

# \*outreach overview St Marys River

# **BPAC Meeting**

June 17, 2015

Presented by: Michelle Bruneau

Michigan Department of Health & Human Services

# Fishing the St Marys River

Some fish have less chemicals than others because of what they eat, how long they live, and how lean or fatty they are. Smaller fish of the same species usually have less chemicals than the bigger ones. It's best to keep the small fish for eating and to snap a picture and return trophy fish to the water!

### How to Catch Walleve

- the day...or even after dark!
- You can catch walleye with live bait; nightcrawlers drifted along the bottom or minnows fished on a tight line are best. In the fall, jigging with spoons in deep water is a good way to get a bite.
- Cast your line out and slowly reel it in. You might want to try different depths to see what works, but you should have the best luck letting your bait skim along the bottom.

### How to Catch Yellow Perch

- . Walleye fishing is often best early and late in . Perch tend to bite all day long, but aren't very active after dark.
  - You can catch yellow perch with live bait; minnows, wigglers, earthworms, leeches, wax worms or small crayfish are best. Use a sinker on the end of the line with a pair of hooks (No. 6 or 8) tied on leaders about a foot apart just above the sinker.
  - · Perch can be found around rocky bottoms in deeper waters, but may be found near weed beds in shallower areas.

Source: www.michigan.gov/howtofish



You can use the Eat Safe Fish Guide to find specific guidelines for the St Marys River and other nearby rivers and lakes.



There are many ways chemicals end up in lakes and rivers, including wind and rain run-off.

This is why larger fish, predator fish, and longerliving fish are likely to have more chemicals in their bodies than smaller, younger fish. You can use the Eat Safe Fish Guide to find safe fish.



The macroinvertebrates are eaten by minnows, minnows by medium-sized fish, and those fish are eaten by large fish - each collecting and storing some of the chemicals in their bodies.

The chemicals sink to the bottom of the lake or river. where they settle in the sediment.

Small creatures, called macroinvertebrates, eat these chemicals as they dig in the sediment for food.



### Have Questions? Want an Eat Safe Fish Guide?

Call MDHHS at 1-800-648-6942 and ask for a free Eat Safe Fish Guide or pick up an Eat Safe Fish brochure at the Sault Sainte Marie Welcome Center or from any of our other local partners.

The Guide and brochure includes maps to nearby lakes and rivers where fish have been tested for chemicals. The MDHHS Lab tests the filets of fish for chemicals, and all of the MDHHS guidelines are based only on this data.

You can also download this information to your smartphone 24/7 at www.michigan.gov/eatsafefish!



### Smaller fish are better.

They tend to have fewer chemicals.





### Avoid large predator fish and the bottom feeders.

They tend to have more chemicals. Please check the Eat Safe Fish Guide before eating these fish.





### Fat should be removed.

Some chemicals are in the fat of the fish.





### Eat fish that have been broiled or grilled on a rack.

More of the fat and chemicals can drip away. You can reduce some chemicals by up to half!











Many thanks to our partners:











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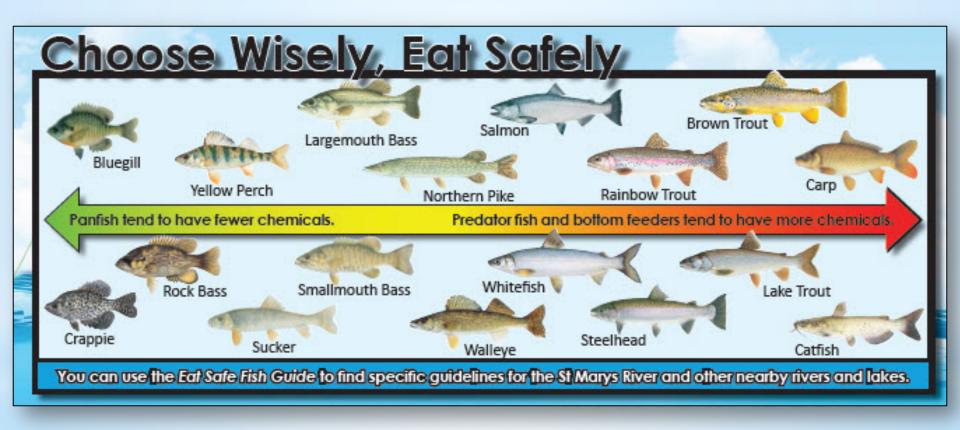


















