

2010

# Fish Smart, Eat Smart

A guide to Health Advisories  
for Eating Fish and Crabs  
Caught in New Jersey Waters

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New Jersey Department of Health and Senior Services



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The New Jersey Department of Environmental Protection and the New Jersey Department of Health and Senior Services can provide more information on the advisories and the health effects of chemical contaminants in the fish. To stay current with advisory updates and to request additional information, please contact the NJDEP Office of Science, at 1-609-984-6070 or check the website [www.FishSmartEatSmartNJ.org](http://www.FishSmartEatSmartNJ.org) or the NJDHSS at 609 826-4935.

## Introduction

This update uses the results of a study involving the analysis of 223 samples of 10 fish species collected in 31 water bodies in the **Atlantic Coastal Plain Region** to support the continuation of current fish consumption advisories and the need for additional fish consumption advisories in this region of the state.

This booklet summarizes the marine, estuarine and fresh water fish consumption advisories for New Jersey including new fish consumption advisories for the Atlantic Coastal Plain Region. It provides you with information on how to reduce your risk by avoiding or limiting consumption of certain fish. It also offers guidance in how to prepare the fish you eat from local waters in ways that reduce your exposure to PCBs, dioxins and mercury.

Fishing provides enjoyable and relaxing recreation. Many people enjoy cooking and eating their own catch. Fish are an excellent source of protein, minerals and vitamins, are low in fat and cholesterol and play an important role in maintaining a healthy, well-balanced diet. The American Heart Association recommends people eat fish regularly. Fish are also one of the few foods that are rich in the omega-3 fatty acids needed for proper development of the brain and nervous system in the fetus and infants, and may reduce the risk of heart attack. Fish are an excellent substitute for other protein foods that are higher in saturated fats and cholesterol. Health professionals recommend that you include fish in your diet.

However, certain fish may contain contaminants, such as polychlorinated biphenyls (PCBs), dioxins and mercury from the water they live in and the food they eat. Contaminants such as dioxin and PCBs are classified by the U.S. Environmental Protection Agency as probable cancer causing substances in humans. Elevated levels of mercury can pose health risks to the human nervous system, particularly to developing fetuses. Therefore, it is a good idea to follow a few precautions in consuming recreationally caught fish and crabs, particularly if you eat them often.

Since 1982, when research began to show elevated levels of potentially harmful contaminants in certain fish and crabs in some New Jersey waters, fish consumption advisories were adopted to guide citizens on safe consumption practices. Fish consumption advisories are developed through a scientific process that includes collecting samples of fish from waters throughout the state and analyzing them for various chemical contaminants, such as dioxin, PCBs and

mercury. The contaminant levels in the fish are then evaluated using federal guidelines for protecting human health.

The New Jersey Department of Environmental Protection (NJDEP) and Department of Health and Senior Services (NJDHSS) provide advice on consuming those species of fish in which high levels of dioxin, PCBs and mercury have been found. Since levels of contaminants may vary from one location to another and from one fish species to another, the advisories are also separated by site. So be sure to check which guidelines refer to your fishing location.

## 2010 Fish Consumption Advisories for PCBs, Dioxin and Mercury

The advisory table in this booklet provides statewide, regional, and water body-specific advisory information for various fish species. The table lists the recommended fish consumption frequencies for the **General Population** and **High-risk Individuals** for waters statewide and for specific water bodies.

**High Risk Individuals: Includes infants, children, pregnant women, nursing mothers and women of childbearing age.**

**General Population: Includes all others not in the high-risk category. PCB advisories for the General Population are presented in meal frequencies (for example: one meal per month or four meals per year).** This range is based on an estimated 1 in 10,000 risk of cancer during your lifetime from eating fish at the advisory level. This means that one additional cancer may occur in 10,000 people eating fish at the advisory level for a lifetime.

By using this advisory, you have the necessary information to make an informed choice on the number of meals of fish to consume. You can reduce your risk further by eating less than the advisory meal frequency, however, this needs to be balanced with the health benefits of eating fish.

The limits that follow each species assume that no other contaminated fish are being eaten. If you eat more than one species of fish listed in the advisory, the total consumption of fish should not exceed the recommended frequency as a guideline for consumption. The best approach is to use the lowest recommended frequency as a guideline for consumption. **Example: If you fish Union Lake, you can eat four meals of white perch or you can eat one meal of Largemouth Bass over the course of a**

**month, but not both.**

If your specific fishing location is not mentioned within the advisories on the following pages, this does not mean the fish are free of contamination. Not all New Jersey waters or fish species have been tested, and not all fish species were found in all locations, or in some cases available data were insufficient to list a species for a specific water body. **Follow the statewide advisory for the listed species if your fishing area is not mentioned in the guidelines, or follow the statewide advisory of one meal per week for (general Population) or one meal per month (high-risk individuals) for freshwaters.**

### **General Consumption Guidelines**

**Fish Species:** Contaminant levels may vary from species to species. If possible, eat smaller amounts of several different types of fish rather than a large amount of one type that may be high in contaminants. Try to focus your consumption on those species of fish that have lower levels of contaminants, such as fluke or flounder.

**Fish Size:** Smaller fish of a species will usually have lower chemical levels than larger fish in the same location because contaminants tend to build up in the fish over time. It is advisable to eat smaller fish (of legal size) more often than larger fish.

**High-risk Individuals:** Infants, children, pregnant women, nursing mothers and women of childbearing age are considered to be at higher risk from contaminants in fish than members of the general public. People within this category should be particularly careful about following the advisories, because of the greater potential for PCBs, dioxin and mercury to affect the development of the fetus, infant, and young child.

### **Health Effects from Consumption of Contaminated Fish and Crabs**

#### **General Advice**

Exposure to low levels of some contaminants in the environment may have long lasting health effects on people. Mercury, PCBs and dioxins are among the major contaminants found in some New Jersey fish in portions of the state. These contaminants can be especially harmful to women of childbearing age, pregnant women and nursing mothers. Trace amounts of these contaminants may remain in your body for a period of time after eating. Should you become pregnant during this time, these contaminants can be passed along to your fetus, potentially affecting the

development of the nervous system. Children are also at risk of developmental and neurological problems if exposed to these chemicals.

### **Mercury**

Mercury is a toxic metal that has been commonly used in a number of products (e.g., thermometers, electrical switches). There are many sources of mercury in the environment, natural and man-made; primary sources include burning of fossil fuels such as coal, incineration of wastes, and metal processing/manufacturing.

Mercury discharged to the environment can end up in local water bodies. Mercury accumulates in fish muscle tissue through the aquatic food chain from the food that fish eat. Above certain levels, mercury can damage the nervous system, particularly in unborn and young children, resulting in learning and developmental delays. Regular consumption, of even low amounts of mercury may cause subtle effects on the central nervous system in both children and adults. In addition, long-term consumption of fish with elevated levels of mercury by adults and older children may result in adverse health effects, including neurological damage. For more information go to: [www.epa.gov/mercury](http://www.epa.gov/mercury).

### **PCBs**

Polychlorinated biphenyls (PCBs) were commercially produced for industrial application in heat transfer systems, hydraulic fluids and electrical equipment. They were later incorporated into other uses such as printing inks, paints and pesticides. The manufacture of PCBs was stopped in 1979 as a result of evidence that PCBs build up in the environment and cause harmful effects. PCBs tend to stay mostly in soil and sediment, but are also found in the air and water.

Once they enter the food chain, they have a tendency to absorb into fat tissue. PCBs build up in fish to levels that are hundreds of thousands of times higher than the levels in the surrounding water. When people consume fish that have already accumulated PCBs, the PCBs then accumulate in their bodies.

