

## General Electric Company

## BIOTA CONSUMPTION ADVISORY OUTREACH PLAN HOUSATONIC REST OF RIVER -MASSACHUSETTS

November 2017

Prepared for:
General Electric Company
Prepared by:
Arcadis U.S., Inc.
One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse
New York 13202
Tel 315 446 9120
Fax 315 449 0017
Our Ref.:
ALLHOUSA.1000
Date:
November 2017

## **CONTENTS**

2	Background	12	2	
3	Proposed A	ctivities	1	
	3.1 Provis	ion and Maintenance of Updated Advisory Signs4	1	
	3.2 Provis	ion of Biota Consumption Advisory Pamphlets	1	
4	Schedule		5	
FIGURES				
Fig	ure 1	Current Massachusetts Fish, Frog, Turtle, Wood Duck, and Mallard Duck Consumption Advisory Sign for the Housatonic River (from Pittsfield South to Rising Pond in Great Barrington) (in text)		
Fig	ure 2	Current Massachusetts Fish, Frog, and Turtle Consumption Advisory Sign for the Housatonic River (below Rising Pond) (in text)		
Fig	ure 3	Locations of Consumption Advisory Signs Along the Massachusetts Section of the		

## **ATTACHMENT**

Figure 4

Attachment A Fish and Waterfowl Consumption Advice for the Housatonic River Area in Massachusetts

Housatonic River (below Rising Pond) (attached)

Housatonic River (from Pittsfield South to Rising Pond in Great Barrington) (attached)

Locations of Consumption Advisory Signs Along the Massachusetts Section of the

#### 1 INTRODUCTION

The Commonwealth of Massachusetts has a general state-wide consumption advisory for eating fish, shellfish, and waterfowl caught in waters of the Commonwealth. It also has specific biota consumption advisories for the freshwater bodies in Massachusetts. These advisories, issued by the Massachusetts Department of Public Health (MDPH), are based on the presence or potential presence of polychlorinated biphenyls (PCBs), mercury, and/or other chemicals in the tissue of the biota. The current biota consumption advisories for the Housatonic River in Massachusetts apply to the consumption of fish, frogs, and turtles from the River between Pittsfield and the Connecticut border and to the consumption of wood ducks and mallard ducks from the River between Pittsfield and Rising Pond in Great Barrington. These specific consumption advisories are based upon findings of PCBs in the tissues of these biota, although the Housatonic River is also subject to the general state-wide advisory.

On October 24, 2016, the U.S. Environmental Protection Agency (EPA) issued to the General Electric Company (GE), pursuant to the 2000 Consent Decree for the GE-Pittsfield/Housatonic River Site, a modification to GE's permit under the corrective action provisions of the Resource Conservation and Recovery Act (RCRA) relating to the portion of the Housatonic River downstream of the confluence of the East and West Branches of the River in Pittsfield (referred to as the "Rest of River"). That permit modification (the Modified Permit) selected a Remedial Action for the Rest of River. Most of the provisions of the Modified Permit have been stayed due to appeals to the EPA Environmental Appeal Board. However, as specified in a January 9, 2017 letter from EPA to GE, one component of the Remedial Action not stayed is preparation of a biota consumption advisories plan(s). Section II.B.6.a.(1) of the Modified Permit requires GE to "cooperate with and support EPA and the States [of Massachusetts and Connecticut] regarding all biota consumption advisories issued by EPA and/or the States for the Rest of River area." More specifically, Section II.B.6.a.(2) requires GE to "cooperate with and support EPA and the States to improve public awareness of the advisories by conducting the following: preparing, distributing, inspecting, monitoring, and maintaining educational and outreach activities, including the producing and posting of signs [in appropriate languages]; providing to hunting and fishing license distributors appropriate written notices regarding such advisories to be included with licenses; and performing all other related activities." To meet those requirements, GE's Rest of River Initial Statement of Work, which was submitted to EPA in May 2017 and conditionally approved by EPA on July 10, 2017, provided that GE would submit separate biota consumption advisory plans for the Massachusetts and Connecticut portions of the Rest of River to present GE's proposals for compliance with Section II.B.6.a of the Modified Permit.

