

c) Is there a pending NPDES application on file with EPA for this discharge? yes no
 If yes, date of submittal: _____ and permit number, if available _____

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.
Map attached?

B. Discharge Information (attach additional sheets as needed):

1. Name of receiving water into which discharge will occur: Blackstone River
 Freshwater Marine Water
 State Water Quality Classification Class B
 Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) stream/river

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

3. Describe the discharge activities for which the owner/applicant is seeking coverage (e.g., building cooling, process line cooling, etc.) Non contact cooling water for electrically operated heat treating furnace

4. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. See EPA's siting tool at http://www.epa.gov/tri/reporting/siting_tool. Attach additional pages if necessary.

Outfall # <u>1</u>	Latitude <u>42.195604</u>	Longitude <u>-71.756779</u>
Outfall # _____	Latitude _____	Longitude _____
Outfall # _____	Latitude _____	Longitude _____

5. For each Outfall provide the following discharge information:

Outfall # 1
 a) Maximum Daily Flow 0.055 MGD Average Monthly Flow 1.705 MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
 b) Maximum Daily Temperature 81.00 °F Average Monthly Temperature 71.4 °F
 c) Maximum Monthly pH 7.3 s.u. Minimum Monthly pH 6.90 s.u.
 d) Outfall's discharge is: continuous intermittent seasonal

Outfall # _____
 a) Maximum Daily Flow _____ MGD Average Monthly Flow _____ MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
 b) Maximum Daily Temperature _____ °F Average Monthly Temperature _____ °F
 c) Maximum Monthly pH _____ s.u. Minimum Monthly pH _____ s.u.
 d) Outfall's discharge is: continuous intermittent seasonal

Outfall # _____
 a) Maximum Daily Flow _____ MGD Average Monthly Flow _____ MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
 b) Maximum Daily Temperature _____ °F Average Monthly Temperature _____ °F
 c) Maximum Monthly pH _____ s.u. Minimum Monthly pH _____ s.u.
 d) Outfall's discharge is: continuous intermittent seasonal

6. Is the source of the NCCW potable water? yes no
 If yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility.
7. Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 24.9 MGD
 Attach any calculation sheets used to support stream flow and/or dilution calculations.

- 8. For facilities that discharge to Massachusetts surface waters:**
- a) Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment B of the General Permit. Calculation attached?
- b) Does the discharge occur in an Area of Critical Environmental Concern (ACEC)? yes no
 If yes, provide the name of ACEC _____
Note: See Part 3.4 and Appendix 1 of the General Permit for more information on ACEC.

C. Chemical Additives

1. Are any non-toxic neutralization and/or dechlorination chemicals used in the discharge(s)? yes no
2. If yes, attach a listing of each chemical used. Include the chemical name and manufacturer; maximum and average daily quantity used on a monthly basis, as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC₅₀ in percent for typically acceptable aquatic organism).
3. Was the listing submitted with the facility's 2008 NCCWGP NOI? yes no

D. NCCW Source Water Information

1. State the source of the NCCW (e.g., municipal water supply, private well, surface water withdrawal, etc.).
 Source Onsite Well Water Supply Name of Source Water _____
2. Is the source water registered/permitted under MA Water Management Act or NHDES User Registration Rule (ENV WQ 2202)? yes no If yes, registration number PWS#2186000
3. If the source water is groundwater (non-municipal well water), see Appendix 9 of the General Permit and submit effluent (and receiving water hardness) test results, as required in Part 5.4 of the General Permit.
Test results attached?
4. Does the facility use both a primary and backup source of NCCW? yes no If yes, **attach information** that identifies and explains the primary and backup sources of NCCW and how often the backup supply was used in the past three years.

E. Best Technology Available for Cooling Water Intake Structures (CWISs)

- If the facility's discharge is covered by this General Permit and the facility **withdraws non-contact cooling water from a surface water**, you are subject to the BTA requirements at Part 4.2 of the General Permit.
1. Are you subject to the BTA requirements of the General Permit? yes no
- a) If no, explain Source not from surface water and skip to F.
- b) If yes, was the facility-specific BTA description submitted with the facility's 2008 NCCW GP NOI?
 yes no
- c) If yes, does that description accurately describe the facility current operations and practices? yes no

2. If the facility is subject to the General Permit's BTA requirements and is requesting coverage under the NCCWGP for the first time, or if you answered "No" to question E.1.c. above, attach the facility-specific BTA description as required in Part 4.2 of the General Permit. For additional information and guidance, see Section IV of the Fact Sheet.

