### Part I: General Conditions General Information State: MA Name of Municipality or Organization: Town of Shrewsbury EPA NPDES Permit Number (if applicable): MAR041158 Primary MS4 Program Manager Contact Information Jeffrey W. Howland, P.E. Title: Director of Public Works Name: Street Address Line 1: Richard D. Carney Municipal Office Building Street Address Line 2: | 100 Maple Avenue MA Zip Code: 01545 City: Shrewsbury State: Phone Number: (508) 841-8502 Email: ihowland@shrewsburyma.gov (508) 841-8497 Fax Number: Other Information Stormwater Management Program (SWMP) Location Richard D. Carney Municipal Office Bldg, 100 Maple Ave, Shrewsbury, MA 01545 (web address or physical location, if already completed): **Eligibility Determination Eligibility Criteria** Endangered Species Act (ESA) Determination Complete? Yes $\square$ A $\square$ B $\boxtimes$ C (check all that apply): **Eligibility Criteria** National Historic Preservation Act (NHPA) Determination Complete? | Yes ⊠ A □ B □ C (check all that apply): Check the box if your municipality or organization was covered under the 2003 MS4 General Permit 囨 MS4 Infrastructure (if covered under the 2003 permit) If 100% of 2003 requirements not met, enter an Estimated Percent of Outfall Map Complete? 100% estimated date of completion (MM/DD/YY): (Part II, III, IV or V, Subpart B.3.(a.) of 2003 permit) Web address where MS4 map is published: See Attachment 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) Effective Date or Estimated Illicit Discharge Detection and Elimination (IDDE) Authority Adopted? 05/23/07 Yes Date of Adoption (MM/DD/YY): (Part II, III, IV or V, Subpart B.3.(b.) of 2003 permit) Construction/Erosion and Sediment Control (ESC) Authority Adopted? **Effective Date or Estimated** 05/23/07 Yes Date of Adoption (MM/DD/YY): (Part II, III, IV or V, Subpart B.4.(a.) of 2003 permit) Effective Date or Estimated Post- Construction Stormwater Management Adopted? 05/23/07 Yes Date of Adoption (MM/DD/YY): (Part II, III, IV or V, Subpart B.5.(a.) of 2003 permit)

### Part II: Summary of Receiving Waters

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

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

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

Waterbody segment that receives flow from the MS4	Number of outfalls into receiving water segment	Chloride	Chiorophyll-a	Dissolved Oxygen/ DO Saturation	Nitrogen	Oil & Grease/ PAH	Phosphorus	Solids/ TSS/ Turbidity	E. coli	Enterococcus	Other pollutant(s) causing impairments
Lake Quinsigamond (51125)				×							Excess Algal Growth, Eurasian Water Milfoil, Myriophyllum spicatum Non-Native Aquatic Plants
Poor Farm Brook (51-17)								×			Aquatic Plants (Macrophytes), Low flow alterations
Newton Pond (51110)											Aquatic Plants (Macrophytes), Non-Native Aquatic Plants
Shirley Street Pond (51196)											Aquatic Plants (Macrophytes)
Mill Pond (51105)								X			
Flint Pond (NB) (51050)								×			Aquatic Plants (Macrophytes), Eurasian Water Milfoil, Myriophyllum spicatum, Non- Native Aquatic Plants
Flint Pond (51188)											Aquatic Plants (Macrophytes), Eurasian Water Milfoil, Myriophyllum spicatum, Non- Native Aquatic Plants
NOTE: For full list of Waterbody Segments + Outfalls, please see attachment.											
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Town of Shrewsbury											Page 3 of 2
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
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### Part III: Stormwater Management Program Summary

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

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

### MCM 1: Public Education and Outreach

BMP Media/Category (enter your own text to override the drop down menu)	BMP Description	Targeted Audience	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal	Beginning Year of BMP Imple- mentation
Brochures/Pamphlets	Develop brochures/ pamphlets regarding SW Utility and related SW Topics	Residents	Department of Public Works	Distribute material to target audience and maintain material in at least 1 publicly accessible location	2019
Brochures/Pamphlets	Develop brochures/ pamphlets regarding SW Utility and related SW Topics	Businesses, Institutions and Commercial Facilities	Department of Public Works	Distribute material to target audience and maintain material in at least 1 publicly accessible location	2019
Brochures/Pamphlets	Develop brochures/ pamhlets for permittees receiving the SW Management Permit on related SW Topics	Developers (construction)	Department of Public Works	Distribute material to target audience and maintain material in at least 1 publicly accessible location	2020
Brochures/Pamphlets	Develop brochures/ pamphlets regarding SW Utility and related SW Topics	Industrial Facilities	Department of Public Works	Distribute material to target audience and maintain material in at least 1 publicly accessible location	2019