This document presents GE's biota consumption advisory outreach plan for Massachusetts in accordance with the requirements of Section II.B.6.a of the Modified Permit. Upon EPA's approval or conditional approval of this plan, GE will carry out the approved activities until such time as the advisories are discontinued or this program is modified with EPA approval. (GE is submitting a separate biota consumption advisory outreach plan for Connecticut.)

Section 2 of this plan provides background information on prior activities relating to the biota consumption advisories in Massachusetts. Section 3 presents a description of proposed activities related to posting/maintenance of signs and provision of written notices regarding biota consumption advisories in Massachusetts. Section 4 presents the proposed schedule for performance of the proposed activities.

#### 2 BACKGROUND

As noted above, the MDPH has issued state-wide and waterbody-specific biota consumption advisories. In 1982, the Massachusetts Division of Fisheries and Wildlife (MDFW) posted the Housatonic River downstream of the GE Pittsfield facility with an advisory, established by the MDPH, warning against the consumption of fish, frogs, and turtles. In March 1992, the Massachusetts Department of Environmental Protection (MDEP) directed GE to replace the original signs with polyethylene signs, and GE did so. Additional signs were also placed at other likely public access points along the Housatonic River in Massachusetts downstream of the GE facility.

Over the next several years, GE undertook periodic inspections of this portion of the Housatonic River to determine whether the previously placed signs were still present and whether there were any locations where new signs were needed. If any new signs were needed or if previously placed signs were found to be vandalized or missing, GE consulted with MDEP and MDPH regarding the need to place new or replacement signs in these areas. If requested by MDEP or MDPH, GE provided such signs and posted them in the appropriate public access areas or delivered them to MDEP or MDPH for posting. In addition, GE provided fishing license sales agents in Berkshire County with cards that described the PCB fish consumption advisory, and it requested the agents to distribute these cards to all persons purchasing a Massachusetts fishing license in Berkshire County.

In August 1999, MDPH determined that wood ducks and mallard ducks taken from the Housatonic River and its impoundments from Pittsfield south to Rising Pond in Great Barrington contained elevated concentrations of PCBs. In response, MDPH issued a provisional waterfowl consumption advisory for that reach of the River. In light of that change, based on a 2000 GE proposal entitled *Proposal for Informing the Public of Biota Consumption Advisories on the Housatonic River* and related discussions with EPA, GE updated the signs for this reach to add wood ducks and mallard ducks to the consumption advisories; and it subsequently posted these revised signs, as replacements for the original signs, along the Housatonic River and its impoundments from Pittsfield south to Rising Pond in Great Barrington. GE also visited each location from Rising Pond to the Connecticut border where the original signs were previously posted and replaced those that were missing or vandalized.

GE has subsequently conducted periodic inspections, on a biennial basis since 2010, of the appropriate areas along the Massachusetts portion of the Housatonic River downstream of the GE facility to determine whether the consumption advisory signs that were placed at public access points were still present. Where signs were missing or vandalized or if additional likely public access points were identified, GE has consulted with EPA and MDEP regarding the need for placement/replacement of the signs and has produced and posted such signs at the appropriate locations.

The current biota consumption advisory sign used for the portion of the River from Pittsfield south to Rising Pond in Great Barrington is shown on Figure 1 (below), and the current sign used for the portion of the River from Rising Pond to the Connecticut border is shown on Figure 2 (below). The current locations of the consumption advisory signs from Pittsfield to Rising Pond, based on GE's latest (2016) inspection, are depicted on Figure 3 (attached). The current locations of the signs from Rising Pond to the Connecticut border, based on the same inspection, are depicted on Figure 4 (attached).



Figure 1. Current Massachusetts Fish, Frog, Turtle, Wood Duck, and Mallard Duck Consumption Advisory Sign for the Housatonic River (from Pittsfield south to Rising Pond in Great Barrington)



Figure 2. Current Massachusetts Fish, Frog, and Turtle Consumption Advisory Sign for the Housatonic River (below Rising Pond)

The MDPH's current biota consumption advisory for the Housatonic River in Massachusetts, set forth in a brochure entitled *Fish and Waterfowl Consumption Advice for the Housatonic River Area in Massachusetts*, available at <a href="http://www.mass.gov/eohhs/docs/dph/environmental/investigations/housatonic-river-brochure-2017.pdf">http://www.mass.gov/eohhs/docs/dph/environmental/investigations/housatonic-river-brochure-2017.pdf</a>, is provided in Attachment A. Note that the last page of that pamphlet describes the general state-wide advisory for eating recreationally caught fish and waterfowl in Massachusetts.

