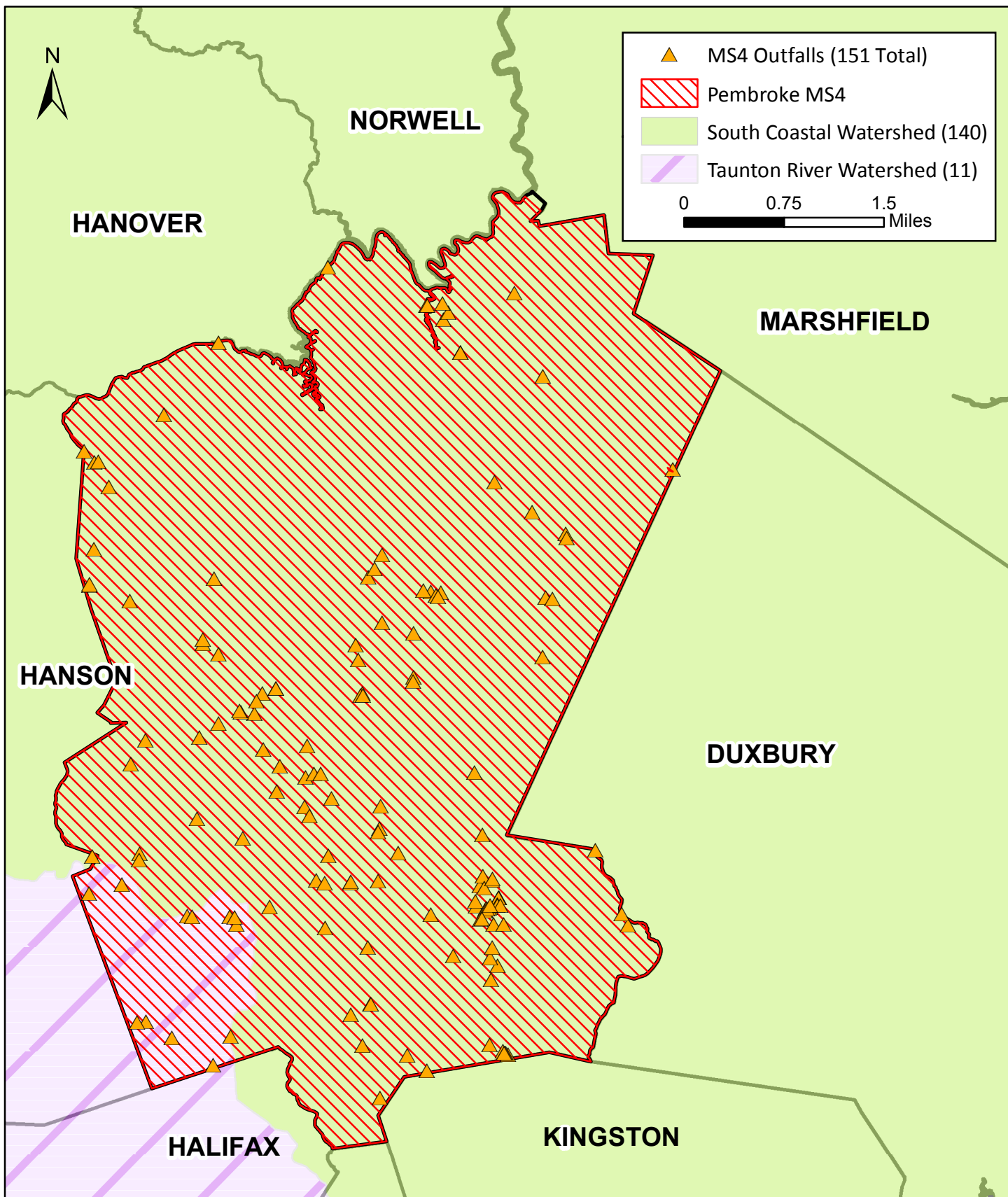
Save NOI for your records

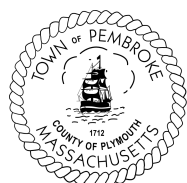
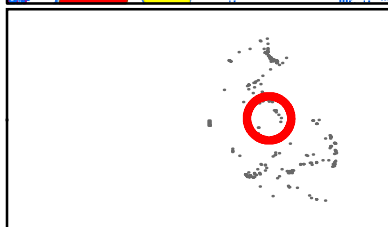
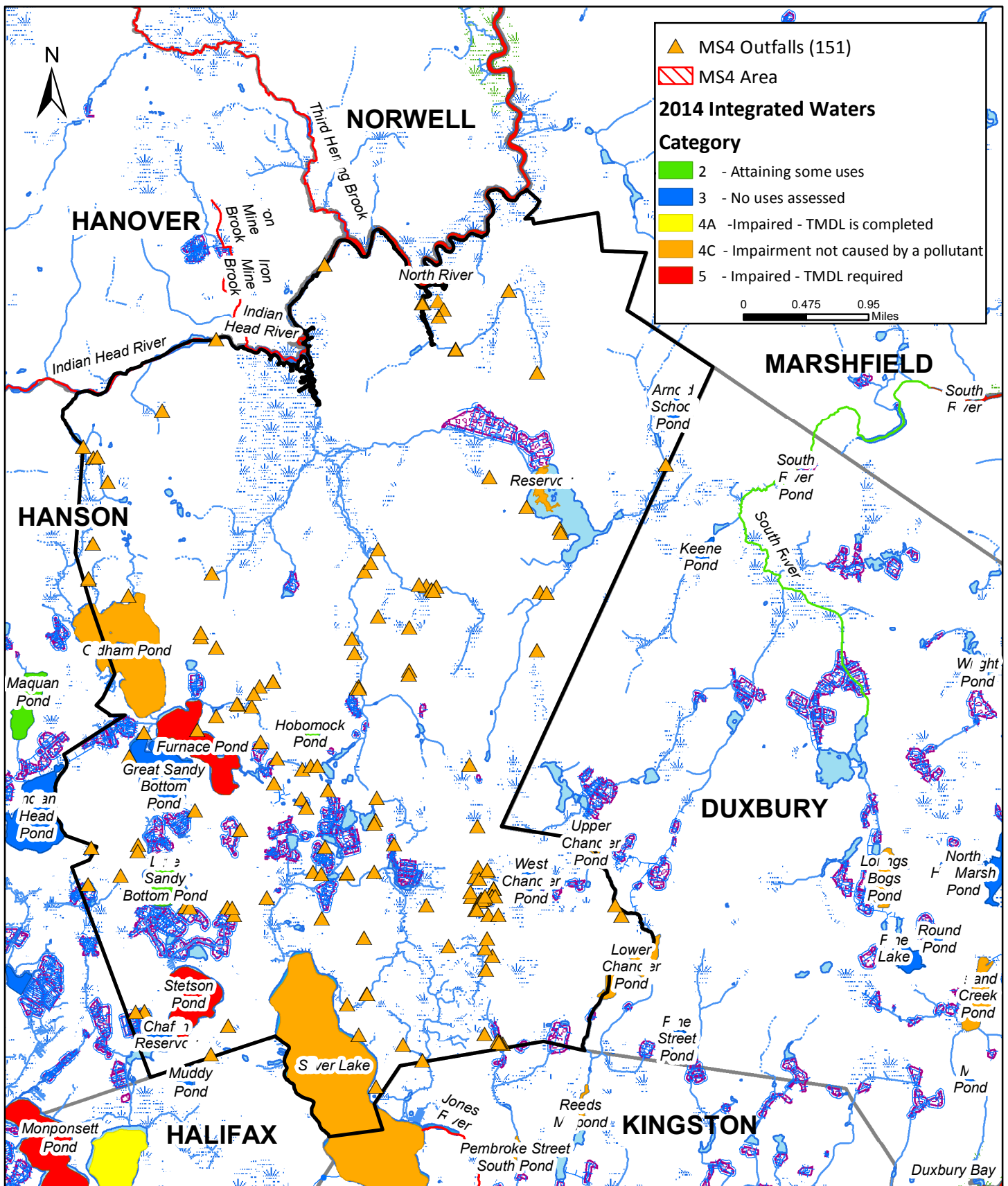
EPA Submittal Address:

United States Environmental Protection Agency
5 Post Office Square - Suite 100
Mail Code - OEP06-1
Boston, Massachusetts 02109-3912
ATTN: Newton Tedder

State Submittal Address:

Massachusetts Department of Environmental Protection
One Winter Street - 5th Floor
Boston, MA 02108
ATTN: Fred Civian





**MS4 Outfalls
Pembroke, Massachusetts
August 2018**



1900 Crown Colony Drive, Suite 402
Quincy, MA 02169

August 15, 2018

To: U.S. Fish and Wildlife Service
New England Field Office
70 Commercial St., Suite 300
Concord, NH 03301

RE: Project Review Request, Stormwater MS4, Pembroke, MA, 05E1NE00-2018-SLI-2422

We have reviewed the referenced project using the Environmental Protection Agency's (EPA) project review process for our Municipal Separate Storm Sewer System (MS4) and have followed all guidance and instructions in completing the review. We completed our review on July 18, 2018, and are submitting our project package in accordance with the instructions for further review. The U.S. Fish and Wildlife Service's (Service) Information for Planning and Consultation (IPaC) species list indicated these species may be present in the project area: Northern Long-eared Bat *Myotis septentrionalis*, and the Plymouth Redbelly Turtle *Pseudemys rubriventris bangsi*. We are submitting this letter as a non-Federal representative of the EPA pursuant to the requirements of the EPA's process for NPDES/MS4 permits.