Town of Shrewsbury					<u>Page 5 of 21</u>
Web Page	Develop and/or share educational material for target audience on related SW topics	Residents	Department of Public Works	Post or link to a website or social media at least 1 piece of educational material targeting audience regarding SW quality or pollution	2021
Web Page	Develop and/or share educational material for target audience on related SW topics	Businesses, Institutions and Commercial Facilities	Department of Public Works	Post or link to a website or social media at least 1 piece of educational material targeting audience regarding SW quality or pollution	2021
Web Page	Develop and/or share educational material for target audience on related SW topics	Developers (construction)	Department of Public Works	Post or link to a website or social media at least 1 piece of educational material targeting audience regarding SW quality or pollution	2022
Web Page	Develop and/or share educational material for target audience on related SW topics	Industrial Facilities	Department of Public Works	Post or link to a website or social media at least 1 piece of educational material targeting audience regarding SW quality or pollution	2022
Web Page	Develop annual messages in spring, summer, and fall regarding specific messages (App F.A. V.1.a.i.1)	Resident, Business/Institution/Commercial		Post or link to website or social media at least 1 piece of educational material regarding SW quality or pollution for spring, summer, and fall	2019
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Town of Shrewsbury	N	 Page 6 of 2
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Part III: Stormwater Management Program Summary (continued)

MCM 2: Public Involvement and Participation

BMP Categorization	Brief BMP Description (enter your own text to averride the drop down menu)	Responsible Department/Parties (enter your own text to override the drop down menu)	Additional Description/ Measurable Goal	Beginning Year of BMP Imple- mentation
Public Review	SWMP Review	Department of Public Works	Allow annual review of stormwater management plan and posting of stormwater management plan on website	2019
Public Participation	SWMP Review	Department of Public Works	Allow public to comment on stormwater management plan annually	2019
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Town of Shrewsbury		Page 8 of 2

Part III: Stormwater Management Program Summary (continued)

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

BMP Categorization (enter your own text to override the drop down menu)	BMP Description	Responsible Department/Parties (enter your own text to override the drop down menu)	Measurable Goal (all text can be overwritten)	Beginning Year of BMP Imple- mentation
SSO inventory	Develop SSO inventory in accordance of permit conditions	Department of Public Works	Complete within 1 year of effective date of permit	2018
Storm sewer system map	Create map and update during IDDE program completion	Department of Public Works	Update map within 2 years of effective date of permit and complete full system map 10 years after effective date of permit	2019
Written IDDE program	Create written IDDE program	Department of Public Works	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	Department of Public Works	Complete 10 years after effective date of permit	2018
Employee training	Train employees on IDDE implementation	Department of Public Works	Train annually	2018
Conduct dry weather screening	Conduct in accordance with outfall screening procedure and permit conditions	Department of Public Works	Complete 3 years after effective date of permit	2019
Conduct wet weather screening	Conduct in accordance with outfall screening procedure	Department of Public Works	Complete 10 years after effective date of permit	2020
Ongoing screening	Conduct dry weather and wet weather screening (as necessary)	Department of Public Works	Complete ongoing outfall screening upon completion of IDDE program	2028
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Town of Shrewsbury			Page 10 of 2
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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 Imple- mentation
Site inspection and enforcement of Erosion and Sediment Control (ESC) measures	Complete written procedures of site inspections and enforcement procedures	Department of Public Works	Complete within 1 year of the effective date of permit	2018
Site plan review	Complete written procedures of site plan review and begin implementation	Department of Public Works	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	Department of Public Works	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	Department of Public Works	Complete within 1 year of the effective date of permit	2018
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### 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)	<b>Measurable Goal</b> (all text can be overwritten)	Beginning Year of BMP Imple- mentation
As-built plans for on-site stormwater control	The procedures to require submission of asbuilt drawings and ensure long term operation and maintenance will be a part of the SWMP	Department of Public Works	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	Department of Public Works	Complete 4 years after effective date of permit and report annually on retrofitted properties	2021
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	Department of Public Works	Complete 4 years after effective date of permit and implement recommendations of report	2021
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.	Department of Public Works	Complete 4 years after effective date of permit and implement recommendations of report	2021