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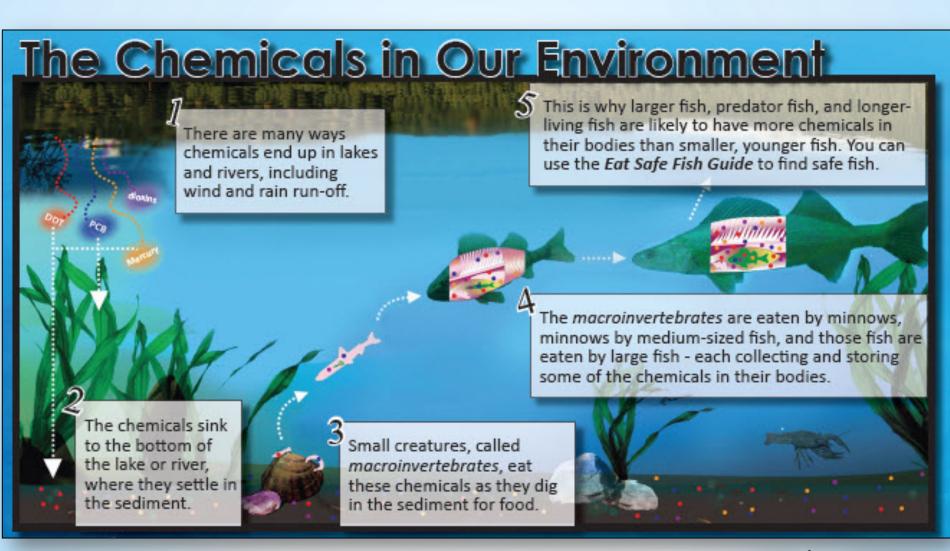
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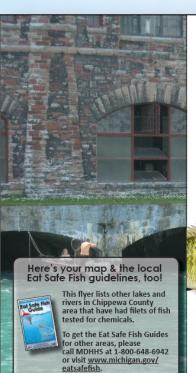
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You can also download this information to your smartphone 24/7 at www.michigan.gov/eatsafefish!









### What are 'safe' fish?

Safe fish are fish that are low in chemicals. If you use the MDHHS Eat Safe Fish Guide for your region when you choose fish to catch and eat, you will protect yourself and your family from chemicals that could someday make you sick.

### If there are chemicals in the fish, why should I still eat it?

Fish have a lot of great health benefits!

- ☑ Fish can be a great low-fat source of protein.
- ☑ Fish are brain food.
- Some fish have heart-healthy omega-3s.

Plus, fishing is a fun way to get outside and enjoy Michigan's 11,000 lakes, rivers, and streams!

> If you follow the 3Cs and go after fish that have fewer chemicals in them, you can get a lot of health benefits and have very little risk.

### Catching fish • Buying fish • Eating fish

For more information on safe fish, call MDHHS at 1-800-648-6942 or visit us online at <u>www.michigan.gov/eatsafefish</u>.







### Areas of Concern (AOCs)

In the 1980s, the United States and Canadian governments identified 43 places in the Great Lakes region that had severe, long-term environmental problems. These places are called Areas of Concern or AOCs. Michigan originally had 14 AOCs located in both the upper and lower peninsulas.

People in federal, state, and provincial governments are working to address the problems in these areas. Local groups, known as Public Advisory Councils (PAC), also work on these environmental problems.

### Beneficial Use Impairments (BUIs)

These environmental problems are called *beneficial* use impairments or *BUIs*. There were 14 categories of BUIs named in the U.S.-Canadian Great Lakes Water Quality Agreement. However, a place did not have to have all 14 problems to be called an AOC.

Each BUI has goals that need to be met in order to be removed from the AOC's list of problems. Once all BUIs are removed from the list, the AOC is considered to be no longer impaired and can be *delisted*, or removed from the list of AOCs.

