

Part I: General Conditions

General Information

Name of Municipality or Organization: Falmouth State: MA

EPA NPDES Permit Number (if applicable): MAR 041114

Primary MS4 Program Manager Contact Information

Name: James McLoughlin, P.E. Title: Town Engineer

Street Address Line 1: Falmouth Public Works, Engineering Division

Street Address Line 2: 416 Gifford Street

City: Falmouth State: MA Zip Code: 02540

Email: jim.mcloughlin@falmouth.mass.us Phone Number: (508) 457-2543

Fax Number: (508) 548-1537

Other Information

Stormwater Management Program (SWMP) Location (web address or physical location, if already completed): Falmouth Public Works, 416 Gifford Street, Falmouth, MA, 02540

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

Web address where MS4 map is published: http://apps.falmouthmass.us/GPV/Viewer.aspx

Regulatory Authorities (if covered under the 2003 permit)

Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? No Effective Date or Estimated Date of Adoption (MM/DD/YY): 06/30/19

Construction/Erosion and Sediment Control (ESC) Authority Adopted? No Effective Date or Estimated Date of Adoption (MM/DD/YY): 06/30/19

Post- Construction Stormwater Management Adopted? No Effective Date or Estimated Date of Adoption (MM/DD/YY): 06/30/19



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
Fresh River	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Jones Pond	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Mill Pond	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Morse Pond	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Palmers Pond	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Salt Pond	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shivericks Pond	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Siders Pond	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sol's Pond	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tributary to Wild Harbor River	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Unnamed Pond near Wild Harbor	2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Unnamed Tributary to Little Pond	3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vineyard Sound	14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Weeks Pond	1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Waterbody segment that receives flow from the MS4</b>	<b>Number of outfalls into receiving water segment</b>	<b>Chloride</b>	<b>Chlorophyll-a</b>	<b>Dissolved Oxygen/DO Saturation</b>	<b>Nitrogen</b>	<b>Oil &amp; Grease/ PAH</b>	<b>Phosphorus</b>	<b>Solids/ TSS/ Turbidity</b>	<b>E. coli</b>	<b>Enterococcus</b>	<b>Other pollutant(s) causing impairments</b>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



## 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

<b>BMP Media/Category</b> (enter your own text to override the drop down menu)	<b>BMP Description</b>	<b>Targeted Audience</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b>	<b>Beginning Year of BMP Implementation</b>
Brochures/Pamphlets	Distribute fact sheets / brochures on pet waste pickup with dog licenses	Residents	Town Clerk	Provide flyers with all pet registrations and renewals	2018
Videos	Air informational TV programming on local public access station	Residents	FCTV	Air videos at least once per year	2018
Web Page	Provide web information on septic system maintenance, illicit discharges, pet waste disposal, lawn care, pesticide and fertilizer use, grass clippings and leaf litter disposal, and car washing	Residents	Engineering, I.T. Department	Update existing website with new information. Continue periodic updates throughout permit term	2018
Web Page	Provide web information on pesticide and fertilizer use, grass clippings and leaf litter disposal, building maintenance, salt usage, storage of materials and wastes, car washing, and the benefits of infiltration	Businesses, Institutions and Commercial Facilities	Engineering, I.T. Department	Update existing website with new information. Continue periodic updates throughout permit term	2018

Web Page	Provide web information on erosion and sediment control, Low Impact Development, and the Construction General Permit	Developers (construction)	Engineering, I.T. Department	Update existing website with new information. Continue periodic updates throughout permit term	2018
Brochures/Pamphlets	Distribute fact sheets or brochures on erosion and sediment control with permit applications	Developers (construction)	Planning Board, Conservation Commission, Building Department	Provide applicable information with permit applications	2018
Web Page	Provide web information on equipment maintenance and inspection, material storage, solid waste handling, salt usage, benefits of onsite infiltration, management of parking lot surfaces, and EPA's MSGP.	Industrial	Engineering, I.T. Department	Update existing website with new information. Continue periodic updates throughout permit term	2018
Posting of Maps	Make GIS mapping software available online for use by the public	Residents, Businesses, Institutions and Commercial Facilities, Developers, Industrial Facilities	Engineering, GIS Department	Update information periodically throughout the permit term	2018
Social Media	Provide relevant stormwater information to different audiences via social media.	Residents, Businesses, Institutions, Commer	Information Technology	Follow statewide "Think Blue" campaign on social media platforms.	2019



