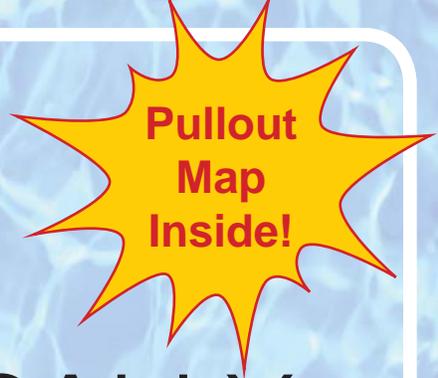




AKWESASNE FAMILY GUIDE TO EATING LOCALLY- CAUGHT FISH



***We turn our minds to all the Fish
that gave themselves to us
as food and send our greetings
and thanks that they continue to do so...***

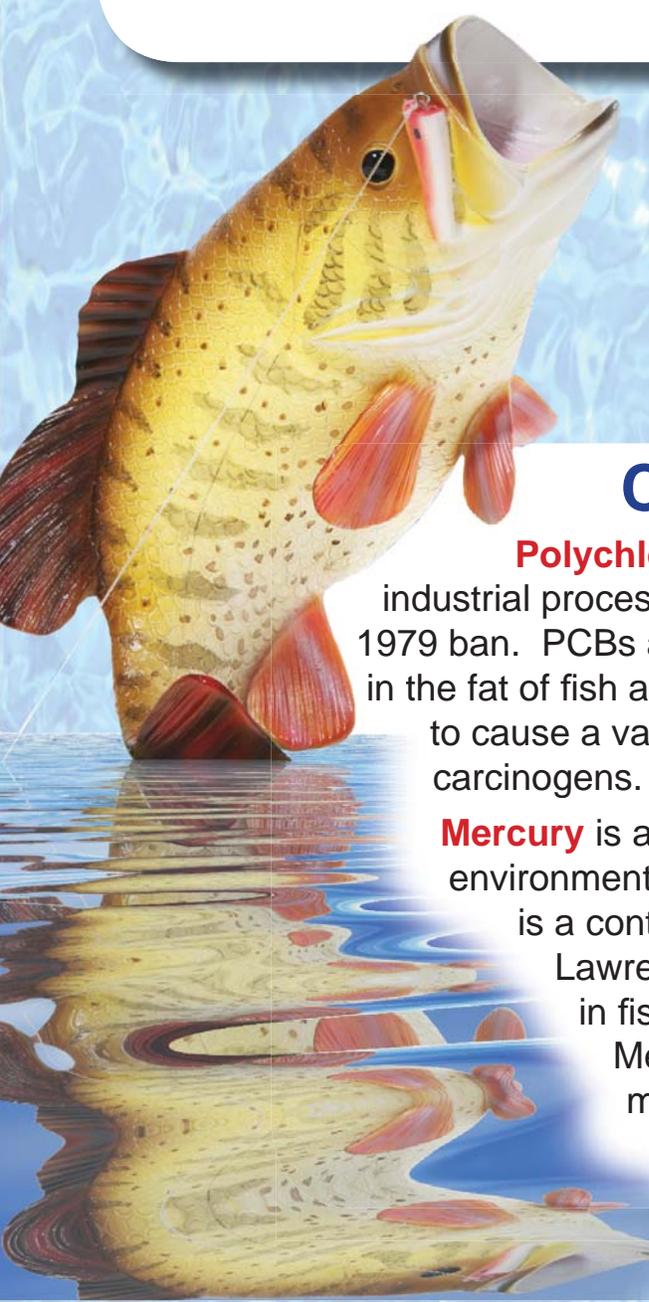
History

The Saint Regis Mohawk Tribe (SRMT) Fish Advisory project began in 2012 with the award of grants from the United States Environmental Protection Agency's Great Lakes Restoration Initiative in collaboration with the New York State (NYS) Department of Health and the NYS Department of Environmental Conservation.

