

General Electric Company

**BIOTA CONSUMPTION ADVISORY
OUTREACH PLAN
HOUSATONIC REST OF RIVER -
CONNECTICUT**

November 2017



BIOTA CONSUMPTION ADVISORY OUTREACH PLAN HOUSATONIC REST OF RIVER - CONNECTICUT

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CONTENTS

1	Introduction	1
2	Background	2
3	Proposed Activities	3
3.1	Provision of Updated Fish Consumption Advisory Signs	3
3.2	Provision of Fish Consumption Advisory Pamphlets	3
4	Schedule	4

ATTACHMENTS

- Attachment A Connecticut Fish Consumption Advisory Signs
- Attachment B 2017 Connecticut Fish Consumption Advisory Pamphlet

1 INTRODUCTION

The State of Connecticut has a general state-wide consumption advisory for eating fish from Connecticut waters, and it also has specific fish consumption advisories for specific waterbodies in Connecticut, including the Housatonic River as well as others. These advisories, developed by the Connecticut Department of Public Health (CDPH) in conjunction with the Connecticut Department of Energy and Environmental Protection (CDEEP), are based on the presence of polychlorinated biphenyls (PCBs), mercury, and/or other chemicals in the fish. The current fish consumption advisories for the Housatonic River in Connecticut apply to the consumption of certain fish species from certain portions of the River. They are based upon the findings of PCBs in the fish, although the Housatonic River is also subject to the state-wide advisory based on mercury.

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 outreach plan for Connecticut 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. (GE is submitting a separate biota consumption advisory outreach plan for Massachusetts.)

Section 2 of this proposal provides background information on prior activities relating to the fish consumption advisories in Connecticut. Section 3 presents a description of GE's proposed outreach activities for Connecticut, and Section 4 presents the proposed schedule for performance of the activities.

2 BACKGROUND

As noted above, the CDPH has issued state-wide and waterbody-specific fish consumption advisories. Specifically, the CDPH, in conjunction with CDEEP and its predecessor the Connecticut Department of Environmental Protection (CDEP), has issued fish consumption advisories covering various portions of the Housatonic River in Connecticut for many years. These advisories provide warnings against consumption of certain fish species from certain portions of the Housatonic River due to the presence or potential presence of PCBs in the fish. These warnings range from “Do not eat” to limit consumption to only “one meal per month” or “one meal per week,” depending on the species, area of the River, and the type of individual (i.e., “high-risk group,” consisting of pregnant women, women who could become pregnant, nursing women, and children under age 6, or “low-risk group,” consisting of all others). In addition, the state-wide advisory warns against consumption of most freshwater fish throughout the State more than once a month or once a week due to the presence of mercury.

Under a series of cooperative agreements between GE and CDEP, executed in 1984, 1990, and 1999, GE cooperated with CDEP in publicizing these fish consumption advisories by preparing signs, flyers, and pamphlets describing the advisories and providing them to CDEP for posting and distribution. These activities have included preparation of signs summarizing the applicable fish consumption advisory for the Housatonic River, using wording developed and specified by the CDPH and CDEP, and providing these signs to CDEP for posting on the Housatonic River and its impoundments in Connecticut. At the CDEP’s request, signs have been prepared in English, Spanish, and four Asian languages (Vietnamese, Cambodian, Lao, and Hmong) and provided to CDEP to post. Copies of the current signs are shown in Attachment A (Source: CDEEP, 2016. Presentation titled *Connecticut Fish Consumption Advisories & Signage for Housatonic River PCBs*. Available at: <https://semspub.epa.gov/work/01/590559.pdf>).

A copy of a pamphlet prepared by the CDPH presenting the current (2017) Connecticut fish consumption advisories, which includes the specific advisory for the Housatonic River, is provided in Attachment B.

3 PROPOSED ACTIVITIES

3.1 Provision of Updated Fish Consumption Advisory Signs

Following EPA approval of this plan, GE will consult with CDEEP regarding the need for preparation of updated or additional fish consumption advisory signs. If CDEEP so requests, GE will produce updated and/or additional fish consumption advisory signs and provide them to CDEEP for posting along the Housatonic River in Connecticut. The signs may be provided in English, Spanish, and/or the four Asian languages used in the current signs. The wording and design of these signs will be determined by CDPH and CDEEP. GE will advise EPA of the results of these discussions and of GE's plans, if any, for providing updated or additional signs.

In future years, GE will continue to cooperate with CDEEP's requests regarding the provision of updated and/or additional fish consumption advisory signs until such time as the advisories are discontinued or this program is modified with EPA approval.