#### 3 PROPOSED ACTIVITIES

### 3.1 Provision and Maintenance of Updated Advisory Signs

GE will consult with EPA and MDEP regarding the need for any changes to the design or wording of the biota consumption signs, either for the reach of the Housatonic River between Pittsfield and Rising Pond or for the reach of the River from Rising Pond to the Connecticut border. If EPA or MDEP, after consultation with MDPH, wants updates to the signs, GE will produce new polyethylene signs using the modified design and wording specified by MDPH and MDEP. GE will then either provide the signs to EPA, MDEP, or another designated state agency for posting, or else will post the updated signs, as replacements for the current signs, along the Housatonic River and its impoundments at the same locations shown on Figure 3 for the reach from Pittsfield south to Rising Pond and those shown on Figure 4 for the reach from Rising Pond to the Connecticut border. In such a case, GE will advise EPA of its plans for providing updated signs.

Regardless of whether GE provides updated signs, GE will, on an annual basis beginning in 2018, conduct inspections of the Housatonic River in Massachusetts to determine whether the consumption advisory signs that were placed at public access points are still present. If signs are missing or vandalized or if additional likely public access points are identified, GE will continue to consult with EPA and MDEP regarding the need for placement/replacement of the signs and will, as requested by those agencies, produce such signs and post them at the appropriate locations or provide them to EPA or MDEP for posting. In addition, if, at another time, EPA or MDEP identifies a specific location or locations where the posting of a replacement or additional sign is warranted, GE will provide the requested sign(s) and post it/them at the appropriate locations or provide it/them to EPA or MDEP for posting.

## 3.2 Provision of Biota Consumption Advisory Pamphlets

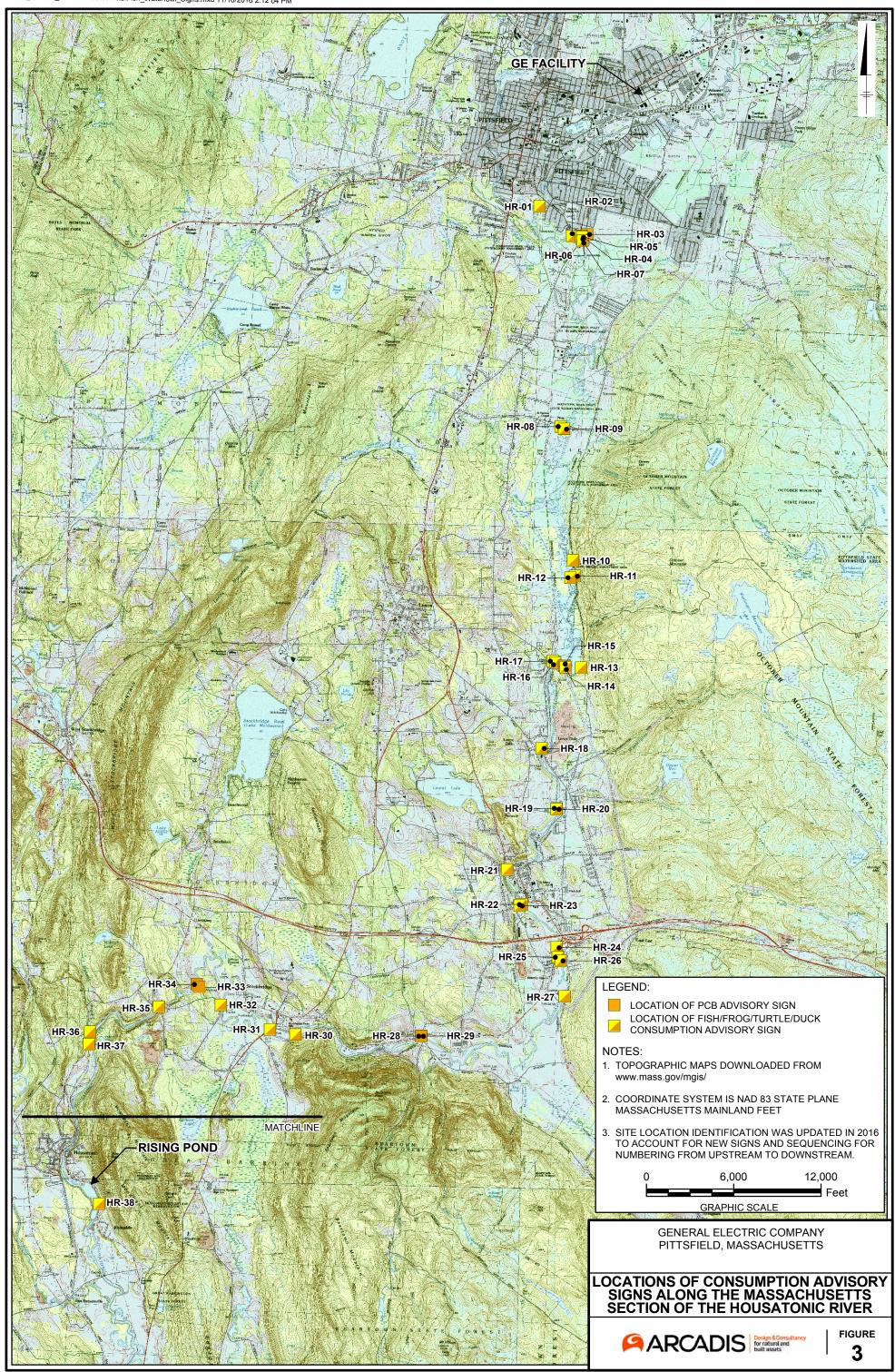
On an annual basis, beginning in 2018, GE will provide fishing and hunting license distributors in Berkshire County – which consist of the local Massachusetts Department of Fish and Game office in Pittsfield, certain city and town clerk offices, and certain sporting goods stores (Dick's Sporting Goods and Wal-Mart in Pittsfield, the Mill River General Store in Mill River, and Wal-Mart in North Adams) – with copies of the thencurrent MDPH pamphlet setting forth the biota consumption advisory for the Housatonic River, as well as the state-wide advisory. The pamphlet to be provided will be the one included in Attachment A or the most recent update of that pamphlet. GE will request these license agents to distribute the pamphlet to all persons obtaining a fishing or hunting license.