Our proposed action consists of stormwater management projects including the evaluation for best management practices (BMPs) to reduce pollutant discharges and general pollutant load reduction through MS4 Permit implementation and enforcement. The Town of Pembroke will be continuing stormwater maintenance and activities listed in the Year 15 NPDES PII Small MS4 General Permit Annual Report, which is included in the attachments. Planned activities within the MS4 area will not pose a disturbance to the habitats of the aforementioned species.

The location action area is identified on the enclosed map. This USGS topographic quadrangle displays the entirety of the Pembroke MS4 project area. The MS4 area is designated using both the 2000 and 2010 U.S. census urbanized area.

Permit implementation will begin in the fall of 2018 and the permit has an expiration date of June 30, 2022.

This is a request for review by the Service pursuant to section 7 of the Endangered Species Act. We determined that the project may affect, but is not likely to adversely affect the above listed species, because:

- This project does not involve tree cutting or manipulating a structure that could be used by the Northern Long-eared Bat. For a variety of reasons, this project would have no effect on the Northern Long-eared Bat and no additional explanation is needed in this letter.
- Although discharges from the Pembroke MS4 may reach the habitat of the Plymouth Redbelly Turtle, the project implements activities that will diminish pollutants to the extent that discharge is not known to adversely affect the Plymouth Redbelly Turtle.

The enclosed project package provides the information about the species and/or critical habitat considered in our review, and we identified our determinations for the resources that may be affected by the project. We request you concur with our determination that the project may affect, but is not likely to adversely affect the species described above.