Include in your description:

- a) Measures to meet the General Permit Part 4.3.a general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrate; or the required alternative monitoring plan frequency and/or protocol.
- b) A characterization of the source water body's aquatic life habitat in the vicinity of each CWIS during the seasons when the CWIS may be in use.
- c) The attributes of the current CWIS.
- d) The design measures of the CWIS.
- e) The operation measures of the CWIS.
- f) The historical occurrence of impinged fish for the past five years.
- g) If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system.
- h) Other components to reduce impingement and/or entrainment of aquatic life.

3. Provide the following information for each CWIS to support your attached facility-specific BTA description:

- a) The design capacity of the of the CWIS _____MGD
- b) Maximum monthly average intake of the CWIS during the previous five years _____MGD
- c) The month in which this flow reported in 3.b. occurred _____
- d) The maximum through-screen design intake velocity _____feet/second (fps)

4. For facilities where the CWIS is located on a freshwater river or stream, provide the following information:

- a) The source water's annual mean flow in MGD as available from USGS or other appropriate source _____MGD
- b) The design intake flow as a % of the source water's annual mean flow _____%
Attach calculations if equal to or less than 5% of annual mean flow.
- c) The source water's 7Q10 _____MGD
- d) The design intake flow as a percent of the source water's 7Q10 _____%

5. Provide a map showing the location of each cooling water intake structure; NCCW Outfall(s) and CWIS features referred to in the BTA description. **Map attached?**

F. Endangered Species Act Eligibility Information

Using the instructions in Appendix 2 of the NCCW GP, which of the following criteria apply to your facility? USFWS

Criteria: A B C

1. If you selected USFWS criteria B, has consultation with the U.S. Fish and Wildlife Service been completed?
yes no

2. If consultation with US Fish & Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?
yes no

3. Attach documentation of ESA eligibility for USFWS as required at Part 3.4 and Appendix 2 of the General Permit.

Documentation attached?

4. Please indicate if your facility **directly intakes water for non-contact cooling** from any of the following waterbodies:

- Merrimack River
- Connecticut River
- Piscataqua River
- Taunton River

EPA will consult with the National Marine Fisheries Service on cooling water intakes covered under this permit in areas (in the above waterbodies) of the endangered Shortnose Sturgeon and Atlantic Sturgeon.

G. 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? yes no

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination? yes no
If yes, attach the results of the consultation(s).

3. Which of the three National Historic Preservation Act scenarios listed in Appendix 3, Section C have you met?
 1 2 3

H. 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.

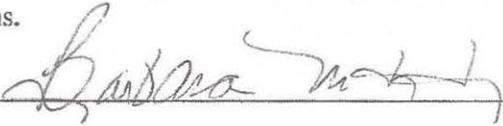
Analytical information- physically sampled and will be sent over as soon as received per discussion with EPA Suzanne Warner.

I. 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) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) 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 certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature  Date 02/02/2015

Printed Name and Title Barbara Nartowt - Vice President County Heat Treat

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
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.

United County Industries dba County Heat Treat, Millbury MA. 01527:

Calculated dilution and temperature rise and additional ancillary information for 2015 NCCW NOI.

