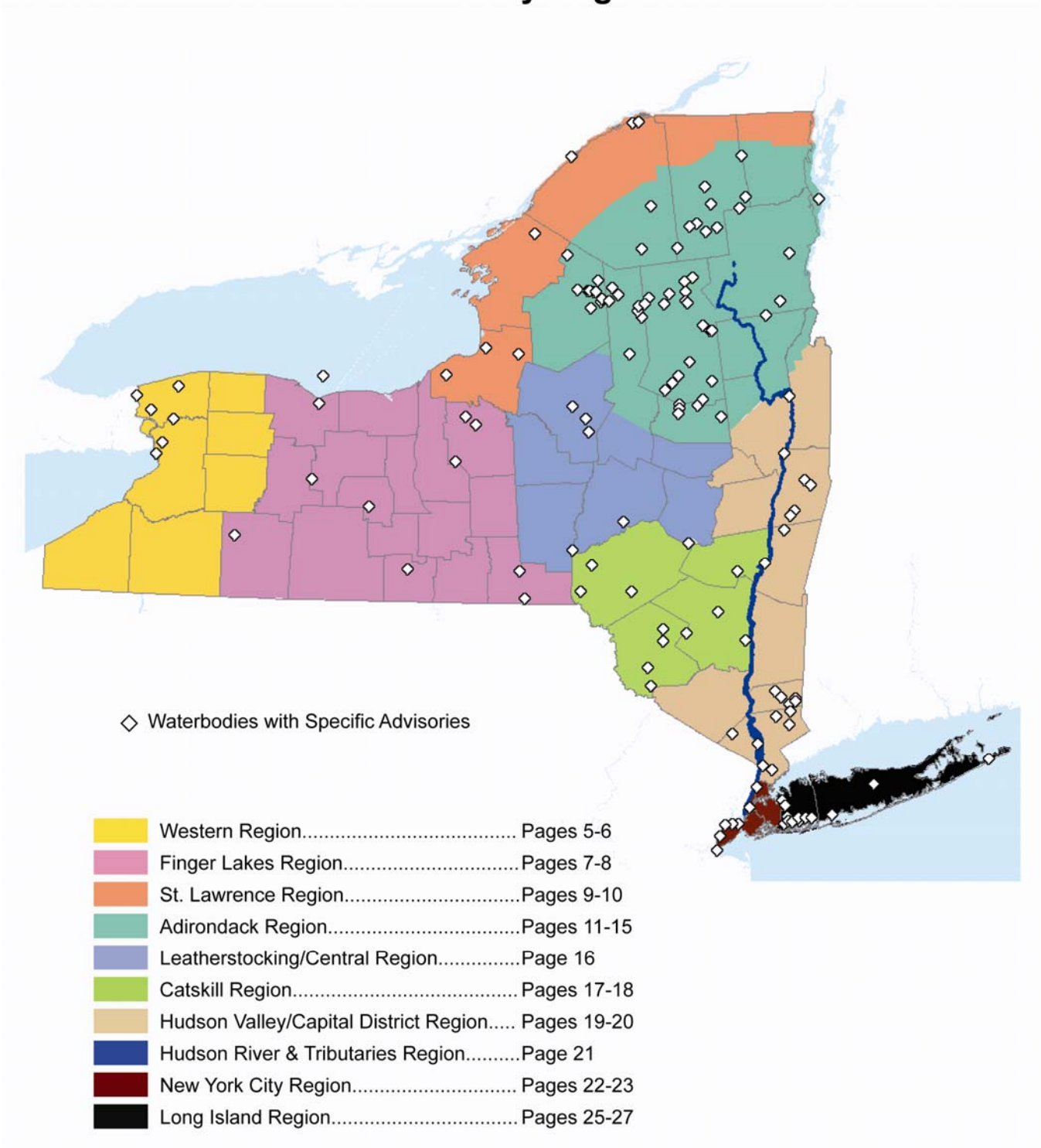
New York State
Department of Health

Chemicals in Sportfish and Game

2010-2011 Health Advisories

New York State Fish Advisory Regions & Waterbodies



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These advisories are also available from the New York State Department of Health web site at www.nyhealth.gov/fish

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2010-2011 Health Advisories: Chemicals in Sportfish and Game

Why We Have Advisories

Fishing is fun and fish are an important part of a healthy diet. Fish contain high quality protein; essential nutrients, healthy fish oils, and are low in saturated fat. However, some fish contain chemicals at levels that may be harmful to health.

To help people make healthier choices about which fish they choose to eat, the New York State Department of Health (NYS DOH) issues advice about eating sportfish (fish you catch). People can get the health benefits of fish and reduce their exposures to chemicals, or contaminants, by following the NYS DOH advice. The advisories tell people which fish to avoid and how to reduce their exposures to contaminants in the fish they do eat.

Fish from fresh waters are more likely to be contaminated than fish from remote marine waters because many fresh waters are close to human activities and contamination sources. Anglers (and others who eat fish caught by friends) often eat fish from a limited set of waters because they tend to return to favorite fishing locations. When those fishing locations contain fish with higher contaminant levels, the people who eat them will have higher contaminant exposures.

NYS DOH also issues advice about game, such as snapping turtles and wild waterfowl. Game may also contain chemicals at levels of concern. Advice about game is on page 34.

Fish from Stores and Restaurants

The U.S. Food and Drug Administration (US FDA) regulates the sale of commercial fish in markets. Due to concerns about mercury contamination, US FDA advises pregnant women, women who may become pregnant, nursing mothers and young children to not eat shark, swordfish, king mackerel or tilefish. As part of a healthy diet, US FDA recommends that women who may become pregnant and nursing mothers eat up to 12 ounces per week of a variety of other kinds of fish and follow the same recommendations when feeding fish and shellfish to their young children, but serve smaller portions.

Unlike anglers, people who get their fish from the market or restaurants are likely to eat fish from a variety of sources and locations. Also, for most contaminants, commercial fish have concentrations generally lower than are found in many New York State sportfish.

The full US FDA advisory, including answers to frequently asked questions about mercury in fish and shellfish, can be found at http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm110591.htm

For further information about the risks of mercury in fish and shellfish call the US FDA at 1-888-SAFEFOOD (1-888-723-3366).

Health Risks from Contaminants in Fish and Game

The primary contaminants of concern in New York State fish are mercury and PCBs. Other contaminants such as cadmium, chlordane, DDT, dieldrin, dioxin and mirex are also concerns in fish from some of the State's waterbodies. These chemicals build up in your body over time. Health problems that may result from these contaminants range from small changes in health that are hard to detect to birth defects and cancer. Women who eat highly contaminated fish and become pregnant may have increased risk of having children who are slower to develop and learn. Chemicals may have a greater effect on developing organs in young children or in the unborn child. Some chemicals may be passed on in mother's milk. Women beyond their childbearing years and men face fewer health risks from contaminants than do children.

Types of Advisories

New York is a water-rich state: 2.6 million acres of water on Lakes Erie, Ontario, and Champlain; approximately 0.75 million acres on more than 4,000 smaller lakes; 70,000 miles of streams and rivers in 15 major watersheds; 150 tidal miles of the Hudson River estuary; and 1.1 million acres of marine waters extending three miles from shore. Many species of fish are sought by anglers in these waters. To help anglers choose which fish to keep for food, NYS DOH has two types of health advisories:

(1) **General advice**. The general health advisory for sportfish is that people can eat up to four one-half pound meals a month (which should be spaced out to about a meal a week) of fish from all New York State fresh waters and some marine waters near the mouth of the Hudson River. If there is no specific advice for a particular waterbody, follow this general advice for these waters.

(2) **Specific advice**. For some waterbodies in New York, NYS DOH issues stricter advice (eat a limited amount or none at all) because contaminant levels in some fish are higher. To be more protective, NYS DOH advises that infants, children under the age of 15 and women under age 50 should not eat any fish from these waterbodies.

- The information in this booklet will help you find where these waterbodies are located in NYS and the specific advice for what should or should not be eaten. In some cases, enough information is available to issue advisories based on the length of the fish. Older (larger) fish are often more contaminated than younger (smaller) fish.

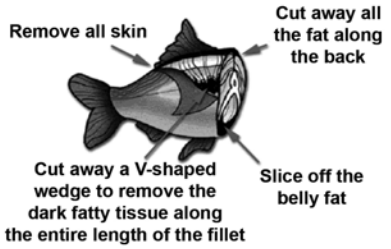
- There is also specific advice for certain regions. For example, some fish from the Adirondack and Catskill Mountain regions have been shown to have higher levels of mercury in their flesh than similar fish from other regions in the state.

9 Tips on Eating Your Catch

#1 To reduce exposures to mercury, avoid or eat less largemouth and smallmouth bass, northern pike, pickerel, walleye and larger yellow perch (for example, longer than 10 inches) because these fish tend to have higher mercury levels, particularly in the Adirondack and Catskill regions.

#2 To reduce exposures to PCBs, dioxin, mirex, DDT, chlordane and dieldrin, avoid or eat less American eel, bluefish, carp, lake trout, salmon (Chinook, Coho), striped bass, weakfish, white and channel catfish, and white perch because these fish tend to have higher levels of these contaminants.

#3 PCBs, dioxin, mirex, DDT, chlordane and dieldrin are found at higher levels in the fat of fish. You can reduce the amount of these contaminants in a fish meal by properly trimming, skinning and cooking your catch. Remove the skin and trim all the fat from the belly flap, the line along the sides, and the fat along the back and under the skin (see diagram on the right). Cooking or soaking fish cannot eliminate the contaminants, but heat from cooking melts some of the fat in fish and allows some of the contaminated fat to drip away. Broil, grill or bake the trimmed, skinned fish on a rack so that the fat drips away. Do not use drippings to prepare sauces or gravies. These precautions will not reduce the amount of mercury or other metals. Mercury is distributed throughout a fish's muscle tissue (the part you eat), rather than in the fat and skin. The only way to reduce mercury intake is to eat less contaminated fish.



#4 Choose freshwater sportfish from waterbodies for which there is no specific advice.

#5 Space out your fish meals so you don't get too much exposure to one or more chemicals at any given time. This is particularly important for women and young children.

#6 When deciding which sportfish to eat, choose smaller fish within a species since they may have lower contaminant levels. Older (larger) fish from the same species may be more contaminated than smaller fish because they have had more time to accumulate contaminants in their bodies. (But make sure to follow NYS DEC regulations about fish length).

#7 Do not eat the soft "green stuff" (mustard, tomalley, liver or hepato-pancreas) found in the body section of crab and lobster. This tissue can contain high levels of chemical contaminants, including PCBs, dioxin and heavy metals.