For additional information, please contact Natalie Pommersheim at the address listed above, by phone at 617-657-0257, or nmp@envpartners.com.

Sincerely,



Environmental Partners Group, Inc.
Natalie Pommersheim
Senior Project Scientist
P: 617.657.0257
E: nmp@envpartners.com

Enclosures:

- 1) IPaC Report
- 2) Year 15 NPDES PII Small MS4 General Permit Annual Report – Town of Pembroke, MA
- 3) USGS Topographic Quadrangle – Town of Pembroke, MA



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-2422

Event Code: 05E1NE00-2018-E-05627

Project Name: Pembroke 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-2422

Event Code: 05E1NE00-2018-E-05627

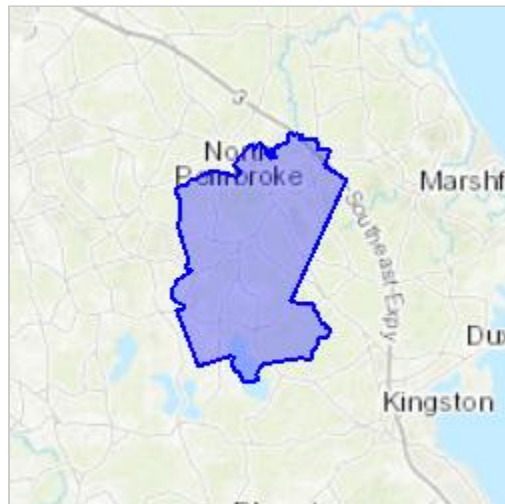
Project Name: Pembroke MS4

Project Type: ** OTHER **

Project Description: Pembroke Stormwater

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.064856923062194N70.80434076512023W>



Counties: Plymouth, MA

Endangered Species Act Species

There is a total of 2 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 Fisheries¹, 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.

-
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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Reptiles

NAME	STATUS
Plymouth Redbelly Turtle <i>Pseudemys rubriventris bangsi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/451	Endangered

Critical habitats

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

Municipality/Organization: Town of Pembroke, MA

EPA NPDES Permit Number: MAR041054

Massachusetts DEP Transmittal Number: W035403

Annual Report Number

& Reporting Period: Year 15: April 1, 2017 -March 31, 2018

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

Part I. General Information

Contact Person: Eugene B. Fulmine, Jr.

Title: DPW Director

Telephone #: (781) 709-1426

Email: efulminejr@townofpembrokemass.org

Mailing Address: 100 Center Street, Pembroke, MA 02359

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: Edwin J. Thorne

Title: Town Administrator

Date: 4/25/18

Part II. Self-Assessment

The Town of Pembroke has completed the required self-assessment and has determined that our municipality is generally in compliance with the conditions of the permit. During Permit Year 10, the Town was approved funding for their Stormwater Management Program under 310 CMR 44.00 within the State's Clean Water State Revolving Fund (CWSRF-3708).

During Permit Year 11, the Town approved the SRF funding and began developing the program, which included mapping the MS4 system, public outreach, training and pollution prevention activities in municipal operations.

In Permit Year 12, the Town continued to develop the mapping of the MS4 system, conducted outfall inspections, and developed a web-based GIS through PeopleGIS.

During Permit Year 13 and 14, the Town continued to develop the mapping layers of the MS4 system, focusing primarily on pipe network connectivity, which will assist in developing drainage catchment areas. The Town is also working on upgrading the High School's parking lot drainage infrastructure which includes improvements on Learning Lane, they are expanding the detention basin to handle peak runoff and provide more infiltration. The Town is also working on a Corridor Project along Route 14 which will provide additional stormwater treatment and increase stormwater recharge.

During Permit Year 15, the Town continued to focus on upgrading drainage improvements at the High School parking lot and on Learning Lane by modifying the detention basin and infiltrating the stormwater versus letting it run off into the woods and cause erosion. As well as the corridor project on Route 14 which installed 50 new catch basins for the Town and a 10,000 gallon Eliminator system for stormwater storage.

See Part III for a more detailed status of BMPs.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
1a	Air stormwater messages on local cable channel	Department of Public Works	Air a message every two weeks	Stormwater messages were developed and have been aired on the local cable access channel in previous years. However, stormwater messages were not aired in Permit Year 15.	Air stormwater messages on the Town website.
1b	Distribute/post non-point source pollution posters	Department of Public Works	Post in all schools and town-owned buildings	Non-point source pollution posters have been displayed in town buildings during Permit Year 15.	Continue to display non-point source pollution posters in town buildings.
1c	Include stormwater info in Consumer Confidence Report	Department of Public Works	Distribute Consumer Confidence Report yearly to all residents	The Town included information on stormwater pollution prevention in the 2017 Consumer Confidence Report, which is distributed annually to all residents. Several of the water bodies in town are drinking water sources for surrounding towns, and preventing pollution discharges from stormwater outfalls is necessary to keep these sources clean.	Continue to include information on stormwater pollution prevention in the Town's Consumer Confidence Report, which is distributed annually to residents.
1d	Develop children's coloring book on Pembroke recycling	Board of Selectmen	Distribute coloring books outside of Board of Health office	The Town has developed an informative coloring book to educate children on the importance of recycling. This has been made available outside the Board of Health office.	Continue to make the coloring book on recycling available outside the Board of Health office.