### The Goal: Delisting & a Healthy Environment

Once all of the assigned BUIs have been removed from an AOC, the PAC and Michigan Department of Environmental Quality submit a petition to the U.S. Environmental Protection Agency requesting to be removed from the list of AOCs. This is called "delisting." Two of Michigan's 14 original AOCs were delisted in 2014. Others are closer to delisting thanks to the dedication of the local, state, and federal stakeholders working to improve our environment, along with funding from the U.S. Environmental Protection Agency and the Great Lakes Restoration Initiative.

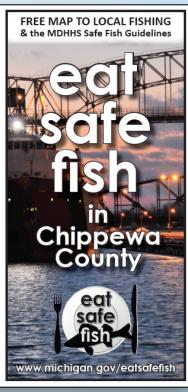
### You can get involved!

Would you like to volunteer with the St. Marys River AOC Binational Public Advisory Council? Contact the Michigan Department of Environmental Quality's Office of the Great Lakes for more information at 1-517-284-5035.

### The 14 BUIs that an AOC can have are:

- · Restrictions on Fish and Wildlife Consumption
- · Tainting of Fish and Wildlife Flavor
- · Fish Tumors or Other Deformities
- · Degraded Fish and Wildlife Populations
- · Loss of Fish and Wildlife Habitat
- Bird or Animal Deformities or Reproductive Problems
- Degradation of Phytoplankton and Zooplankton Populations
- Degradation of Benthos
- Degradation of Aesthetics
- · Eutrophication or Undesirable Algae
- Beach Closings
- Added Costs to Agriculture or Industry
- · Restrictions on Dredging Activities
- Restrictions on Drinking Water Consumption or Taste and Odor Problems









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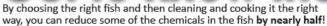
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# **Get to know the**







Some fish contain chemicals that can harm your health. MDHHS tests filets of fish taken from Michigan's lakes and rivers to learn which fish are safer to eat. The Eat Safe Fish Guides make it easy to find out which fish have been tested and easy to choose fish that are safe to eat.

The Eat Safe Fish Guide:

- ☑ lists fish species that have had filets tested for chemicals by MDHHS.
- ☑ protects people who eat Michigan fish often.
- ☑ protects anyone who has health problems, is young, is pregnant, or is planning on having children in the future.

Other lakes and rivers have been tested in the Eastern U.P.. You can find some of these guidelines in the back of this brochure. To get the guidelines for other areas, visit www.michigan.gov/eatsafefish or call 1-800-648-6942.





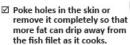
Some chemicals, like PCBs and dioxins, collect in the fat of the fish.

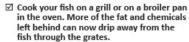
- ☑ When cleaning the fish, trim away any of the fat you can see.
- ☑ Remove and throw away the organs, too.

Careful cleaning and cooking can get rid of up to half of these chemicals from the fish.



LOOK





☑ If you choose to fry your fish, it's best to pan fry and throw away the oil. Please note that frying does not get rid of any of the chemicals that may be in the fish.

You can't remove mercury or PFOS from fish by cleaning and cooking. Always choose your fish wisely!

### Why are there chemicals in some fish?



- PCBs, dioxins, and mercury are the most common chemicals found in filets of Michigan fish.
- ☑ These chemicals are persistent and bioaccumulative. This means the chemicals not only stay in the environment, they also build up in living things.
- Because of this, they have become part of the food chain for fish, as you can see in the picture above.
- Some chemicals, like PCBs and dioxins, build up in the fat of the fish. Mercury and PFOS build up in the muscle, or filet, of the fish.
- If you choose fish lower in mercury and PFOS and follow the 3Cs, you can keep these chemicals from building up in your body, too.
- You can't see or taste these chemicals. They do not change how clear or dirty the water looks. The only way to know if these chemicals are in the fish is by testing for them in a laboratory.







### Using the Eat Safe Fish Guidelines

MDHHS tests only the filets of the fish for chemicals to set these guidelines. *MI Servings* are set to be safe for everyone. This includes children, pregnant or breastfeeding women, and people who have health problems like cancer or diabetes.

### How much is MI Serving?

Weight of Person	MI Serving Size
45 pounds	2 ounces
90 pounds	4 ounces
180 pounds	8 ounces

For every 20 pounds <u>less</u> than the weight listed in the table, subtract 1 ounce of fish.