$$Q_r = 24.9 \text{ mgd}$$

$$Q_p = 0.055 \text{ mgd}$$

$$\text{Dilution factor} = 453.72$$

$$T_p = 81^\circ \quad T_r = 45^\circ \quad M_p = 0.055 \quad M_r = 24.9$$

$$\frac{(0.055 \times 81) + (24.9 \times 45)}{(0.055 + 24.9)}$$

$$= 45.079$$

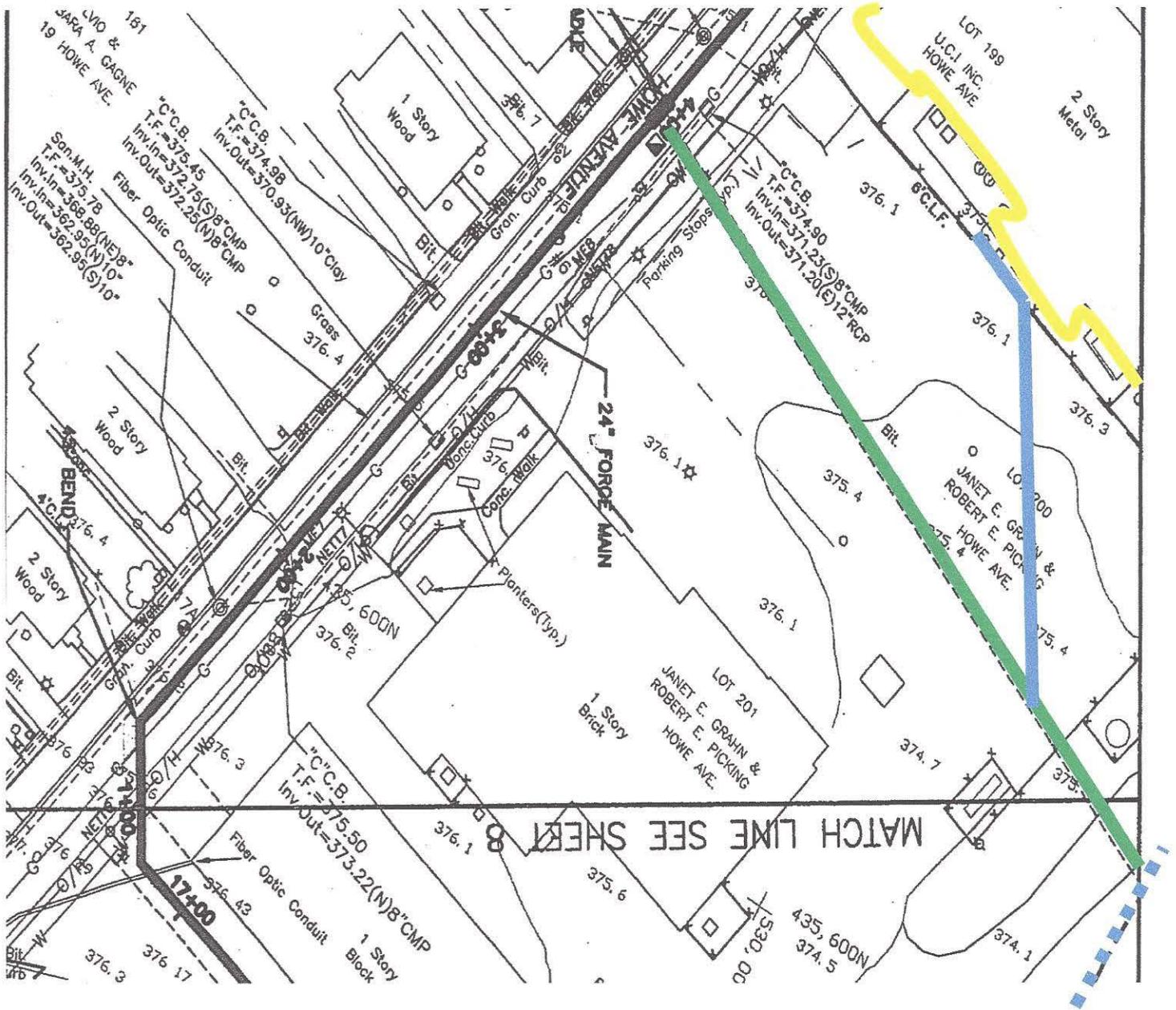
$$\Delta T_r = 45.079 - 45$$

$$\Delta T_r = 0.079^\circ \text{ F}$$

Explanation of use of alternative source water:

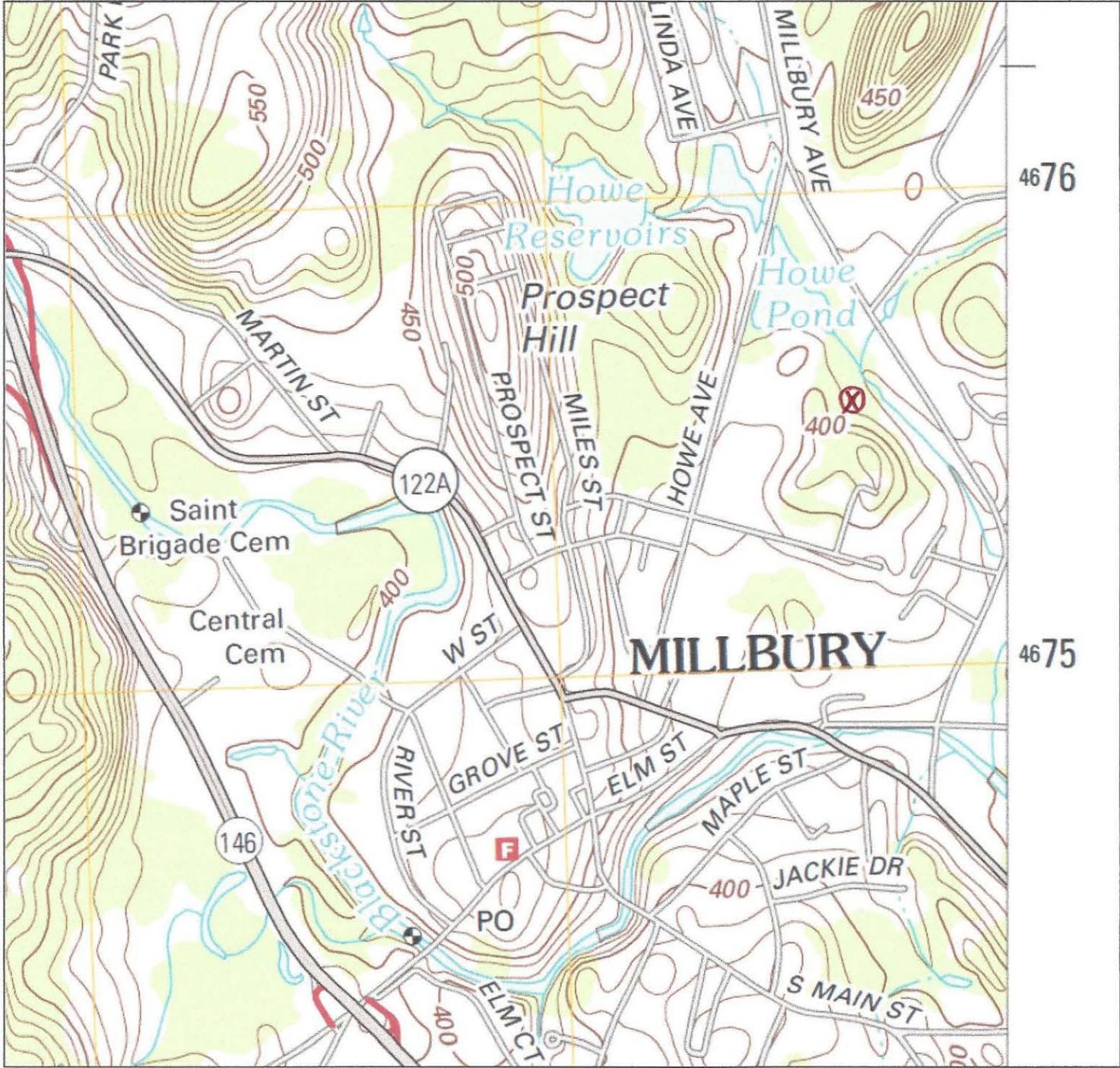
In August 2014 the facility experienced a failure of the variable frequency drive associated with the pumping system of the well water source used for the non-contact cooling water. This forced an unplanned system shutdown to allow for repairs and replacement of equipment. During this 2 day shutdown the facility operated using the city-provided water supply as the substitute non-contact cooling water source. The level of operation was approximately 30% of normal production levels due to the decrease in available water supply. This was the first time that this supply has been used in the last 3 calendar years.