Town of Shrewsbury

Ensure any stormwater controls or management practices for new development and redevelopment meet the retention or treatment requirements of the permit and all applicable requirements of the Massachusetts Stormwater Handbook	regulatory mechanism to meet permit requirements	Department of Public Works	Complete 2 years after effective date of permit	2018
Target properties to reduce phosphorus load	Evaluate all permittee- owned properties within the drainage area of WQ- limited water bodies or its tributaries for retrofit opportunities (App H.II.1. c)	Department of Public Works	Complete 5 years after effective date of permit	2021
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Part III: Stormwater Management Program Summary (continued)

MCM 6: Municipal Good Housekeeping and Pollution Prevention

				Beginning
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)	Year of BMP Imple- mentation
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	Department of Public Works	Complete and implement 2 years after effective date of permit	
Inventory all permittee-owned parks and open spaces, buildings and facilities, and vehicles and equipment	Create inventory	Department of Public Works	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	Department of Public Works	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	Department of Public Works	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	Department of 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 permitee-owned parking lots in accordance with permit conditions	Department of Public Works	Sweep all streets and permitee-owned parking lots once per year in the spring	2019
Road salt use optimization program	Establish and implement a program to minimize the use of road salt	Department of Public Works	Implement salt use optimization during deicing season	2019

**Town of Shrewsbury** 

Establish and implement Inspect and maintain Inspections and maintenance of stormwater treatment inspection and Department of Public Works treatment structures at 2019 maitenance procedures structures least annually and frequencies Establish program for Town personnel and Establish program to properly manage grass modify contracts for Program to manage grass cuttings and leaf litter cuttings and leaf litter on Department of Public Works contractors to properly 2019 manage grass cuttings and leaf litter on permittee property (App F.A.V.1.a.i.3) permittee property

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Part III: Stormwater Management Program Summary (continued)

Actions for Meeting Total Maximum Daily Load (TMDL) Requirements

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

Applicable TMDL	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
Lake Quinsigamond and Flint Pond (Phosphorus)	Adhere to requirements in part A.II of Appendix F	Department of Public Works
Assabet River (Phosphorus)	Adhere to requirements in part A.V of Appendix F	Department of Public Works
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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. In addition, if you are subject to additional requirements due to a downstream nutrient impairment (see Part 2.2.2 of the permit) select the pollutant of concern and indicate applicable waterbody IDs or write "all waterbodies" if applicable. Choose the action description from the dropdown menu and indicate the responsible party. If no options are applicable, or more than one, enter your own text to override drop-down menus.

Pollutant	Waterbody ID(s)	Action Description	Responsible Department/Parties (enter your own text to override the drop down menu)
Phosphorus	Lake Quinsigamond (51125)	Adhere to requirements in part II of Appendix H	Department of Public Works
TSS	Flint Pond (NB) (51050)	Adhere to requirements in part V of Appendix H	Department of Public Works
TSS	Poor Farm Brook (51-17)	Adhere to requirements in part V of Appendix H	Department of Public Works
TSS	Mill Pond (51105)	Adhere to requirements in part V of Appendix H	Department of Public Works
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### 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.

* The "Beginning Year of Implementation" is assumed to be Calendar Year.					
NATIONAL HISTORIC PRESERVATION ACT COMPLIANCE: The Town of Shrewsbury has completed their historic properties review in the previous permit, and the Town does not anticipate undertaking any activity involving less than an acre of subsurface land disturbance on those properties as a result of this permit.					
Attached are the following documents:					
Attachment 1: Documentation of Compliance with the Endangered Species Act					
Attachment 2: Authorization for the Position of Director of Public Works as Duly Authorized Representative					
Attachment 3: Town of Shrewsbury - List of Waterbody Segments & Number of Outfalls					
Attachment 4: Town of Shrewsbury - Outfall Map					

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### 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:	Kevin J. Mizikar	Title:	Town Manager
Signature:	lenger	Date:	09/28/18
	[To be signed according to Appendix B, Subparagraph B.11, Standard Conditions]		
Note: When	prompted during signing, save the document under a	new file nar	me

## Attachment 1 Documentation of Compliance with the Endangered Species Act



TELEPHONE: (508) 841-8502 FAX: (508) 841-8497 jhowland@shrewsburyma.gov

### TOWN OF SHREWSBURY

100 MAPLE AVENUE SHREWSBURY, MASSACHUSETTS 01545-5398

National Pollutant Discharge Elimination System General Permit, effective July 1, 2018 Endangered Species Act Compliance September 28, 2018

In order for the United Stated Environmental Protection Agency (USEPA) to meet their obligations under the Clean Water Act and the Endangered Species Act (ESA), and to promote the goals of those Acts, the USEPA is seeking to ensure that the activities regulated by the National Pollutant Discharge Elimination System (NPDES) General Permit, effective July 1, 2018 (hereby known as the MS4-2018 Permit) does not adversely affect endangered or threatened species or critical habitat.