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
1e	Develop stormwater informational flyer to include with Water Bill mailing	Department of Public Works	Distribute stormwater informational flyer with Water Bill Mailing	The Town's DPW has developed an informative stormwater flyer to educate residents on the importance of the Stormwater Program and possible pollution sources. The flyer was developed and printed during Permit Year 12. In addition, through the Town's partnership with the North and South River Watershed Association's Greenscapes Program, a separate flyer was sent out on stormwater pollution prevention awareness, and is available on the Town's website.	Will continue to post link to flyers on Town's website for outreach.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
2a	Form Stormwater Advisory Committee	Department of Public Works	Hold Quarterly Meetings	During Permit Year 15, the Town held DPW Commissioner Meetings as needed 1-2 times per month, where drainage issues and stormwater pollution prevention are discussed.	Continue to hold DPW Commissioner Meetings and work to expand the existing Drainage Commission.
2b	Collect household hazardous waste from residents	Board of Selectmen	Hold household hazardous waste collection day once per year	During Year 15, the Town held a household hazardous waste collection day on October 15 th , 2017 and in April 15 th , 2017. The events were announced in the local press, on social media, on cable and at BOH and Selectmen meetings.	Continue to hold Household Hazardous Waste Collection Days.
2c	Implement annual, volunteer waterways clean-up day	Pembroke Watershed Association/Department of Public Works	Hold waterways clean-up day once per year beginning in the Spring of 2005 (Permit Year 3)	During Year 15, the Town held its annual volunteer waterways clean-up day on June 17, 2017.	Continue to hold a volunteer waterways clean-up day annually.
2d	Make SWMP available for public comment/review	Department of Public Works	Post SWMP in DPW office and Town library	Throughout Permit Year 15, copies of the Town's Stormwater Management Plan were made available for public review and comment at the Town Library and at the DPW office.	Continue to make copies of the Town's Stormwater Management Plan available for public review and comment at the Town Library and at the DPW office.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
3a	Map outfalls and receiving waters	Department of Public Works	Complete mapping by end of fifth permit year	In Year 15, the Town continued to add drainage for newly developed areas in town and add flow directions for storm drains. This included the incorporation of MassDOT's MS4 data which the Town requested and received.	The Town will continue to update their storm drain mapping to include connectivity throughout their MS4.
3b	Develop an Illicit Discharge & Elimination Plan	Department of Public Works	Make recommendations for proposed plan	During Permit Year 5, the Town made a number of recommendations regarding items to be included in their Illicit Discharge Detection & Elimination Plan. During Permit Year 15, the Town continued updating their IDDE Plan to incorporate more recent EPA and DEP guidance as well as the Town's mapping updates.	The Town will continue to update their IDDE Plan that they developed during Permit Year 5.
3c	Review existing bylaws and regulation	Department of Public Works/Stormwater Advisory Committee	Determine whether existing bylaws/regs are adequate	The Town reviewed their existing bylaws and regulations for requirements relating to illicit discharge detection and elimination during Permit Year 3. BMP Completed.	BMP Completed
3d	Develop/modify general illicit discharge bylaw	Department of Public Works/Stormwater Advisory Committee	If necessary, propose recommendations for bylaw updates	A general illicit discharge bylaw that meets USEPA requirements was developed during Permit Year 3. After having their attorneys review the general illicit discharge bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. BMP Completed.	BMP Completed
3e	Present bylaw for Town meeting action	Department of Public Works/Stormwater Advisory Committee	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 15 and there were no violations.	The Town will continue to enforce the IDDE bylaw that they adopted during Permit Year 5.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
4a	Review existing bylaws and regulations	DPW/Planning/Zoning	Determine whether existing bylaws/regs are adequate	The Town reviewed the relevant sections of the Rules and Regulations Governing the Subdivision of Land, the Zoning Bylaws, and the Water Resource Protection Bylaw during Permit Year 3. BMP Completed.	BMP Completed.
4b	Develop/modify bylaws for construction site runoff	DPW/Planning/Zoning	If necessary, propose recommendations for bylaw updates	In Permit Year 4, the Town completed the development of a bylaw for the control of construction site runoff. After having their attorneys review the bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. BMP Completed.	BMP Completed.
4c	Present bylaw for Town meeting action	DPW/Planning/Zoning/Conservation	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 15, and there were no violations.	The Town will continue to enforce the bylaw that they adopted.
4d	Review existing site inspection practices	DPW/Planning/Zoning	Determine whether existing practices are adequate	The Town reviewed their erosion/sedimentation control and drainage submittal requirements, as well as their site inspection practices, during Permit Year 4. BMP Completed.	BMP Completed.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
4e	Develop/modify site inspection practices	DPW/Planning/Zoning	If necessary, make recommendations for updating existing practices	During Permit Year 4, the Town completed review of their construction site inspection practices. The Town currently uses a consultant, Merrill Associates, who works for the Planning Board to oversee private developments. The DPW and the Conservation Commission also assist with internal site reviews. Any recommended changes to these site inspection practices were incorporated into the Town's Construction Site Runoff Control Bylaw which was adopted during Permit Year 5. Changes to the Town's site inspection practices were enforced under this bylaw during Permit Year 15. There were no construction runoff violations during Permit Year 15.	The Town will continue to enforce changes to their site inspection practices under their Construction Site Runoff Control Bylaw.