#8 Maintain good sanitary practices to reduce the chance of getting sick from bacteria, viruses or parasites that may be in or on fish. Harvest fish fresh and keep them cool. Wear gloves when skinning and trimming. Cook fish and shellfish thoroughly before eating.

#9 Anglers who want to enjoy the fun of fishing but who wish to eliminate the potential risks associated with eating contaminated sportfish may want to consider "catch and release" fishing. Refer to the New York State Department of Environmental Conservation (NYS DEC) New York State Fishing Regulations Guide for suggestions on catch and release fishing techniques or go to the NYS DEC website at http://www.dec.ny.gov/outdoor/7917.html

2010-2011 Health Advisories

The specific advisories for the waters listed below also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls. This is because chemicals remain in fish even if they move from one water body to another. If you are not sure about possible fish barriers near the waters you fish, contact your local NYS DEC regional office listed on page 28. If you have questions about which advisories apply to the waters you fish, call the New York State Department of Health at 518-402-7800 or toll free at 1-800-458-1158. Or, e-mail BTSA@health.state.ny.us.

The advisories listed below apply to New York State portions of listed waters. If you fish in portions of waters in another state, consult that state's fish advisories, available from state health or environmental agencies, or on the internet at http://www.epa.gov/waterscience/fish/states.htm

Western Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Special Advisories for Lake Erie due to PCBs: Women under 50 years and children under 15 years can eat up to four meals per month of chinook salmon less than 19 inches, burbot, freshwater drum, lake whitefish, rock bass and yellow perch. For all other fish from Lake Erie, they can eat up to one meal per month. Women over 50 years and men over 15 years can eat up to four meals per month of any Lake Erie fish species.			
Women under 50 years and children under 15 years: Don't eat any fish from the waters listed below. All others: Should follow the advice listed below.			
Barge Canal [4] Tonawanda Creek, Lockport to Niagara River (Erie & Niagara)	Carp	Eat up to one meal per month	PCBs
Buffalo River/Harbor [6] (Erie)	Carp	**Don't eat**	PCBs
Cayuga Creek [2] (Niagara)	All species	**Don't eat**	Dioxin
Delaware Park Lake [5] (Erie)	Carp	Eat up to one meal per month	PCBs
Eighteen Mile Creek [3] (Niagara)	All species	**Don't eat**	PCBs
Lake Ontario [8] -Whole lake*	Channel catfish, carp, lake trout over 25" and brown trout over 20"	**Don't eat**	PCBs, Mirex, Dioxin
	Chinook salmon, rainbow trout, white sucker, smaller lake trout, smaller brown trout and coho salmon over 25"	Eat up to one meal per month	PCBs, Mirex, Dioxin
-West of Point Breeze	White perch	**Don't eat**	PCBs, Mirex, Dioxin
-East of Point Breeze	White perch	Eat up to one meal per month	PCBs, Mirex, Dioxin

*Harvest/possession of Lake Ontario American eel is prohibited per NYS DEC Regulations.

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Niagara River [1]			
-Above Niagara Falls*	Carp	Eat up to one meal per month	PCBs
-Below Niagara Falls*	Channel catfish, carp, lake trout over 25", brown trout over 20" and white perch	**Don't eat**	PCBs, Mirex, Dioxin
	Chinook salmon, rainbow trout, smallmouth bass, white sucker, smaller lake trout, smaller brown trout and coho salmon over 25"	Eat up to one meal per month	PCBs, Mirex, Dioxin

*Harvest/possession of Niagara River American eel is prohibited per NYS DEC Regulations.

All waters not listed above for Western Region**:** All ages men, women and children	All fish species	Eat up to four meals per month

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to maps on pages 29-30

Finger Lakes Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. <u>All others:</u> Should follow the advice listed below.			
Canadice Lake [10] (Ontario)	Lake trout over 23”	**Don’t eat**	PCBs
	Brown trout and smaller lake trout	Eat up to one meal per month	PCBs
Chenango River [34]	Walleye over 22”	Eat up to one meal per month	Mercury
Irondequoit Bay [9] (Monroe)	Carp	**Don't eat**	PCBs, Mirex
Keuka Lake [11] (Yates & Steuben)	Lake trout over 25”	Eat up to one meal per month	DDT
Koppers Pond [12] (Chemung)	Carp	Eat up to one meal per month	PCBs
Lake Ontario [8] -Whole lake*	Channel catfish, carp, lake trout over 25” and brown trout over 20”	**Don't eat**	PCBs, Mirex, Dioxin
	Chinook salmon, rainbow trout, white sucker, smaller lake trout, smaller brown trout and coho salmon over 25”	Eat up to one meal per month	PCBs, Mirex, Dioxin
-West of Point Breeze	White perch	**Don't eat**	PCBs, Mirex, Dioxin
-East of Point Breeze	White perch	Eat up to one meal per month	PCBs, Mirex, Dioxin

*Harvest/possession of Lake Ontario <u>American eel is prohibited per NYS DEC Regulations.</u>

*Numbers in brackets [ ] refer to maps on pages 29-30

Water (County)	Species	Advice	Chemical(s) of Concern
Onondaga Lake [14] (Onondaga)	Largemouth bass and smallmouth bass over 15” and walleye	**Don't eat**	Mercury, PCBs
	Carp, channel catfish and white perch	**Don't eat**	PCBs, Mercury, Dioxin
	All fish not listed	Eat up to one meal per month	Mercury, PCBs
	Brown bullhead and pumpkinseed	Eat up to four meals per month	Mercury, PCBs
Rushford Lake [7] (Allegany)	Walleye	Eat up to one meal per month	Mercury
Seneca River [15] - Downstream of Lock 24 at Baldwinsville	See Onondaga Lake		
Skaneateles Creek [13] - From dam at Skaneateles to Seneca River (Onondaga)	Brown trout over 10”	Eat up to one meal per month	PCBs
Susquehanna River [35]	Walleye over 22”	Eat up to one meal per month	Mercury
All waters <u>not listed above</u> in the Finger Lakes Region**:** All ages men, women and children	All fish species	Eat up to four meals per month	

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to maps on pages 29-30

St. Lawrence Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. <u>All others:</u> Should follow the advice listed below.			
Grasse River [64] - Mouth to Massena Power Canal (St. Lawrence)	All species	**Don't eat**	PCBs
Lake Ontario [8] -Whole lake*	Channel catfish, carp, lake trout over 25" and brown trout over 20"	**Don't eat**	PCBs, Mirex, Dioxin
	Chinook salmon, rainbow trout, white sucker, smaller lake trout, smaller brown trout and coho salmon over 25"	Eat up to one meal per month	PCBs, Mirex, Dioxin
-West of Point Breeze	White perch	**Don't eat**	PCBs, Mirex, Dioxin
-East of Point Breeze	White perch	Eat up to one meal per month	PCBs, Mirex, Dioxin
Massena Power Canal [63] (St. Lawrence)	Smallmouth bass	Eat up to one meal per month	PCBs
Oswego River [16] -Mouth to Oswego power dam	See Lake Ontario		
-Oswego power dam to upper dam at Fulton (Oswego)	Channel catfish	Eat up to one meal per month	PCBs
Red Lake [61] (Jefferson)	Walleye	Eat up to one meal per month	Mercury

*Harvest/possession of Lake Ontario <u>American eel is prohibited per NYS DEC Regulations.</u>

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Salmon River [59] - Mouth to Salmon Reservoir (Oswego) (also see Lake Ontario)	Smallmouth bass	Eat up to one meal per month	PCBs, Mirex
Salmon River Reservoir [60] (Oswego)	Largemouth and smallmouth bass	Eat up to one meal per month	Mercury
St. Lawrence River [62] -Whole river*	Carp, channel catfish, lake trout over 25” and brown trout over 20”	**Don't eat**	PCBs, Mirex, Dioxin
	Chinook salmon, rainbow trout, white perch, white sucker, smaller lake trout, smaller brown trout and coho salmon over 25”	Eat up to one meal per month	PCBs, Mirex, Dioxin
-Bay and Cove east of South Channel Bridge, near St. Lawrence/ Franklin Co. line	All species	**Don't eat**	PCBs

*Harvest/possession of St. Lawrence River American eel is prohibited per NYS DEC Regulations.

All waters <u>not listed above</u> in the St. Lawrence Region: All ages men, women and children	All fish species	Eat up to four meals per month

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to maps on pages 29-30

Adirondack Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. For waters not listed, women and children should follow the <u>Special Adirondack Mountain Advice</u> at the end of this section. <u>All others:</u> Should follow the advice listed below.			
Beaver Lake [86] (Lewis)	Chain pickerel	Eat up to one meal per month	Mercury
Big Moose Lake [92] (Herkimer)	Yellow perch over 9”	Eat up to one meal per month	Mercury
Blue Mountain Lake [100] (Hamilton)	Largemouth and smallmouth bass over 15”	Eat up to one meal per month	Mercury
Canada Lake [25] (Fulton)	Smallmouth bass over 15” and chain pickerel	Eat up to one meal per month	Mercury
Carry Falls Reservoir [66] (St. Lawrence)	Walleye	Eat up to one meal per month	Mercury
Chase Lake [26] (Fulton)	Yellow perch over 9”	Eat up to one meal per month	Mercury
Cranberry Lake [77] (St. Lawrence)	Smallmouth bass over 15” and largemouth bass over 15”	Eat up to one meal per month	Mercury
Crane Pond [108] (Essex)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Dart Lake [91] (Herkimer)	Yellow perch over 10”	Eat up to one meal per month	Mercury
East Stoner Lake (or Middle Stoner Lake) [23] (Fulton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Effley Falls Reservoir [81](Lewis)	Chain pickerel and smallmouth bass	Eat up to one meal per month	Mercury
Elmer Falls Reservoir [80] (Lewis)	Smallmouth bass	Eat up to one meal per month	Mercury
Ferris Lake [22] (Hamilton)	Yellow perch over 12”	**Don't eat**	Mercury
	Smaller yellow perch	Eat up to one meal per month	Mercury

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Forked Lake [96] (Hamilton)	Largemouth and smallmouth bass	Eat up to one meal per month	Mercury
Fourth Lake [90] (Herkimer & Hamilton)	Lake trout	**Don't eat**	DDT
Francis Lake [85] (Lewis)	Yellow perch over 9” and chain pickerel	Eat up to one meal per month	Mercury
Franklin Falls Flow (Pond) [70] (Essex and Franklin)	Walleye	**Don't eat**	Mercury
Great Sacandaga Lake [29] (Fulton and Saratoga)	Smallmouth bass and walleye	Eat up to one meal per month	Mercury
Halfmoon Lake [84] (Lewis)	Yellow perch	Eat up to one meal per month	Mercury
High Falls Pond [79] (Lewis)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Hudson River [30]	See Hudson River Tributaries Region page 21		
Indian Lake [65], Fort Drum (Lewis)	All species	Eat up to one meal per month	Mercury
Indian Lake, Town of Indian Lake [104] (Hamilton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Kings Flow [106] (Hamilton)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Lake Champlain [110] - Whole Lake	Lake trout over 25” and walleye over 19”	Eat up to one meal per month	PCBs, Mercury
-Bay within Cumberland Head to Crab Island	Brown bullhead	**Don't eat**	PCBs
	American eel and yellow perch	Eat up to one meal per month	PCBs