3.2 Provision of Fish Consumption Advisory Pamphlets

In addition, if so requested by CDEEP, GE will provide copies of the CDPH's fish consumption advisory pamphlet (using the one provided in Attachment B or the most recent update thereof), or other written notices in a form specified by CDPH or CDEEP, to CDEEP for distribution to fishing license sales agents in Connecticut. In such a case, GE will notify EPA of those activities.

4 SCHEDULE

Within 60 days of EPA's approval of this plan, GE will consult with CDEEP regarding the need for preparation of updated or additional fish consumption advisory signs. If CDEEP so requests, based on that consultation or thereafter, GE will provide the signs to CDEEP on a schedule to be agreed upon with CDEEP, and will so advise EPA. In addition, if CDEEP requests GE to provide copies of CDPH's current fish consumption advisory pamphlet (or another appropriate notice) for distribution to fishing license sales agents in Connecticut, GE will provide such notices to CDEEP on a schedule to be agreed upon with CDEEP, and will so advise EPA.

ATTACHMENT A

Connecticut Fish Consumption Advisory Signs



Warning to People Who Fish

Although many fish in Connecticut are safe and healthy to eat, some fish from Connecticut waters have dangerous chemicals in them.

Housatonic River Upstream of the Derby Dam

Includes:

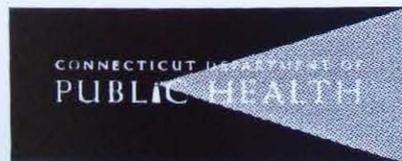
- **Lake Zoar**
- **Lake Lillinonah**
- **Lake Housatonic**

Pregnant women, women who plan to become pregnant and children under six should not eat fish from the Housatonic River upstream of the Derby Dam. Others should not eat Catfish, Carp, Eels or Trout from the Housatonic River. People other than pregnant women and children under six should eat no more than one meal every two months of Bass, White Perch and Bullheads.

If you follow this advice, you and your family will be safe and healthy eating fish caught in Connecticut waters.

For more information, call the Connecticut Department of Public Health (860) 509-7742, or the Department of Environmental Protection (860) 424-3474.

Warning to Fishermen and Their Families has been produced as a collaborative project of Connecticut's Department of Public Health and Environmental Protection.



Keeping Connecticut Healthy



ATTACHMENT B

2017 Connecticut Fish Consumption Advisory Pamphlet





If I Catch It, Can I Eat It?

A Guide to Eating Fish Safely 2017 Connecticut Fish Consumption Advisory



www.ct.gov/dph/fish
1-877-458-FISH (3474)

This pamphlet will give you information that will help your family avoid chemicals in fish and eat fish safely.

Fish from Connecticut's waters are a healthy, low-cost source of protein. Unfortunately, some fish take up chemicals such as mercury and polychlorinated biphenyls (PCBs). These chemicals can build up in your body and increase health risks. The developing fetus and young children are most sensitive. Women who eat fish containing these chemicals before or during pregnancy or nursing may have children who are slow to develop and learn. Long term exposure to PCBs may increase cancer risk.

What Does The Fish Consumption Advisory Say?

The advisory tells you how often you can safely eat fish from Connecticut's waters and from a store or restaurant. In many cases, separate advice is given for the **High Risk** and **Low Risk** Groups.

- You are in the **High Risk Group** if you are a *pregnant woman, a woman who could become pregnant, a nursing mother, or a child under six.*
- If you do not fit into the High Risk Group, you are in the **Low Risk Group.**

Advice is given for three different types of fish consumption:

1. Statewide FRESHWATER Fish Advisory: Most freshwater fish in Connecticut contain enough mercury to cause some limit to consumption. The statewide freshwater advice is that:

- High Risk Group: eat no more than 1 meal per month
- Low Risk Group: eat no more than 1 meal per week

2. Advisories for SPECIFIC WATERBODIES: Certain waterbodies contain fish with higher levels of contaminants. These waterbodies include the Housatonic River, part of the Quinnipiac River, certain lakes, and certain species from Long Island Sound. The large chart in the center of this pamphlet provides details on eating fish safely from these waterbodies.

3. Advice for Fish Purchased from the MARKET: Most fish from the market are healthy to eat and contain important nutrients such as omega-3 fatty acids. However, there are some fish that contain high levels of mercury or PCBs and so should be eaten less or not at all. This pamphlet points out which fish are healthy to eat and which ones are not safe to eat (small chart on page 3).

Are Trout Safe To Eat?

Most trout from Connecticut's rivers are safe to eat because they usually have little contamination and are routinely re-stocked. However, there are limits on trout from certain waterbodies due to PCBs and on large trout from lakes due to mercury (see large chart in center).

