

# **PCBs in Fish in the Lange/Revere Canals in St. Clair Shores**

## **Testing Results, Public Health Actions, and Future Work**

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- History of MDCH involvement, documents
- Fish sampling by MDEQ/MDNR
  - Results
  - Future plans
- Fish advisory
  - General background
  - Lange/Revere canals and Lake St. Clair
  - Actions taken/planned

# MDCH Involvement/Documents

- Involved since 2001
- Funded by federal ATSDR (part of CDC)
- \*Health consultation report 7/31/2003
  - Re emergency removal of sediments in Ten Mile Drain and Lange/Revere canals
- \*Health consultation report 11/27/2007
  - Re surface soil removal in residential areas near Bon Brae/Bon Heur
- Various public meetings

\* Available on MDCH and St. Clair Shores websites



# Fish Sampling and Analysis

## PCBs in CARP (ppm)

	<b>N</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>
<b>10 Mile Canal – 2010</b>	<b>12</b>	<b>13.5</b>	<b>88.0</b>	<b>215.0</b>
<b>Lake St. Clair – 1998/2001</b>	<b>11</b>	<b>0.2</b>	<b>0.7</b>	<b>4.1</b>

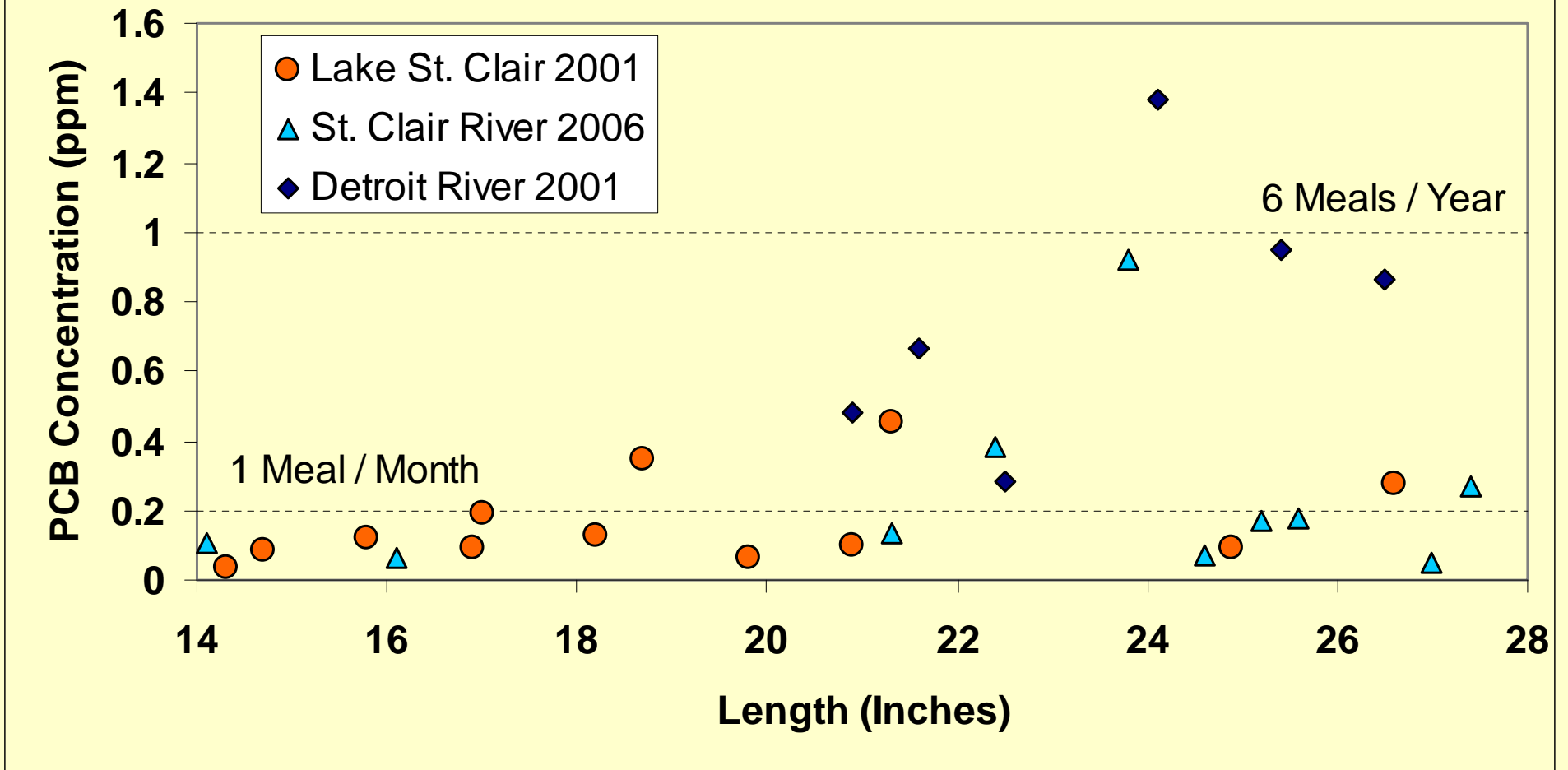
## PCBs in LARGEMOUTH BASS (ppm)