Applicants applying for coverage must assess the impacts of their stormwater discharges and discharge-related activities on federally listed endangered and threatened species and designated critical habitat to ensure that those goals are met.

The Town of Shrewsbury has determined that they do not anticipate any adverse effects to any endangered species or critical habitat within the Town's boundaries from stormwater discharge and discharge-related activities.

This determination was based on a preliminary determination that indicated federally listed species or designated critical habitats within the Town's boundaries from completing the Information, Planning, and Conservation (IPaC) online system process outlined in Appendix C in the USEPA-issued MS4-2018 Permit.

As such, the Town of Shrewsbury is certifying eligibility for Criterion C on their Notice of Intent for coverage under the USEPA's MS4-2018 Permit.

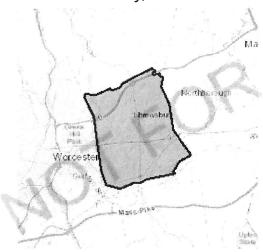
### IPaC resource list

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.

### Location

Worcester County, Massachusetts



### 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

### 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. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> 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 <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, 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

### Northern Long-eared Bat Myotis septentrionalis

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>

### 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  $Act^{1}$  and the Bald and Golden Eagle Protection  $Act^{2}$ .

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 <u>below</u>.

- 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 <a href="http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php">http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php</a>
- Measures for avoiding and minimizing impacts to birds
   <u>http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php</u>
- Nationwide conservation measures for birds <a href="http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf">http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf</a>

The birds listed below are birds of particular concern either because they occur on the <u>USFWS Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found <u>below</u>.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A
BREEDING SEASON IS INDICATED
FOR A BIRD ON YOUR LIST, THE
BIRD MAY BREED IN YOUR
PROJECT AREA SOMETIME WITHIN
THE TIMEFRAME SPECIFIED,
WHICH IS A VERY LIBERAL
ESTIMATE OF THE DATES INSIDE
WHICH THE BIRD BREEDS
ACROSS ITS ENTIRE RANGE.
"BREEDS ELSEWHERE" INDICATES
THAT THE BIRD DOES NOT LIKELY
BREED IN YOUR PROJECT AREA.)

Bald Eagle Haliaeetus leucocephalus

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

https://ecos.fws.gov/ecp/species/1626

Breeds Oct 15 to Aug 31

Black-billed Cuckoo Coccyzus erythropthalmus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a>

Breeds May 15 to Oct 10

Bobolink Dolichonyx oryzivorus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Jul 31

**Buff-breasted Sandpiper** Calidris subruficollis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9488 Breeds elsewhere

Canada Warbler Cardellina canadensis

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 20 to Aug 10

Cerulean Warbler Dendroica cerulea

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

https://ecos.fws.gov/ecp/species/2974

Breeds Apr 29 to Jul 20

**Dunlin** Calidris alpina arcticola

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds elsewhere

Eastern Whip-poor-will Antrostomus vociferus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Aug 20

**Evening Grosbeak** Coccothraustes vespertinus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Lesser Yellowlegs Tringa flavipes

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>

Breeds elsewhere

Prairie Warbler Dendroica discolor

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

Red-headed Woodpecker Melanerpes erythrocephalus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Sep 10

Red-throated Loon Gavia stellata

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Ruddy Turnstone Arenaria interpres morinella

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds elsewhere

Rusty Blackbird Euphagus carolinus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Semipalmated Sandpiper Calidris pusilla

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Short-billed Dowitcher Limnodromus griseus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480 Breeds elsewhere

Snowy Owl Bubo scandiacus

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds elsewhere

Wood Thrush Hylocichla mustelina

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 10 to Aug 31

### **Probability of Presence Summary**

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (\*)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (1)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