Page 1

How Do These Contaminants Get Into Fish?

Mercury and PCBs can build up in fish to levels that are thousands of times higher than in the water. These contaminants enter the water from:

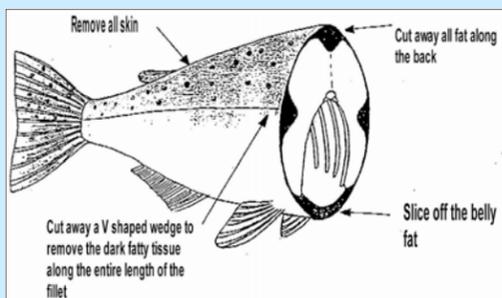
- Chemical spills that happened in the past. Even though these spills have been stopped, it will take years for the mercury or PCB levels in the fish to drop to safe levels.
- Mercury in the air. Mercury travels long distances from where it is released. Much of it comes from air pollution outside of Connecticut.

The Connecticut Department of Energy and Environmental Protection (CT DEEP) is working to improve water quality in Connecticut and is limiting the amount of mercury which can be released into the air.

What Else Can I Do To Eat Fish Safely?

PCBs are mostly in the fatty portions of fish. It is very important to remove skin and other fatty parts. Cook fish on a rack (broil) so that fat can drip away from the flesh.

Remove fatty portions before cooking



Remove and do not eat the organs, head, skin and the dark fatty tissue along the back bone, lateral lines and belly.

Mercury is in the edible (fillet) portion of fish. Therefore, you cannot lower your exposure to mercury by cooking or cleaning the fish. Large fish usually have the highest levels of PCBs and mercury. If you have a choice, eat smaller fish of any species. In addition, certain smaller species generally have lower levels of contamination (perch, small trout, sunfish).

Page 2

What About Fish from Markets and Restaurants?

Many fish from the market or restaurant are low in contaminants. Some of these fish are also high in omega-3 fatty acids, a nutrient oil from fish that improves brain development and helps prevent heart disease. However, some fish from the market can contain high levels of certain contaminants, especially mercury.

In general, people in the High Risk Group can eat up to 2 fish meals a week from the market or at restaurants. Certain fish are especially low in contaminants and can be eaten more often. The following are specific tips for those in the **High Risk** Group to choose healthy fish from the store:

- Swordfish and Shark: these contain high levels of mercury and **should not be eaten.**
- Canned tuna: Choose "light" tuna because it has less mercury than "white" tuna.
- Lobster and other shellfish are generally low in chemical contaminants. The tomalley portion of lobster (the green gland) can be high in contaminants and should not be eaten. This applies to lobster from Long Island Sound and elsewhere.

Fish from the Market and Restaurant

The Chart below provides general guidance for **Women & Children** on which fish to choose. Fish with hearts ♥ are either especially high in omega-3 fatty acids and/or very low in contaminants and can be eaten more than twice a week.

Eat 2 Meals a Week		Eat 1 Meal a Week		Avoid
Herring ♥	Trout ♥	Tuna Steak	Swordfish	
Pollock ♥	Haddock	Halibut	Shark	
Salmon (wild) ♥	Perch	Red Snapper	King Mackerel	
Atlantic Mackerel ♥	Tilapia	White Tuna (canned)	Striped Bass	
Flounder & Fluke ♥	Light tuna (canned)	Catfish (farm-raised)	Tilefish (Gulf of Mexico)	
Sole ♥	Cod	Tilefish (Atlantic)	Bluefish	
Sardines & Smelt ♥	Salmon (farm-raised)		Tuna Sushi	
Shellfish: oysters, shrimp, clams, scallops, lobster *		* see warning above about lobster tomalley		

People in the **Low Risk** Group can safely eat higher amounts of market seafood. For example, swordfish or shark - once per month; tuna steak or halibut - twice per week.

Page 3



Connecticut Safe Fish Consumption Guide



2017 Advisory for Eating Fish From Connecticut Waterbodies

STATEWIDE FRESHWATER FISH ADVICE

Waterbody	Fish Species	High Risk Group ^a	Low Risk Group ^b	Contaminant
All fresh lakes, ponds, rivers & streams	Trout ^c Sunfish	No Limits on Consumption	No Limits on Consumption	--
	All other freshwater fish	One meal per month	One meal per week	Mercury

Footnotes from Table:

a. The **High Risk Group** includes pregnant women, women who could become pregnant, nursing women, and children under age 6.