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Lake Durant and Rock Pond, Town of Indian Lake [101] (Hamilton)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Lake Eaton [97] (Hamilton)	Yellow perch over 10” and smallmouth bass	Eat up to one meal per month	Mercury
Lincoln Pond [109] (Essex)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Long Lake [98] (Hamilton)	Northern pike	Eat up to one meal per month	Mercury
Long Pond, Town of Croghan [78] (Lewis)	Splake over 12”	**Don't eat**	Mercury
Lower and Upper Sister Lakes [94] (Hamilton)	Yellow perch over 10”	**Don't eat**	Mercury
Lower Saranac Lake [72] (Franklin)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Meacham Lake [67] (Franklin)	Yellow perch over 12” and smallmouth bass	**Don't eat**	Mercury
	Northern pike and smaller yellow perch	Eat up to one meal per month	Mercury
Middle Stoner Lake (or East Stoner Lake) [23] (Fulton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Moshier Reservoir [89] (Herkimer)	Smallmouth bass and yellow perch	Eat up to one meal per month	Mercury
North Lake, Town of Ohio [102] (Herkimer)	Yellow perch	Eat up to one meal per month	Mercury
Osgood Pond [71] (Franklin)	Smallmouth bass	Eat up to one meal per month	Mercury
Pine Lake [24] (Fulton)	Largemouth bass	Eat up to one meal per month	Mercury
Polliwog Pond [74] (Franklin)	Smallmouth bass	Eat up to one meal per month	Mercury

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Raquette Lake [95] (Hamilton)	Largemouth bass	Eat up to one meal per month	Mercury
Rock Pond and Lake Durant, Town of Indian Lake [101] (Hamilton)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Rollins Pond [75] (Franklin)	Smallmouth bass	Eat up to one meal per month	Mercury
Round Pond, Town of Long Lake [105] (Hamilton)	Yellow perch over 12”	Eat up to one meal per month	Mercury
Russian Lake [93] (Hamilton)	Yellow perch over 9”	Eat up to one meal per month	Mercury
Sacandaga Lake [103] (Hamilton)	Smallmouth bass	Eat up to one meal per month	Mercury
Sand Lake, Town of Arietta [21] (Hamilton)	Chain pickerel	Eat up to one meal per month	Mercury
Schroon Lake [107] (Warren & Essex)	Lake trout over 27”, yellow perch over 13” and smallmouth bass	Eat up to one meal per month	PCBs, Mercury
Soft Maple Dam Pond [82] (Lewis)	Rock bass and smallmouth bass	Eat up to one meal per month	Mercury
Soft Maple Reservoir [83] (Lewis)	Rock bass and smallmouth bass	Eat up to one meal per month	Mercury
South Pond, Town of Long Lake [99] (Hamilton)	Yellow perch over 10”	Eat up to one meal per month	Mercury
Spy Lake [20] (Hamilton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Stillwater Reservoir [88] (Herkimer)	Yellow perch over 9”, smallmouth bass and splake	Eat up to one meal per month	Mercury
Sunday Lake [87] (Herkimer)	Chain pickerel	**Don't eat**	Mercury
	Yellow perch	Eat up to one meal per month	Mercury

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Tupper Lake [76] (Franklin & St. Lawrence)	Smallmouth bass and walleye	Eat up to one meal per month	Mercury
Union Falls Flow (Pond) [69] (Clinton & Franklin)	Northern pike and smallmouth bass	Eat up to one meal per month	Mercury
Upper and Lower Sister Lakes [94] (Hamilton)	Yellow perch over 10”	**Don't eat**	Mercury
Upper Chateaugay Lake [68] (Clinton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury
Weller Pond [73] (Franklin)	Northern pike	Eat up to one meal per month	Mercury
Willis Lake [28] (Hamilton)	Smallmouth bass	Eat up to one meal per month	Mercury
Woods Lake [27] (Hamilton)	Smallmouth bass over 15”	Eat up to one meal per month	Mercury

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

For All Adirondack Waters Not Listed Above

Special Adirondack Mountain Advice for Women under 50 years and Children under 15 years

- Lower Mercury Levels - **Eat up to four meals per month**: Yellow perch less than 10”, brook trout, brown trout, rainbow trout, bullhead, bluegill/sunfish, rock bass, and crappie.
- Higher Mercury Levels - **Don’t Eat**: Yellow perch longer than 10”, northern pike, pickerel, walleye, largemouth and smallmouth bass.

General Advice for Women over 50 years and Men over 15 years- Eat up to four meals per month: All fish species

*Numbers in brackets [ ] refer to maps on pages 29-30

Leatherstocking & Central Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. <u>All others:</u> Should follow the advice listed below.			
Goodyear Lake [32] (Otsego)	Walleye over 22”	Eat up to one meal per month	Mercury
Mohawk River [18] -Between Oriskany Creek and West Canada Creek (Oneida & Herkimer)	Carp	**Don't eat**	PCBs
	Largemouth bass and tiger muskellunge	Eat up to one meal per month	PCBs
-Between West Canada Creek and Fivemile Dam below Little Falls (Herkimer)	Carp	Eat up to one meal per month	PCBs
Sauquoit Creek [19] - Between Old Silk Mill Dam (near New Hartford/Paris town line) and Mohawk River (Oneida)	Brown trout	**Don't eat**	PCBs
Threemile Creek [17] (Oneida)	White sucker	Eat up to one meal per month	PCBs
Unadilla River [33] (Delaware, Otsego & Chenango)	Walleye over 22”	Eat up to one meal per month	Mercury
All waters <u>not listed above</u> in the Leatherstocking/Central Region: All ages men, women and children	All fish species	Eat up to four meals per month	

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to maps on pages 29-30

Catskill Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. For waters not listed, women and children should follow the <u>Special Catskill Mountain Advice</u> at the end of this section. <u>All</u> others: Should follow the advice listed below.			
Ashokan Reservoir [47] (Ulster)	Smallmouth bass over 16" and walleye	Eat up to one meal per month	Mercury
Cannonsville Reservoir [36] (Delaware)	Smallmouth bass over 15" and yellow perch	Eat up to one meal per month	Mercury
Chodikee Lake [53] (Ulster)	Largemouth bass over 15"	Eat up to one meal per month	Mercury
Herrick Hollow Creek [37] (Delaware)	Brook trout	Eat up to one meal per month	PCBs
Hudson River [45]	See <u>Hudson River and Tributaries Region</u> page 21		
Loch Sheldrake [50] (Sullivan)	Walleye	Eat up to one meal per month	Mercury
Neversink Reservoir [49] (Sullivan)	Brown trout over 24" and smallmouth bass	Eat up to one meal per month	Mercury
North-South Lake [46] (Greene)	Largemouth bass over 15"	Eat up to one meal per month	Mercury
Pepacton Reservoir [38] (Delaware)	Brown trout over 24", smallmouth bass over 15" and yellow perch	Eat up to one meal per month	Mercury
Rio Reservoir [52] (Orange & Sullivan)	Smallmouth bass over 15"	Eat up to one meal per month	Mercury
Rondout Reservoir [48] (Sullivan & Ulster)	Smallmouth bass over 16"	Eat up to one meal per month	Mercury

*Numbers in brackets [ ] refer to maps on pages 29-30

Catskill Region continued

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Schoharie Reservoir [39] (Delaware, Greene and Schoharie)	Smallmouth bass over 15" and walleye over 18"	**Don't eat**	Mercury
	Smaller smallmouth bass and smaller walleye	Eat up to one meal per month	Mercury
Swinging Bridge Reservoir [51] (Sullivan)	Walleye	Eat up to one meal per month	Mercury

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

For All Catskill Waters Not Listed Above

Special Catskill Mountain Advice for Women under 50 years and Children under 15 years

- Lower Mercury Levels - **Eat up to four meals per month**: Yellow perch less than 10", brook trout, brown trout, rainbow trout, bullhead, bluegill/sunfish, rock bass, and crappie.
- Higher Mercury Levels - **Don't Eat**: Yellow perch longer than 10", northern pike, pickerel, walleye, largemouth and smallmouth bass.

General Advice for Women over 50 years and Men over 15 years - Eat up to four meals per month: All fish species

*Numbers in brackets [ ] refer to maps on pages 29-30

Hudson Valley & Capital District Region

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Women under 50 years and children under 15 years: Don't eat any fish from the waters listed below. All others: Should follow the advice listed below.			
Amawalk Reservoir [112] (Westchester)	Largemouth and smallmouth bass over 16”	Eat up to one meal per month	Mercury
Bog Brook Reservoir [57] (Putnam)	Walleye over 21 inches	Eat up to one meal per month	Mercury
Boyds Corner Reservoir [54] (Putnam)	Largemouth bass over 16” and walleye	Eat up to one meal per month	Mercury
Breakneck Pond [114] (Rockland)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Cross River Reservoir [113] (Westchester)	Largemouth and smallmouth bass over 16”	Eat up to one meal per month	Mercury
Diverting Reservoir [56] (Putnam)	Walleye	Eat up to one meal per month	Mercury
Dunham Reservoir [40] (Rensselaer)	Walleye	**Don't eat**	Mercury
	Smallmouth bass	Eat up to one meal per month	Mercury
Dyken Pond [41] (Rensselaer)	Largemouth bass	Eat up to one meal per month	Mercury
East Branch Reservoir [58] (Putnam)	Walleye	Eat up to one meal per month	Mercury
Hoosic River [31] (Rensselaer)	Brown trout over 14”	Eat up to one meal per month	PCBs
Hudson River [45 & 115]	See Hudson River and Tributaries Region page 21		
Kinderhook Lake [44] (Columbia)	American eel	Eat up to one meal per month	PCBs
Nassau Lake [43] (Rensselaer)	All species	**Don't eat**	PCBs

*Numbers in brackets [ ] refer to maps on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Saw Mill River [116] (Westchester)	American eel	Eat up to one meal per month	Chlordane
Sheldrake River [117] (Westchester)	American eel	**Don't eat**	Chlordane, Dieldrin
	Goldfish	Eat up to one meal per month	Chlordane
Titicus Reservoir [111] (Westchester)	White perch	Eat up to one meal per month	Mercury
Valatie Kill [42] -Between County Rt. 18 and Nassau Lake (Rensselaer)	All species	**Don't eat**	PCBs
-Between Nassau Lake and Kinderhook Lake (Rensselaer & Columbia)	American eel, bluegill and redbreasted sunfish	Eat up to one meal per month	PCBs
West Branch Reservoir [55] (Putnam)	Walleye	Eat up to one meal per month	Mercury
All waters <u>not listed above</u> in Hudson Valley/Capital District Region: All ages men, women and children	All fish species	Eat up to four meals per month	