	<b>N</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>
<b>10 Mile Canal - 2010</b>	<b>1</b>		<b>3.9</b>	
<b>Lake St. Clair - 2010</b>	<b>10</b>	<b>0.009</b>	<b>0.04</b>	<b>0.09</b>
<b>Lake St. Clair - 1987</b>	<b>10</b>	<b>0.01</b>	<b>0.21</b>	<b>0.72</b>

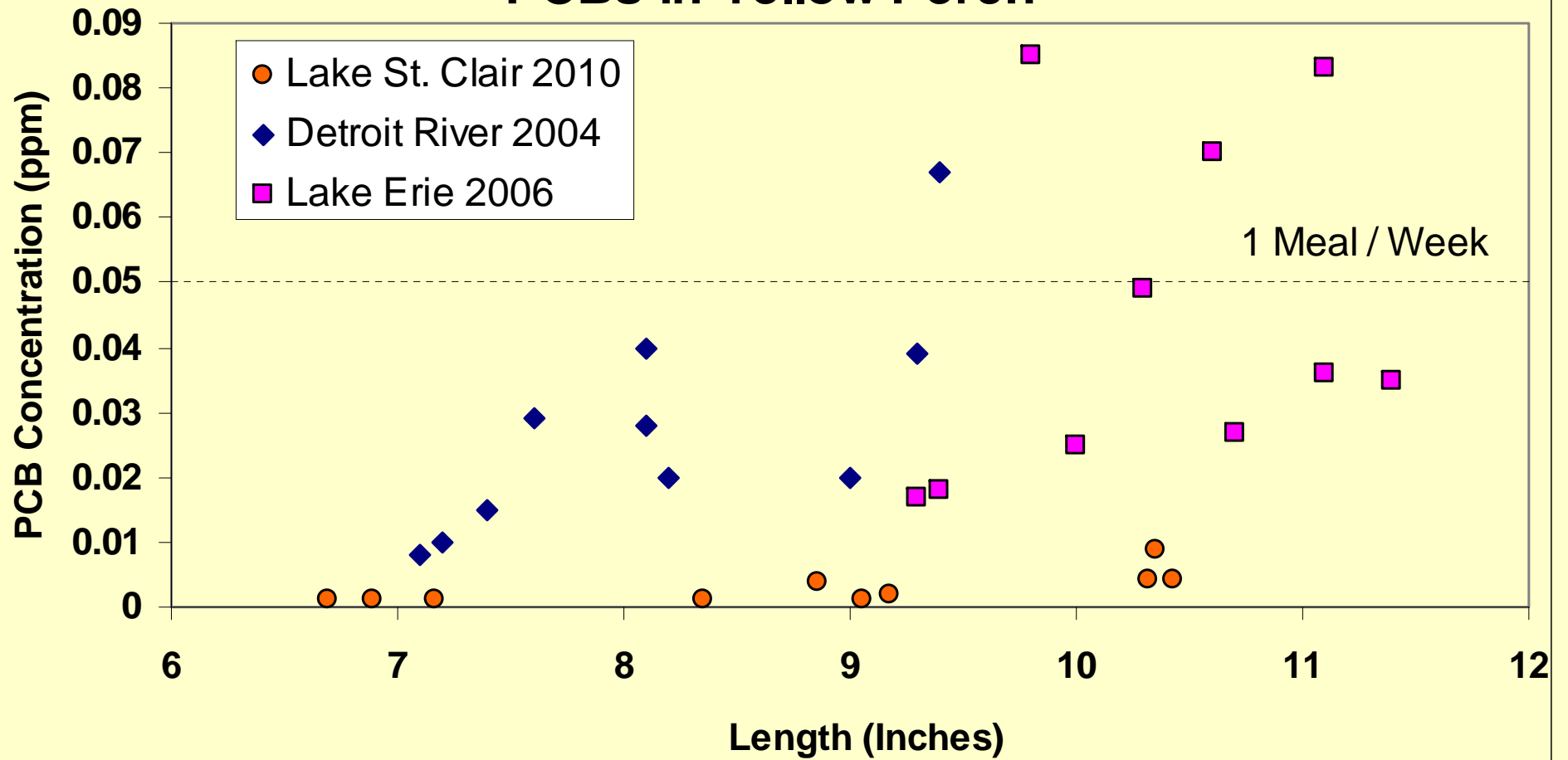
**Lake St. Clair  
(Anchor Bay)  
2010 Results (ppm)**