PCBs have been shown to cause cancer in animals, and there is evidence that PCBs may cause cancer in exposed humans. PCBs have also been shown to cause a number of serious health effects besides cancer in humans and animals, including effects on the nervous system of the developing fetus, the immune system, and the reproductive system. Studies have shown that unborn and young children are most at risk to PCB exposure. Because PCBs take a long time to leave the body after they accumulate, women who plan

to become pregnant should follow the more restrictive consumption advice before becoming pregnant. For more information go to: [www.epa.gov/ebtpages/pollutants.html](http://www.epa.gov/ebtpages/pollutants.html)

## Dioxin

Dioxin is the most toxic member of a large chemical family of related dioxins and furans. Dioxin is an unwanted industrial byproduct formed through numerous processes, including production of chlorinated phenol products such as herbicides, the incineration of municipal solid waste, and creation of paper products using bleach. Most of what we know about dioxin has been obtained through animal toxicity testing in the laboratory and representative wildlife species. Dioxin produces a number of effects in animal testing, including suppression of the immune system, impaired reproduction, birth defects in some species tested, a skin condition called chloracne, alterations in liver function, and cancer. The federal Environmental Protection Agency (EPA) has classified dioxin as a probable human carcinogen. For more information go to: [www.epa.gov/ebtpages/pollutants.html](http://www.epa.gov/ebtpages/pollutants.html)

## Preparation and Cooking Methods for Fish and Crabs under Advisory

The best way to reduce exposure to contaminants in fish is to learn what fish species are affected and either limit or avoid consumption. However, if you must eat those species under advisories, there are steps you can take to reduce your exposure. Contaminants tend to concentrate in the fatty tissue of the fish you catch. Proper cleaning and cooking techniques, which remove some of the fat from the fish, can significantly reduce levels of PCBs, dioxins and other organic chemicals. **Please note, however, that these techniques will not reduce or remove unsafe levels of mercury from these fish.** Mercury occurs in the flesh. There is no way to remove mercury through cooking. The best way to reduce mercury exposure is to select those species of fish which are known to have lower levels of mercury

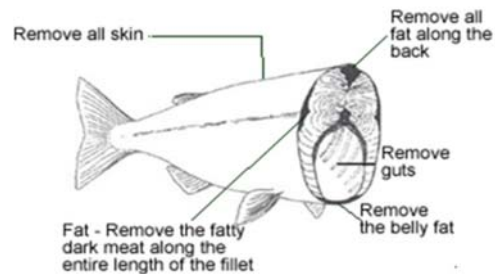
### Fish Preparation Methods

Proper fish cleaning and cooking techniques may reduce PCB levels by approximately 50 percent when compared to raw fish fillets. A meal size is considered to be an uncooked 8 ounce fillet.

**Eat only the fillet portions.** Do not eat whole fish or steak portions.

Many chemical contaminants, like PCBs and pesticides (but not mercury), are stored in the fatty portions of fish. To reduce the levels of these chemicals, skin the

fish and trim any of the dark meat (lateral line), back strap and belly flap. The following diagram illustrates those body portions.



Do not eat the heads, guts or liver, because PCBs usually concentrate in those body parts. Also, avoid consumption of any reproductive parts such as eggs roe.

## Fish Cooking Methods

Use a cooking method such as baking, broiling, frying, grilling, or steaming that allows the fats and juices to drain away from the fish. When possible, cook the fish on an elevated rack that allows fats and juices to drain to the pan below.

Avoid batter, breading or coatings that can hold in the juices that may contain contaminants. The juices should be thrown away since they contain the PCBs and other chemicals that were in the fat. Do not pour these juices over the fish as a sauce or to moisten the fish. Butter, margarine or other liquids can be added to the fish for this purpose once the juices have been poured off.

After cooking, **discard all liquids and frying oils.** Do not reuse.

Do not use heads, skin, trimmed fatty portions in soups, stews, chowders, boils, broth or for fish stock. If you make stews or chowders, only use skinless fillet parts.

Raw fish may be infested by parasites. Cook fish thoroughly to destroy the parasites. This also helps to reduce the level of many chemical contaminants.

## Crab Preparation Methods

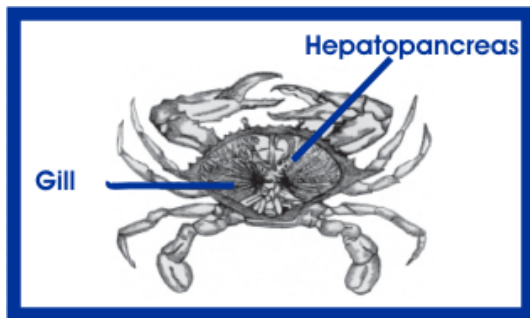
Eating, selling or taking (harvesting) blue crabs from Newark Bay Complex and the tidal Passaic River is prohibited. The Newark Bay Complex is located in northeastern New Jersey. It includes the Newark Bay

tidal Hackensack River, Arthur Kill, Kill Van Kull and tidal tributaries. (See chart on page 8.) If blue crabs are taken from water bodies other than the Passaic River/Newark Bay Complex, the following preparation techniques can be followed to reduce exposure to some contaminants.

The highest levels of chemical contaminants are found in the hepatopancreas, commonly known as the tomalley or green gland. It is the yellowish green gland under the gills. This material is found next to the lump meat (backfin) portion of the crab. Chill and break the crabs immediately before cooking. Care must be taken to remove all of the hepatopancreas before cooking.

There is no specific cooking method available to reduce the chemical contaminant levels in blue crabs. The following steps for proper preparation are key to reducing your exposure to harmful chemical contaminants.

- \* Do not eat the green gland (hepatopancreas).
- \* Remove green gland (hepatopancreas) before cooking.
- \* After cooking, discard the cooking water.
- \* Do not use cooking water or green gland (hepatopancreas) in any juices, sauces, bisques or soups.



### Federal Advice on Fish Consumption

The following is provided as general information and advice from the federal government.

Fish and shellfish are an important part of a healthy diet. Fish and shellfish contain high quality protein and other essential nutrients, are low in saturated fat, and contain omega-3 fatty acids. A well-balanced diet that includes a variety of fish and shellfish can contribute to heart health and children's proper growth and development. So, women and young children in particular, should include fish or shellfish in their diets

due to the many nutritional benefits.

However, nearly all fish and shellfish contain traces of mercury. For most people, the risk from mercury by eating fish and shellfish is not a health concern. Yet, some fish and shellfish contain higher levels of mercury that may harm an unborn baby or young child's developing nervous system. The risks from mercury in fish and shellfish depend on the amount of fish and shellfish eaten and the levels of mercury in the fish and shellfish. Therefore, the Food and Drug Administration (FDA) and the Environmental Protection Agency (EPA) are advising women who may become pregnant, pregnant women, nursing mothers, and young children to avoid some types of fish and eat fish and shellfish that are lower in mercury

By following these 3 recommendations for selecting and eating fish or shellfish, women and young children will receive the benefits of eating fish and shellfish and be confident that they have reduced their exposure to the harmful effects of mercury.

1. Do not eat Shark, Swordfish, King Mackerel, or Tilefish because they contain high levels of mercury.
2. Eat up to 12 ounces (2 average meals) a week of a variety of fish and shellfish that are lower in mercury
  - \* Five of the most commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock, and catfish.
  - \* Another commonly eaten fish, albacore ("white") tuna has more mercury than canned light tuna. So, when choosing your two meals of fish and shellfish, you may eat up to 6 ounces (one average meal) of albacore tuna per week.
3. Check local advisories about the safety of fish caught by family and friends in your local lakes, rivers, and coastal areas. If no advice is available, eat up to 6 ounces (one average meal) per week of fish you catch from local waters, but don't consume any other fish during that week.

Follow these same recommendations when feeding fish and shellfish to your young child, but serve smaller portions.