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
5a	Review existing bylaws and regulations	DPW/Planning/Zoning	Determine whether existing bylaws/regs are adequate	The Town evaluated regulations regarding the control of post-construction stormwater runoff, including the Rules and Regulations Governing the Subdivision of Land and the Zoning Bylaws during Permit Year 3. BMP Completed.	BMP Completed.
5b	Develop/modify bylaws for post-construction runoff	DPW/Planning/Zoning	If necessary, propose recommendations for bylaw updates	During Permit Year 4, the Town developed a post-construction site runoff control bylaw that meets USEPA requirements and considers MADEP Stormwater Management Policy Standard 3 (Recharge to Groundwater). After having their attorneys review the bylaw that was developed, the Town distributed the bylaw to local town boards and commissions for their review. Based on input from these departments, the bylaw was revised during Permit Year 5. BMP Completed.	BMP Completed.
5c	Present bylaw for Town meeting action	DPW/Planning/Zoning	Make presentations for Town meeting action, if necessary	The bylaw was presented for Town Meeting action during Permit Year 5 and was adopted. This bylaw was enforced by the Town during Permit Year 15, and there were no violations.	The Town will continue to enforce the bylaw that they adopted.
5d	Review existing site inspection practices	DPW/Planning/Zoning	Determine whether existing practices are adequate	During Permit Year 4, the Town completed review of their existing site inspection and maintenance practices. BMP Completed.	BMP Completed.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
5e	Develop/modify site inspection practices	DPW/Planning/Zoning	If necessary, make recommendations for updating existing practices	During Permit Year 4, the Town completed review of their post-construction site inspection and maintenance practices. Once construction is complete, the Town takes ownership of drainage infrastructure in new developments, and the DPW is responsible for the maintenance and operation of stormwater controls. Any recommended changes to these site inspection practices were incorporated into the Town's Post Construction Site Runoff Control Bylaw during Permit Year 5. Changes to the Town's site inspection practices were enforced under this bylaw during Permit Year 15.	The Town will continue to enforce changes to their site inspection practices under their Post Construction Site Runoff Control Bylaw.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
6a	Sweep streets and clean catch basins	Department of Public Works	Sweep all town-owned streets and clean all catch basins once per year	During Permit Year 15, the Pembroke Highway Department swept all of their roads. The Town cleans their catch basins on a continual basis. In Permit Year 15, 2038 catch basins were cleaned.	Attempt to sweep streets in Town at least once per year and clean catch basins on a continual basis.
6b	Maintain filtration system at North & Indian Head Rivers	Department of Public Works	Inspect baffle tank and leaching basin, and remove sediment	During Permit Year 15, the Town inspected the filtration system installed at the confluence of the North and Indian Head Rivers and removed sediment as needed. In Permit Year 15, it was found not to be in the need of cleaning.	Continue to inspect the filtration system at the confluence of the North and Indian Head Rivers and clean as needed.
6c	Train municipal employees at each facility	Department of Public Works	Target all applicable municipal facilities	During Permit Year 3, the Town examined existing practices at municipal facilities and trained employees at these facilities in construction methods to prevent soil erosion with Environmental Partners Group, Inc.	Continue to conduct follow-ups at municipal facilities to ensure that employees are following the required stormwater management practices.
6d	Implement items in EPA env. audit report for DPW facility	Department of Public Works	Ensure action items completed and BMPs followed	The Town made changes at the DPW Facility during Permit Year 1 to comply with the EPA Environmental Audit Report that was completed. These changes included developing a SPCC plan, which the Town continued to follow throughout Permit Year 15 with the exception of washing vehicles inside.	Adopt recommendations from the SWPPP for the Highway Garage.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16 (if applicable)
6e	Retrofit catch basins around Furnace and Oldham Ponds	Department of Public Works	Install vortex separators and new piping	PA Landers installed 50 Eliminators (Gas and Oil Separators) in the new catch basins along Route 14 (the Corridor Project) from the Hanson town line to beyond Furnace Lane, near the 10,000 gallon sediment tank that was installed.	Maintain and clean regularly those catch basins around Furnace Pond and Oldham Pond that were retrofitted with vortex oil/water separators.

6a. Additions

6f	Perform Stream Maintenance	Department of Public Works	Complete stream maintenance each year in coordination with the Plymouth County Mosquito Control Project	During Permit Year 15, the Town worked with crews from the Plymouth County Mosquito Control Project to remove blockages, brush and other obstructions from ditches and streams to prevent water overflows and stagnation that can result in mosquito production. This included 2,850 linear feet of stream and upland ditches.	The Town will continue to remove blockages, brush and other obstructions from ditches and streams in coordination with the Plymouth County Mosquito Control Project.
6g	Enhance Existing Storm Drainage Infrastructure	Department of Public Works	Incorporate BMPs wherever feasible into annual drainage improvement projects	The Town is working to improve High School Parking Lot and Learning Lane to expand the detention basin to handle peak runoff and provide more infiltration. The Town is also working on a Corridor Project on Route 14 which will provide additional stormwater treatment and increase stormwater recharge.	The Town will continue to assess drainage infrastructure needs and take advantage of opportunities to enhance their existing drainage system by retrofitting with BMPs.

Additional Information:

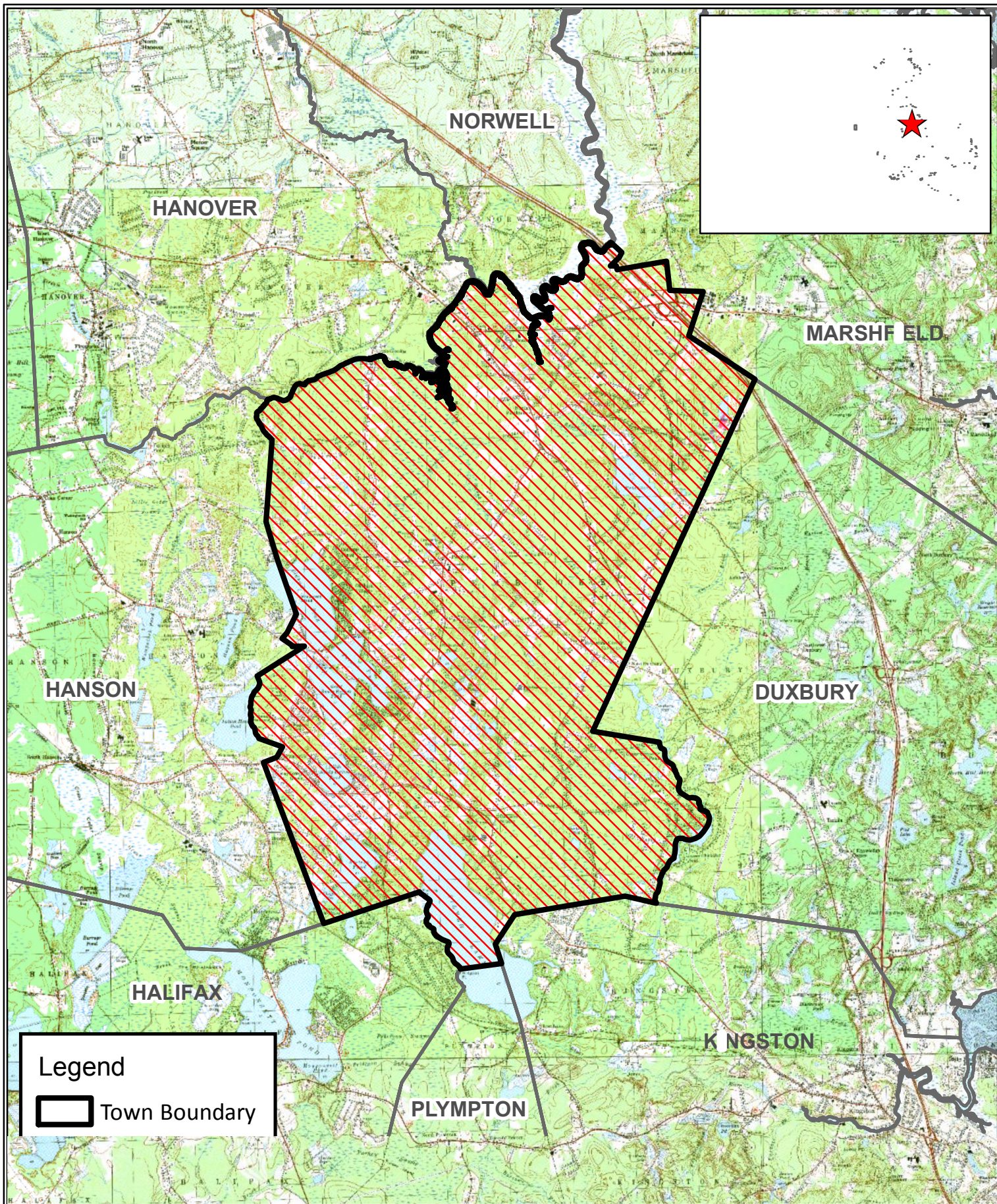
In Permit Year 12, the Town completed drafting an Operations and Maintenance Plan for its MS4 Infrastructure. In the future, the Town will be evaluating the plan for consistency with the upcoming new permit.

Town of Pembroke Annual Stormwater Report #15

In Permit Year 15, the Town completed drafting an updated IDDE Plan, as well as a draft Stormwater Management Plan and NOI for submittal under the new Permit this July.

Part IV. Summary of Information Collected and Analyzed

No additional information has been collected or analyzed outside of what was listed in Part III above.

