

# Eat Safe Fish

## from Michigan's Areas of Concern

### 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*.

People in federal, state, and provincial government environmental remediation programs are working to address the problems in these areas. Funding and expert guidance are provided to AOCs to help local groups, known as Public Advisory Councils (PACs), work on these environmental problems, as well.

### Beneficial Use Impairments (BUIs)

These environmental problems are called *beneficial use impairments*. There are 14 categories of BUIs, originally named in the U.S.-Canadian Great Lakes Water Quality Agreement. However, a place does 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 14 BUIs that an AOC can have are:

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

Over the years, several BUIs have been removed from Michigan's AOCs as citizens, industries, and government joined together to improve our state's environmental health. In fact, after decades of hard work, some Michigan AOCs only have one or two BUIs remaining and are getting closer to being delisted.



Michigan's AOCs in 2012

## Restrictions on Fish Consumption BUI

If an AOC has a **Restrictions on Fish Consumption BUI**, it means that the fish from the affected lake or river at one time had higher levels of chemicals than fish in similar lakes or rivers in the Great Lakes region.

In most cases, the process to remove the Fish Consumption BUI is fairly direct. Chemical levels in fish from the AOC are compared to levels in fish from outside of the AOC. The BUI can be removed from the AOC's list of problems when:

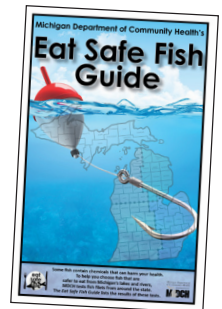
- the levels of chemicals found in fish from the AOC are the same or less than fish from a similar location that is not an AOC, or
- the levels of chemicals in fish from the same lake or river have decreased over time. This process is used if there isn't a similar enough location outside of the AOC to use as a comparison.

Each AOC has their own process for BUI removal in place. The final decision to remove the BUI depends on the process that the PAC and the Michigan Department of Environmental Quality agree upon.

## Michigan Department of Community Health *Eat Safe Fish Guide*

The ***Eat Safe Fish Guide*** is put out by the Michigan Department of Community Health (MDCH). This guide lists all of the fish species that have been tested from lakes and rivers throughout Michigan. MDCH tests only the filet of the fish for chemicals like PCBs, dioxins, and mercury. They use this information to develop the safe fish eating guidelines printed in the *Eat Safe Fish Guide*.

Fish with chemicals in their bodies are not just found in AOCs, but also in the other thousands of lakes and rivers throughout Michigan. If you eat a lot of Michigan fish, are young and/or have health problems, you can use the *Eat Safe Fish Guide* to find fish that are lower in chemicals and safer for you to eat. You can get a free copy of the *Eat Safe Fish Guide* from MDCH by calling 1-800-648-6942 or visiting [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish).



## BUIs and Eat Safe Fish Guidelines are NOT the same.

- ***Fish Consumption BUIs*** compare chemical levels in fish from the AOC to chemical levels in fish that are not in an AOC. When these levels are similar - meaning the amount of chemicals in fish from the AOC are little different than those from other lakes and rivers in the state that are not in an AOC - then the BUI can be removed.
- The ***MDCH Eat Safe Fish Guide*** helps you find safer fish to eat from Michigan lakes and rivers. MDCH tests filets of fish for chemicals from locations all around the state. The *Eat Safe Fish Guide* can help you find safer fish to eat in lakes and rivers throughout Michigan, not just in the AOC.

When the Fish Consumption BUI is removed from an AOC's list of problems, fish from the lake or river will still be tested and listed in the ***MDCH Eat Safe Fish Guide*** for some time after.

Michigan lakes and rivers are improving thanks to federal and state environmental rules and the hard work of the US Environmental Protection Agency, the MDEQ, and the PACs, but it will take many years for these chemicals to leave the ecosystem and the fish.

### To learn more about AOCs & BUIs:

MDEQ - Office of the Great Lakes  
517-335-3168

<http://www.michigan.gov/deqaocprogram>



### To learn more about eating safe fish:

MDCH - Division of Environmental Health  
1-800-648-6942

<http://www.michigan.gov/eatsafefish>