Beginning in 1986, the Akwesasne community has dealt with environmental degradation in various forms, including restrictions to fish consumption due to polychlorinated biphenyl (PCB) contamination. Since then fish contaminant levels have improved for multiple species. While some fish remain contaminated, there exist an abundance of options for *Akwesashró:non* to eat and enjoy the nutritional benefits of a traditional diet.

The advice in this brochure was driven by community member requests. We appreciate your help and hope you will tell us what you think about the information we have provided.

Niawenkó:wa



"The river and fish are getting cleaner and we are getting closer to our goal of unlimited safe consumption by all Akwesashró:non."

*Ken Jock, Director
SRMT Environment Division*

Contaminants of Concern

Polychlorinated biphenyls (or PCBs) were used in industrial processes and released into the environment prior to the 1979 ban. PCBs are long-lived in the environment and accumulate in the fat of fish and other animals. PCBs have been demonstrated to cause a variety of health effects and are probable human carcinogens.

Mercury is a naturally occurring metal and its presence in the environment has been increased by human activities. Mercury is a contaminant of concern across the Great Lakes and St. Lawrence River. Most of the mercury that accumulates in fish is in its organic form called methylmercury. Methylmercury can affect the nervous system, and is more of a concern for children and unborn babies.

Eat Fish



Choose Wisely

Advice for the Entire Family

Best Choice for Everyone to Eat



Brown Trout
(from smaller streams)



Brook Trout



Yellow Perch



Black Crappie



Bluegill



Brown Bullhead



Walleye
smaller than 18"



Rock Bass



Pumpkinseed/Sunfish

Up to 8 portions a month

OR



Chinook Salmon



Coho Salmon



Rainbow Trout



Brown Trout
(from St. Lawrence River)



Largemouth Bass
smaller than 18"



Smallmouth Bass
smaller than 18"



Walleye
larger than 18"



White Sucker

Up to 4 portions a month

OR



Muskellunge



Northern Pike



Channel Catfish



Largemouth Bass
larger than 18"



Smallmouth Bass
larger than 18"