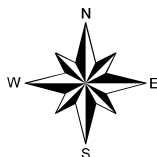


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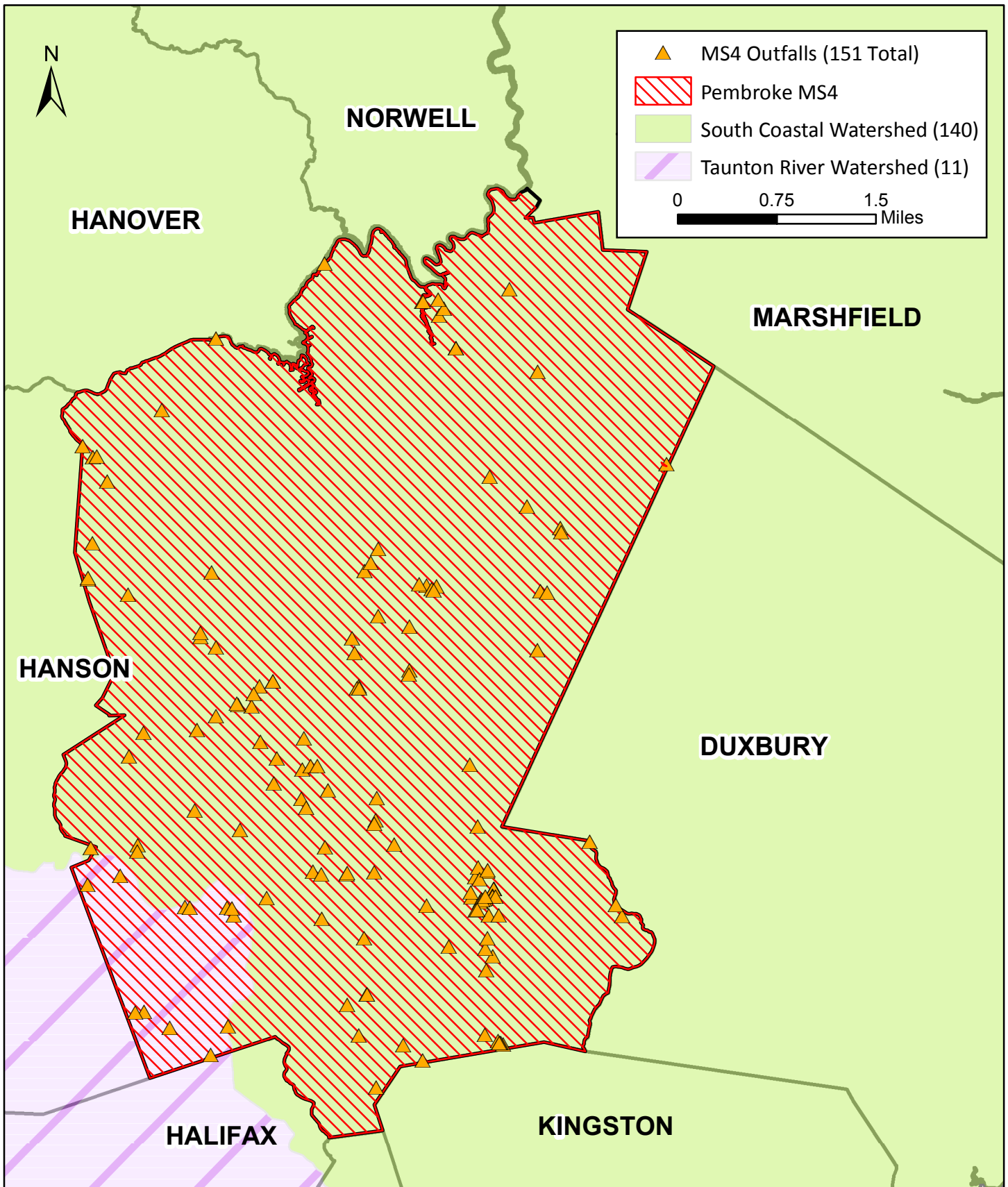
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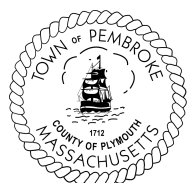
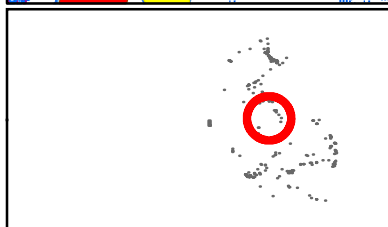
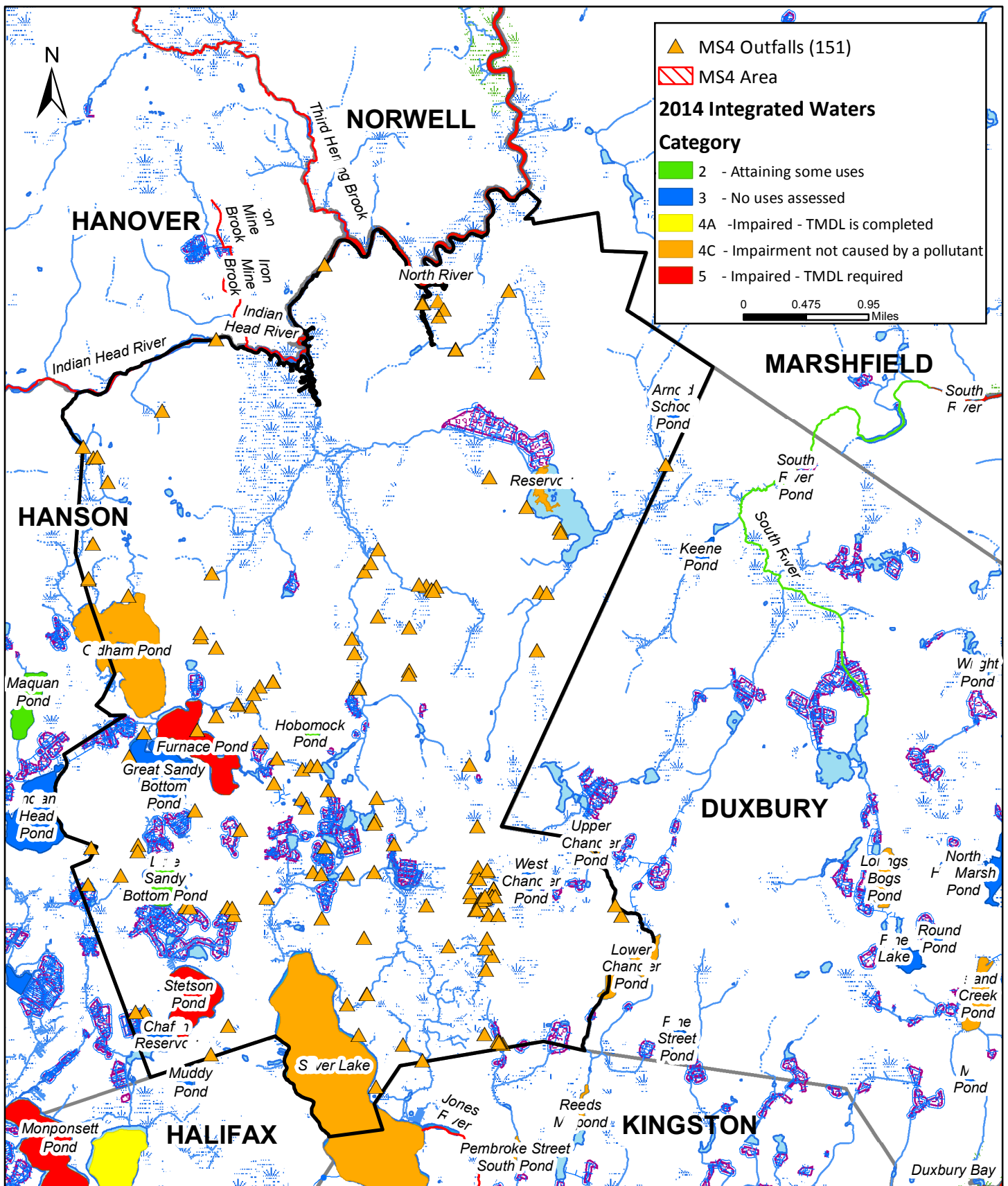
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Environmental Partners
A partnership for engineering solutions.