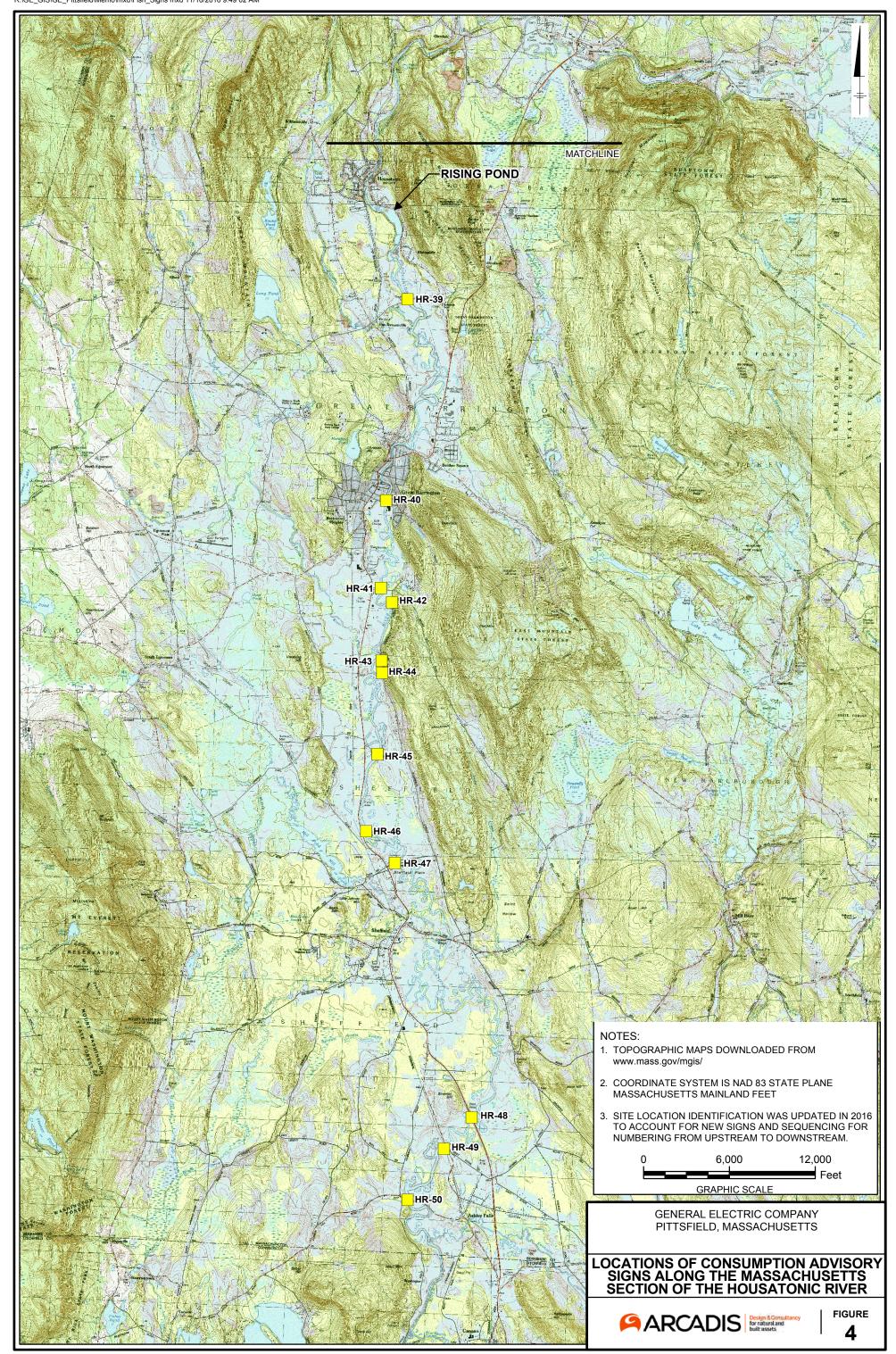
#### 4 SCHEDULE

GE will consult with EPA and MDEP regarding the need for updated biota consumption advisory signs within 60 days of EPA's approval of this plan. If those agencies so request, GE will produce updated signs, using the specified design and wording, and either provide them to a designated agency for posting or install them at the locations shown on Figure 3 and 4 within 120 days of the request, subject to winter weather constraints. Following that initial round of activities, GE will conduct inspections of the posted signs and perform repair, replacement, or additional sign installation activities (as necessary) on an annual basis, beginning in 2018 – or if requested by EPA or MDEP for specific location(s) – until such time as the advisories are discontinued or this program is modified with EPA approval.

In addition, beginning in 2018, GE will, on an annual basis, provide copies of MDPH's Housatonic River fish consumption advisory pamphlet to the organizations that sell fishing and hunting licenses in Berkshire County (as described in Section 3.2) and ask them to distribute the pamphlets to all persons obtaining a fishing or hunting license. GE will continue this activity until such time as the advisories are discontinued or this program is modified with EPA approval.