COUNTY HEAT TREAT -32 Howe Ave, Millbury, MA 01527



Highlighted Effluent from non-contact cooling water(blue) is released out the large stormwater pipe(green) that is located southeast from the facility behind an existing business located to the southwest of United County Industries dba County Heat Treat (Yellow). Drawing is estimated as there are no known existing engineering documents showing exact locations of piping. Wetland/Stream (blue dotted) located at termination of stormwater piping is shown in lower right.

COUNTY HEAT TREAT -32 Howe Ave, Millbury, MA 01527



Est. Line Diagram of non-contact cooling: County Heat Treat-Millbury MA

HOWE AVE



- Incoming well water
- Outbound heated non-contact water



The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

32 Howe Avenue - Millbury, MA

1/26/2015 1:59:30 PM



1:1128
1"=94'



Shows Stormwater system and locations relative to factory.



IPaC - Information, Planning, and Conservation System

Environmental Conservation Online System

<http://www.fws.gov>

IPaC Home Page (/ipac/)

Initial Project Scoping (/ipac/wizard/chooseLocation/prepare.action)

Project Builder ()

Updated Species List (/ipac/resubmit.jsp)

FAQs (/ipac/faqs.jsp)

Step 1

Trust Resources List

[\(/ipac/wizard/chooseLocation/prepare.action\)](/ipac/wizard/chooseLocation/prepare.action)

Location

An online Endangered Species Act species list **IS** available below for your project area, represented by the office(s) listed:

Step 2

[\(/ipac/wizard/chooseActivities/prepare.action\)](/ipac/wizard/chooseActivities/prepare.action)

Activities

New England Ecological Services Field Office
70 COMMERCIAL STREET, SUITE 300
CONCORD, NH 3301
(603) 223-2541
<http://www.fws.gov/newengland> (<http://www.fws.gov/newengland>)

Step 3

Trust resources list

Step 4

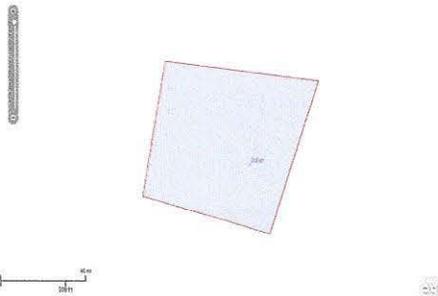
Conservation measures

The Endangered Species Act species list below is for planning purposes only -- it is not an official species list.

To save or print all Trust Resources lists on this page, click here:

To request an official species list, click here:

Project Location Map:



Note: The map reflects the map layers selected on the Step 1 Location page. To change what appears on this map, return to the Location page and adjust the map layers.

Project Counties:

Worcester, MA

Trust Resources

Project type: wastewater pipeline

Endangered Species Act Species List (USFWS Endangered Species Program (<http://www.usfws.gov>))

There are no listed species found within the vicinity of your project.

[Don't see a species you expect to see? \(#\)](#)

Critical habitats within your project area:

There are no critical habitats within your project area.

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program (<http://refuge.usfws.gov>))

There are no National Wildlife Refuges found within the vicinity of your project.

FWS Migratory Birds (USFWS Migratory Bird Program (<http://www.fws.gov/migratorybirds>))

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds killed or injured by otherwise lawful activities. For more information regarding the MBTA, please visit <http://www.fws.gov/migratorybirds/RegulationsandPolicies.html> (<http://www.fws.gov/migratorybirds/RegulationsandPolicies.html>).

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (BCC) list identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html> (<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html>).

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Bird Conservation Tools section at: <http://www.fws.gov/migratorybirds/CCMB2.htm> (<http://www.fws.gov/migratorybirds/CCMB2.htm>).

For information about conservation measures that help avoid or minimize impacts to birds, please visit: <http://www.fws.gov/migratorybirds/CCMB2.html> (<http://www.fws.gov/migratorybirds/CCMB2.html>).

Migratory birds of concern that may be affected by your project:

There are 15 birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory birds of concern list are updated regularly as new and better information is obtained. User feedback is one method of identifying any needed updates. We encourage you to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list for a specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list) to the [ECOS Help Desk \(ecos/helpdesk.do\)](mailto:ecos/helpdesk@fws.gov).