## 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 <small>(enter your own text to override the drop down menu)</small>	Responsible Department/Parties <small>(enter your own text to override the drop down menu)</small>	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	Upload written SWMP Plan to website and provide a link with contact information	Engineering, I.T. Department	Allow public to comment on stormwater management plan annually	2018
Public Participation	Meet periodically with watershed protection groups involved with program	Public Works	Meet approximately monthly with community groups	2018
Public Participation	Household haz. waste/used oil collection	Health Department	Hold collection days 4 times annually in conjunction with neighboring towns	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)

<b>BMP Categorization</b> (enter your own text to override the drop down menu)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
SSO inventory	Develop SSO inventory in accordance of permit conditions	Engineering, Health Department	Complete within 1 year of effective date of permit	2018
Storm sewer system map	Create map and update during IDDE program completion	Engineering, GIS Department	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, Health Department	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	PublicWorks, Engineering, Health Department	Complete 10 years after effective date of permit	2020
Employee training	Train employees on IDDE implementation	PublicWorks, Engineering	Train annually	2018
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	PublicWorks, Engineering, Health Department	Complete 3 years after effective date of permit	2019
Conduct wet weather screening	Conduct in accordance with outfall screening procedure	PublicWorks, Engineering, Health Department	Complete 10 years after effective date of permit	2024
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	PublicWorks, Engineering	Complete ongoing outfall screening upon completion of IDDE program	2028
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<input type="text"/>		<input type="text"/>		<input type="text"/>
<input type="text"/>		<input type="text"/>		<input type="text"/>



## 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

<b>BMP Categorization</b> (enter your own text to override the drop down menu or entered text)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures	Engineering, Conservation Commission, Building Department	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, Planning Board, Conservation Commission, Building Department	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	Planning Board, Conservation Commission, Building Department	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	Planning Board, Conservation Commission, Building Department	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

<b>BMP Categorization</b> (enter your own text to override the drop down menu or entered text)	<b>BMP Description</b>	<b>Responsible Department/Parties</b> (enter your own text to override the drop down menu)	<b>Measurable Goal</b> (all text can be overwritten)	<b>Beginning Year of BMP Implementation</b>
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, Building Department	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	2020
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	Planning Board, Conservation Commission, Building Department	Complete 4 years after effective date of permit and implement recommendations of report	2020
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.	Planning Board, Conservation Commission, Zoning Board	Complete 4 years after effective date of permit and implement recommendations of report	2020



## 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

<b>BMP Categorization</b> <small>(enter your own text to override the drop down menu or entered text)</small>	<b>BMP Description</b>	<b>Responsible Department/Parties</b> <small>(enter your own text to override the drop down menu)</small>	<b>Measurable Goal</b> <small>(all text can be overwritten)</small>	<b>Beginning Year of BMP Implementation</b>
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	Public Works, Engineering, Recreation Department, Natural Resources	Complete and implement 2 years after effective date of permit	2019
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory	Public Works, Engineering, Recreation Department, Natural Resources	Complete 2 years after effective date of permit and implement annually	2019
Infrastructure O&M	Establish and implement program for repair and rehabilitation of MS4 infrastructure	Public Works, Engineering	Complete 2 years after effective date of permit	2019
Stormwater Pollution Prevention Plan (SWPPP)	Create SWPPPs for maintenance garages, transfer stations, and other waste-handling facilities	Engineering	Complete and implement 2 years after effective date of permit	2019
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	Public Works	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 permittee-owned parking lots in accordance with permit conditions	Public Works	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	Public Works, Engineering	Implement salt use optimization during deicing season	2018







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.