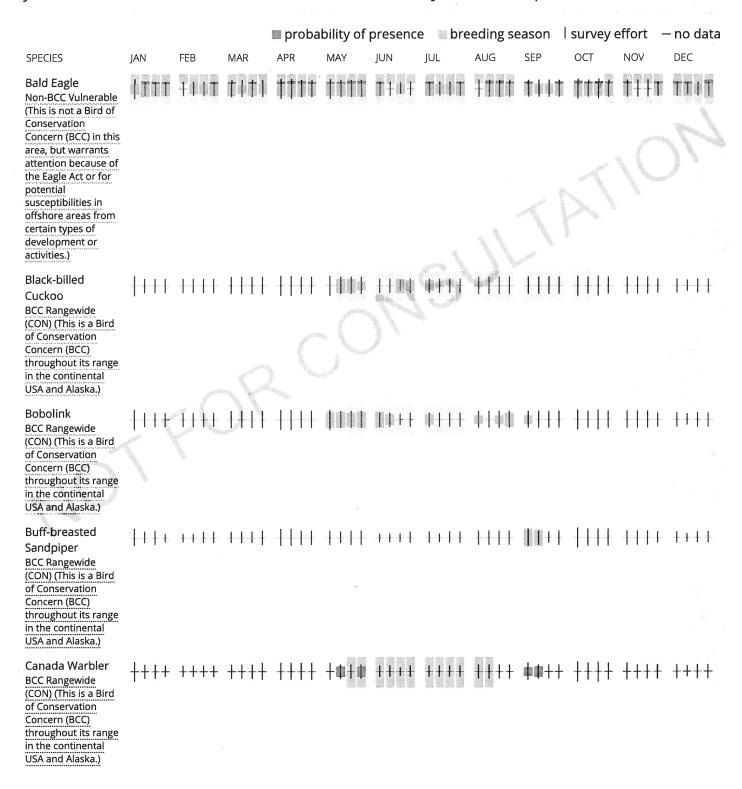
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Cerulean Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	++++	<b>w</b> +++	++++	++++	++++	++++	++++	++++	++++
Dunlin  BCC - BCR (This is a  Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		++++	++++	+++=	++##	++++	++++	++++	++++	++++	++++	++++
Eastern Whip- poor-will BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	+++	++++	++++	++++		++++	++++	++++	++++
Evening Grosbeak BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	alpe alpe alpe	++++	++++	+++	++++	++++	++++	++++	+++#	++++	ala ala ala
Lesser Yellowlegs BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	+++111	10++	÷÷÷÷	++11		[1]	**++	+#++	ate ate ate
Prairie Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	+++		+++#			111+	1111	111+	++++		+++
Red-headed Woodpecker BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	++++	++++	++++	+++	++++	+++	++ <b>  </b>   +	++++	++++
SPECIES	JAN	FEB	MAR	APR	MAY	JUŅ	JUL	AUG	SEP	ОСТ	NOV	DEC

Red-throated Loon BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	+++#	+++#	++#+	++++	++++	++++	++++	+++++	<b>#</b> +++	++++
Ruddy Turnstone BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)		++++	++++	++++	++++	++++	++++	M+++	++++	++++	++++	++++
Rusty Blackbird BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++##	#+++	++++	+	++++	++++	++++	+1111	11+1	++++
Semipalmated Sandpiper BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)		++++	++++	++++	++++	++++	+++1		<b>4 T U 0</b>	444	++++	++++
Short-billed Dowitcher BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	++++	1-1-1	4+++	++++	++++	++++	++++	++++	++++
Snowy Owl BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++  +	++++	++++	++++	++++	++++	++++	++++	++++	++++	++++	++++
Wood Thrush BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)	++++	++++	++++	++++	1111	<b>1 1 1 1</b>		<b>#</b> ###	+••+	++++	++++	++++

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

<u>Nationwide Conservation Measures</u> 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. <u>Additional measures</u> and/or <u>permits</u> 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 <u>Birds of Conservation Concern (BCC)</u> 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 <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> 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 (<u>Eagle Act</u> 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 <u>E-bird Explore Data Tool</u>.

### 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 <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u>.

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 <u>Birds of Conservation Concern</u> (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 <u>Eagle Act</u> 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 <u>Northeast Ocean Data Portal</u>. 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 <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

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 <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> 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**

### National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

### Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> 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>U.S. Army Corps of Engineers District</u>.

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:

```
FRESHWATER EMERGENT WETLAND
   PEM1C
   PEM1E
   PEM1F
FRESHWATER FORESTED/SHRUB WETLAND
   PFO1E
   PSS1E
   PFO1C
   PSS1C
   PFO1/4E
   PSS1/4E
FRESHWATER POND
   PUBH
   <u>PABH</u>
   PUBHh
  PUBHx
LAKE
  L1UBH
  L2ABH
RIVERINE
  R5UBH
  R4SBC
```

R2UBH

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 tuberficid 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.