For example, a 70-pound child's M/Serving size is 3 ounces of fish. 90 pounds - 20 pounds = 70 pounds & 4 ounces - 1 ounce = a M/Serving size of 3 ounces

For every 20 pounds more than the weight listed in the table, add 1 ounce of fish.

For example, a 110-pound person's M/Serving size is 5 ounces of fish. 90 pounds + 20 pounds = 110 pounds /4 ounces plus 1 ounce = a M/Serving size of 5 ounces

You might eat more than one MI Serving in a meal. That's OK, just keep track so you don't have too much.

### Are you pregnant?

Fish is good for you and your baby! Use your pre-pregnancy weight to find your MI Serving size. It's also best to avoid eating fish labeled as "Limited" when you're pregnant or breastfeeding.

### My Michigan, MI Serving Size

............



- 8 ounces of fish = size of an adult's hand (large oval)
- 4 ounces of fish = size of the palm of an adult's hand (small circle)
- 2 ounces of fish = size of half a palm of an adult's hand (rectangle)

### Restoring the St. Marys River

St. Marys River Binational Public Advisory
Committee (BPAC) has been working with the US
Environmental Protection Agency, the Michigan
Department of Environmental Quality (MDEQ) and
other partners to improve the local environment for
people, animals, and fish!

To learn more about the work that is being done, please visit <a href="http://www.lssu.edu/bpac">http://www.lssu.edu/bpac</a> or call MDEQ at 1-517-284-5035.

### Little Rapids Restoration

Rapids and riffles in rivers provide areas for fish to forage, spawn, and raise their young. Dredging, filling, diversion, and urban development has greatly affected the flow of the St. Marys River over the years.

However, researchers found that by redesigning the base of the Sugar Island causeway to allow for more water to pass through, they can restore the flow of the river over the rapids, improving fish habitat.

In time, we will likely see a larger population of fish in the area, making it even more of a prime and picturesque fishing location!

### Project 2

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### Catching fish . Buying fish . Eating fish

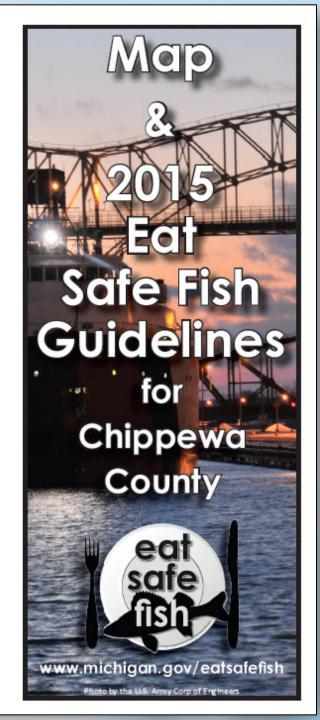
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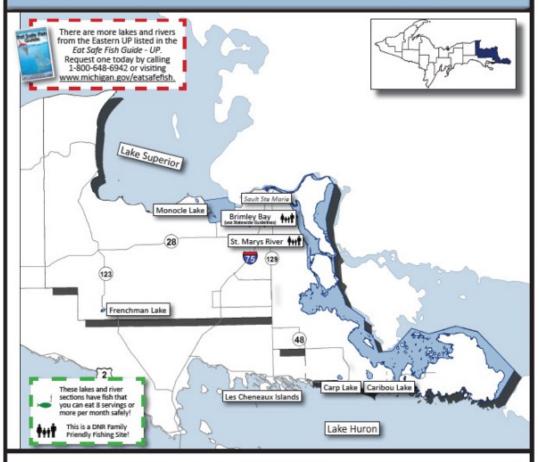




The MDHHS Safe Fish Guidelines in this brochure are from the MDHHS 2015 Eat Safe Fish Guide. For updates, visit <a href="www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> or call 1-800-648-6942 and ask for a free Guide.