Per the 2016 Permit, "Approved TMDLs" are those that have been approved by EPA as of the date of issuance of the permit. A TMDL covering Fiddlers Cove and Rands Harbor was finalized in November 2017, and a separate TMDL for Wild Harbor was also finalized in November 2017 which is after the MS4 permit issuance date of April 4, 2016. In addition, per the most recent Final 303(d) List available when preparing this NOI (2014 as of September 24, 2018), Fiddlers Cove, Rands Harbor, and Wild Harbor are listed specifically as impaired for Nutrient/Eutrophication Biological Indicators rather than nitrogen. Thus, Falmouth is not specifically required by the permit to meet TMDL or water quality limited waterbody requirements for nitrogen in either Appendix F or Appendix H for these three waterbodies. However, it is expected that the source of the estuarine bioassessments impairment is excess nitrogen loads, which would then require the Town meet the requirements of part I of Appendix H. Part I of Appendix H then states that permittees may be relieved of meeting these requirements if an EPA approved TMDL indicates that no additional stormwater controls for the control of nitrogen are necessary for the permittee's discharge based on wasteload allocations as part of the approved TMDL. The TMDLs indicate that approximately 65% to 78% of nitrogen loading originates from wastewater, with only small amounts originating due to stormwater runoff. TMDLs thus do not require implementing additional nitrogen controls, and instead require permittees to meet the requirements of the MS4 permit. Thus, Falmouth will meet the requirements of part IV of Appendix F for these waterbodies with a Cape Cod nitrogen TMDL in addition to those waterbodies specifically listed in the permit, even though the TMDLs were finalized after the April 4, 2016 MS4 Permit issue date.

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

## 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.

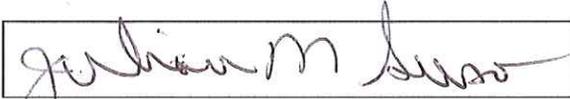
Name:

Julian Suso

Title:

Town Manager

Signature:

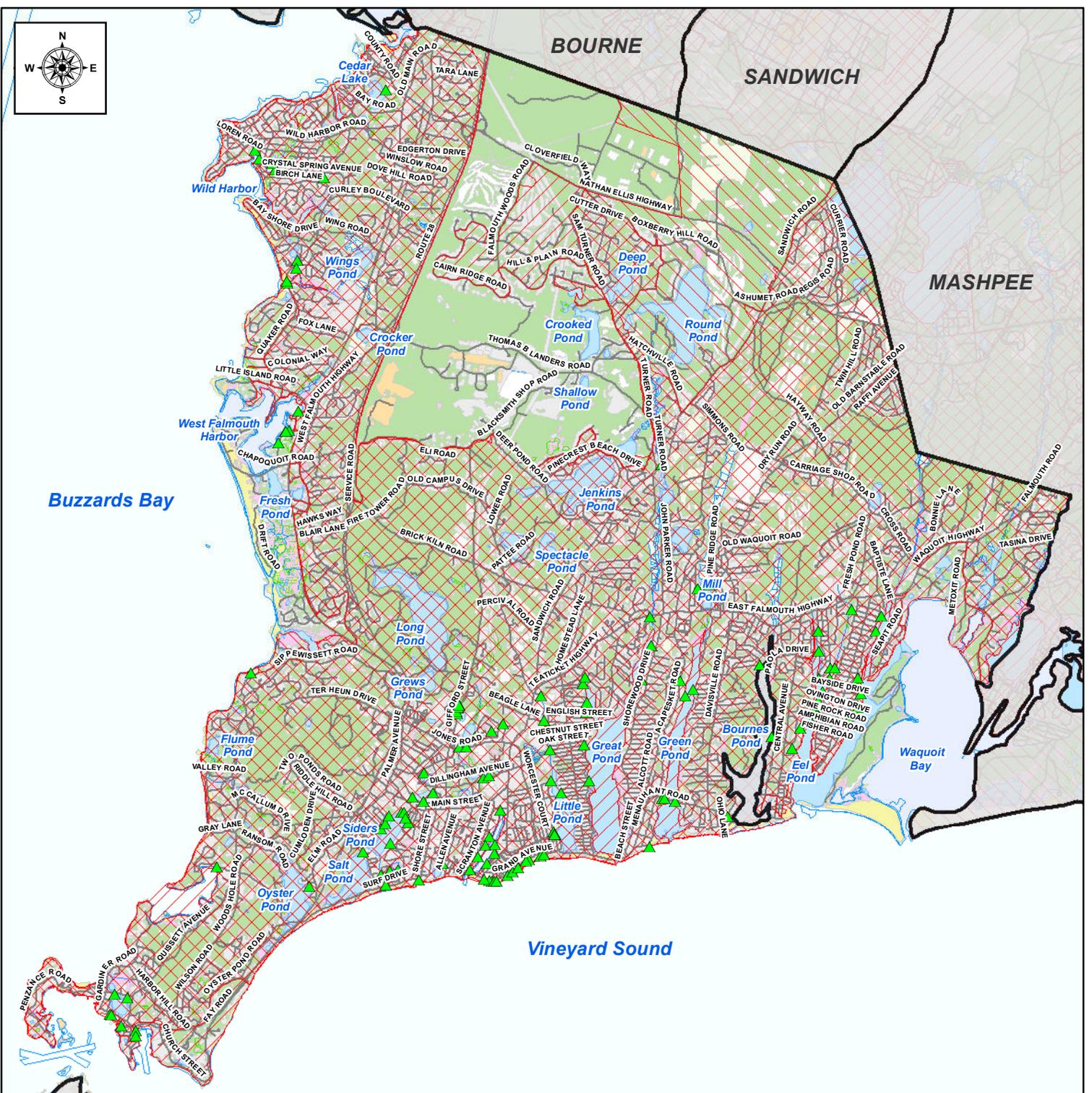
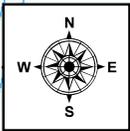