**Additional information on mercury in seafood can be found at the FDA's web site:** <http://www.fda.gov/Food/FoodSafety/FoodContaminantsAdulteration/ Metals/default.htm>

**For more information on EPA freshwater fish consumption advisories, go to** <http://www.epa.gov/waterscience/fish/>

New Advisories or Changes in Advisories for 2010 are indicated in Bold

# 2010 FISH CONSUMPTION ADVISORIES

## STATEWIDE FISH CONSUMPTION ADVISORIES

### STATEWIDE ESTUARINE & MARINE WATERS

(All coastal waters except those under WATERBODY SPECIFIC ADVISORIES)

SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUALS <sup>(1)</sup>
	EAT NO MORE THAN: <sup>(2, 3)</sup>	EAT NO MORE THAN: <sup>(2, 3)</sup>
Striped Bass	One meal per month	Do not eat
Bluefish ( <u>greater than</u> 6 lbs / 24 inches)	Six meals per year	
Bluefish ( <u>less than</u> 6 lbs / 24 inches)	One meal per month	
American Eel	Four meals per year	
American Lobster	Do Not Eat the Green Gland, (aka. Tomalley or Hepatopancreas)	

### GENERAL FRESHWATER ADVISORIES

**For all freshwater fish species and waters not covered by consumption advisories:**

General Population – Eat no more than one meal per week

High-risk individuals – Eat no more than one meal per month

### STATEWIDE FRESHWATER

(All waters *except* PINELANDS REGION and those listed as WATERBODY SPECIFIC ADVISORIES)

SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUALS
	EAT NO MORE THAN: <sup>(2, 3)</sup>	EAT NO MORE THAN: <sup>(2, 3)</sup>
Trout (Brown, Brook, Rainbow)	One meal per week	One meal per week
Largemouth Bass		One meal per month
Smallmouth Bass		
Chain Pickerel		
Yellow Bullhead	No restrictions	One meal per month
Brown Bullhead		
Sunfish <sup>(4)</sup>		One meal per week

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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## REGIONAL FRESHWATER ADVISORIES

### PINELANDS REGION

(All water bodies of the PINELANDS REGION except those listed below with a P notation)

Largemouth Bass	One meal per month	Do not eat
Chain Pickerel		
Brown Bullhead	One meal per week	
Yellow Bullhead		
Sunfish <sup>(4)</sup>		One meal per month

## WATERBODY SPECIFIC

### FISH CONSUMPTION ADVISORIES

#### ESTUARINE & MARINE WATERS

WATERBODY	SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUALS
		EAT NO MORE THAN:	EAT NO MORE THAN:
<u>NEWARK BAY COMPLEX</u> Including Newark Bay, tidal Hackensack River, Arthur Kill, Kill Van Kull and tidal tributaries.	Blue Crab*	Do not eat or harvest <sup>(5)</sup>	
	Striped Bass*	Four meals per year	Do not eat
	American Eel*	Do not eat	
	White Perch		
	White Catfish	One meal per year	
<u>TIDAL PASSAIC RIVER</u> From the head of tide (Dundee Dam) to Newark Bay and all tidal tributaries.	All Fish & Shellfish*	Do not eat	
	Blue Crab*	Do not eat or harvest <sup>5</sup>	
<u>HUDSON RIVER</u> From the New York & New Jersey border (near Alpine, NJ) to the NY-NJ border at the Upper New York Bay	Striped Bass*	Four meals per year	Do not eat
	American Eel*	One meal per year	
	White Perch		
	Winter Flounder	One meal per month	
	White Catfish	Do not eat	
	Blue Crab	One meal of 7 crabs per week Do not eat green gland (hepatopancreas); Discard cooking liquid	

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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**WATERBODY SPECIFIC**  
**FISH CONSUMPTION ADVISORIES**

**ESTUARINE & MARINE WATERS**

WATERBODY	SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUALS
		EAT NO MORE THAN:	EAT NO MORE THAN:
<u>RARITAN BAY COMPLEX</u> Includes Raritan Bay, tidal Raritan River (to the Rt.1 bridge) & tidal portion of all tributaries to the head of tide.	American Lobster	One meal per week Do not eat green gland (hepatopancreas) Discard cooking liquid	
	Weakfish	One meal per month	Do not eat
	Striped Bass		One meal per month
	Winter Flounder		
	Porgy		
	American Eel	One meal per year	Do not eat
	Summer Flounder	One meal per week	
	White Perch (Raritan Bay)	One meal per year	Do not eat
Blue Crab	One meal of seven (7) crabs per month. Do not eat green gland (hepatopancreas); Discard cooking liquid		
Raritan River upstream of Route 35 Bridge and the South River (tidal portion)	White Catfish	Four meals per year	Do not eat
	White Perch		
<u>SANDY HOOK BAY &amp; LOWER BAY (NJ Waters)</u>	Summer Flounder	One meal per week	
<u>COASTAL TRIBUTARIES</u> Including the Navesink, Shrewsbury, Shark, Toms & Mullica Rivers.	American Eel	One meal per month	
<u>BARNEGAT BAY</u> Manahawkin Bay	Weakfish	One meal per week	One meal per month
<u>COASTAL WATERS</u> Atlantic Ocean from Sandy Hook to Sea Bright	Summer Flounder	One meal per week	

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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**WATERBODY SPECIFIC  
FISH CONSUMPTION ADVISORIES**

**ESTUARINE & MARINE WATERS**

WATERBODY	SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUALS
		EAT NO MORE THAN:	EAT NO MORE THAN:
Atlantic Ocean from Sea Isle City to Cape May	Weakfish	One meal per week	One meal per month
<u>LOWER DELAWARE RIVER (Tidal Waters)</u> Trenton to the Delaware, Pennsylvania, New Jersey borderline, including all tributaries to the head of tide.	Hybrid Striped Bass	No restrictions	One meal per week
	Largemouth Bass		
	American Eel	One meal per year	Do not eat
	Channel Catfish		
	Striped Bass	Four meals per year	
	White Perch		
	White Catfish	One meal per month	
<u>DELAWARE RIVER (Estuarine Waters)</u> Delaware, Pennsylvania, New Jersey borderline to the Chesapeake & Delaware (C&D) Canal	All Finfish	Do not eat	
<u>DELAWARE ESTUARY &amp; DELAWARE BAY</u> Chesapeake & Delaware (C&D) Canal to the mouth of Delaware Bay	Bluefish	Do not eat fish larger than 6 lbs or 24 inches	Do not eat
		One meal per year for fish less than 6 lbs or less than 24 inches	
	White catfish	One meal per year	
	Striped Bass		
	White perch		
	American eel		
	Channel catfish	One meal per week	One meal per month
Weakfish			
<u>DELAWARE BAY TRIBUTARIES</u>	American eel	One meal per month	Four meals per year

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Alycon Lake (Gloucester Co.) (P)	Black Crappie	No restrictions	One meal per month
Assunpink Creek (Mercer/Monmouth Co.)	Largemouth Bass	No restrictions	One meal per week
Atlantic City Reservoir - (Atlantic Co.) (P)  <i>No Fishing Allowed</i>	<i>Chain Pickerel</i>	<i>Do not eat</i>	
	<i>Largemouth Bass</i>		
	<i>Yellow Perch</i>		
	<b>American Eel</b>	<b>One meal per month</b>	<b>Do not eat</b>
Atsion Lake (Burlington Co.) (P)	<b>American Eel</b>	<b>One meal per week</b>	<b>One meal per month</b>
	<b>Chain Pickerel</b>		<b>Do not eat</b>
Batsto Lake (Burlington Co.) (P)	Chain Pickerel	One meal per week	<b>Do not eat</b>
	Largemouth Bass		Do not eat
	<b>Brown Bullhead</b>	<b>No restrictions</b>	One meal per month
	Yellow Bullhead		
Big Timber Creek (Gloucester Co.)	Channel Catfish	No restrictions	One meal per week
	Largemouth Bass		
	White Catfish		
	Brown Bullhead	No restrictions	
Boonton Reservoir (Morris Co.)	Largemouth Bass	Four meals per year	Do not Eat
	Smallmouth Bass		
	Rock Bass	No Restriction	One meal per month
	White Catfish	One meal per week	
	Brown Bullhead	No restrictions	
Bound Brook – (Somerset Co) <u>Entire length</u> incl. New Market Pond & Spring Lk.	All fish species	Do not eat	
Branch Brook Park – Newark, (Essex Co.)	Largemouth Bass	One meal per week	Do not eat
	Common Carp	One meal per month	
	Bluegill	No restrictions	One meal per week