**USGS Topographic Quadrangle
Pembroke, Massachusetts**





**MS4 Outfalls
Pembroke, Massachusetts
August 2018**





United States Department of the Interior

FISH AND WILDLIFE SERVICE



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

September 24, 2018

To whom it may concern:

The U.S. Fish and Wildlife Service (USFWS) reviewed the stormwater discharge activities associated with the 2016 National Pollutant Discharge and Elimination System (NPDES) Massachusetts (MA) Small Municipal Separate Storm Sewer System (MS4) general permit (MA MS4 General Permit) issued by the Environmental Protection Agency (EPA). We determined those activities may affect, but are not likely to adversely affect, certain species listed under the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) when specific conditions are met. When these conditions are met, we do not need to review individual projects. These comments are provided in accordance with section 7 of the ESA and complement existing 2016 MA MS4 General Permit Appendix C Guidance. We understand the applicant is acting as a non-Federal representative of the EPA for the purpose of consultation under section 7. **This letter provides additional guidance for meeting Criterion B and should be submitted as part of your application package to the EPA.**

If the USFWS Information for Planning and Consultation website (<https://ecos.fws.gov/ipac/>) indicates your MA MS4 General Permit project action area may contain one or more of the following federally listed endangered species: roseate tern (*Sterna dougallii*), northern red-bellied cooter (*Pseudemys rubriventris*), dwarf wedgemussel (*Alasmidonta heterodon*), rusty patched bumble bee (*Bombus affinis*), northeastern bulrush (*Scirpus ancistrochaetus*), or American chaffseed (*Schwalbea americana*); threatened species: piping plover (*Charadrius melodus*), bog turtle (*Glyptemys muhlenbergii*), Puritan tiger beetle (*Cicindela puritana*), northeastern beach tiger beetle (*Cicindela dorsalis*), or red knot (*Calidris canutus rufa*); or their federally designated critical habitat; and the specific conditions listed below are met, you may submit this letter to complete the **MA MS4 General Permit Appendix C: Step 4** in place of a concurrence letter for informal consultation as documentation of ESA eligibility for **USFWS Criterion B**.

In addition, this letter also satisfies the requirement in the **MA MS4 General Permit Appendix C: Step 2 (3)** to contact the USFWS and obtain a concurrence letter, if you have not yet done so. If your project action area includes one or more of the above-listed species *and* one or more of the

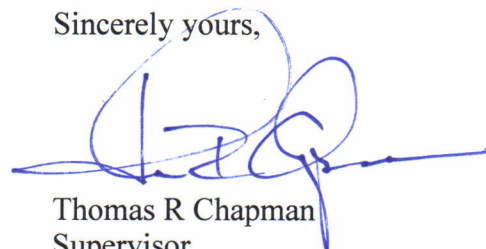
species listed under **Criterion C**,¹ you may still use this letter to certify under **Criterion B**. All existing guidance regarding requirements for certifying eligibility according to the USFWS Criterion A, B, or C for coverage by the 2016 MS4 Permit (see MA MS4 General Permit Appendix C – Endangered Species Guidance) remains unchanged.

We have determined that proposed stormwater discharge activities covered under the 2016 MS4 Permit *may affect, but are not likely to adversely affect*, the above-listed species and the species' critical habitat when the following are true:

1. all stormwater discharges are pre-existing or previously permitted by EPA;
2. any planned operations and maintenance work covered by this permit will only affect previously disturbed areas where stormwater controls are already installed. In these situations the chance of encountering any of the subject species is discountable;
3. the project implements EPA MS4 Best Management Practices (BMPs) and meets Clean Water Act and Massachusetts Water Quality Standards. Although permitted discharges may reach the environment used by these species, BMPs reduce pollutants to the extent that discharges are not known to have measurable impacts on these species or their habitat;
4. no new construction or structural BMPs are proposed under this permit at this time; and
5. you agree that if, during the course of the permit term, you plan to install a structural BMP not identified in the Notice of Intent (NOI), you will re-initiate consultation with the USFWS as necessary (see **MA MS4 General Permit Appendix C: Step 2 (5)**).

If the above criteria are met, further consultation with the USFWS under section 7 of the ESA is not required at this time; however, if the proposed action changes in any way such that it may affect a listed species in a manner not previously analyzed or if new information reveals the presence of additional listed species that may be affected by the project, the applicant or the EPA should contact us immediately and suspend activities that may affect those species until the appropriate level of consultation is completed with our office. Thank you for your cooperation, and please contact David Simmons of this office at (603) 227-6425 if you have questions or need further assistance.

Sincerely yours,



Thomas R Chapman
Supervisor
New England Field Office

¹ Criterion C includes guidance for project action areas that may contain species for which EPA has already made a determination. These species include the northern long-eared bat (*Myotis septentrionalis*), sandplain gerardia (*Agalinis acuta*), small whorled pogonia (*Isotria medeoloides*), and/or American burying beetle (*Nicrophorus americanus*) (MA MS4 General Permit Appendix C: Step 3 – Determine if You Can Meet Eligibility USFWS Criterion C).