# Attachment 2 Authorization for the Position of Director of Public Works as Duly Authorized Representative



TELEPHONE: (508) 841-8508 FAX: (508) 842-0587 kmizikar@shrewsburyma.gov

### **TOWN OF SHREWSBURY**

Richard D. Carney Municipal Office Building 100 Maple Avenue Shrewsbury, Massachusetts 01545-5338

September 27, 2018

United States Environmental Protection Agency Stormwater and Construction Permit Section (OEP06-1) Five Post Office Square, Suite 100 Boston, MA 02109

RE: National Pollutant Discharge Elimination System (NPDES) General Permit (effective

July 1, 2018)

Director of Public Works as Authorized Representative of NPDES General Permit

To whom it may concern:

I, as the principal executive officer as defined in Appendix B Subparagraph B.11 of the National Pollutant Discharge Elimination System (NPDES) Permit (effective July 1, 2018), hereby authorize the position of the Director of Public Works as the duly authorized representative having responsibility for compliance with the above permit.

Town of Shrewsbury
Town Manager

/dcs

Cc:

Frederick Civian, Stormwater Coordinator Massachusetts Department of Environmental Protection One Winter Street - 5th Floor Boston, MA 02108

### Attachment 3 Town of Shrewsbury List of Waterbody Segments & Number of Outfalls



TELEPHONE: (508) 841-8502 FAX: (508) 841-8497 jhowland@shrewsburyma.gov

### **TOWN OF SHREWSBURY**

### 100 MAPLE AVENUE SHREWSBURY, MASSACHUSETTS 01545-5398

The following table is a list of waterbody segments within the Town of Shrewsbury that receives flow from the Town along with the number of outfalls that segment receives.

Each waterbody segment is attributed to an ID used by the Town to identify different unnamed tributaries.

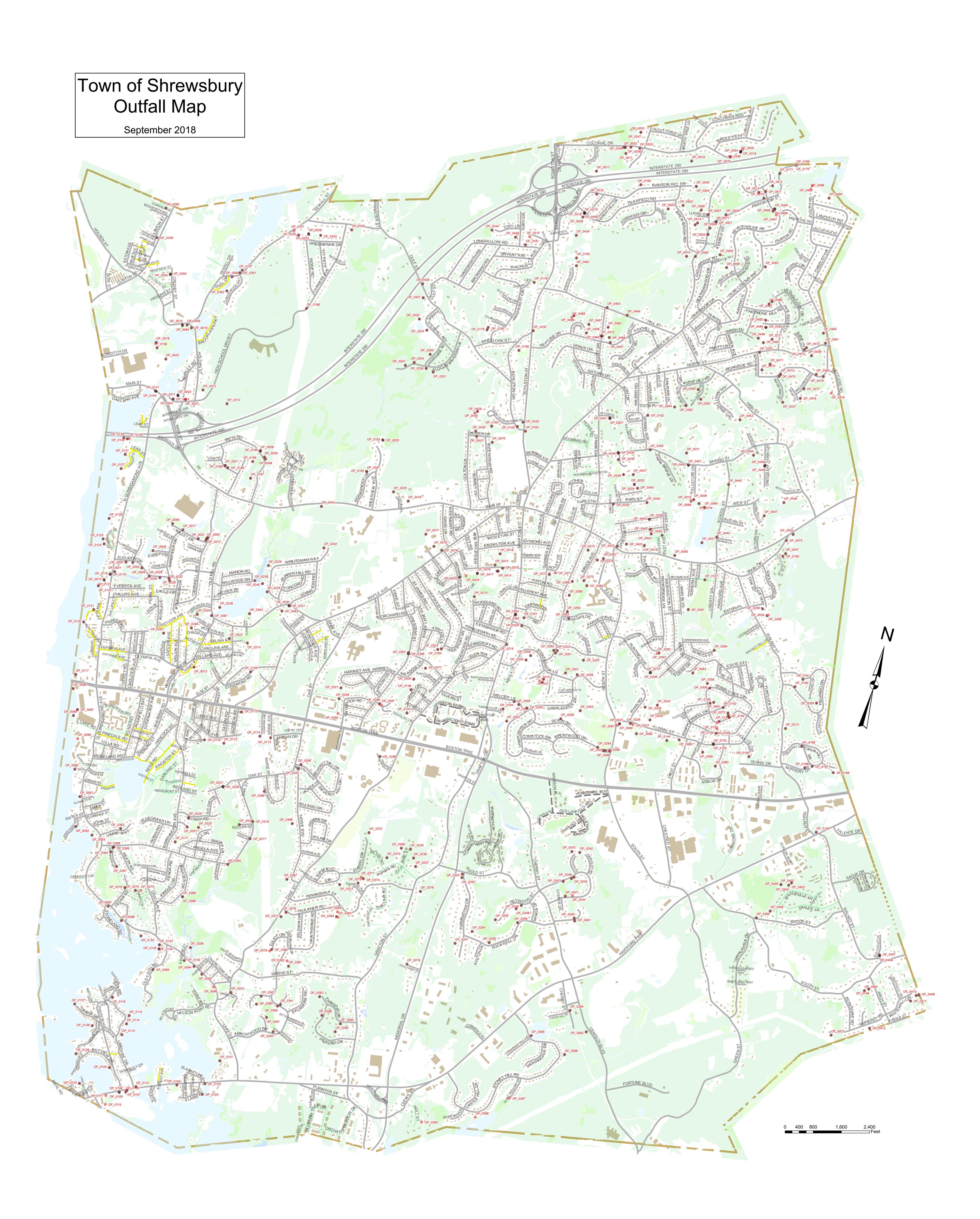
	1
	Number of
Waterbody segment that receives flow from the MS4	outfalls into
	receiving water
75151105 7 1 0 1 1	segment
MA51125_Lake Quinsigamond	38
92113Unnamed trib to Hop Brook	25
96335Unnamed trib to Big Bummet Brook	22
95955_Unnamed trib to Hop Brook S of Main Blvd	15
104122Unnamed trib to Lake Quinsigamond	15
51196_Shirley Street Pond	13
92593_Rawson Hill Brook	12
51050Flint Pond (N.B.)	11
94378Unnamed trib to Dean Park Pond	10
82004_Unnamed trib to wetland to Assabet River Reservoir	10
96061Unnamed trib to West Brook	9
51188Flint Pond (S.B.)	9
95646Unnamed trib W of South St	9
101288_Unnamed trib to Big Bummet Brook	9
95646_Unnamed trib to Hop Brook E of Francis Ave	9
92335Unnamed trib to Flint Pond (N.B.)	8
88458Rawson Hill Brook	7
102944Unnamed trib to Little Bummet Brook E of Cherry St	7
92509Unnamed trib to Rawson Hill Brook	7
94125_Unnamed trib to Lake Quinsigamond	7
82026Dean Park Pond	7
86170Unnamed trib to Rawson Hill Brook	6
82222_Rawson Hill Brook	6
86390Hop Brook	6
92289Unnamed trib to Hop Brook	6
102491 Unnamed trib to Little Bummet Brook N of Brook St	6