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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## **WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES**

### **FRESHWATER SITES**

<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Budd Lake (Morris Co.)	White Catfish	One meal per month	One meal per month
	Northern Pike	One meal per week	
	Largemouth Bass		
	Brown Bullhead	No restrictions	No restrictions
	Bluegill Sunfish		One meal per week
Butterfly Bogs Pond (Ocean Co.) (P)	Chain Pickerel	One meal per week	Do not eat
	Brown Bullhead	No restrictions	One meal per week
Canistear Reservoir (Sussex Co.)	Chain Pickerel	No restrictions	One meal per month
	Yellow Perch		
	Yellow Bullhead		
	Bluegill Sunfish		One meal per week
Carnegie Lake (Mercer Co.)	Largemouth Bass	No restrictions	One meal per month
	Channel Catfish		
	White Perch		One meal per week
	Bluegill Sunfish		No restrictions
Cedar Lake (Cumberland Co.)	<b>White Perch</b>	<b>One meal per week</b>	<b>One meal per month</b>
	<b>American Eel</b>	<b>One meal per month</b>	
	Chain Pickerel	One meal per week	Do not eat
	Largemouth Bass		
<b>Cedarville Ponds (Cumberland Co.)</b>	<b>Chain Pickerel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Yellow Perch</b>	<b>No restrictions</b>	<b>One meal per month</b>
Clementon Lake (Camden Co.) (P)	Chain Pickerel	One meal per week	One meal per month
	Largemouth Bass		
Clinton Reservoir (Passaic Co.)	Largemouth Bass	One meal per week	Do not eat
	Yellow Bullhead		
	Rock Bass	No restrictions	One meal per month
	White Sucker		
Cooper River, below Evans Pond (Camden Co.)	Common Carp	One meal per month	Do not eat
	Bluegill Sunfish	One meal per week	One meal per month

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Cooper River, Hopkins Pond (Camden Co.)	Brown Bullhead	One meal per month	Four meals per year
Cooper River Lake (Camden Co.)	Largemouth Bass	Four meals per year	Do not eat
	Common Carp		
	Brown Bullhead	One meal per week	One meal per month
	Bluegill Sunfish		
Cranberry Lk. (Sussex Co.)	Hybrid Striped Bass	One meal per week	One meal per month
Crater Lake (Sussex Co.)	Yellow Perch	One meal per week	Do not eat
	Brown Bullhead		One meal per month
Crosswicks Creek (Mercer Co.)	Largemouth Bass	No restrictions	One meal per week
	White Catfish		
Crystal Lake (Burlington Co.)	Largemouth Bass	No restrictions	One meal per month
	Black Crappie		One meal per week
	Brown Bullhead		No restrictions
Davidson Mill Pond (Middlesex Co.)	American Eel	One meal per month	
	Bluegill Sunfish	No restrictions	One meal per week
	Chain Pickerel		One meal per month
	Largemouth Bass	One meal per week	
<b>Deal Lake (Monmouth Co)</b>	<b>American Eel</b>	<b>One meal per month</b>	<b>Do not eat</b>
	<b>White Perch</b>		<b>One meal per month</b>
	<b>Largemouth Bass</b>	<b>One meal per week</b>	
Delaware & Raritan Canal ( <u>Entire Length</u> )	Channel Catfish	One meal per month	Do not eat
	American Eel		
	Bluegill Sunfish	No restrictions	One meal per week
	Chain Pickerel		
	Smallmouth Bass	One meal per week	One meal per month
	Largemouth Bass		

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Delaware & Raritan Canal @ Bound Brook (Somerset Co.)	Yellow Perch	No restrictions	One meal per month
	Common Carp	Four meals per year	Do not eat
Delaware & Raritan Canal at Griggstown (Middlesex-Somerset Co.)	Brown Bullhead	No restrictions	One meal per week
Delaware & Raritan Canal at Lambertville (Hunterdon Co.)	Common Carp	One meal per month	Do not eat
Delaware & Raritan Canal at Port Mercer (Mercer Co.)	Common Carp	One meal per year	Do not eat
Delaware & Raritan Canal at West Trenton (Mercer Co.)	Walleye	One meal per month	Do not eat
	Common Carp		
Delaware River – New York State border to the Delaware Water Gap (Warren/Sussex Co)	Channel Catfish	No restrictions	One meal per month
	Muskellunge		
	Smallmouth Bass	One meal per week	
	White Sucker	One meal per month	
Delaware River – Delaware Water Gap to Phillipsburg (Warren Co.)	White Catfish	One meal per week	Do not eat
	Channel Catfish	No restrictions	One meal per month
	Smallmouth Bass		
	Walleye		One meal per week

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Delaware River- Phillipsburg to Trenton (Hunterdon/Mercer Co.)	Channel Catfish	Four meals per year	Do not eat
	Striped Bass		
	American Eel	One meal per month	Do not eat
	White Sucker		
	Largemouth Bass	No restrictions	One meal per month
	Smallmouth Bass	One meal per week	
DeVoe Lake (Middlesex Co.)	Brown Bullhead	One meal per week	
	Chain Pickerel	One meal per week	One meal per month
	Largemouth Bass	No restrictions	
Double Trouble Lake (Ocean Co.) (P)	Yellow Bullhead	One meal per month	Do not eat
Duhernal Lake (Middlesex Co.)	Bluegill Sunfish	No restrictions	One meal per week
	Largemouth Bass	One meal per week	One meal per month
	Brown Bullhead	One meal per week	
East Creek Lake (Cape May Co.) (P)	<b>American Eel</b>	<b>One meal per month</b>	<b>Do not eat</b>
	<b>Chain Pickerel</b>		
	<b>Largemouth Bass</b>		
	Brown Bullhead	One meal per month	Do not eat
	Yellow Bullhead		
	Yellow Perch		
Echo Lake Reservoir (Passaic Co.)	Largemouth Bass	No restrictions	One meal per month
	Chain Pickerel		
	Bluegill Sunfish		One meal per week
	Yellow Bullhead		
<b>Enno Lake (Ocean Co)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>One meal per month</b>
	<b>Largemouth Bass</b>		

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<b>FRESHWATER SITES</b>				
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>	
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>	
Evans Pond (Camden Co.)	Brown Bullhead	One meal per week	One meal per month	
Farrington Lake (Middlesex Co.)	Bluegill Sunfish	No restrictions	One meal per week	
	Chain Pickerel		One meal per month	
	Yellow Perch			
	Brown Bullhead	One meal per week	Do not eat	
	Largemouth Bass			
Green Brook - (Somerset Co.)	American Eel	One meal per month	Do not eat	
Green Turtle Lake (Passaic Co.)	Chain Pickerel	No restrictions	One meal per week	
	Yellow Perch			
Greenwood Lake (Passaic Co.)	Largemouth Bass	No restrictions	One meal per month	
	Walleye		No restrictions	
	White Perch			No restrictions
	Bluegill Sunfish			One meal per week
	Yellow Bullhead			
Grovers Mill Pond (Mercer Co.)	Brown Bullhead	One meal per week	One meal per month	
	Chain Pickerel	No restrictions	One meal per week	
Hainesville Pond (Sussex Co.)	Largemouth Bass	No restrictions	One meal per month	
	Chain Pickerel		One meal per week	
Harrisville Lake (Burlington Co.) (P)	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>	
	<b>Chain Pickerel</b>			
	Mud Sunfish	One meal per month	Do not eat	
	Yellow Bullhead			
<b>Horicon Lake (Ocean Co)</b>	<b>American Eel</b>	<b>One meal per month</b>	<b>Do not eat</b>	
	<b>Chain Pickerel</b>			
<b>Lake Absegami (Burlington Co.) (P)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>One meal per month</b>	
	<b>Chain Pickerel</b>	<b>One meal per month</b>	<b>Do not eat</b>	
Lake Carasaljo (Ocean Co.) (P)	Largemouth Bass	One meal per week	Do not eat	
	Chain Pickerel		One meal per month	

