

June 6, 2017

US EPA, Region 1
Office of Ecosystems Protection
PWTF GP Applications Coordinator (OEP06-4)
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Email: pwtf.generalpermit@epa.gov

Re: NPDES Notice of Intent for Sargent Water Treatment Plant
MAG640000

Dear Applications Coordinator:

Enclosed please find the National Pollutant Discharge Elimination System Notice of Intent (NOI) per the requirements of the *Code of Federal Regulations* 122.21 for the E.H. Sargent Water Treatment Facility located in Wilmington Massachusetts.

If you have any questions regarding this submittal, please contact me at (978) 532-1900 ext 2359 or mccarthy@wseinc.com

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.



Margaret McCarthy, P.E.
Team Leader

Enclosures: NPDES Potable Water Treatment Facility General Permit Notice of Intent

Cc: Joseph Lobao
Cliff Preble

A. Facility Information

1. MAG640000

2. **Facility Data**

Facility Name: Edmund H. Sargent Water Treatment Plant – Wilmington
Street: 11 Sewell Road **City:** Wilmington **State:** Massachusetts
Zip Code: 01887
Latitude: 42°34' 24.47" N **Longitude:** 71° 08' 35.83" W
SIC Code: 4941
Type of Business: Municipal Water Treatment Facility

3. **Facility Mailing Address**

Same as above

4. **Facility Owner**

Legal Name: Town of Wilmington, Massachusetts
Email: jlobao@wilmingtonma.gov **Street/PO Box:** 121 Glen Road
City: Wilmington **State:** Massachusetts **Zip Code:** 01887
Contact Person: Joseph Lobao **Tel #:** (978) 658-4711
Owner is: Town

5. **Facility Operator**

Legal Name: Town of Wilmington, Massachusetts
Email: cpreble@wilmingtonma.gov **Street/PO Box:** 121 Glen Road
City: Wilmington **State:** Massachusetts **Zip Code:** 01887
Contact Person: Cliff Preble **Tel #:** (978) 658-4711
Owner is: Town

6. **Currently Covered Under the Expired PWTF General Permit?**

Yes

a) **Has a prior NPDES permit been granted for the discharge that is listed in the NOI?**

Yes **Permit Number:** MAG640020

b) **Is the discharge a “new discharger” as defined by 40 CFR Section 122.22?**

No

c) **Is the facility covered by an individual NPDES permit for other discharges?**

No

d) **Is there a pending NPDES application on file with EPA for this discharge?**

No

e) **Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.**

Map Attached – Figure 1

B. Discharge Information

1. Name of receiving water into which discharge will occur:

Wetlands adjacent to Martins Brook; Freshwater

State water quality Classification:

Class B

Type of Receiving Water Body:

Brook

2. Indicate the frequency of the discharge:

Batch Discharges – In summer months, the facility discharges almost daily; in winter months, the facility discharges every two to three days

3. Describe the activity/activities that generate the discharge(s) to be covered by the permit. Include process discharges not specifically authorized in the PWTF GP which need to be authorized for the discharge (and which attain the effluent limits and other conditions of the general permit.) This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses, etc. (If lagoons are used, include the number and size of lagoons; Size and elevation of entry pipe; time of travel from entry point of the discharge into the lagoon to the entry point to the receiving water; and the length of backwash cycle for any combination of number of filters.):

The WTP capacity for finished water is 3 mgd. The two lagoons are each capable of holding approximately 130,000 cubic feet. The residuals come from two sources: the

sedimentation basin and the filter backwash. The filter backwash and sedimentation basin residuals flow by gravity to either of the lagoons. The level in each basin can be adjusted by adding or removing the wooden stop logs at the outlet structure. There is a 12-inch discharge pipe from the common manhole structure for the outlets of the two lagoons. The length of the pipe from the manhole to the discharge point is about 210 feet. The pipe invert elevation at the discharge point is 74.5 feet. Only one lagoon is active while the other is taken offline for freeze-thaw over the winter. Over a period of time, the wooden stop logs in the outlet structure are removed one at a time in order to slowly decant the clarified supernatant over the settled residuals.

- 4. Attach a line drawing or flow schematic showing the water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).**

See Attached – Figure 2 – Schematic Flow Diagram

- 5. Identify the source of water being discharged:**

Surface water

- 6. Number of Outfalls:**

1

Latitude: 42°34' 26" N

Longitude: 71°08' 34" N

- 7. For each outfall, indicate the proposed sampling location(s) for both effluent and ambient water (when applicable) and proposed consistent times of the month for collecting samples:**

The active lagoon outlet structure is the sampling location. Samples to be collected during the second full week of the month.