99429Unnamed trib to Lake Quinsigamond	6
88362Unnamed to Rawson Hill Brook	6
100390Unnamed trib to Meadow Brook E of Crescent St	6
51110Unnamed trib to Newton Pond	6
100390Unnamed trib to Meadow Brook	6
101070Unnamed trib to Big Bummet Brook	5
92315Unnamed trib to Rawson Hill Brook	5
104080Unnamed trib to Hop Brook W of South St	5
90173Unnamed trib to Meadow Brook	5
51105_Mill Pond	5
100680Unnamed trib to Summet Brook	4
100303_West Brook	4
101102Unnamed trib to Mill Pond	4
95685Unnamed trib to West Brook	4
97520Hop Brook	4
105307Unnamed trib to Meadow Brook	4
51196Unnamed trib to Worc Sand -Shirley Street Pond	4
96105Unnamed trib to Hop Brook	4
80528Unnamed trib to West Brook	4
101646Unnamed trib to West Brook	4
104080Unnamed trib to Hop Brook crossing Floral St	3
99304Unnamed trib to Hop Brook crossing Walnut St	3
92026Unnamed trib to West Brook	3
101003Unnamed trib to Hop Brook	3
96223Unnamed trib to Big Bummet Brook	3
Unnamed trib to Hop Brook	3
92600_Unnamed trib to Rawson Hill Brook	3
88144Unnamed trib to Rawson Hill Brook	3
92599Unnamed trib to Rawson Hill Brook	3
102128Unnamed trib to Big Bummet Brook	3
102128Unnamed trib to Big Bummet Brook E of Sheryl Dr	3
102255Unnamed trib to Rawson Hill Brook	3
102475Unnamed trib to Hop Brook crossing Floral St	2
97144Unnamed trib to Hop Brook	2
100698Unnamed trib to Lake Quinsigamond	2
95919Unnamed trib to Hop Brook	2
105183_Meadow Brook	2
97184Unnamed trib to Bummet Brook - Smith Pond Northboro	2
89172Meadow Brook	2