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Lake Hopatcong (Morris/Sussex Co.)	Largemouth Bass	No restrictions	One meal per month
<b>Lake Manahawkin (Ocean Co.)</b>	<b>American Eel</b>	<b>One meal per month</b>	<b>Do not eat</b>
	<b>Largemouth Bass</b>		
Lake Nummy (Cape May Co.) (P)	Chain Pickerel	<b>One meal per month</b>	Do not eat
	Yellow Perch	One meal per week	
	Yellow Bullhead	<b>One meal per week</b>	One meal per month
<b>Lake Oswego (Burlington Co.) (P)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Chain Pickerel</b>	<b>One meal per month</b>	
Lake Tappan (Bergen Co.)	Smallmouth Bass	No restrictions	One meal per month
	Largemouth Bass		No restriction
	Bluegill Sunfish		
	Yellow Bullhead		
	Common Carp		One meal per week
Lamington River at Lamington (Hunterdon-Somerset Co.)	American Eel	One meal per week	One meal per month
	Brown Trout	No restrictions	One meal per week
	Redbreast Sunfish		
	Smallmouth Bass		
<b>Lefferts Lake (Monmouth Co.)</b>	<b>Brown Bullhead</b>	<b>No restrictions</b>	<b>One meal per week</b>
	<b>Chain Pickerel</b>		
	<b>Yellow Perch</b>		
Lenape Lake – (Atlantic Co.) (P)	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Largemouth Bass</b>	<b>One meal per month</b>	
	Chain Pickerel	One meal per week	Do not eat
Linden Lake- (Camden Co.) (P)	Largemouth Bass	No restrictions	One meal per month
Little Timber Creek (Camden Co.)	Brown Bullhead	No restrictions	No restrictions

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Manalapan Lake (Middlesex Co.)	American Eel	One meal per month	
	Black Crappie	No restrictions	One meal per week
	Bluegill Sunfish		No restrictions
	Largemouth Bass	One meal per week	One meal per month
Manasquan Reservoir (Monmouth Co.)	<b>American Eel</b>	<b>One meal per month</b>	
	Largemouth Bass	One meal per week	<b>One meal per month</b>
	Black Crappie	One meal per week	One meal per month
	Chain Pickerel	No restrictions	
	Yellow Perch		One meal per week
<b>Maple Lake (Cumberland Co.)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Largemouth Bass</b>		
<b>Marlu Lake (Monmouth Co.)</b>	<b>Common Carp</b>	<b>One meal per month</b>	
	<b>Largemouth Bass</b>	<b>No restrictions</b>	<b>One meal per week</b>
Maskells Mill Lake (Salem Co.) (P)	Brown Bullhead	One meal per week	One meal per month
	Chain Pickerel		
	Largemouth Bass		
	Black Crappie	No restrictions	
<b>Maurice River (Cumberland Co.)</b>	<b>Channel Catfish</b>	<b>One meal per month</b>	<b>Do not eat</b>
	<b>White Catfish</b>		
	<b>Largemouth Bass</b>	<b>One meal per week</b>	<b>One meal per month</b>
	<b>White Perch</b>		
<b>Menantico Sand Ponds (Cumberland Co.)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Largemouth Bass</b>		
Merrill Creek Reservoir (Warren Co.)	Smallmouth Bass	One meal per week	Do not eat
	Lake Trout		
	Largemouth Bass	One meal per month	
	Black Crappie	No restrictions	One meal per week
	Bluegill Sunfish		
	Brown Bullhead		
	Yellow Perch		

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
<b>Metedeconk River North Branch (Monmouth Co.)</b>	<b>American Eel</b>	<b>Four meals per year</b>	
Millstone River at Manville (Somerset Co.)	Bluegill Sunfish	No restrictions	One meal per week
	Common Carp	Four meals per year	Do not eat
	Largemouth Bass	One meal per week	One meal per month
Mirror Lake (Burlington Co.) (P)	Largemouth Bass	One meal per week	One meal per month
	Brown Bullhead	No restrictions	One meal per week
Monksville Reservoir (Passaic Co.)	Smallmouth Bass	No restrictions	One meal per month
	Walleye	One meal per week	Do not eat
	White Perch		
	Yellow Perch	No restriction	One meal per week
Mountain Lake (Warren Co.)	Largemouth Bass	One meal per week	Do not eat
Mullica River (Burlington/Atlantic Co.) (P)	Brown Bullhead	One meal per week	One meal per month
	White Perch		
	White Catfish	No restrictions	
New Brooklyn Lake (Camden Co.) (P)	Chain Pickerel		Do not eat
	Largemouth Bass	One meal per week	One meal per month
	Sunfish	No restrictions	
	Black Crappie		
	Yellow Bullhead		One meal per week
New Market Pond–Spring Lake & full length of Bound Brk . (Somerset Co.)	<u>See Bound Brook Advisories</u>		
Newton Creek, North (Camden Co.)	Brown Bullhead	No restrictions	
Newton Creek, South (Camden Co.)	Largemouth Bass	One meal per month	Do not eat

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Newton Lake (Camden Co.)	Bluegill Sunfish	One meal per week	One meal per month
	Brown Bullhead		
	Largemouth Bass	One meal per month	Four meals per year
	Common Carp		Do not eat
Oak Ridge Reservoir (Passaic Co.)	Largemouth Bass	One meal per week	Do not eat
	Chain Pickerel	No restrictions	One meal per month
	Brown Bullhead		No restrictions
Oradell Reservoir (Bergen Co.)	Largemouth Bass	No restrictions	One meal per month
	Bluegill Sunfish		No restriction
	Yellow Bullhead		
	Common Carp		
Overpeck Lake (Bergen Co.)	Largemouth Bass	Four meals per year	Do not eat
	Common Carp		
	American Eel		
<b>Parvin Lake (Salem Co.)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>One meal per month</b>
	<b>Largemouth Bass</b>		
	<b>Chain Pickerel</b>	<b>No restrictions</b>	
Passaic River: Rt. 280 to confluence of Pompton R at Two Bridges (Morris/Essex/Passaic Co.)	Redbreast Sunfish	One meal per week	One meal per month
	Northern Pike		
	Black Crappie	No restrictions	One meal per week
	Yellow Bullhead		
	Pumpkinseed Sunfish		
	Common Carp	One meal per month	Do not eat
Passaic River: Elmwood Park to Dundee Lake (Garfield)	Largemouth Bass	One meal per week	One meal per month
	Yellow Bullhead		Four meals per year
	Brown Bullhead		

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<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
(Passaic/Bergen Co.)	Redbreast Sunfish	One meal per month	Do not eat
	Common Carp		
	Bluegill Sunfish		
	American Eel		
Pennsauken Creek, at Forked Landing (Camden Co.)	Common Carp	Four meals per year	Do not eat
	Largemouth Bass	One meal per month	
	Sunfish		Four meals per year
	White Catfish		One meal per year
<b>Pohatcong Lake (Ocean Co.)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Largemouth Bass</b>		
	<b>Yellow Perch</b>		<b>One meal per month</b>
Pompton Lake (Passaic Co.)	Largemouth Bass	One meal per week	Do not eat
	Common Carp	One meal per month	
Pompton River at Lincoln Park (Passaic/Morris Co.)	Common Carp	Four meals per year	Do not eat
	Northern Pike	One meal per week	
	Rock Bass		
	Redbreast Sunfish		Four meals per year
	Largemouth Bass	One meal per month	
	Yellow Perch		
Black Crappie	No restrictions		
Ramapo River at Pompton Feeder (Morris Co.) Formerly listed as Pompton River at Pequannock R. (Passaic/Morris Co.)	Largemouth Bass	One meal per week	Do not eat
	Smallmouth Bass		
	Yellow Bullhead		
	Rock Bass		
	Pumpkinseed Sunfish		
	Redbreast Sunfish		
	Black Crappie		One meal per month