Lake Sturgeon

Up to 1 portion a month



American eel



Carp

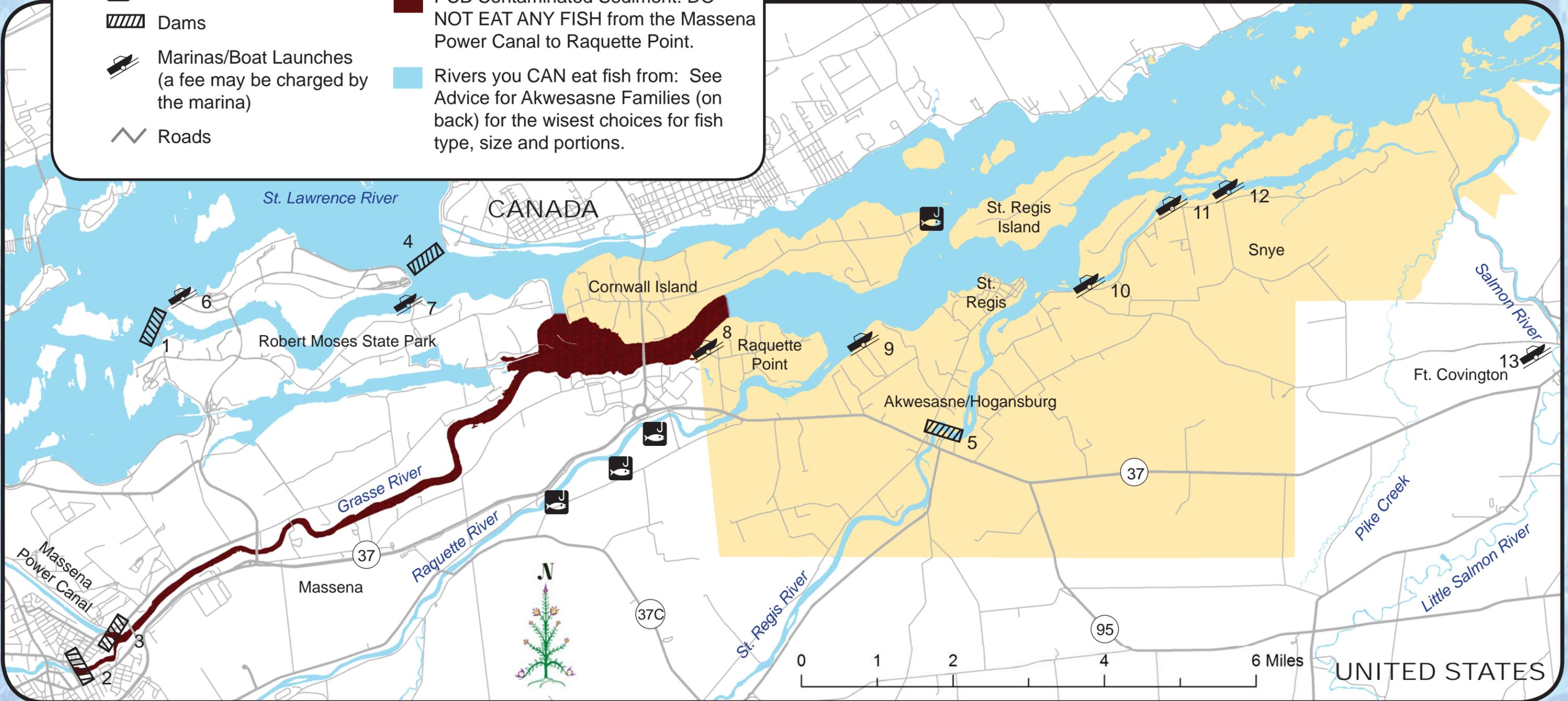
Do Not Eat

Avoid

Akwesasne Waters

LEGEND

-  Fishing Access Sites
-  Dams
-  Marinas/Boat Launches (a fee may be charged by the marina)
-  Roads
-  Akwesasne Territory
-  PCB Contaminated Sediment: DO NOT EAT ANY FISH from the Massena Power Canal to Raquette Point.
-  Rivers you CAN eat fish from: See Advice for Akwesasne Families (on back) for the wisest choices for fish type, size and portions.



- 1 - Long Sault Diversion Dam
- 2 - Massena Village Dam
- 3 - Massena Diversion Dam
- 4 - Robert H. Saunders / Robert Moses Power Dam
- 5 - Hogansburg Hydroelectric Dam

- 6 & 7 - Robert Moses State Park Boat Launches
- 8 - Ahnawate Marina
- 9 - Sit-N-Bull Campground
- 10 - Tacklebox Marina
- 11 - King's Marina
- 12 - Adams Marina
- 13 - Lewis Marine

For up-to-date information about marinas contact SRMT Economic Development at 518-358-2835 or view the Akwesasne Business Directory located at www.srmt-nsn.gov/divisions/administration/economic_development/.

Akwesasne Family Guide to Eating Locally Caught Fish, Kentenhkó:wa/November 2013 is published by the Environment Division, Saint Regis Mohawk Tribe. For more information call 518-358-5937 or check online at www.srmtenv.org.

Fish Are Good for You!

A healthy diet should include good sources of protein – such as fish or seafood. Fish and seafood are low in saturated fats and a good source of omega-3 fatty acids which may help to prevent heart disease. It is recommended adults eat at least 6-8 oz. of a variety of cooked fish or seafood a week; less for children. Pregnant and breastfeeding women should be extra cautious that their choices of fish are low in contaminants like mercury and PCBs because of the risk to developing fetuses and young children. For more information about fish and seafood consumption for pregnant and breastfeeding women and/or children, please contact the Women, Infants and Children (WIC) program at 518-358-3141.



Catch

- Choose younger and smaller fish within a species because they contain fewer contaminants than older, larger fish.
- To prevent the growth of bacteria, keep freshly caught fish on ice and out of direct sunlight.