# **Map of Chippewa County**



### Lake Huron

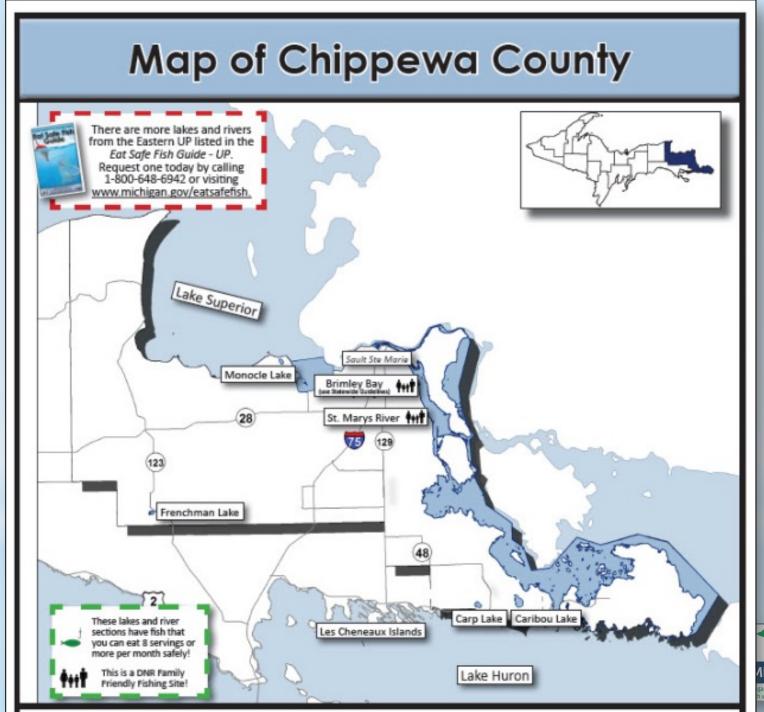
Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*	
Brown Trout	PCBs	Any	6 Per Year <sup>b</sup>	
Carp	PCBs & Dioxins	Any	Limited*	
Catfish	Dioxins	Any	Limited*	
Chinook Salmon Coho Salmon Freshwater Drum	PCBs PCBs Mercury	Any	6 Per Year <sup>a</sup> 6 Per Year <sup>a</sup> 1	
		Any		
		Any		
	PCBs & Dioxins	Under 20°	1 <sup>24</sup>	
Lake Trout	non.	20" to 24"	6 Per Year <sup>ts</sup>	
	PCBs	Over 24"	Limited*	
Lake Whitefish	Dioxins	Any	6 Per Year <sup>bs</sup>	
Northern Pike	PCBs	Any	12×	

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month	
Rainbow Trout	PCBs	PCBs Any	6 Per Year <sup>2x</sup>	
Smelt	PCBs			
Steelhead	PCBs	Any	6 Per Year <sup>2x</sup> 2 <sup>2x</sup> 6 Per Year <sup>2x</sup>	
Suckers	PCBs	Any		
Walleye	Dioxins	Any		
White (Silver) Bass	PCBs & Diaxins	Any	Limited*	
White Perch	PCBs	Any	6 Per Year <sup>2s</sup>	
Yellow Perch	Diaxins	Any	2 <sup>2x</sup>	

Great Lakes guidelines should also be used for rivers that flow into the lakes, up to the first dam.









## Chippewa Co. Eat Safe Fish Guidelines

These guidelines are from the 2015 Eat Safe Fish Guide for the Upper Peninsula. To get the most up-to-date guidelines for lakes and rivers in your county or other areas of Michigan, please visit <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> to download the Eat Safe Fish Guides to your smartphone or call 1-800-648-6942 to get a print copy!

### Caribou Lake

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Serving per Month	
I		Under 18"	1	
Largemouth Bass	Mercury	Over 18"	6 Per Year	
D - 1 D		Under 10"	2	
Rock Bass	Mercury	Over 10"	1	
S		Under 18"	1	
Smallmouth Bass	Mercury	Over 18"	6 Per Year	
Walleye	Mercury	Any	1	

### Carp Lake

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
144-11	Marrows	Under 18"	2
Walleye	Mercury	Over 18"	1

### Frenchman Lake

	Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*	
Γ	Northern Pike		Under 30"	4	
		Mercury	Over 30"	2	

### Les Cheneaux Island Area

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*	
Bluegill	Mercury	Any		
Carp	PCBs & Dioxins	Any	Limited*	
		Under 18"	2	
Largemouth Bass	Mercury	Over 18"	1	
		Under 8"	8	
Rock Bass	Mercury	Over 18" Under 8" Over 8"	4	
	Mercury	Under 18"	2	
Smallmouth Bass		Over 18"	1	
Sunfish	Mercury	Any	12	
Yellow Perch	Dioxins	Any	221	

Please use the Lake Huron guidelines on the other side of this brochure for any fish species not listed above.