C. Effluent Characteristics

- 1. List here and attach additional information (on separate sheet) on any water additives used at the facility. This includes chemicals (including aluminum, iron, or phosphorus-containing chemicals) for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.**

- Chlorine
- Potassium Permanganate
- Polymer
- Aluminum Sulfate
- Lime
- Ammonium Sulfate

- 2. Report any known remediation activities or water quality issues in the vicinity of the discharge.**

N/A

- 3. Are aluminum compounds or polymers used as coagulants in this facility?**

Yes

- 4. Does this facility use any alum-based products for algae control?**

No

- 5. Are iron-containing coagulants used at this facility?**

No

- 6. Does the facility's discharge contain residual chlorine?**

Yes

- 7. Does the facility provide treatment to remove arsenic from the raw water source?**

No

- 8.**
a. Are phosphorus-containing chemicals added to the treated water at this facility?

No

b. N/A

c. N/A

- 9. Does this facility remove radium or other radioactive substances from raw water sources to comply with drinking water standards?**

No

- 10. Provide the reported or calculated seven-day ten-year low flow (7Q10) of the receiving water 7Q10:**

0.4799 cfs

11. For each outfall, provide the following discharge information:**Outfall # 1**

- a) **Design Flow of Facility (in million gallons per day, MGD):**
This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

3.0 MGD

- b) **Discharge Flow (in gallons per day, GPD):**

Maximum Daily Flow:

180,000 GPD

Average Monthly Flow:

174,000 GPD

- c) **TSS (mg/l):**

Number of samples:

10

Maximum Daily:

18 mg/l

Average Monthly:

3.52 mg/l

- d) **pH (s.u.) :**

Number of samples:

10

Minimum:

7.4 s.u.

Maximum:

8.0 s.u.

e) Total Residual Chlorine (ug/l):**Number of samples:**

10

Maximum Daily:

50.00 ug/l

12. The following section must be completed for any facility that answered "Yes" to Question III.C.3 or III.C.4 (e.g. adds an aluminum-containing chemical to the water being treated and/or discharged) AND was not covered under the previous PWTF GP (which expired on 10/2/14).

N/A

D. Endangered Species Act Eligibility Information

Using the instructions in Appendix III of the PWTF GP, which of the following criteria apply to your facility?

U.S. Fish and Wildlife Service (USFWS) Criteria:

B

1. If you selected USFWS criteria B, has consultations with the U.S. Fish and Wildlife Service been completed?

Yes

2. If consultation with US Fish & Wildlife Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?

Yes

3. Attach documentation of ESA eligibility for USFWS as required at Part 1.4 and Appendix III of the General Permit.

Documentation attached?

Yes

4. For facilities seeking coverage under the Potable Water Treatment Facility General Permit for the first time, respond to the following questions to assist in ESA eligibility for NMFS:

N/A

E. National Historic Properties Act Eligibility

- 1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge?**

No

- 2. Have any State or Tribal Historic Preservation Officers been consulted in this determination?**

No

- 3. Which of the three National Historic Preservation Act scenarios listed in Appendix II, Section III have you met?**

1

F. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

N/A

G. Signature Requirements

The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR §122.22 (see below) including the following certification:

I certify under penalty of law that (1) the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility; (2) any chemicals used to treat the discharge have been identified in this NOI; and (3) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Jeffrey M. Hull Date 6/6/2017
Printed Name and Title Jeffrey M. Hull Town Manager

Federal regulations require this application to be signed as follows:

1. For a corporation, by a responsible corporate party;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

H. "Opt-Out Request" from NetDMR Requirement

N/A

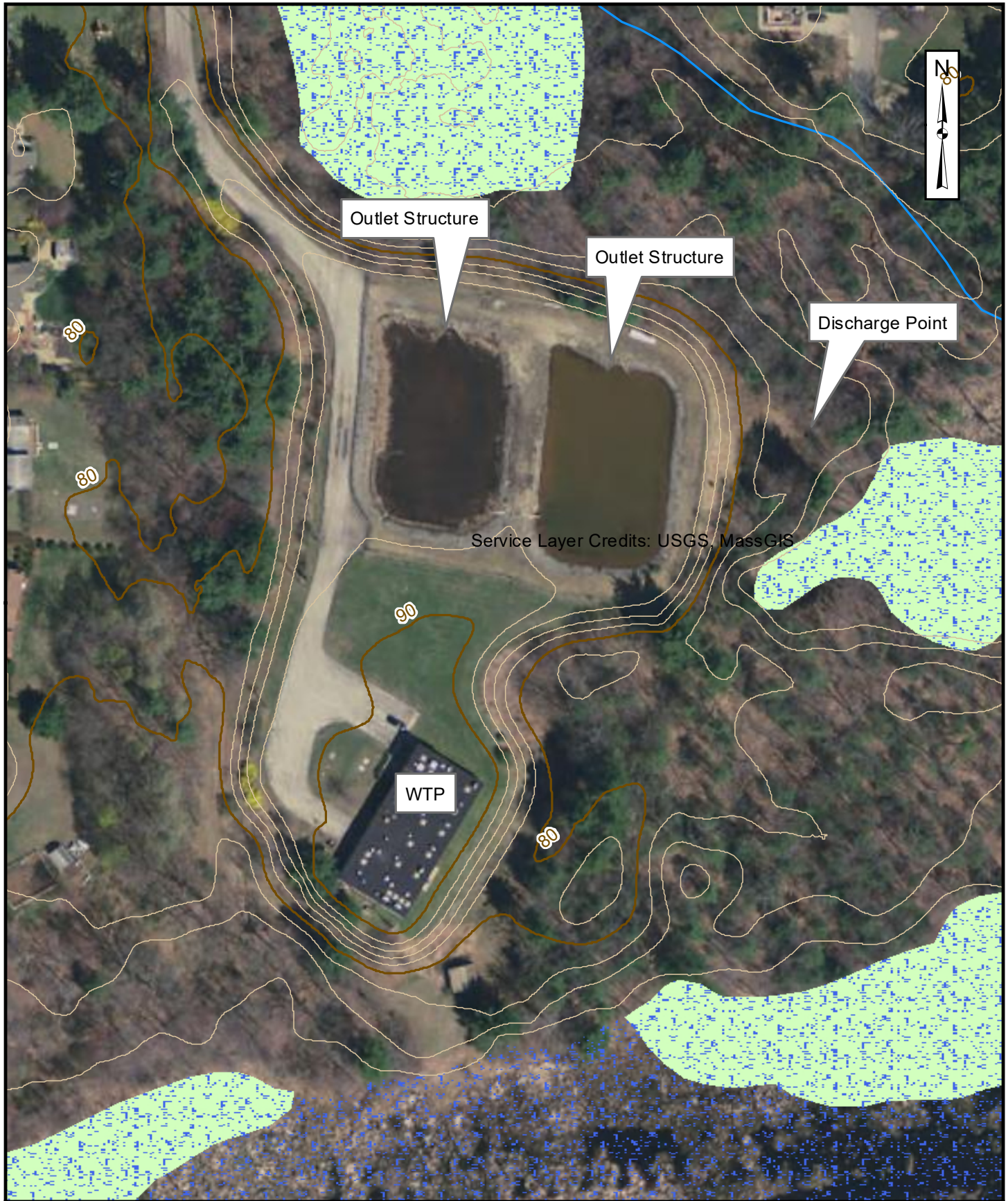


FIGURE 1
TOWN OF WILMINGTON, MASSACHUSETTS
SARGENT WTP

- Hydrologic Connection
- Marsh/Bog
- Wooded marsh

0 150 300 Feet

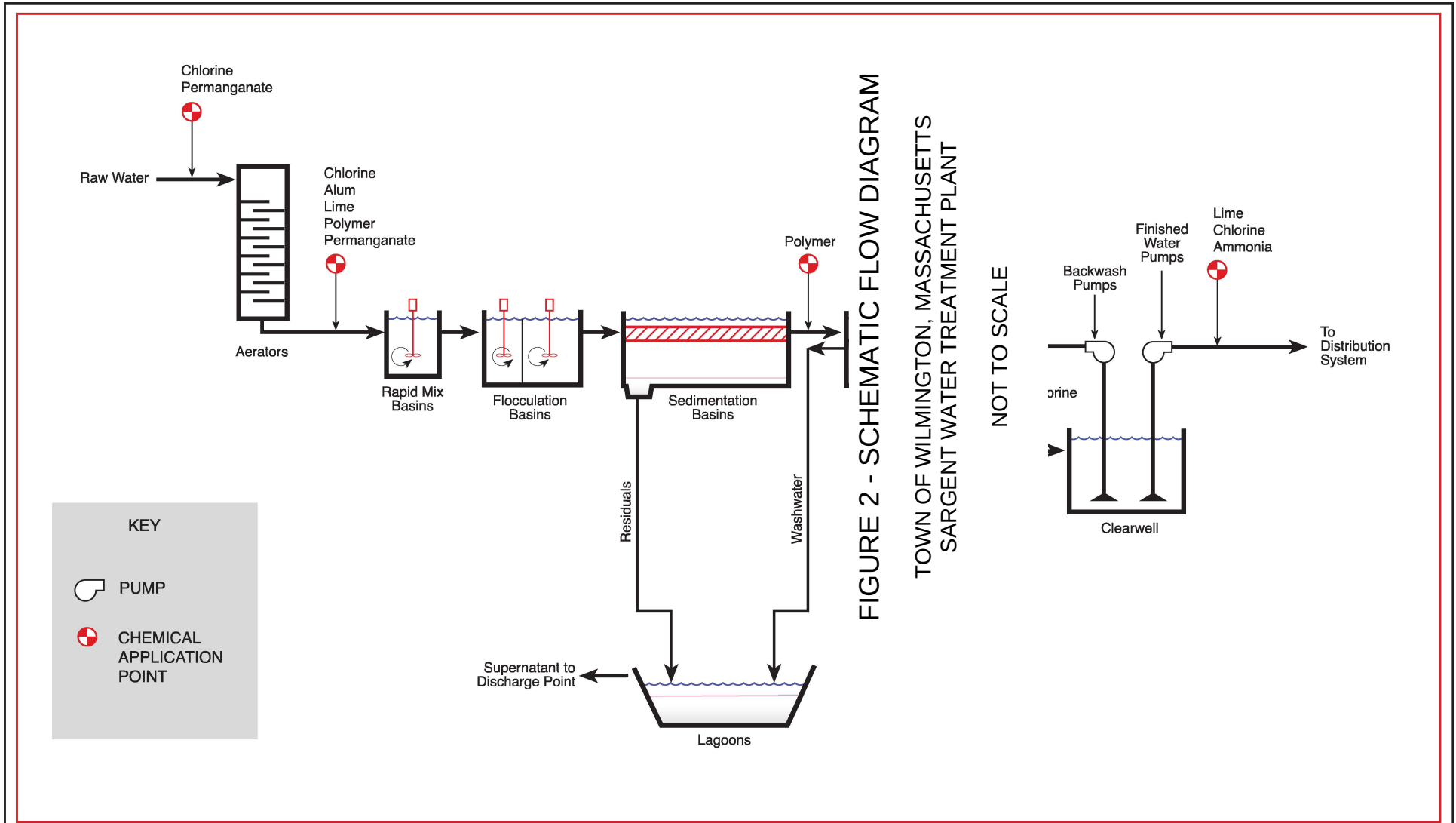


FIGURE 2 - SCHEMATIC FLOW DIAGRAM

TOWN OF WILMINGTON, MASSACHUSETTS
SARGENT WATER TREATMENT PLANT

TOWN OF WILMINGTON, MASSACHUSETTS
BUTTERS ROW WATER TREATMENT PLANT
SARGENT WATER TREATMENT PLANT
SCHEMATIC FLOW DIAGRAM
NOT TO SCALE



United States Department of the Interior

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



In Reply Refer To:

May 08, 2017

Consultation Code: 05E1NE00-2017-SLI-1460

Event Code: 05E1NE00-2017-E-02938

Project Name: The Town of Wilmington, MA - E.H. Sargent Potable Water Treatment Facility -
Notice of Intent

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having

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

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