Date:

9/26/18

[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



### Legend

- |                              |                                       |
|------------------------------|---------------------------------------|
| Outfalls                     | <b>Land Use</b>                       |
| 2010 Urbanized Area          | Residential / Commercial / Industrial |
| 2000 Urbanized Area          | Agriculture                           |
| <b>Hydrography</b>           | Forest                                |
| Lake, Pond, Reservoir, River | Wetland                               |
| Wetland, Marsh, Swamp        | Water                                 |
| Stream, Brook                | Beach                                 |
|                              | Disturbed Land                        |
|                              | Other Cleared Land                    |



## Stormwater Map

### Falmouth, MA



**Comprehensive Environmental Incorporated**

From: Timothy Pasakarnis  
Cape Cod Commission  
3225 Main St. P.O. Box 226  
Barnstable, MA 02630

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

August 17, 2018

Re: Project Review Request, 2016 Massachusetts Small Municipal MS4 Permit Eligible Municipalities, Barnstable County, MA

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 August 13, 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 within the regulated areas on Cape Cod, which includes the municipalities of Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Mashpee, Orleans, Sandwich and Yarmouth: (1) Northern Long-eared Bat (2) Piping Plover (3) Roseate Tern (4) Red Knot (5) Plymouth Redbelly Turtle (6) Northeastern Beach Tiger Beetle (7) Rusty Patched Bumble Bee (8) Sandplain Gerardia. 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: regular operation (discharge from), inspection, and maintenance of existing stormwater infrastructure owned by the towns.

The location action area is identified on the enclosed map.

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:

- Of the identified species, permit activities are expected to have no effect on the (1) Northern Long-eared Bat, (7) Rusty Patched Bumble Bee, or (8) Sandplain Gerardia because no clearing, new construction, or land disturbance is planned; and (6) Northeastern Beach Tiger Beetle because the habitat for the Northeastern Beach Tiger Beetle within Barnstable County is outside the MS4 permit regulated area.

- (2-4) Piping Plover, Roseate Tern, and Red Knot: The general inspection and maintenance of existing stormwater infrastructure does not include new construction or landscape alteration, therefore these activities are not expected to impact these species' habitats. Although discharges from the project may reach the coastal habitats and feeding grounds used by all three species, the project implements BMPs to reduce pollutants to the extent that the discharges are not known to have measurable impacts on the species, their habitat, or their food sources.
- (5) Plymouth Redbelly Turtle: Similar to above, inspection and maintenance of existing infrastructure is not expected to impact the Plymouth Redbelly Turtle or its habitat. Discharges from the project may reach the pond/lake habitats utilized by this species, however the project implements BMPs to reduce pollutants to the extent that the discharges are not known to have measurable impacts on the species, its habitat, or its food sources.

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 Timothy Pasakarnis at the address listed above, by phone at (508) 744-1214, or [tim.pasakarnis@capecodcommission.org](mailto:tim.pasakarnis@capecodcommission.org).