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Rahway River (East Branch) at Milton Lake (Union Co.)	Bluegill Sunfish	One meal per week	One meal per month
	Brown Bullhead		
	Largemouth Bass		
	Common Carp	Four meals per year	Do not eat
Rahway River (West Branch) at Valley Road Pond (Union Co.)	Brown Bullhead	One meal per month	
	Common Carp	One meal per month	Do not eat
	Largemouth Bass	One meal per week	One meal per month
Raritan River – North Branch at Branchburg (Somerset Co.)	American Eel	One meal per week	One meal per month
	Yellow Bullhead		
	Smallmouth Bass		
	Redbreast Sunfish	No restrictions	One meal per week
Raritan River - South Branch at Flemington (Hunterdon Co.)	American Eel	One meal per month	Do not eat
	Brown Trout	No restrictions	One meal per week
	Redbreast Sunfish		
	Smallmouth Bass	One meal per week	One meal per month
	Yellow Bullhead		
Raritan River - South Branch at High Bridge (Hunterdon Co.)	American Eel	One meal per month	Do not eat
	Redbreast Sunfish	No restrictions	One meal per week
Raritan River - South Branch at Long Valley (Clairmont Reach) (Morris Co.)	Brown Trout	No restrictions	One meal per week
Raritan River at confluence with the Millstone River (Somerset Co.)	Brown Bullhead	No Restrictions	
	Channel Catfish	One meal per month	Do not eat
	American Eel		
	Common Carp		
	Largemouth Bass	One meal per week	One meal per month
	White Catfish	No restrictions	
	Smallmouth Bass		
	Redbreast Sunfish		

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Raritan River- <u>South Branch at Neshanic Station</u> (Somerset Co.)	Largemouth Bass	One meal per week	One meal per week
	Smallmouth Bass		One meal per month
	Rock Bass	No restrictions	One meal per week
	Redbreast Sunfish		One meal per month
	Common Carp	One meal per week	One meal per month
	American Eel	One meal per month	Do not eat
Rockaway River at Powerville (Morris Co.)	Largemouth Bass	One meal per week	Do not eat
	Chain Pickerel	No restrictions	One meal per month
	Rock Bass		One meal per week
	Yellow Bullhead		One meal per month
	Bluegill Sunfish		One meal per week
Rockaway River at Whippany (Morris Co.)	Largemouth Bass	One meal per week	Do not eat
	Black Crappie	No restrictions	One meal per month
	Bluegill Sunfish		One meal per week
Rosedale Lake at Pennington (Mercer Co.)	Black Crappie	No restrictions	One meal per week
	Bluegill Sunfish		No restrictions
	Largemouth Bass		One meal per month
	Common Carp	One meal per week	One meal per month
Round Valley Reservoir (Hunterdon Co.)	Bluegill Sunfish	No restrictions	One meal per week
	White Catfish		One meal per month
	Lake Trout	One meal per month	One meal per month
	Channel Catfish		One meal per month
	Largemouth Bass		One meal per week
Saw Mill Lake (Sussex Co.)	Northern Pike	No restrictions	One meal per month
	Brown Bullhead		No restrictions
Shadow Lake (Monmouth Co.)	Largemouth Bass	No restrictions	One meal per week
<b>Shenandoah Lake (Ocean Co.)</b>	<b>American Eel</b>	<b>One meal per month</b>	<b>One meal per month</b>
	<b>Chain Pickerel</b>	<b>No restrictions</b>	
	<b>Largemouth Bass</b>	<b>One meal per week</b>	

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**WATERBODY SPECIFIC**  
**FISH CONSUMPTION ADVISORIES**  
**FRESHWATER SITES**

WATER BODY	SPECIES	GENERAL POPULATION	HIGH-RISK INDIVIDUAL
		EAT NO MORE THAN:	EAT NO MORE THAN:
Shepherd Lake (aka; Sheppards Lake: (Passaic Co.)	Largemouth Bass	One meal per week	Do not eat
	Rock Bass	No restrictions	One meal per week
Speedwell Lake (Morris Co.)	Bluegill Sunfish	No restrictions	One meal per week
	Chain Pickerel		
	Common carp		
Splitrock Reservoir (Morris Co.)	Chain Pickerel	No restrictions	One meal per month
	Yellow Perch		One meal per week
	Bluegill Sunfish		No restrictions
	Brown Bullhead		
Spring Lake (Monmouth Co.) (P)	Largemouth Bass	One meal per week	Do not eat
Spruce Run Reservoir (Hunterdon Co.)	Northern Pike	No restrictions	One meal per month
	Hybrid Striped Bass	One meal per month	
	Common Carp	One meal per week	
	Channel Catfish		
	Largemouth Bass		
Stafford Forge Main Line (Ocean Co.) (P)	Chain Pickerel	One meal per week	Do not eat
Steenykill Lake (Sussex Co.)	Largemouth Bass	No restrictions	One meal per week
Stewart Lake (Camden Co.)	Bluegill Sunfish	One meal per week	One meal per month
	Brown Bullhead		Do not eat
	Largemouth Bass	Four meals per year	
	Common Carp	One meal per month	Do not eat
Strawbridge Lake (Burlington Co.)	Largemouth Bass	One meal per month	One meal per year
	Bluegill Sunfish		
	Common Carp	Four meals per year	Do not eat
	Brown Bullhead	One meal per week	Four meals per year

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<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
<b>Stow Creek at Canton (Salem Co.)</b>	<b>American Eel</b>	<b>One meal per week</b>	<b>One meal per month</b>
Sunset Lake (Cumberland Co.) (P)	Largemouth Bass	One meal per week	One meal per month
Swartswood Lake (Sussex Co.)	Smallmouth Bass	No restrictions	One meal per month
	Chain Pickerel		One meal per week
<b>Swimming River Reservoir (Monmouth Co.)</b>	<b>American Eel</b>	<b>One meal per month</b>	
	<b>Largemouth Bass</b>	<b>One meal per week</b>	<b>One meal per month</b>
<b>Turn Mill Pond at Colliers Mills WMA (Ocean Co.) (P)</b>	<b>American Eel</b>	<b>One meal per week</b>	
	<b>Largemouth Bass</b>	<b>One meal per week</b>	<b>One meal per month</b>
Union Lake (Cumberland Co.) (P)	White Perch	One meal per week	Do not eat
	<b>Brown Bullhead</b>	<b>One meal per week</b>	<b>Do not eat</b>
	<b>Chain Pickerel</b>	<b>One meal per month</b>	
	<b>Largemouth Bass</b>		
Wading River (Burlington Co.) (P)	Yellow Bullhead	One meal per month	Do not eat
	<b>Chain Pickerel</b>	<b>One meal per month</b>	
	White Catfish	One meal per week	
Wanaque Reservoir (Passaic Co.)	Largemouth Bass	One meal per week	Do not eat
	White Perch		
	White Catfish	No restrictions	One meal per month
	Brown Bullhead		No restrictions
	Yellow Bullhead		One meal per week
Wawayanda Lake (Sussex Co.)	Chain Pickerel	No restriction	One meal per month
	Largemouth Bass	One meal per week	Do not eat
	Yellow Bullhead		One meal per month

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

**New Advisories or Changes in Advisories for 2010 are indicated in Bold**

<b>WATERBODY SPECIFIC FISH CONSUMPTION ADVISORIES</b>			
<b>FRESHWATER SITES</b>			
<b>WATER BODY</b>	<b>SPECIES</b>	<b>GENERAL POPULATION</b>	<b>HIGH-RISK INDIVIDUAL</b>
		<b>EAT NO MORE THAN:</b>	<b>EAT NO MORE THAN:</b>
Weequahic Lake (Essex Co.)	Largemouth Bass	One meal per month	One meal per month
	Common Carp		Do not eat
	Bluegill	One meal per week	One meal per week
	White Perch	No restrictions	No restrictions
	Brown Bullhead		
Weston Mill Pond (Middlesex Co.)	Brown Bullhead	One meal per week	One meal per month
	Largemouth Bass		
	Yellow Perch	No restrictions	
	Black Crappie		
	Chain Pickerel		
	Bluegill Sunfish		
	American Eel	One meal per month	
Whitesbog Pond (Ocean Co.) (P)	Chain Pickerel	One meal per week	Do not eat
Willow Grove Lake (Cumberland Co.) (P)	Brown Bullhead	No restrictions	One meal per month
Wilson Lake (Gloucester Co.) (P)	Chain Pickerel	One meal per month	Do not eat
	Pumpkinseed Sunfish		
	Yellow Perch		
	Largemouth Bass	<b>One meal per month</b>	
Woodstown Memorial Lake (Salem Co.)	Black Crappie	No restrictions	One meal per month
	Largemouth Bass		