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

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

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2017-SLI-1460

Event Code: 05E1NE00-2017-E-02938

Project Name: The Town of Wilmington, MA - E.H. Sargent Potable Water Treatment Facility - Notice of Intent

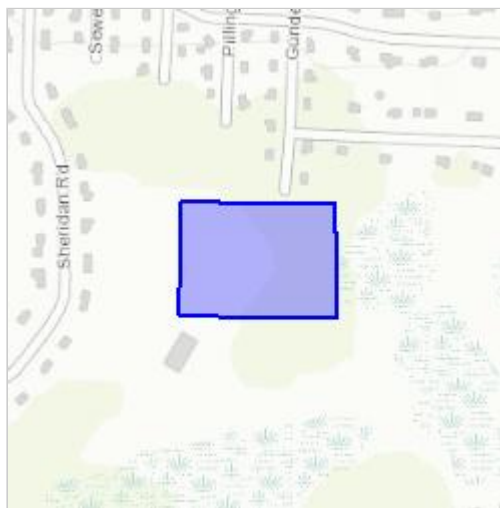
Project Type: WATER QUALITY MODIFICATION

Project Description: The potable water treatment facility (PWTF) is located on Sewell Road in Wilmington, MA. The PWTF discharges, intermittently year round, an approximate monthly average of 174,000 (gpd) with a maximum daily flow of less than 1,000,000 (gpd). This project does not involve any construction and is for permit renewal. The discharge from the PWTF is not likely to adversely affect the Northern Long-eared Bat.

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/42.57376403155793N71.14294162551403W>



Counties: Middlesex, MA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9045	

Critical habitats

There are no critical habitats within your project area.