## **FIGURES**





# **ATTACHMENT A** Fish and Waterfowl Consumption Advice for the Housatonic River Area in Massachusetts

## MDPH advises that NO ONE should eat the following from the Housatonic River Area

- Fish, frogs, and turtles from the Housatonic River and tributaries that feed into the main river from Center Pond Dam in Dalton to the Connecticut border
- Mallards and wood ducks from the Housatonic River and its impoundments from Pittsfield south to Rising Pond in Great Barrington

#### Information about the Housatonic River Area

The Housatonic River Area is made up of eight communities in Berkshire County: Lanesborough, Dalton, Pittsfield, Lenox, Stockbridge, Lee, Great Barrington, and Sheffield. There are three main branches of the Housatonic River, the East Branch, West Branch, and Southwest Branch that combine to make up the main stem of the Housatonic River which flows south from Pittsfield into Connecticut.

Due to releases of chemicals by the General Electric Company from the early 1930s through the late 1970s, polychlorinated biphenyls (PCBs) are present in soils, sediment, fish, and certain waterfowl in and around the Housatonic River area.

While some portions of the Housatonic River area have been cleaned up, PCBs may be present in some fish and waterfowl at levels that could be

harmful if eaten. For more information on the Housatonic River clean-up, visit www.epa.gov/ge-housatonic.