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to maps on pages 29-30

Hudson River & Tributaries Region

<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. <u>All others:</u> Should follow the advice listed below.			
Location (chemicals of concern)	**Don't Eat**	Eat up to one meal per month	Eat up to four meals per month
Corinth Dam to Dam at Route 9 Bridge in South Glens Falls (mercury)		Smallmouth bass over 14"	All other fish species
Sherman Island Dam downstream to Feeder Dam at South Glens Falls (PCBs)		Carp	All other fish species
Dam at Route 9 Bridge in South Glens Falls to Bakers Falls (PCBs)	All fish species		
Bakers Falls to Troy Dam	Catch and release fishing <u>only</u> per NYS DEC regulations		
Troy Dam south to bridge at Catskill (PCBs)	All fish species (except those listed at right→)	Alewife Blueback herring Rock bass Yellow perch	
South of Catskill (PCBs in fish and cadmium, dioxin and PCBs in crabs)	Channel catfish Gizzard shad White catfish Crab hepatopancreas and crab cooking liquid*	Atlantic needlefish Bluefish Brown bullhead Carp Goldfish Largemouth bass Rainbow smelt Smallmouth bass Striped bass Walleye White perch	All other fish species Blue crab meat (six crabs per week)

*NYS DOH strongly recommends to **not eat** the soft "green stuff" (mustard, tomalley, liver or hepatopancreas) found in the body section of crabs and lobsters from any waters because cadmium, PCBs and other contaminants concentrate there. As contaminants are transferred to cooking liquid, you should also discard crab or lobster cooking liquid.

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

Note: NYS DEC regulations prohibit:

- The harvest/possession of American eel for food
- Taking American shad from the Hudson, East and Harlem Rivers and New York State marine waters

New York City Region

New York City Rivers, Upper Bay, and Kills

NYS DOH has specific advice for the Hudson River (south of the Tappan Zee Bridge), the Harlem and East Rivers, the Upper Bay of New York Harbor (north of the Verrazano Narrows Bridge), Newark Bay, the Arthur Kill, Kill Van Kull, and Raritan Bay west of Wolfe's Pond Park (see table below and map on page 24). The contaminants of concern for these waters are PCBs and dioxin in fish, and cadmium, dioxin and PCBs in crab and lobster.

<u>Women under 50 years and children under 15 years:</u> Don't eat any fish from the waters listed below.

Women under 50 years and children under 15 years can eat up to a few meals per <u>year</u> of crab meat from these waters, and they should not eat the crab tomalley (hepatopancreas) or cooking liquid*.

<u>All others:</u> Should follow the advice listed below.

Locations	**Don't eat**	Eat up to one meal per month	Eat up to four meals per month
Hudson River (south of the Tappan Zee Bridge), Harlem River and East River (to the Throgs Neck Bridge)	Channel catfish Gizzard shad White catfish Crab tomalley (hepatopancreas) and crab cooking liquid*	Atlantic needlefish Bluefish Rainbow smelt Striped bass White perch Carp Goldfish	All other fish species Blue crab meat (six crabs per meal)
Upper Bay of New York Harbor (north of the Verrazano Narrows Bridge), Newark Bay, Arthur Kill, Kill Van Kull, and Raritan Bay (west of Wolfe's Pond Park).	American eel Gizzard shad White perch **Striped bass** (from Newark Bay, Arthur Kill and Kill Van Kull) Crab and lobster tomalley (hepatopancreas) and cooking liquid*	Atlantic needlefish Bluefish Rainbow smelt **Striped bass** (from the Upper Bay of New York Harbor and western Raritan Bay)	All other fish species Blue crab meat (six crabs per meal)

*NYS DOH strongly recommends to **not eat** the soft "green stuff" (mustard, tomalley, liver or hepatopancreas) found in the body section of crabs and lobsters from any waters because cadmium, PCBs and other contaminants concentrate there. As contaminants are transferred to cooking liquid, you should also discard crab or lobster cooking liquid.

Note: NYS DEC regulations prohibit:

- The harvest/possession of American eel for food from the Hudson, East and Harlem Rivers
- Taking American shad from the Hudson, East and Harlem Rivers and New York State marine waters
- Please consult NYS DEC regulations for other restrictions on fisheries.

New York City Lower Bay, Long Island Sound, and South Shore/ Atlantic Ocean

NYS DOH has specific advisories for the Lower Bay of New York Harbor (south of Verrazano Narrows Bridge), Raritan Bay east of Wolfe's Pond Park, Jamaica Bay, the Long Island Sound, the Long Island South Shore, and the Atlantic Ocean (see table below and map on page 24). The contaminants of concern for these waters are PCBs in fish, and cadmium, dioxin and PCBs in crab and lobster.

This advice applies to striped bass, bluefish, weakfish and American eels and is the only advice that applies to these waters. Ocean fish, although tested less often, are generally less contaminated than freshwater fish. However, striped bass, bluefish, weakfish and eels have specific habits or characteristics that make them more likely to have contaminants than other marine species.

<u>Women under 50 years and children under 15 years:</u> Should follow the advice listed below.

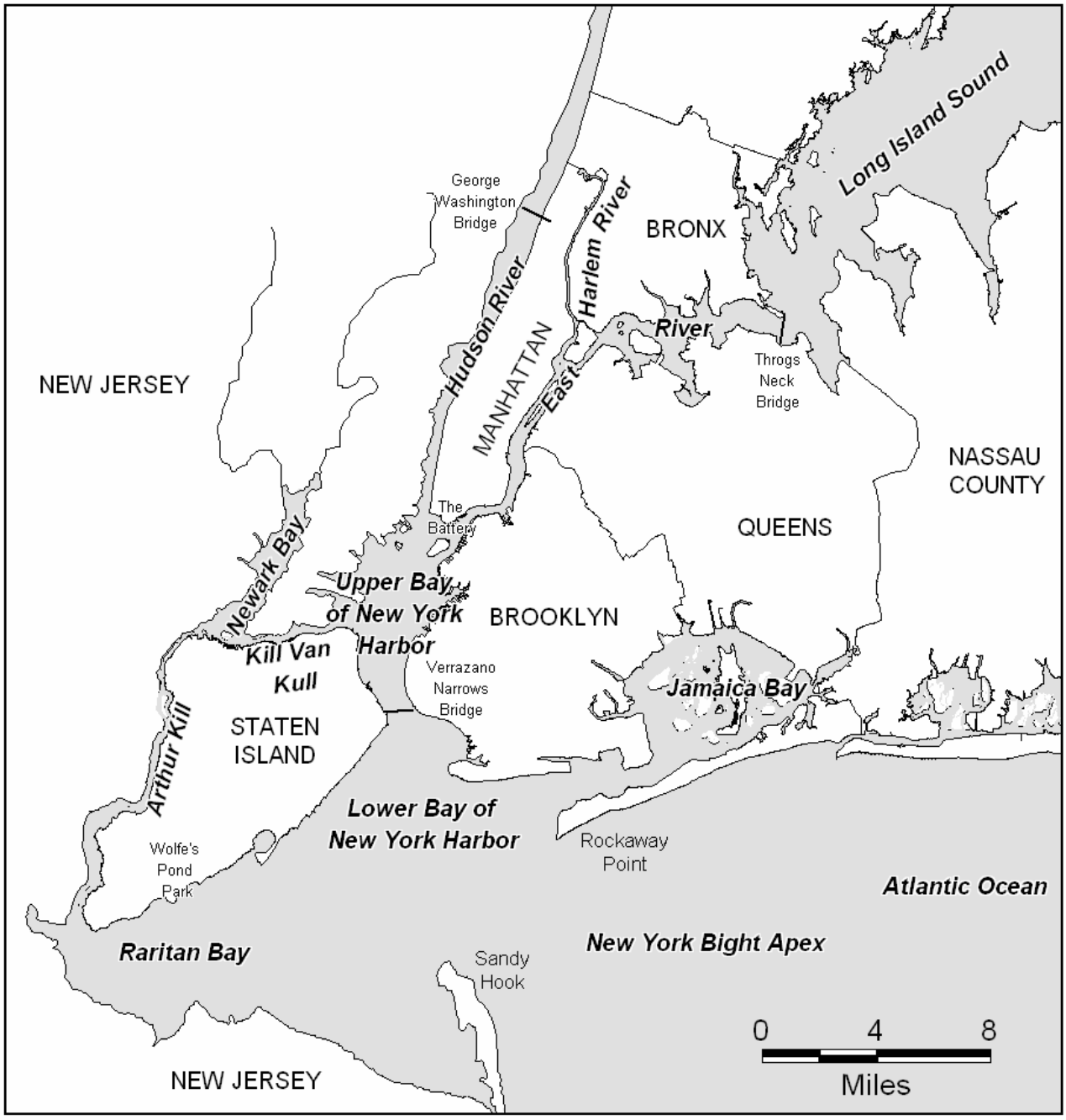
Locations	**Don't eat**	Eat up to one meal per month	Eat up to four meals per month
Lower Bay of New York Harbor (south of Verrazano Narrows Bridge), Raritan Bay (east of Wolfe's Pond Park), Jamaica Bay, Long Island Sound, and Long Island South Shore/ Atlantic Ocean	Weakfish over 25" Crab and lobster tomalley (hepatopancreas) and cooking liquid*	American eel Striped bass Bluefish over 20" Smaller Weakfish	Smaller bluefish

<u>Women over 50 years and men over 15 years:</u> Should follow the advice listed below.

Locations	**Don't eat**	Eat up to one meal per month	Eat up to four meals per month
Lower Bay of New York Harbor (south of Verrazano Narrows Bridge), Raritan Bay (east of Wolfe's Pond Park), Jamaica Bay, Long Island Sound, and Long Island South Shore/ Atlantic Ocean	Crab and lobster tomalley (hepatopancreas) and cooking liquid*	Weakfish over 25"	American eel Bluefish Striped bass Smaller weakfish

*NYS DOH strongly recommends that you **not eat** the soft "green stuff" (mustard, tomalley, liver or hepatopancreas) found in the body section of crabs and lobsters from any waters because cadmium, PCBs and other contaminants concentrate there. As contaminants are transferred to cooking liquid, you should also discard crab or lobster cooking liquid.