The **High Risk Group** should eat no more than one fish meal per month of most freshwater fish from local waters.

b. The **Low Risk Group** should limit eating most freshwater fish to once a week.

c. Most trout are not part of the advisory and are safe to eat. However, the high risk group should eat no more than one meal of large trout (over 15") per month and should not eat trout from the Housatonic River.

d. Snappers (bluefish under 13") are not on the advisory because they have very low contamination.

SPECIAL ADVICE FOR THE HOUSATONIC RIVER AREA

Waterbody	Fish Species	High Risk Group ^a	Low Risk Group ^b	Contaminant
<i>Housatonic River above Lake Lillinonah</i>	Trout, Catfish, Eels, Carp, Northern Pike	Do not eat	Do not eat	PCBs
	Bass, White Perch	Do not eat	One meal per 2 months	PCBs
	Bluegill, Bullheads, Fallfish	One meal per month	One meal per month	PCBs
	Yellow Perch, Calico Bass (Crappie), Rock Bass & Sunfish	One meal per month	One meal per week	PCBs
<i>Lakes on Housatonic River: (Lillinonah, Zoar, Housatonic)</i>	Catfish, Eels, Carp, Northern Pike, Trout	Do not eat	Do not eat	PCBs
	White Perch, Fallfish, Bullheads	One meal per month	One meal per month	PCBs
	Bass	Do not eat	One meal per 2 months	PCBs
	Yellow Perch, Calico Bass (Crappie), Rock Bass, Bluegill & Sunfish	One meal per month	One meal per week	PCBs
<i>Furnace Brook (Cornwall)</i>	Trout	One meal per month	One meal per month	PCBs
<i>Blackberry River below "Blast Furnace" (North Canaan)</i>	Smallmouth Bass	One meal per month	One meal per month	PCBs

REMEMBER

Follow this advisory to make sure the fish you choose to eat are safe for your family.

- Every fresh waterbody has some consumption limits as indicated at the top of the chart.
- *Long Island Sound*: Most fish are safe to eat except for listed restrictions on striped bass, bluefish, and weakfish.
- Be aware of advice for fish from the market or restaurant. See market advice on page 3.
- Your exposure to PCBs in fish can be reduced by trimming away fat and cooking fish on a rack so that fat drips away.

WHERE CAN I GET MORE INFORMATION?

More specific fact sheets can be obtained by calling 1-877-458-FISH (3474), or by going to the DPH WEB SITE: www.ct.gov/dph/fish

Health Questions?
Call CT DPH toll-free at:
1-877-458-FISH (3474)

Questions about fishing in Connecticut?
Call CT DEEP at 860-424-3474.
www.ct.gov/deep/fishing

This fact sheet is funded in part by funds from the CT Environmental Public Health Tracking Program and the Comprehensive Environmental Response, Compensation, and Liability Act trust fund through a cooperative agreement with the Agency for Toxic Substances & Disease Registry, Public Health Service, U.S. Department of Health and Human Services.

SPECIAL ADVICE FOR OTHER CT FRESH WATERBODIES

Waterbody	Fish Species	High Risk Group ^a	Low Risk Group ^b	Contaminant
<i>Dodge Pond Lake McDonough Silver Lake Wyassup Lake</i>	Largemouth Bass, Smallmouth Bass, Pickerel	Do not eat	One meal per month	Mercury
<i>Quinnipiac River (Gorge south to Hanover Pond) Meriden</i>	All Species	One meal per month	One meal per month	PCBs
<i>Connecticut River</i>	Carp Catfish	Do not eat	One meal per 2 months	PCBs
		Do not eat	One meal per month	PCBs
<i>Versailles, Papermill Ponds & attached Little River (Sprague)</i>	All Species	Do not eat	Do not eat	Mercury PCBs
<i>Konkapot River (North Canaan)</i>	White Suckers	Do not eat	One meal per month	Mercury
<i>Brewster Pond (Stratford)</i>	Catfish & Bullheads	Do not eat	Do not eat	Chlordane
<i>Union Pond (Manchester)</i>	Carp, Catfish, Bass	Do not eat	Do not eat	Chlordane

SPECIAL ADVICE FOR LONG ISLAND SOUND

Waterbody	Fish Species	High Risk Group ^a	Low Risk Group ^b	Contaminant
<i>Long Island Sound and connected rivers</i>	Striped Bass Bluefish over 25" ^d	Do not eat	One meal per month	PCBs
		Do not eat	One meal per month	PCBs
	Bluefish 13- 25 " ^d Weakfish	One meal per month One meal per month	One meal per month One meal per month	PCBs PCBs
<i>Mill River, Fairfield [excluding Southport Harbor]</i>	Blue Crab	Do not eat	Do not eat	Lead

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