### Monocle Lake

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*	
		Under 20"	2	
Walleye	Mercury	Over 20"	1	

### St. Marys River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month	
Bluegill	Mercury	Any	12	
Carp	PCBs	Any	Limited*	
		Under 18"	2	
argemouth Bass	Mercury	Over 18"	1	
Northern Pike		Under 30"	2	
Northern Pike	Mercury	Over 30"	1	
Rock Bass		Under 8"	4	
NULK BASS	Mercury	Over 8"	2	
Smallmouth Bass	Mercury	Under 18"	2	
omanimouth Bass	ivieicury	Over 18"	1	
Suckers	Mercury	Any	4	
Sunfish	Mercury	Any	12	
Walleye	PCBs & Mercury	Under 22"	2	
	Mercury	Over 22"	1	
Yellow Perch	Mercury	Any	4	

When fishing the river near Lake Huron or Lake Superior (Whitefish Bay), please check the Great Lake guidelines on the other side of this brochure.



For all other lakes and rivers in Chippewa County, please use the Statewide Safe Fish Guidelines found on the other side of this brochure.

Please see the other side of this brochure for the Lake Superior & Lake Huron guidelines.

- See the 2x box on the back of this page to learn how you can eat more of these fish safely.
  - See the Limited and Do Not Eat boxes on the back of this page for more information.



To get the full Eat Safe Fish Guides with guidelines for other counties and regions in Michigan, please visit <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> or call MDHHS at 1-800-648-6942.





### Lake Superior

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*	
Brown Trout	PCBs	Any	1 <sup>2s</sup>	
Burbot Chinook Salmon Coho Salmon	PCBs PCBs PCBs & Toxaphene	Any	Limited*	
		Any	6 Per Year <sup>2x</sup>	
		Any	424	
Lake Herring	Mercury	Any	8	
	PCBs & Toxaphene	Under 24"	2 <sup>24</sup>	
Lake Trout	nen-	24" to 28"	124	
	PCBs	Over 28"	6 Per Year <sup>2x</sup>	

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month	
Lake Whitefish	PCBs, Dioxins, Toxaphene	Any	22x	
Northern Pike	Mercury	Any	2	
Rainbow Trout Siscowet Steelhead	PCBs & Toxaphene PCBs	Any	2 <sup>2x</sup>	
		Any	Limited*	
		Any	2 <sup>2x</sup>	
Suckers	Toxaphene	Any	2 <sup>2x</sup>	
Walleye	Mercury	Any	2	
Yellow Perch	Mercury	Any	2	

### Statewide Guidelines & MI Servings

Don't see a certain Chippewa County lake or river listed in this brochure? Then the Statewide Safe Fish Guidelines can help you find safer fish to eat. But only use the Statewide Guidelines if...



- the Chippewa County lake or river you are fishing in is not listed in this brochure, OR
- · your lake or river is listed in this brochure, but the fish species is not listed.

### Statewide Safe Fish Guidelines

Type of Fish	Chemical of Concern	Size of Fish (length in inches)	MI Servings per Month*	Type of Fish	Chemical of Concern	Size of Fish (length in inches)	MI Servings per Month*
Black Crappie	Mercury	Any Size	4	Rock Bass	Mercury	Any Size	4
Bluegill	Mercury	Any Size	8	Smallmouth Bass		Under 18"	2
Carp	PCBs	Any Size	2		Mercury	Over 18"	1
Catfish	PCBs & Mercury	Any Size	4	Suckers	Mercury	Any Size	8
Largemouth		Under 18"	2	Sunfish	Mercury	Any Size	8
Bass	Mercury	Over 18"	1			Under 20"	2
Muskellunge	Mercury	Any Size	1	Walleye	Mercury	Over 20"	1
No al propins		Under 30"	2	White Crappie	Mercury	Any Size	4
Northern Pike	Mercury	Over 30"	1	Yellow Perch	Mercury	Any Size	4

These guidelines are based on the typical amount of chemicals found in fish filets tested from around the state. Some fish may be higher or lower. If any of these fish are listed in the guidelines for the lake or river you are fishing in, use <u>those</u> guidelines instead of the statewide guidelines. The *MI Servings* recommendation will be more exact for that lake or river because those filets have been tested. For other counties in Michigan, please visit www.michigan.gov/eatsafefish to get the Eat Safe Fish Guide for that region.