Map of New York City Harbor Area



Long Island Region (Marine)

Long Island Sound, Block Island Sound, Jamaica Peconic and Gardiners Bays, and South Shore/ Atlantic Ocean

NYS DOH has specific advice for the New York waters of Long Island Sound, Block Island Sound, Peconic/Gardiners Bays, the Long Island South Shore, and the Atlantic Ocean (see table below and map on page 26). The contaminants of concern for these waters are PCBs in fish, and cadmium, dioxin and PCBs in crab and lobster.

This advice applies to striped bass, bluefish, weakfish and American eels and is the only advice that applies to these waters. Ocean fish, although tested less often, are generally less contaminated than freshwater fish. However, striped bass, bluefish, weakfish and eels have specific habits or characteristics that make them more likely to have contaminants than other marine species.

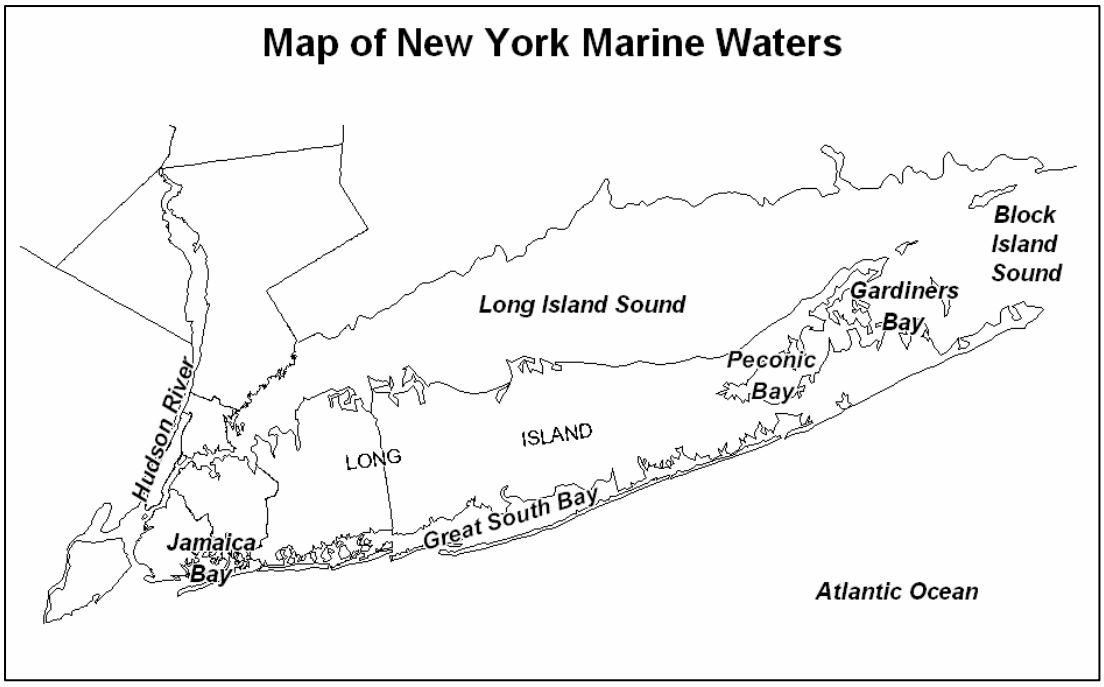
<u>Women under 50 years and children under 15 years:</u> Should follow the advice listed below.

Locations	**Don't eat**	Eat up to one meal per month	Eat up to four meals per month
Long Island Sound, Block Island Sound, Jamaica, Peconic and Gardiners Bays, and Long Island South Shore/ Atlantic Ocean	Weakfish over 25" Crab and lobster tomalley (hepatopancreas) and cooking liquid*	American eel Striped bass Bluefish over 20" Smaller Weakfish	Smaller bluefish

<u>Women over 50 years and men over 15 years:</u> Should follow the advice listed below.

Locations	**Don't eat**	Eat up to one meal per month	Eat up to four meals per month
Long Island Sound, Block Island Sound, Jamaica, Peconic and Gardiners Bays, and Long Island South Shore/ Atlantic Ocean	Crab and lobster tomalley (hepatopancreas) and cooking liquid*	Weakfish over 25"	American eel Bluefish Striped bass Smaller Weakfish

*NYS DOH strongly recommends that you not eat the soft "green stuff" (mustard, tomalley, liver or hepatopancreas) found in the body section of crabs and lobsters from any waters because cadmium, PCBs and other contaminants concentrate there. As contaminants are transferred to cooking liquid, you should also discard crab or lobster cooking liquid.



Long Island Region (Freshwater)

Water [*] (County)	Species	Advice	Chemical(s) of Concern
<u>Women under 50 years and children under 15 years</u>: Don't eat any fish from the waters listed below. <u>All others:</u> Should follow the advice listed below.			
Freeport Reservoir [131] (Nassau)	Carp	Eat up to one meal per month	Chlordane
Fresh Pond, Hither Hills State Park [137] (Suffolk)	Largemouth bass over 15”	Eat up to one meal per month	Mercury
Grant Park Pond [128] (Nassau)	Carp	Eat up to one meal per month	PCBs
Hall’s Pond 127[] (Nassau)	Carp and goldfish	**Don't eat**	Chlordane
Lake Capri [135] (Suffolk)	American eel and carp	Eat up to one meal per month	Chlordane, Cadmium
Loft’s Pond [130] (Nassau)	Carp and goldfish	Eat up to one meal per month	Chlordane

*Numbers in brackets [ ] refer to map on pages 29-30

Water [*] (County)	Species	Advice	Chemical(s) of Concern
Massapequa Reservoir (Upper) [134] (Nassau)	White perch	Eat up to one meal per month	Chlordane
Ridders Pond [126] (Nassau)	Goldfish	**Don't eat**	Chlordane
Smith Pond, Rockville Centre [129] (Nassau)	White perch	Eat up to one meal per month	Chlordane
Smith Pond, Roosevelt Park [132] (Nassau)	American eel	**Don't eat**	Chlordane
	Carp and goldfish	Eat up to one meal per month	Chlordane
Spring Pond, Middle Island [136] (Suffolk)	Carp and goldfish	**Don't eat**	Chlordane
Upper Twin Pond [133] (Nassau)	American eel and carp	Eat up to one meal per month	Chlordane
Whitney Park Pond [125] (Nassau)	Carp and goldfish	Eat up to one meal per month	Chlordane
All freshwaters in Long Island Region **not listed above**: All ages men, women and children	All fish species	Eat up to four meals per month	

Note: The specific advisories for the waters listed above also apply to tributaries and connected waters if there are no barriers to stop the fish from crossing, such as dams or falls.

*Numbers in brackets [ ] refer to map on pages 29-30

Contacts for Additional Information

For more information on health effects from exposure to chemical contaminants or to provide comments on the format or content of this report contact:

New York State Department of Health at 518-402-7800. You may also call toll-free 1-800-458-1158. Calls are taken from 8:00AM-4:30PM, Monday through Friday. After hours, leave a voice mail message. The full advisories are also available online at www.nyhealth.gov/fish or can be requested by e-mail at BTSA@health.state.ny.us

For more information on fishing inland waters, contact:

New York State Department of Environmental Conservation

Region 1
Loop Road
Bldg. 40 SUNY
Stony Brook, NY 11790
(631) 444-0280

Region 2
1 Hunter Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
(718) 482-4922

Region 3
21 South Putt Corners Road
New Paltz, NY 12561-1696
(845) 256-3161

Region 4
65561 State Hwy. 10
Suite One
Stamford, NY 12167-9503
(607) 652-7366

Region 5
1115 NYS Rt. 86
P.O. Box 296
Raybrook, NY 12977-0296
(518) 897-1333

Region 6
317 Washington St.
Watertown, NY 13601-3787
(315) 785-2262

Region 7
1285 Fisher Avenue
Cortland, NY 13045-1090
(607) 753-3095, ext.213

Region 8
6274 E. Avon-Lima Road
Avon, NY 14414-9519
(585) 226-5343

Region 9
270 Michigan Avenue
Buffalo, NY 14203-2999
(716) 851-7000 or 7010

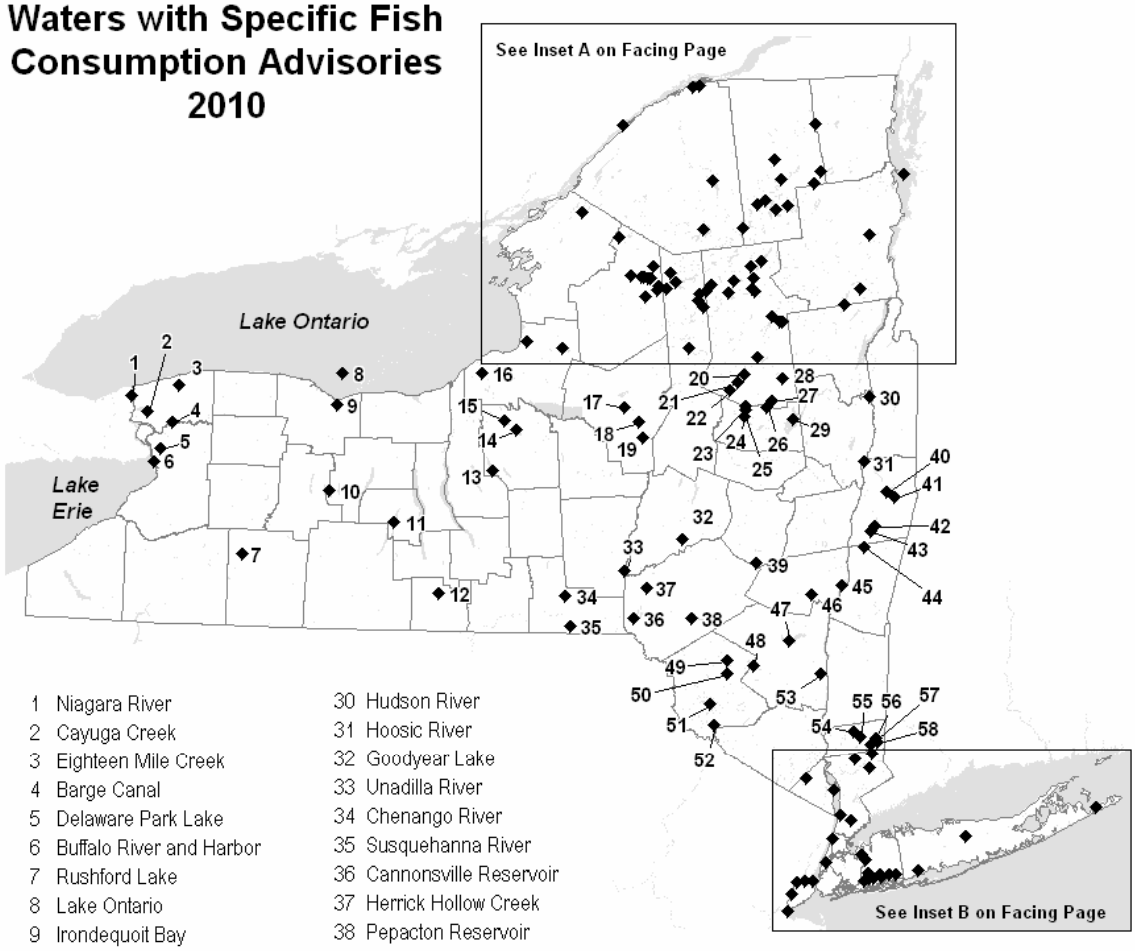
For more information on **fishing marine waters**, contact:

Bureau of Finfish and Crustaceans
205 North Belle Mead Road, Suite 1
East Setauket, NY 11733
(631) 444-0435

For information on **contaminant levels** in fish, shellfish and wildlife, contact:

Division of Fish and Wildlife
625 Broadway, Fifth Floor
Albany, NY 12233-4756
(518) 402-8920

Waters with Specific Fish Consumption Advisories 2010



1 Niagara River
2 Cayuga Creek
3 Eighteen Mile Creek
4 Barge Canal
5 Delaware Park Lake
6 Buffalo River and Harbor
7 Rushford Lake
8 Lake Ontario
9 Irondequoit Bay
10 Canadice Lake
11 Keuka Lake
12 Koppers Pond
13 Skaneateles Creek
14 Onondaga Lake
15 Seneca River
16 Oswego River
17 Threemile Creek
18 Mohawk River
19 Sauquoit Creek
20 Spy Lake
21 Sand Lake
22 Ferris Lake
23 Middle Stoner Lake
24 Pine Lake
25 Canada Lake
26 Chase Lake
27 Woods Lake
28 Willis Lake
29 Great Sacandaga Lake
30 Hudson River
31 Hoosic River
32 Goodyear Lake
33 Unadilla River
34 Chenango River
35 Susquehanna River
36 Cannonsville Reservoir
37 Herrick Hollow Creek
38 Pepacton Reservoir
39 Schoharie Reservoir
40 Dunham Reservoir
41 Dyken Pond
42 Valatie Kill
43 Nassau Lake
44 Kinderhook Lake
45 Hudson River
46 North-South Lake
47 Ashokan Reservoir
48 Rondout Reservoir
49 Neversink Reservoir
50 Loch Sheldrake
51 Swinging Bridge Reservoir
52 Rio Reservoir
53 Chodikee Lake
54 Boyds Corner Reservoir
55 West Branch Reservoir
56 Diverting Reservoir
57 Bog Brook Reservoir
58 East Branch Reservoir

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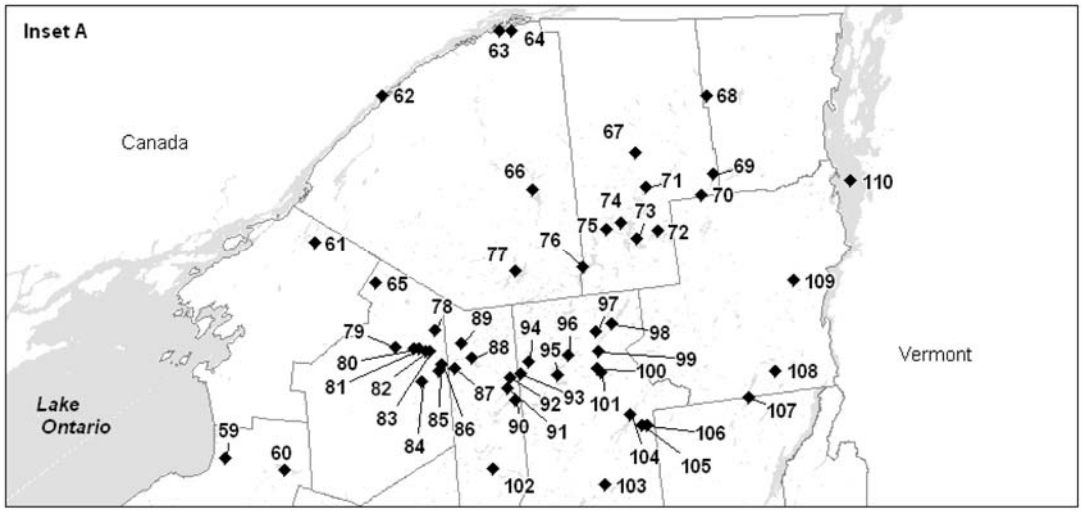
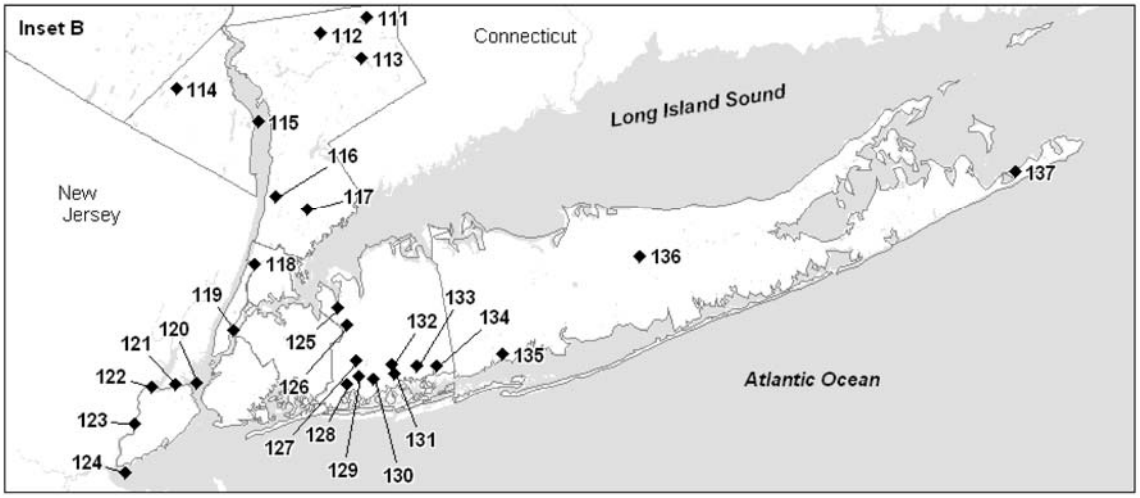


59 Salmon River
60 Salmon River Reservoir
61 Red Lake
62 St. Lawrence River
63 Massena Power Canal
64 Grasse River
65 Indian Lake (Fort Drum)
66 Carry Falls Reservoir
67 Meacham Lake
68 Upper Chateaugay Lake
69 Union Falls Pond
70 Franklin Falls Pond
71 Osgood Pond
72 Lower Saranac Lake
73 Weller Pond
74 Polliwog Pond
75 Rollins Pond
76 Tupper Lake
77 Cranberry Lake
78 Long Pond (Croghan)
79 High Falls Pond
80 Elmer Falls Reservoir
81 Effley Falls Reservoir
82 Soft Maple Dam Pond
83 Soft Maple Reservoir
84 Halfmoon Lake
85 Francis Lake
86 Beaver Lake
87 Sunday Lake
88 Stillwater Reservoir
89 Moshier Reservoir
90 Fourth Lake
91 Dart Lake
92 Big Moose Lake
93 Russian Lake
94 Upper and Lower Sister Lakes
95 Raquette Lake
96 Forked Lake
97 Lake Eaton
98 Long Lake
99 South Pond
100 Blue Mountain Lake
101 Rock Pond and Lake Durant
102 North Lake
103 Sacandaga Lake
104 Indian Lake (Indian Lake)
105 Round Pond
106 Kings Flow
107 Schroon Lake
108 Crane Pond
109 Lincoln Pond
110 Lake Champlain



111 Titicus Reservoir
112 Arnawalk Reservoir
113 Cross River Reservoir
114 Breakneck Pond
115 Hudson River
116 Saw Mill River
117 Sheldrake River
118 Harlem River
119 East River
120 New York Harbor
121 Kill Van Kull
122 Newark Bay
123 Arthur Kill
124 Raritan Bay
125 Whitney Park Pond
126 Ridders Pond
127 Hall's Pond
128 Grant Park Pond
129 Smith Pond (Rockville Center)
130 Loft's Pond
131 Freeport Reservoir
132 Smith Pond (Roosevelt Park)
133 Upper Twin Pond
134 Upper Massapequa Reservoir
135 Lake Capri
136 Spring Pond (Middle Island)
137 Fresh Pond

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Alphabetic Listing of Waterbodies and Regions

Code	Region	Page
WEST	Western	5
FL	Finger Lakes	7
SL	St. Lawrence	9
ADK	Adirondack	11
LE/C	Leatherstocking/Central	16
CAT	Catskill	17
HV/CD	Hudson Valley/Capital	19
HR	Hudson River	21
NYC	New York City	22
LI	Long Island	25