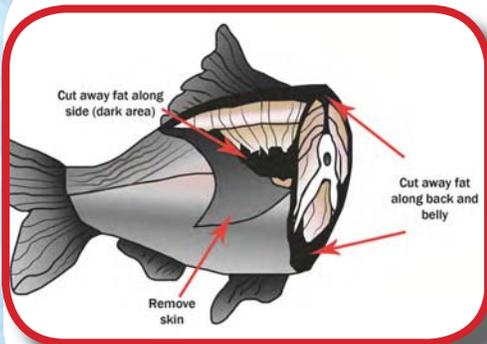
Prepare

- Wear gloves when cleaning fish.
- Remove the skin, fat and internal organs before cooking to reduce the amount of some contaminants
- Refrigerate at 40 degrees or below until ready to cook.



Cook

- Grill, bake or broil fish so that the fat drips off while cooking to reduce the amount of PCBs (mercury is found throughout the fish and cannot be cooked off).
- Cook thoroughly (internal temperature at least 145 degrees).
- For even healthier meals try not to cook with additional fat or salts. For more information on healthy meal ideas or cooking tips, contact the Let's Get Healthy Program at 518-358-9667.



Eat

- A portion of cooked fish for an adult is 3-4 oz. or about the size of your palm without your fingers.
- A meal larger than 3-4 oz. may be considered more than one portion.
- Space out your portions over a month to further reduce contaminant exposure. For example: if you caught a brown bullhead, it would be healthier for you to eat two portions a week for four weeks.



Frequently Asked Questions

Q. Can you tell if a fish is contaminated with chemicals by how it looks, tastes or smells?

A. No, you can't tell if a fish is contaminated by how it looks, smells or tastes.

Q. Does smoking, grilling or baking fish alter the PCB level?

A. Yes, PCBs are found in fat and any cooking methods that reduce the fat will also reduce PCBs. However, mercury is not fat-soluble and cannot be cooked off.

Q. Are fish found in a grocery store generally less contaminated?

A. Like locally caught fish, it is important to make choices based on the type of fish and who is going to eat it. The U.S. Food and Drug Administration (FDA) regulates the sale of commercial fish in grocery stores, which generally contain lower concentrations of some contaminants (e.g., PCBs).

Q. Can I totally avoid PCBs by not eating any contaminated fish?

A. No, trace (extremely small) amounts of PCBs can be found in a variety of other foods including dairy, meats and poultry.

Q. Are all bottom feeders the most contaminated of the fish species (e.g., bullhead)?

A. No, even though bullhead are bottom feeders, they are a good choice for eating when caught in a better choice waterbody (see map). Carp on the other hand are longer lived, very fatty and will accumulate high amounts of PCBs.

Q. What are those small black dots or "PCB rocks" I found in the fish?

A. "PCB rocks" is a local term used to describe solid black spots in the fins or the meat of fish. This term is misleading, because PCBs in fish cannot be seen and do not take on a solid form. Fish serve as a host for a variety of parasites which are not harmful to humans. What people are actually observing is a natural occurrence in the larval stage of the mussel, snail or other aquatic insect life cycle. They are not harmful if eaten after the fish is cooked thoroughly.

Q. Does the fat content of a fish increase in the winter?

A. No, it decreases over winter because most fish are less active and do not replace their energy as fast as they use it. Fish caught in winter may be a better choice; however, the advice remains the same.

Q. I saw suds in the river at Raquette Point. What does it mean?

A. Most foam is natural and is the result of dissolved organic matter from decomposing plants and animals decreasing the surface tension of the water. The bubbles are then formed by wind, waves or flowing over rapids.



The SRMT Environment Division aims to prevent disease and injury while at the same time promoting lifestyles that respect, protect and enhance the environment for the next seven generations at Akwesasne.

Respect the Resource to Ensure Future Use by the Next Seven Generations

Obey the Law
Educate Yourself
Only Take What You Need
Tread Lightly
Be Mindful of Others
Share Your Knowledge
Participate in Resource-Enhancement Projects

Water Resources Program, Environment Division
Saint Regis Mohawk Tribe
449 Frogtown Road, Akwesasne, NY 13655
518-358-5937

**More information can be found on our website at:
www.srmtenv.org**



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