### Special MI Serving Categories

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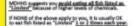
 cook the fish on a grill or broiling pen so more fat can drip away

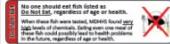
Do you eat fish at least twice a week? When using the MDHHS for Safe Fish Guide, watch for this MDHHS "Best Choise" symbol. The hook and fish mark species that you and your family can safely eat 5 MI Servings or more each month!



- · are under the age of 15,
- +87×
- heve health problems, like cancer or diabetes,
   are planning on having children in the

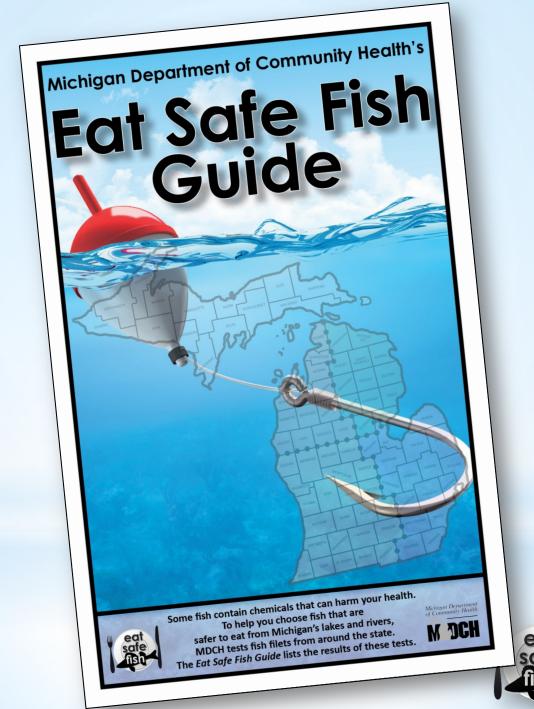
 are plenning on having children in the next several years, currently pregnant, or breastleeding.



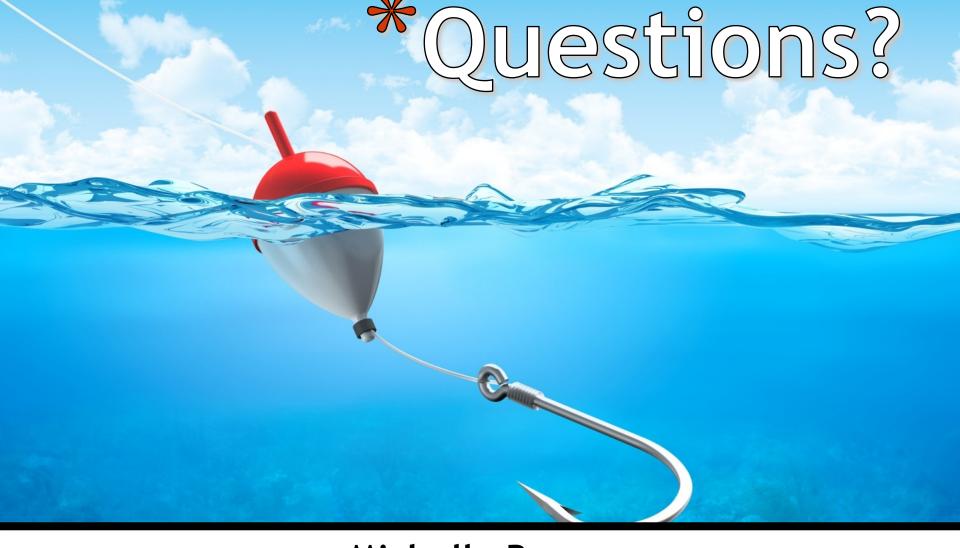












# Michelle Bruneau

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