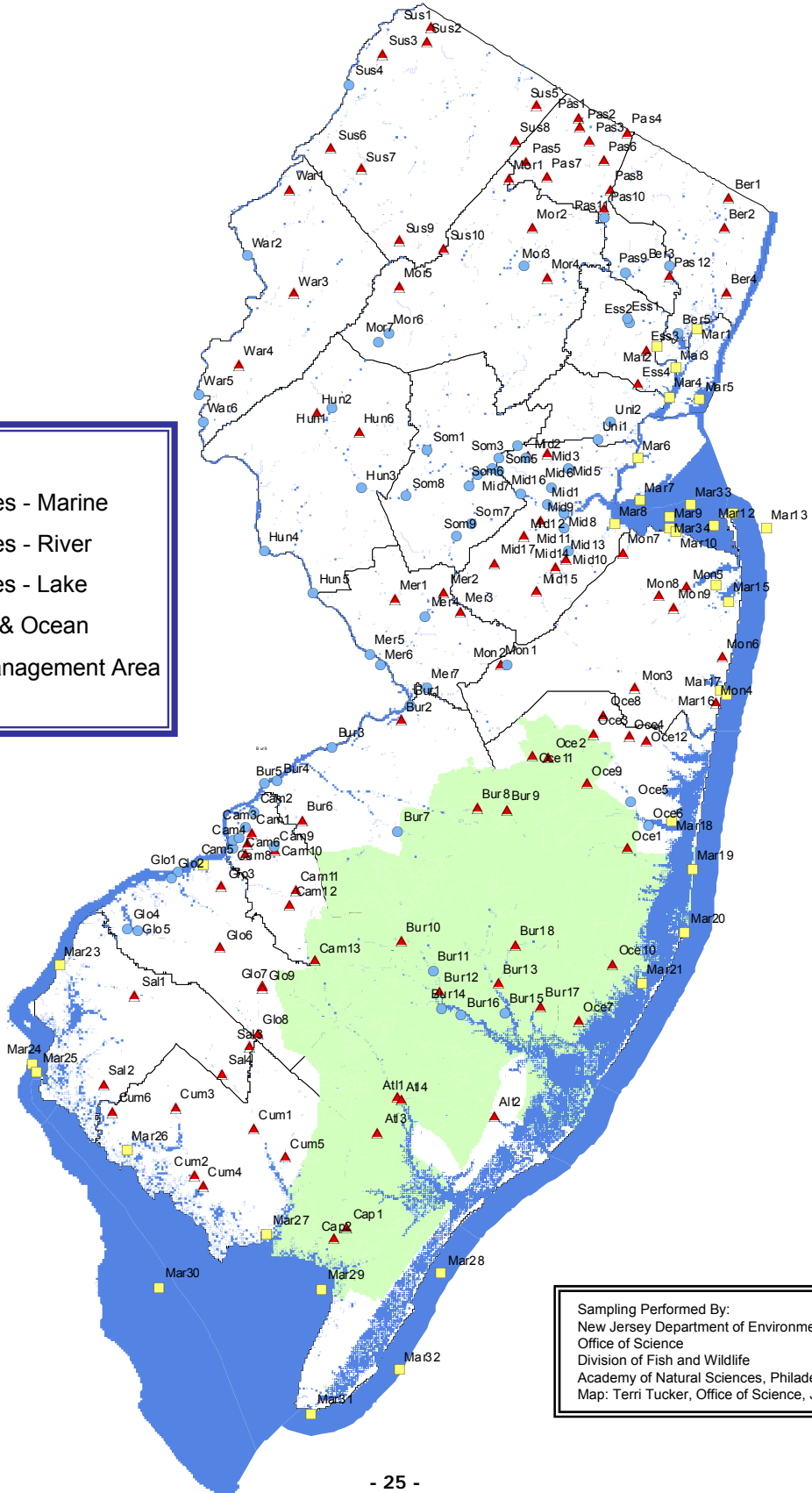
- (1) High-risk individuals include infants, children, pregnant women, nursing mothers and women of childbearing age.
  - (2) One meal is defined as an eight-ounce serving
  - (3) Eat only the fillet portions of the fish. Use proper trimming techniques to remove fat, and cooking methods that allow juices to drain from the fish (e.g., baking, broiling, frying, grilling, and steaming). See text for full description.
  - (4) Sunfish includes bluegill, pumpkinseed, and redbreast sunfish.
  - (5) No harvest means no taking or attempting to take any blue crabs from these waters.
- Note: Not all species were found or analyzed in all water bodies, or inadequate data were available to list some species.  
(P) = Pinelands Area  
\* Selling any of these species from designated water bodies is prohibited in New Jersey.

NOTE: To reduce your exposure, eat those fish with the lowest meal restrictions. Do not combine meal restrictions. (For example, if you eat multiple species or catch fish from more than one area, the recommendation guidelines for different species and different locations should not be combined.)

# New Jersey Fish Tissue Sampling Sites 2010

**Legend**

- Sampling Sites - Marine
- Sampling Sites - River
- Sampling Sites - Lake
- Rivers, Bays & Ocean
- Pinelands Management Area
- Counties



Sampling Performed By:  
 New Jersey Department of Environmental Protection  
 Office of Science  
 Division of Fish and Wildlife  
 Academy of Natural Sciences, Philadelphia  
 Map: Terri Tucker, Office of Science, January 2010