Amawalk Reservoir	HV/CD
Arthur Kill	NYC
Ashokan Reservoir	CAT
Barge Canal	WEST
Beaver Lake	ADK
Big Moose Lake	ADK
Blue Mountain Lake	ADK
Bog Brook Reservoir	HV/CD
Boyds Corner Reservoir	HV/CD
Breakneck Pond	HV/CD
Buffalo River and Harbor	WEST
Canada Lake	ADK
Canadice Lake	FL
Cannonsville Reservoir	CAT
Carry Falls Reservoir	ADK
Cayuga Creek	WEST
Chase Lake	ADK
Chenango River	FL
Chodikee Lake	CAT
Cranberry Lake	ADK
Crane Pond	ADK
Cross River Reservoir	HV/CD
Dart Lake	ADK
Delaware Park Lake	WEST
Diverting Reservoir	HV/CD
Dunham Reservoir	HV/CD
Dyken Pond	HV/CD
East Branch Reservoir	HV/CD
East River	NYC
East Stoner Lake (or (Middle Stoner Lake)	ADK
Effley Falls Reservoir	ADK
Eighteen Mile Creek	WEST
Elmer Falls Reservoir	ADK
Ferris Lake	ADK
Forked Lake	ADK
Fourth Lake	ADK
Francis Lake	ADK
Franklin Falls Pond	ADK
Freeport Reservoir	LI
Fresh Pond	LI
Goodyear Lake	LE/C
Grant Park Pond	LI
Grasse River	SL
Great Sacandaga Lake	ADK
Halfmoon Lake	ADK
Hall's Pond	LI
Harlem River	NYC
Herrick Hollow Creek	CAT
High Falls Pond	ADK
Hoosic River	HV/CD
Hudson River	HR
Indian Lake (Hamilton County)	ADK
Indian Lake (Lewis County)	ADK
Irondequoit Bay	FL
Keuka Lake	FL
Kill Van Kull	NYC
Kinderhook Lake	HV/CD
Kings Flow	ADK
Koppers Pond	FL
Lake Capri	LI
Lake Champlain	ADK
Lake Durant and Rock Pond	ADK
Lake Eaton	ADK
Lake Erie	WEST
Lake Ontario	WEST,FL,SL
Lincoln Pond	ADK
Loch Sheldrake	CAT
Loft's Pond	LI
Long Lake	ADK
Long Pond (Croghan)	ADK
Lower and Upper Sister Lakes	ADK
Lower Saranac Lake	ADK
Massena Power Canal	SL
Meacham Lake	ADK
Middle Stoner Lake (or East Stoner Lake)	ADK
Mohawk River	LE/C
Moshier Reservoir	ADK
Nassau Lake	HV/CD
Neversink Reservoir	CAT
New York Harbor	NYC
Newark Bay	NYC
Niagara River	WEST
North Lake	ADK
North-South Lake	CAT
Onondaga Lake	FL
Osgood Pond	ADK
Oswego River	SL
Pepacton Reservoir	CAT
Pine Lake	ADK
Polliwog Pond	ADK
Raquette Lake	ADK
Raritan Bay	NYC
Red Lake	SL
Ridders Pond	LI
Rio Reservoir	CAT
Rock Pond and Lake Durant	ADK
Rollins Pond	ADK
Rondout Reservoir	CAT
Round Pond	ADK
Rushford Lake	FL
Russian Lake	ADK
Sacandaga Lake	ADK
Salmon River	SL
Salmon River Reservoir	SL
Sand Lake	ADK
Sauquoit Creek	LE/C
Saw Mill River	HV/CD
Schoharie Reservoir	CAT
Schroon Lake	ADK
Seneca River	FL
Sheldrake River	HV/CD
Skaneateles Creek	FL
Smith Pond (Rockville Centre)	LI
Smith Pond (Roosevelt Park)	LI
Soft Maple Dam Pond	ADK
Soft Maple Reservoir	ADK
South Pond	ADK
Spring Pond (Middle Island)	LI
Spy Lake	ADK
St. Lawrence River	SL
Stillwater Reservoir	ADK
Sunday Lake	ADK
Susquehanna River	FL
Swinging Bridge Reservoir	CAT
Threemile Creek	LE/C
Titicus Reservoir	HV/CD
Tupper Lake	ADK
Unadilla River	LE/C
Union Falls Pond	ADK
Upper and Lower Sister Lakes	ADK
Upper Chateaugay Lake	ADK
Upper Massapequa Reservoir	LI
Upper Twin Pond	LI
Valatie Kill	HV/CD
Weller Pond	ADK
West Branch Reservoir	HV/CD
Whitney Park Pond	LI
Willis Lake	ADK
Woods Lake	ADK

Procedures for Setting Advisories

In New York State, these advisories are primarily based on information that the New York State Department of Environmental Conservation (NYS DEC) gathers on contaminant levels in fish and game. NYS DEC collects fish samples each year from different waterbodies. In recent years, NYS DEC has annually collected approximately 2000 fish from more than 50 locations/waters and analyzed these fish for various contaminants. Sampling focuses on waterbodies with known or suspected contamination, waterbodies susceptible to mercury contamination, popular fishing waters and waters where trends in fish contamination are being monitored. Also, testing focuses on those species that are most likely to be caught and eaten by sport anglers. NYS DEC also tests some game species (e.g., waterfowl, snapping turtles) that accumulate chemical contaminants.

NYS DOH annually reviews the new NYS DEC testing results for fish and game to determine if an advisory should be issued or revised for a given waterbody or fish or game species. When reviewing the data, NYS DOH compares testing data to federal marketplace standards (when available) for a contaminant and considers other factors such as potential human exposures and health risks; location, type and number of samples, etc.

Information on Chemicals in Sportfish and Game

Most of what we know about the potential health effects of these chemicals comes from high-dose laboratory animal studies or in people exposed by accidents or in the workplace. Chemicals that cause health effects in laboratory animals and people after high level exposures may also increase the risk of effects in people exposed to lower levels for long periods of time.

PCBs (polychlorinated biphenyls) are a family of man-made chemicals that were used in many commercial and electrical products until their manufacture was banned in the mid-1970s. PCBs are persistent in the environment and accumulate in the fat of fish and other animals. Thus, PCBs still remain a fish contaminant.

Health concerns: Studies of women and their children show a link between elevated levels of PCBs in their bodies and slight effects on their children's birth weight, short-term memory and learning ability. A study of older adults (49-86 years old) who ate fish containing PCBs suggest that higher PCB exposure is associated with decreased memory and learning. Other studies have suggested a link between increased PCB exposure and effects on the human reproductive system, including changes in sperm quality, time to pregnancy and menstrual cycles. These studies suggest that the effects were caused by PCBs, but other factors may have played a role too. Studies of workers exposed to PCBs raise concerns that these chemicals can cause cancer in people, but the information is not adequate to prove that this is the case.

Mercury is a metal that occurs naturally in the environment and can also get into the environment from human activity. Most of the mercury that accumulates in fish is an organic form called methylmercury. Fish that live longer and eat other fish tend to have more methylmercury than do smaller fish.

Health concerns: Methylmercury can cause effects on the nervous system. Exposure to methylmercury is more of a concern for children and unborn babies because their nervous systems are still developing. People who ate fish that contained large amounts of methylmercury had permanent damage to the brain, kidneys and fetus. Some recent research on populations that eat a large amount of fish finds that methylmercury can affect children's memory, attention and language development. Other research on a different population that also eats large amounts of fish has not found such effects.

Chlordane, DDT, dieldrin and mirex are all man-made organochlorine chemicals that were once used as insecticides. Mirex was also used as a flame retardant in a number of materials. Although these chemicals have been banned in the United States since the 1970s (with the exception that chlordane and dieldrin were allowed for termite control until the 1980s), they are very persistent in the environment and accumulate in the fat of fish and other animals. Thus, these chemicals can still be found as fish contaminants.

Health concerns: Chlordane, DDT, dieldrin and mirex can cause effects on the nervous system and the liver in laboratory animals. Chlordane, DDT and dieldrin have also caused effects on the nervous system of people. Some of these chemicals can also cause effects on the kidneys, the thyroid gland and on reproduction in animals and people. The levels of exposure that caused these effects are typically much higher than would likely occur from eating fish containing these chemicals. Chlordane, DDT, dieldrin and mirex also caused cancer in

laboratory animals exposed to high levels over their lifetimes. Whether these chemicals cause cancer in people is not known.

Dioxins (polychlorinated dibenzo-p-dioxins or PCDDs) and **furans** (polychlorinated dibenzofurans or PCDFs) are two closely related families of chemicals. Some dioxins and furans are unwanted by-products of manufacturing and also come from the smoke or ash of motor vehicles, municipal waste incinerators, wood fires and trash burning. Dioxins and furans are very persistent in the environment and accumulate in the fat of fish and other animals. Thus, these chemicals are fish contaminants.

Health concerns: Most of what we know about dioxins and furans come from one particular dioxin, but many of these chemicals are likely to cause similar health effects. Dioxins and furans have been associated with causing skin effects as well as changes in reproductive hormone levels and indicators of liver function in people. Weaker evidence suggests that these chemicals can also cause a number of other health effects in people. Such effects include an association between a mother's exposure and effects on her child's nervous system, hormone levels and immune system. Some dioxins have been shown to cause cancer in laboratory animals exposed to high levels of the chemicals throughout their lifetime. Some evidence suggests that people exposed to dioxins, as well as other chemicals at the same time, have developed cancer.

Cadmium is a naturally-occurring metal found in small amounts in soil and water. Cadmium is used in many industrial operations and in consumer products such as paints, plastics and batteries. Cadmium also occurs in foods (especially fruits, vegetables and cereals) and tobacco. Cadmium can also be found in fish and shellfish from some waters.

Health concerns: Cadmium accumulates in the body, mainly in the kidneys, with continued exposure. Some people with long-term cadmium exposure have had effects on their kidneys, bones and blood.

Lead can be found in fishing tackle (especially sinkers and jig heads).

Health concerns: Lead can cause health problems when it builds up in the body. Because the unborn baby and young child are at the greatest risk, it is particularly important for pregnant women, women of childbearing age and young children to minimize their lead exposures. Lead poisoning can slow a child's physical growth and mental development and can cause behavior and other nervous system problems, reproductive problems, kidney and liver damage, blindness and even death in both adults and children. To reduce exposure to the lead in these products, you should:

- Keep all lead objects away from young children (young children often put their hands and objects in their mouth).
- Wash hands with soap and water after holding or using lead sinkers and jig heads.
- Never put lead sinkers in your mouth. This includes biting down on lead sinkers.
- Never eat, drink, or smoke immediately after handling lead sinkers, wash hands first.
- Take proper precautions when melting lead and pouring sinkers at home.

Consider non-lead alternatives. NYS DOH recommends that non-lead fishing sinkers and lures be used whenever possible. NYS DEC encourages anglers to use non-lead alternatives for sinkers and jig heads to reduce the risk of lead poisoning to birds. New York State law prohibits the sale of lead fishing sinkers (including "split shot") weighing one-half ounce or less. More information is provided on the DEC website www.dec.ny.gov/outdoor/9223.html.

Good Sanitary Practices - Bacteria, Viruses and Parasites in Fish

Fish can be contaminated with bacteria, viruses or parasites that can cause illness. Avoid directly handling fish when you have cuts or open sores on your hands. You should harvest fish that act and look healthy, and follow good sanitary practices when preparing them. We recommend that you wear rubber or plastic protective gloves while filleting or skinning. We also recommend that you remove intestines soon after harvest, don't eat intestines and avoid direct contact with intestinal contents. Hands, utensils and work surfaces should be washed before and after handling any raw food, including fish. Fish should be kept cool (with ice or refrigerated below 45°F or 7°C) until filleted and then should be refrigerated or frozen.

Advice on Eating Raw or Partially Cooked Fish and Shellfish

Foods of animal origin, such as pork, poultry, beef, dairy products, eggs, fish and shellfish, can be contaminated with bacteria, viruses or parasites that can cause illness. Persons at high risk (for example,

those who are immunocompromised, suffer from liver disease or other chronic diseases) can be more susceptible to and more severely affected by these infectious diseases. This is why we recommend that all of these foods be thoroughly cooked before eating. Government agencies and the food industry strive to minimize contamination of raw animal foods and provide healthful food products.

Call NYS DEC at (631) 444-0475 for information on shellfish regulations, including areas in which clam, oyster and mussel collection are permitted. NYS DEC routinely tests clam, oyster and mussel beds for bacteria. Based on these tests, an area may be closed to clam, oyster and mussel harvesting.