Unnamed trib to Big Bummet Brook	2
103017Unnamed trib to Big Bummet Brook E of Cherry St	2
90169Unnamed trib to Flint Pond (N.B.)	2
92354Unnamed trib to Flint Pond (N.B.)	2
94209Unnamed trib to West Brook	2
94176Unnamed trib to Dean Park Pond	2
97559Unnamed trib to West Brook W of Westview Ave	2
105250Unnamed trib to Eaton Pond	2
77797Rawson Hill Brook	2
102347Unnamed trib to Little Bummet Brook at Hillando Dr	2
88362 Rawson Hill Brook	2
97127Unnamed trib to Big Bummet Brook	2
97559 Unnamed trib to West Brook	2
95718 Unnamed trib E of Crescent St	2
99441 Meadow Brook	2
104590Unnamed trib to Flint Pond (N.B.)	2
99196_Unnamed trib to Flint Pond (N.B.)	2
77634Rawson Hill Brook	2
28849_Unnamed trib crossing Floral St	2
51110Newton Pond	2
32902_Unnamed trib crossing Floral St	2
51078 Jordan Pond	2
51078Unnamed trib to Jordan Pond E of Harrington Ave	1
51-17_Poor Farm Brook	1
99735_Newton Pond Stream	1
97280Unnamed trib to Hop Brook crossing Floral St	1
100078 Little Bummet Brook	1
103682Unnamed trib to Meadow Brook at Edgemont Rd	1
100390Meadow Brook	1
106633 Meadow Brook	1
103877_Unnamed trib to Bummet Brook - Smith Pond Northboro	1
99420 Unnamed trib to Bummet Brook - Smith Pond Northboro	1
92121_Unnamed trib to Flint Pond (N.B.)	1
102256Unnamed trib to Eaton Pond E of Seneca St	1
95818_Unnamed trib to S of Main Blvd	1
102431Unnamed trib to Big Bummet Brook E of Hemingway St	1
90438Unnamed trib to Summet Brook	1
89430_Summet Brook	1
103768Hop Brook	1

100900Unnamed trib to Hop Brook - N of Main St	1
94538Unnamed trib to Northboro Reservoir	1
106778_Unnamed trib to West Brook	1
100698Unnnamed trib to Lake Quinsigamond	1
106633Unnamed trib to Meadow Brook	1
104082Unnamed trib to Bummet Brook N of Tennis Dr	1
100553Unnamed trib to Flint Pond (N.B.)	1
99420Unnamed trib to Little Bummet Brook	1
97392_West Brook	1
98741Unnamed trib to West Brook	1
103709Unnamed trib to Meadow Brook	1
105601Unnamed trib to Big Bummet Brook	1
90185Unnamed trib to Flint Pond (N.B.)	1
99999Unknown - Isolated	1
92466Unnamed trib to West Brook	1
100390Unnmaed trib to Meadow Brook	1
51078Unnamed trib to Jordan Pond	1
92335Unnamed trib to Flint Pond (N.B.)	1
95927_Summet Brook	1
102613Unnamed trib to Hop Brook E of Bonnie Dell Ln	1
95769Rawson Hill Brook	1
31792_Unnamed trib crossing Floral St	1
26502_Unnamed trib to Bummet Brook - Smith Pond Northboro	1
32341Unnamed trib to Big Bummet Brook	1
51108Mud Pond	1
	·

### Attachment 4 Town of Shrewsbury Outfall Map





TELEPHONE: (508) 841-8502 FAX: (508) 841-8497 stormwater@shrewsburyma.gov

### **TOWN OF SHREWSBURY**

### 100 MAPLE AVENUE SHREWSBURY, MASSACHUSETTS 01545-5398

February 11, 2019

United States Environmental Protection Agency Stormwater Construction Permits Section (OEP06-1) Five Post Office Square, Suite 100 Boston, MA 02109

Dear USEPA,

The Town of Shrewsbury amends Part III of their Small MS4 NOI, submitted on October 1, 2018, such that the Town will adhere to Part II of Appendix H of the MS4-2016 Permit to the following waterbodies and its tributaries (as listed in Part II of Appendix F of the MS4-2016 Permit):

- **❖** Lake Quinsigamond
- Flint Pond
- Jordan Pond
- Mill Pond
- Shirley Street Pond
- Newton Pond

Sincerely,

Leffrey W. Howland, P.E.

Director of Public Works

Copy to:

Frederick Civian, MassDEP