## Sampling Sites by County

Name	County #	Type	Name	County #	Type
<b>Atlantic County</b>			<b>Gloucester County</b>		
Atlantic City Reservoir (Lower)	Atl4	▲Lake	Alcyon Lake	Glo6	▲Lake
Atlantic City Reservoir (Upper)	Atl2	▲Lake	Delaware River at Mantua Creek	Glo2	●River
Lake Lenape	Atl1	▲Lake	Delaware River at Paulsboro	Glo1	●River
Maple Lake	Alt3	▲Lake	Malaga Lake	Glo8	▲Lake
<b>Bergen County</b>			<b>Hunterdon County</b>		
Oradell Reservoir	Ber2	▲Lake	Raccoon Creek at mouth near Swedesboro	Glo4	●River
Overpeck Creek Lake	Ber4	▲Lake	Rancocas Creek	Glo5	●River
Passaic River at Elmwood Park	Ber3	●River	Stewart Lake	Glo3	▲Lake
Passaic River at Lyndhurst	Ber5	●River	Wilson Lake	Glo7	▲Lake
Tappan Lake	Ber1	▲Lake	<b>Mercer County</b>		
<b>Burlington County</b>			<b>Middlesex County</b>		
Absegami Lake	Bur17	▲Lake	Delaware -Raritan Canal @ Lambertville	Hun5	●River
Atsion Lake	Bur10	▲Lake	Delaware River at Byram	Hun4	●River
Batsto Lake	Bur12	▲Lake	Raritan River South @ High Bridge	Hun1	●River
Crystal Lake	Bur2	▲Lake	Raritan River South @Flemington	Hun3	●River
Delaware River at Crosswicks Creek	Bur1	●River	Round Valley Reservoir	Hun6	▲Lake
Delaware River at Palmyra	Bur5	●River	Spruce Run Reservoir	Hun2	▲Lake
Delaware River at Riverton	Bur4	●River	<b>Monmouth County</b>		
Delaware River mouth of Neshaminy Creek	Bur3	●River	Carnegie Lake	Mer2	▲Lake
Harrisville Lake	Bur13	▲Lake	Crosswicks Creek	Mer7	●River
Mirror Lake	Bur8	▲Lake	Delaware -Raritan Canal @ Port Mercer	Mer4	●River
Mullica River	Bur14	●River	Delaware -Raritan Canal @ Trenton	Mer5	●River
Mullica River from Atsion to Pleasantville	Bur11	●River	Delaware River at Trenton	Mer6	●River
Mullican River between Green Bank & Batsto	Bur16	●River	Grovers Mill Pond	Mer3	▲Lake
Oswego Lake	Bur18	▲Lake	Rosedale Lake in Pennington	Mer1	▲Lake
Rancocas Tributary between Vincetown/Buddtown	Bur7	●River	<b>Morris County</b>		
Strawbridge Lake	Bur6	▲Lake	Boonton Reservoir	Mor5	▲Lake
Wading River	Bur15	●River	Budd Lake	Mor6	▲Lake
Whitesbog Pond	Bur9	▲Lake	Oak Ridge Reservoir	Mor1	▲Lake
<b>Camden County</b>			<b>Essex County</b>		
Big Timber Creek	Cam8	●River	Branchbrook Park Lake	Ess3	▲Lake
Clementon Lake	Cam1	▲Lake	Passaic River at Hatfield Swamp	Ess1	●River
Cooper River at Cooper River Lake	Cam3	●River	Rockaway/ Whippany River	Ess2	●River
Cooper River at mouth of Evans Pond	Cam10	●River	Weequahic Lake	Ess4	▲Lake
Copper River Park Lake	Cam4	▲Lake	<b>Assessment Summary</b>		
Evans Pond	Cam11	▲Lake	Total Sites: 100		
Haddon Lake	Cam9	▲Lake	Total Rivers: 30		
Linden Lake	Cam12	▲Lake	Total Lakes: 70		
Little Timber Creek	Cam7	●River	Total Reservoirs: 10		
Newton Creek	Cam5	●River	Total Ponds: 10		
Newton Lake	Cam6	▲Lake	Total Damages: 10		
Pennsauken Creek at Forked Landing	Cam2	●River	Total Other: 10		
<b>Cape May County</b>			<b>Assessment Summary</b>		
Lake Nummy	Cap1	▲Lake	Total Sites: 100		
East Creek Lake	Cap2	▲Lake	Total Rivers: 30		
<b>Cumberland County</b>			Total Lakes: 70		
Cedar Lake	Cum2	▲Lake	Total Reservoirs: 10		
Cedarville Ponds	Cum4	▲Lake	Total Ponds: 10		
Menantico Sand Ponds	Cum5	▲Lake	Total Damages: 10		
Stow Creek Canton	Cum6	▲Lake	Total Other: 10		
Sunset Lake	Cum3	▲Lake	Total Sites: 100		
Union Lake	Cum1	▲Lake	Total Rivers: 30		
<b>Essex County</b>			Total Lakes: 70		
Branchbrook Park Lake	Ess3	▲Lake	Total Reservoirs: 10		
Passaic River at Hatfield Swamp	Ess1	●River	Total Ponds: 10		
Rockaway/ Whippany River	Ess2	●River	Total Damages: 10		
Weequahic Lake	Ess4	▲Lake	Total Other: 10		

## Sampling Sites by County

Name	County #	Type	Name	County #	Type
<b>Ocean County</b>			<b>Marine</b>		
Butterfly Bogs	Oce3	▲Lake	Arthur Kill	Mar6	■
Double Trouble Lake	Oce1	▲Lake	Atlantic Ocean about 1 mile S. of Cape May	Mar31	■
Enno Lake (Bennetts Pond)	Oce8	▲Lake	Atlantic Ocean at Barnegat Light	Mar20	■
Horicon Lake	Oce9	▲Lake	Atlantic Ocean at Island Beach State Park	Mar19	■
Lake Carasaljo	Oce4	▲Lake	Atlantic Ocean E of Sea Isle City, S of Ocean City	Mar28	■
Lake Manahawkin	Oce10	▲Lake	Atlantic Ocean just N of Sandy Hook	Mar11	■
Metedeconk River North Branch	Oce13	●River	Atlantic Ocean North	Mar13	■
Pohatcong Lake	Oce7	▲Lake	Atlantic Ocean off Belmar	Mar17	■
Ridgeway Branch of Toms River	Oce5	●River	Atlantic Ocean, Sea Isle City to Cape May	Mar32	■
Shenandoah Lake	Oce12	▲Lake	Barnegat Bay @ Manahawkin Bay	Mar21	■
Success Lake	Oce2	▲Lake	Barnegat Bay at Toms River	Mar18	■
Toms River	Oce6	●River	Cohansey River at Greenwich	Mar26	■
Turn Mill Pond	Oce11	▲Lake	Delaware Bay at Bower's Beach, DE	Mar30	■
<b>Passaic County</b>			Delaware Bay West of Reeds Beach, SE of Thompsons	Mar29	■
Clinton Reservoir	Pas5	▲Lake	Delaware River at Deepwater	Mar23	■
Dundee Lake	Pas12	▲Lake	Delaware River at National Park	Mar22	■
Echo Lake	Pas7	▲Lake	Delaware River at Port Penn	Mar24	■
Green Turtle Lake	Pas2	▲Lake	Delaware River/Bay at Reedy Island	Mar25	■
Greenwood Lake	Pas1	▲Lake	E. Raritan Bay at Keansburg	Mar10	■
Monksville Reservoir	Pas3	▲Lake	Hackensack River	Mar1	■
Passaic River - Great Piece	Pas9	●River	Lower Passaic River	Mar3	■
Passaic River at Pompton	Pas11	●River	Maurice River at Mauricetown	Mar27	■
Pompton Lake	Pas10	▲Lake	Mid-Raritan Bay	Mar7	■
Ramapo Lake	Pas8	▲Lake	Navesink River at Fairhaven	Mar14	■
Sheppard Lake	Pas4	▲Lake	Newark Bay	Mar4	■
Wanaque Reservoir	Pas6	▲Lake	Passaic River by Kearny	Mar2	■
<b>Salem County</b>			Raritan Bay at Keansburg	Mar33	■
Maskells Mills Lake	Sal2	▲Lake	Raritan Bay at Lower Bay	Mar34	■
Parvin Lake	Sal4	▲Lake	Raritan Bay Lower at Union Beach	Mar9	■
Willow Grove Lake	Sal3	▲Lake	Raritan River at Rt. 35	Mar8	■
Woodstown Memorial lake	Sal1	▲Lake	Sandy Hook Bay	Mar12	■
<b>Somerset County</b>			Shark River at Belmar	Mar16	■
Bound Brook	Som4	●River	Shrewsbury River at Oceanport	Mar15	■
Bound Brook @ Shepard Rd.	Som3	●River	Upper Bay	Mar5	■
Delaware and Raritan Canal	Som9	●River			
Delaware -Raritan Canal @ Griggstown	Som7	●River			
Delaware -Raritan Canal @ S. Bound Brook	Som5	●River			
Green Brook @ Madison Ave. Bridge	Som2	●River			
Millstone River @Manville	Som6	●River			
Raritan River at Neshanic Station	Som8	●River			
Raritan River North Branch at Branchburg	Som1	●River			
<b>Union County</b>					
Rahway River at Milton Lake	Uni1	●River			
Rahway River at Valley Road	Uni2	●River			
<b>Warren County</b>					
Catfish Pond near Delaware Water Gap	War1	▲Lake			
Delaware River at Easton	War5	●River			
Delaware River at Raubsville	War6	●River			
Delaware River Phillipsburg to Water Gap	War2	●River			
Mountain Lake	War3	●River			
Merrill Creek Reservoir	War4	▲Lake			

The NJDEP and NJDHSS can provide more information on the advisories and the health effects of chemical contaminants in the fish. To stay current with advisory updates and to request additional information, please contact the NJDEP, Office of Science at 1-609-984-6070 or check the website [www.FishSmartEatSmartNJ.org](http://www.FishSmartEatSmartNJ.org) or the NJDHSS at 1-609-826-4935.