Check the NYS DEC website at www.dec.ny.gov/outdoor/345.html for general information on shellfish harvest. Call NYS DEC at (631) 444-0480 for the latest information on emergency closures.

Deformed or Abnormal Fish

The health implications of eating deformed or abnormal fish are unknown. Any obviously diseased fish (marked by tumors, lesions or other abnormal condition of the fish skin, meat or internal organs) should be discarded.

Botulism in Fish

In recent years, large numbers of some species of Lake Erie fish and waterfowl have been found dead, sick and dying, many of them as a result of botulism poisoning. The botulism poison is produced by Clostridium botulinum, a bacterium that is common in the environment and can produce harmful levels of botulism poison under some conditions. This poison has been found in some of the affected fish and waterfowl. The botulism poison can cause illness and death if eaten by humans or animals. Cooking may not destroy the botulism poison. This problem may also occur in other waters, and we don't know whether all or only some fish and waterfowl species can be affected. NYS DEC continues to monitor and investigate this problem.

No human cases of botulism poisoning have been linked to these events. However, as a precaution, do not eat any fish or game if they are found dead or dying, act abnormally or seem sick. If you must handle dead or dying fish, birds or other animals, cover your hands with disposable rubber or plastic protective gloves or a plastic bag.

Advice on Contaminants in Game

NYS DOH also issues advisories about eating certain game. The primary contaminants of concern in waterfowl are PCBs, mirex, chlordane and DDT; and PCBs are the main concern in snapping turtles.

Snapping Turtles - Snapping turtles retain contaminants in their fat, liver, eggs and, to a lesser extent, muscle. If you choose to consume snapping turtles, you can reduce your exposure by carefully trimming away all fat and discarding the fat, liver and eggs prior to cooking the meat or preparing soup. Women of childbearing age, infants and children under the age of 15 should AVOID EATING snapping turtles or soups made with their meat. (Contaminant - PCBs)

Wild Waterfowl - Mergansers are the most heavily contaminated waterfowl species and should NOT BE EATEN. EAT NO MORE THAN TWO MEALS PER MONTH of other wild waterfowl; you should skin them and remove all fat before cooking, and discard stuffing after cooking. Wood ducks and Canada geese are less contaminated than other wild waterfowl species and diving ducks are more contaminated than dabbler ducks. (Contaminants - PCBs, mirex, chlordane, DDT)

Lead in Shot and Bullets

The use of lead shot for waterfowl hunting is prohibited in New York State, and waterfowl hunters are required to use NYS DEC-approved non-lead shot alternatives. Remove all bullets, slugs, shot, lead fragments and affected meat (including feathers, fur, debris, etc.) from game when preparing it for consumption. Studies indicate that lead shot can contaminate game meat. Thus, people who eat game harvested with lead shot may be exposed to lead. You may want to consider using non-lead shot alternatives to hunt other small game as well. More information on lead shot alternatives is provided on the NYS DEC website at www.dec.ny.gov/outdoor/28175.html

Small lead fragments can be present in venison from deer harvested with lead bullets. Some bullets shatter into small pieces that can be too small to detect by sight, feel, or when chewing the meat. For advice on how to eliminate or reduce the potential risk of consuming lead fragments go to the NYS DEC website at http://www.dec.ny.gov/outdoor/48420.html.
If you have any questions regarding how to reduce the amount of lead in venison, please contact your NYS DEC Regional Wildlife Office. For questions

about potential health effects from lead, call NYS DOH at 1-800-458-1158.

Studies have shown that people can be exposed to lead from shooting at indoor and outdoor firing ranges. For additional information on how to minimize your exposure to lead, call 1-800-458-1158,

Good Sanitary Practices - Bacteria, Viruses and Parasites in Game

Game and other meats can be contaminated with bacteria, viruses or parasites that can cause illness. Avoid directly handling game when you have cuts or open sores on your hands. You should harvest game that act and look healthy, and follow good sanitary practices when preparing them. We recommend that you wear rubber or plastic protective gloves while field dressing, skinning or butchering. We also recommend that you remove intestines soon after harvest, don't eat intestines and avoid direct contact with intestinal contents. Hands, utensils and work surfaces should be washed before and after handling any raw food, including game meat. Game should be kept cool (with ice or refrigerated below 45°F or 7°C) until butchered and then should be refrigerated or frozen. Some hunters prefer to hang big game for several days before butchering; this should not be done unless the game can be kept at temperatures consistently below 45°F. Game birds and other types of wild game meat should be cooked to an internal temperature (in the thickest part) of 165°F (74°C).

In 2008 the NYS Department of Agriculture and Markets discovered a type of tuberculosis (TB) bacterium (*Mycobacterium bovis)* infecting a captive deer in Columbia County. This bacterium causes TB in cattle and can spread to other species, including humans. Although this infection has not been found in any other deer at this point, when field dressing deer, hunters should follow good sanitary practices (see above) and should be alert to abscesses in the lungs and rib cage, intestines, liver or stomach. Anyone seeing these signs or other unusual lesions in deer should contact the NYS DEC at 518-402-8965.

Advice on Eating Raw or Partially Cooked Meats

Foods of animal origin, such as pork, poultry, beef, dairy products, eggs, fish and shellfish, can be contaminated with bacteria, viruses or parasites that can cause illness. Persons at high risk (for example, those who are immunocompromised, suffer from liver disease or other chronic diseases) can be more susceptible to and more severely affected by these infectious diseases. This is why we recommend that all of these foods be thoroughly cooked before eating. Government agencies and the food industry strive to minimize contamination of raw animal foods and provide healthful food products.

Botulism in Waterfowl

In recent years, large numbers of some species of Lake Erie fish and waterfowl have been found dead, sick and dying, many of them as a result of botulism poisoning. The botulism poison is produced by *Clostridium botulinum*, a bacterium that is common in the environment and can produce harmful levels of botulism poison under some conditions. This poison has been found in some of the affected fish and waterfowl. The botulism poison can cause illness and death if eaten by humans or animals. Cooking may not destroy the botulism poison. This problem may also occur in other waters, and we don't know whether all or only some fish and waterfowl species can be affected. NYS DEC continues to monitor and investigate this problem.

No human cases of botulism poisoning have been linked to these events. However, as a precaution, do not eat any fish or game if they are found dead or dying, act abnormally or seem sick. If you must handle dead or dying fish, birds or other animals, cover your hands with disposable rubber or plastic protective gloves or a plastic bag.

Rabies and Chronic Wasting Disease (CWD)

Rabies and Chronic Wasting Disease (CWD) are two diseases that can cause abnormal behavior in deer. Rabies can be found in any mammal (especially raccoons, bats, skunks and foxes) and is found only occasionally in New York State deer. Chronic Wasting Disease (CWD) is a disease of deer and elk. In 2005, CWD was found for the first time in captive and wild white-tailed deer in New York State. This disease has been present for several years in some deer or elk from several Western and mid-Western states and some Canadian provinces.

Rabies is a viral infection which causes a rapidly progressive disease of the animal's nervous system that leads to paralysis and death, usually within several days after signs of the disease first appear. Rabid deer may seem to lose their normal fear of humans, appear to have injured hind legs, salivate excessively, or be found laying on the ground struggling. Rabies can be transmitted from infected mammals to humans by exposure to infected tissues, particularly nervous tissue and saliva. Treatment can prevent rabies from developing in

exposed humans. Rabies is almost always fatal in exposed humans who develop the disease. Thorough cooking will inactivate the rabies virus (see “Good Sanitary Practices” on page 35 of this booklet), but meat from infected game should not be eaten. Hunters should be aware that deer with rabies might have symptoms similar to CWD.

CWD is a brain infection of deer and elk that leads to loss of body functions, poor body condition and abnormal behavior such as staggering or very poor posture. It eventually leads to the death of the animal. CWD appears to be caused by abnormal, infectious proteins called prions. There is currently no evidence that CWD is linked to disease in people. Cooking does not destroy the CWD prion.

The following precautions are recommended to minimize the risk of transmission of infectious diseases when handling or processing animals:

- Do not handle or eat deer or other game that appear sick, act strangely, or are found dead.
- Wear rubber or latex gloves when field dressing game.
- Avoid handling or cutting through the skull or spinal cord. Use separate dedicated knives, saws and cutting boards to butcher deer, particularly if you cut through the spinal cord or skull (such as when removing antlers). Do not use regular kitchen utensils. Wash thoroughly with soap and water any knives, butchering tools, work surfaces, hands and any other part of the body that has been exposed to animal tissue, blood, urine or feces. Equipment should then be rinsed with boiling (212 degree Fahrenheit) water or sanitized with a chemical sanitizer.
- As an additional precaution against CWD, you can soak cleaned knives and tools for one hour in a fresh solution of household chlorine bleach (unscented) mixed with an equal amount of water (e.g., 1 quart bleach with 1 quart of water), air dry, then rinse with clean water. Wipe down cleaned counters and other surfaces with the bleach solution and allow them to air dry.
- Warning: When handling bleach, wear rubber or latex gloves and avoid getting bleach in eyes or on skin or clothing. If bleach contacts eyes, skin, or clothing, immediately wash affected area with water and remove affected clothing. Make sure that enough fresh air is available because bleach may cause eye, nose, or throat irritation.
- Should you decide to take the skull cap (e.g., with antlers), make sure to thoroughly clean the skull cap, utensils and work surfaces with bleach solution, as described above.
- Avoid handling the brain and spinal tissues or fluids, saliva and mouth parts of game animals. If these tissues or fluids are handled, wash hands thoroughly with soap and water. If these tissues or fluids make contact with a person's eyes, nose, mouth, or fresh open breaks in a person's skin, contact the local health department to see if rabies exposure may have occurred and whether the animal should be tested for rabies.
- If possible, request that the meat from your deer be processed separately, without adding other hunters’ deer meat.
- The brain, spinal cord and other nervous tissue, spleen, pancreas, eyes, tonsils, and lymph nodes of game may have CWD prions, and additional organs (liver, kidney, heart and salivary glands) may pose a risk of infection for a number of diseases. Normal field dressing will eliminate most of these organs and tissues. Lymph nodes can be eliminated by boning out the meat and carefully trimming the fat and connective tissue. Although no current evidence links CWD to human health, out of an abundance of caution, we recommend that people not consume a known or suspect CWD positive animal.

For additional information about CWD and rabies, visit the NYS DOH Website at www.health.state.ny.us/diseases/communicable/zoonoses/

For an update on CWD testing in New York State and for information on wild deer, visit the NYS Department of Environmental Conservation Website at www.dec.ny.gov/animals/7191.html

For information on captive deer, visit the NYS Department of Agriculture and Markets website at www.agmkt.state.ny.us/AI/cwd.html