Sincerely,

Timothy Pasakarnis  
Water Resource Analyst

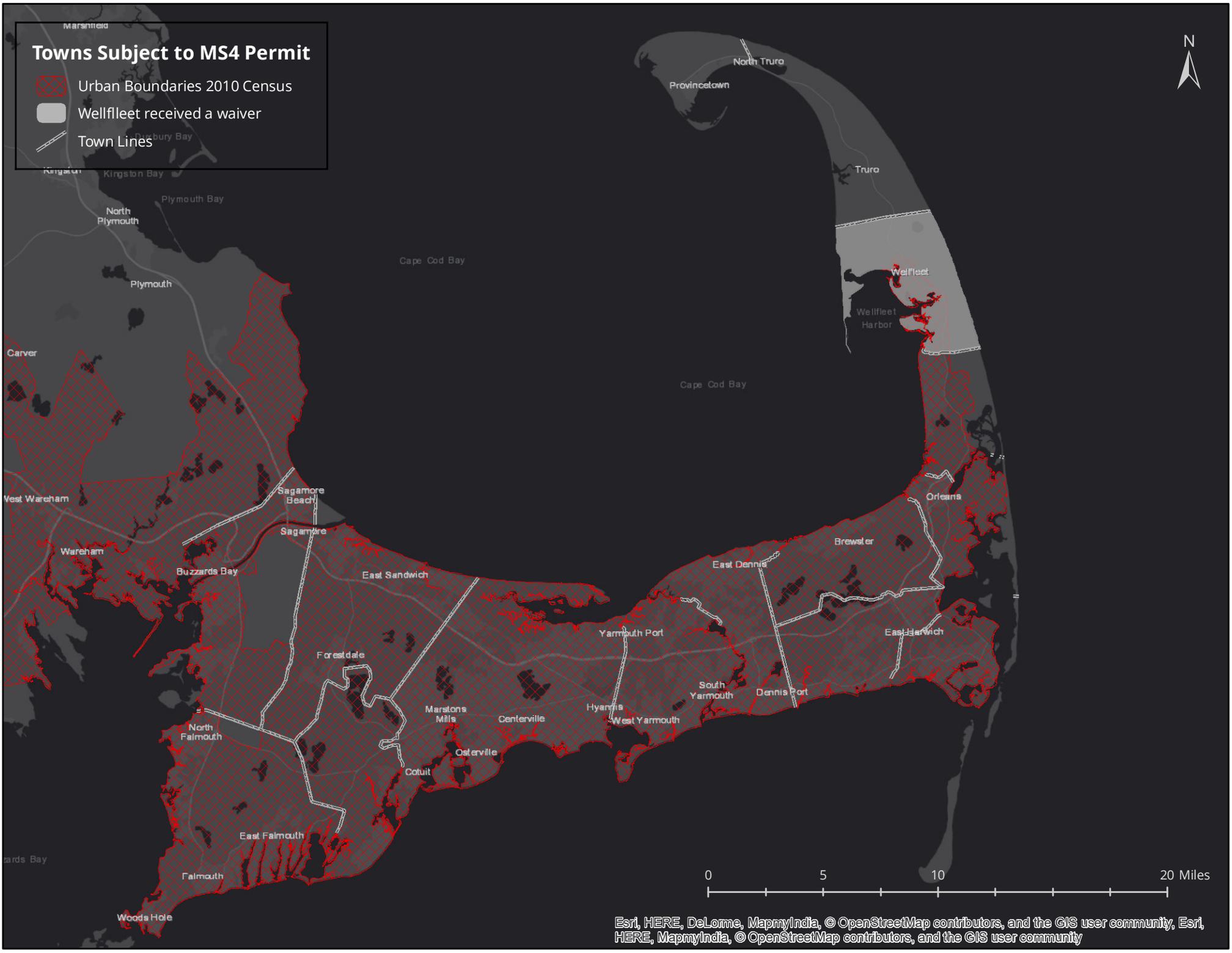
Enclosures:

- 1) Project review request
- 2) Map of regulated areas where MS4 activities will occur
- 3) Information for Planning and Consultation (IPaC) resource list

**Attachment 1: Map of Cape Cod MS4 Regulated Areas**

# Towns Subject to MS4 Permit

-  Urban Boundaries 2010 Census
-  Wellfleet received a waiver
-  Town Lines



Attachment 2: Information for Planning and Consultation (IPaC) resource list

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Project information

### NAME

Barnstable County 2016 MS4 Permit

### LOCATION

Barnstable County, Massachusetts



### DESCRIPTION

Operation and maintenance of existing municipal separate storm sewer systems in accordance with the 2016 Massachusetts Small MS4 General Permit

## Local office

New England Ecological Services Field Office

☎ (603) 223-2541

📠 (603) 223-0104

70 Commercial Street, Suite 300

Concord, NH 03301-5094

<http://www.fws.gov/newengland>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species

<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
  2. [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.