Species Name	Bird of Conservation Concern (BCC)	Species Profile
American Oystercatcher (<i>Haematopus palliatus</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
American bittern (<i>Botaurus lentiginosus</i>)	Yes	species info (/ipac/wizard/speciesInformation/showSpeciesInformation.action)
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Yes	species info (/ipac/wizard/speciesInformation/showSpeciesInformation.action)
Black-billed Cuckoo (<i>Coccyzus erythrophthalmus</i>)	Yes	species info (/ipac/wizard/speciesInformation/showSpeciesInformation.action)
Blue-winged Warbler (<i>Vermivora pinus</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Canada Warbler (<i>Wilsonia canadensis</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Least Bittern (<i>Ixobrychus exilis</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Peregrine Falcon (<i>Falco peregrinus</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Pied-billed Grebe (<i>Podilymbus podiceps</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Prairie Warbler (<i>Dendroica discolor</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Purple Sandpiper (<i>Calidris maritima</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Short-eared Owl (<i>Asio flammeus</i>)	Yes	species info (/ipac/wizard/speciesInformation/showSpeciesInformation.action)
Upland Sandpiper (<i>Bartramia longicauda</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)

Trust Resources

Wood Thrush (<i>Hylocichla mustelina</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)
Worm eating Warbler (<i>Helmitheros vermivorum</i>)	Yes	species info (http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action)

NWI Wetlands (USFWS National Wetlands Inventory (<http://www.fws.gov/wetlands/>)).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status

National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, you may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetlands Inventory Program (NWI) office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be covered by the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of the project to the Regulatory Program of the appropriate U.S. Army Corps of Engineers (<http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx>).

Data Limitations, Exclusions and Precautions

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on wetland resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation indices. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may be necessary to confirm 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 of ground truth verification work conducted. Metadata should be consulted to determine the date of the mapping problems.

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

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

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetland types used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of project area, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local regulatory programs and proprietary jurisdictions that may affect such activities.

IPaC is unable to display wetland information at this time.

Last updated: February 2, 2015

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IPaC Home Page ([/ipac/](#))

Initial Project Scoping ([/ipac/wizard/chooseLocation!prepare.action](#))

Project Builder ()

Updated Species List ([/ipac/resubmit.jsp](#))

FAQs ([/ipac/faqs.jsp](#))

Step 1

Conservation Measures (CM) Report

[\(/ipac/wizard/chooseLocation!prepare.action\)](#)

Location

Step 2

[\(/ipac/wizard/chooseActivities!prepare.action\)](#)

Activities

Caution!

This portion of the IPaC system is still under development and testing by the U.S. Fish & Wildlife Service. Conservation Measures obtained at this time should not be used as authoritative recommendations for your project.

Step 3

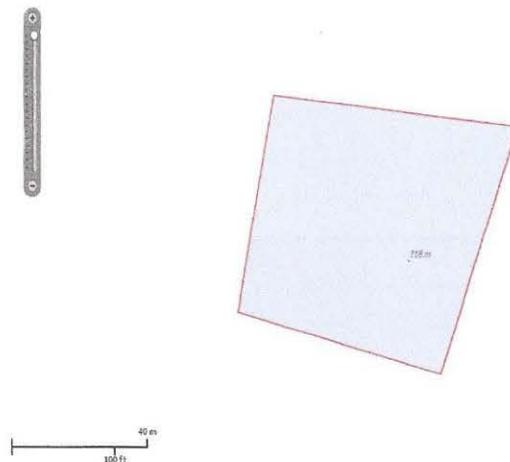
Project Location Map:

[\(/ipac/wizard/trustResourceList!prepare.action\)](#)

Trust resources list

Step 4

Conservation measures



Note:

The map reflects the map layers selected on the Step 1 Location page. To change what appears on this map, return to the

Location
page
and
adjust
the map
layers.

Project Counties:

Worcester, MA

Project type: Wastewater Pipeline

Conservation Measures (Grouped by Category)

FWS Endangered Species conservation measures are not available for your project online.

For information about conservation measures that help avoid or minimize impacts to birds, please visit: <http://www.fws.gov/migratorybirds/CCMB2.htm>
(<http://www.fws.gov/migratorybirds/CCMB2.htm>).

Last updated: February 2, 2015

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