# Fish and waterfowl in the Housatonic River and tributaries may be exposed to PCBs



- PCBs are a group of man made organic chemicals banned in the 1970s.
- PCBs can still be found in our environment and can get into our food due to their widespread use.
- PCBs can enter fish's bodies and concentrate in their skin fat, internal organs and sometimes muscles.
- Larger species feed on smaller species. This causes the larger, older fish to concentrate the most chemicals (a process known as biomagnification).
- PCBs can also collect in the tissue of waterfowl.

#### Effects of PCBs on health

- In studies of workers, PCBs are suspected of causing liver problems, skin lesions or irritations, and some types of cancer.
- In non-workplace settings, children are most affected by PCBs during fetal development, nursing, and early growth.
- Exposure to small amounts of these chemicals can interfere with brain development even before birth (affecting how well children learn, think, behave and develop later in life).

## Tips for recreational fishing in the Housatonic River and its tributaries

- Observe posted warning signs and follow their advice.
- Practice "Catch and Release" when fishing in the Housatonic River and in tributaries that feed into the main river.
- Follow the State-wide Fish Consumption Advisory for other lakes, rivers, and ponds in the Housatonic River area in Massachusetts (see back). More specific consumption advice is available for certain bodies of water that have been tested at www.mass.gov/dph/fishadvisories.
- For information on stocked fish, please contact the MassWildlife Western District office, Dalton. Tel: (413) 684-1646 or visit www.masswildlife.com

## Tips for preparing fish caught from feeder streams to the Housatonic River

- Trim fatty tissue prior to cooking.
- Broil instead of fry.
- Allow as much fat as possible to be drained away.

Fish is good for you! Continue to eat a variety of fish from other sources because fish is low in saturated fat, high in protein, and helps to prevent heart disease.

For more information on how to choose fish and waterfowl that are safe to eat please contact the MDPH Bureau of Environmental Health at 617-624-5757 or 800-240-4266.

www.mass.gov/dph/environmental\_health Revised August 2017

# General State-wide Advice for Eating Recreationally Caught Fish and Waterfowl In Massachusetts

MDPH guidelines for pregnant women, women who may become pregnant, nursing mothers, and children under 12 years old:

**Do Not Eat:** Freshwater fish caught in streams, rivers, lakes, and ponds in Massachusetts\*

Safe To Eat: Fish that are stocked in streams, rivers, lakes, and ponds in Massachusetts

Do Not Eat: Bluefish caught off the Massachusetts coast

**Do Not Eat:** Lobsters, flounder, soft-shell clams and bivalves from Boston Harbor

**Guidelines for everyone, including the groups listed above:** 

**Do Not Eat:** • Fish, shellfish, or lobsters from Area I of New Bedford Harbor

- Lobsters or bottom feeding fish from Area II of New Bedford Harbor
- Lobsters from Area III of New Bedford Harbor

Do Not Eat: Lobster tomalley

In 2017, the federal government issued additional advice about safe fish consumption. Please visit: www.fda.gov/fishadvice and www.epa.gov/fishadvice

A varied diet, including safe fish, will lead to good nutrition and better health.

\*More specific consumption advice is available for certain freshwater bodies that have been tested at: www.mass.gov/dph/fishadvisories or by calling 617-624-5757

#### Safe Guidelines for Eating Wild Waterfowl

- Skin and remove all fat before cooking
- · Discard stuffing after cooking
- · Drippings should not be used for gravy
- Eat waterfowl in moderation (no more than 2 meals per month)

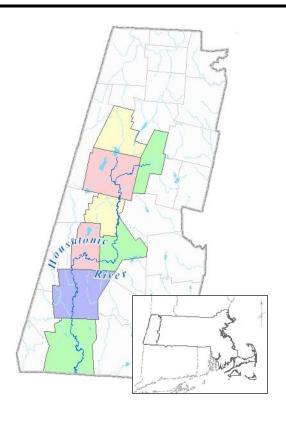
# Fish and Waterfowl Consumption Advice for the Housatonic River Area in Massachusetts











#### Bureau of Environmental Health

Massachusetts Department of Public Health 250 Washington Street Boston, MA 02108 617-624-5757





#### Arcadis U.S., Inc.

One Lincoln Center
110 West Fayette Street
Suite 300
Syracuse, New York 13202
Tel 315 446 9120
Fax 315 449 0017

www.arcadis.com