The following species are potentially affected by activities in this location:

# Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

# Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened
Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1864">https://ecos.fws.gov/ecp/species/1864</a>	Threatened
Roseate Tern <i>Sterna dougallii dougallii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a>	Endangered

# Reptiles

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

# Insects

NAME	STATUS
Northeastern Beach Tiger Beetle <i>Cicindela dorsalis dorsalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8105">https://ecos.fws.gov/ecp/species/8105</a>	Threatened
Rusty Patched Bumble Bee <i>Bombus affinis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9383">https://ecos.fws.gov/ecp/species/9383</a>	Endangered

# Flowering Plants

NAME

STATUS

Sandplain Gerardia *Agalinis acuta*

Endangered

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/8128>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds

MIGRATORY BIRD INFORMATION IS NOT AVAILABLE AT THIS TIME

**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur

and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

### **What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

## Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

## Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Facilities

## Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of](#)

[Engineers District.](#)

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

The area of this project is too large for IPaC to load all NWI wetlands in the area. The list below may be incomplete. Please contact the local U.S. Fish and Wildlife Service office or visit the [NWI map](#) for a full list.

ESTUARINE AND MARINE DEEPWATER

[E1UBL](#)

[E1ABL](#)

[M1ABL](#)

[E1UBLx6](#)

[E1UBLx](#)

[E1UBL6](#)

ESTUARINE AND MARINE WETLAND

[E2EM1P](#)

[E2EM1Pd](#)

[M2USM](#)

[M2USP](#)

[E2USM](#)

[M2USN](#)

[E2USN](#)

[E2USP](#)

[E2EM1N](#)

[E2SS1P](#)

[E2EM1/SS1P](#)

[E2EM1Nx](#)

FRESHWATER EMERGENT WETLAND

[PEM1R](#)

[PEM1E](#)

[PEM1F](#)

[PEM1Ed](#)

[PEM1Fh](#)

[PEM1/SS1Rd](#)

[PEM1A](#)

[PEM1C](#)

[PEM1/SS1R](#)

[PEM1Fd](#)

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1E](#)

[PSS1E](#)

[PFO1/4E](#)  
[PSS1R](#)  
[PFO1R](#)  
[PFO4E](#)  
[PFO4Eg](#)  
[PFO1/4R](#)  
[PSS1/4Eg](#)  
[PFO1/4Eg](#)  
[PSS1Ed](#)  
[PFO4R](#)  
[PSS1/FO1E](#)  
[PFO1A](#)  
[PFO1F](#)  
[PFO1/SS1E](#)  
[PFO1Rd](#)  
[PFO1C](#)  
[PFO1/4B](#)  
[PSS1C](#)  
[PSS1Ex](#)  
[PFO4A](#)  
[PFO1Ed](#)  
[PSS1F](#)  
[PSS1Fx](#)  
[PSS1A](#)

FRESHWATER POND

[PABF](#)  
[PABH](#)  
[PABHh](#)  
[PABKx](#)  
[PUBHh](#)  
[PUBH](#)  
[PUBHx](#)

LAKE

[L1UBH](#)

OTHER

[Pf](#)

RIVERINE

[R4SBC](#)  
[R5UBFx](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



# 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

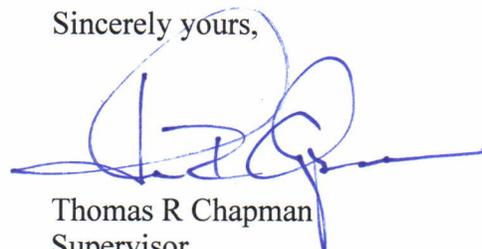
species listed under **Criterion C**,<sup>1</sup> you may still use this letter to certify under **Criterion B**. All existing guidance regarding requirements for certifying eligibility according to the USFWS Criterion A, B, or C for coverage by the 2016 MS4 Permit (see MA MS4 General Permit Appendix 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

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<sup>1</sup> 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).