<b>Species</b>	<b>N</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>
<b>Channel Catfish</b>	<b>7</b>	<b>0.004</b>	<b>0.23</b>	<b>0.35</b>
<b>Freshwater Drum</b>	<b>9</b>	<b>0.001</b>	<b>0.01</b>	<b>0.25</b>
<b>Muskellunge</b>	<b>8</b>	<b>0.002</b>	<b>0.33</b>	<b>0.5</b>
<b>Northern Pike</b>	<b>7</b>	<b>0.001</b>	<b>0.004</b>	<b>0.02</b>
<b>Pumpkinseed</b>	<b>10</b>	<b>all below quantitation limit of 0.001</b>		
<b>Rock Bass</b>	<b>9</b>	<b>0.001</b>	<b>0.001</b>	<b>0.02</b>
<b>Yellow Perch</b>	<b>10</b>	<b>0.001</b>	<b>0.002</b>	<b>0.009</b>

## PCBs in Walleye



## PCBs in Yellow Perch



# Fish Advisory – General Background

- Advice given for “General Population” and “Sensitive Population” (children, women of child-bearing age)
- Most contaminants will be in fatty tissue (mercury is exception)
- “Trigger” levels

# MDCH “Trigger Levels”

## Mercury

Restrict Consumption	0.5 ppm
No Consumption	1.5 ppm

## Total PCBs

**General Population 2.0 ppm**

## Women and Children

1 meal per week	0.05 ppm
1 meal per month	0.2 ppm
6 meals per year	1.0 ppm
no consumption	1.9 ppm

**Dioxin TEQ 10.0 ppt**

## Total Chlordane

0.3 ppm

## Total DDT

5.0 ppm

## Dieldrin

0.3 ppm

## Heptachlor +

Heptachlor epoxide 0.3 ppm

## Mirex

5.0 ppm

## Toxaphene

5.0 ppm

# Fish Advisory – Lange/Revere canals and Lake St. Clair

- Lange/Revere canals
  - “No consumption” of any fish caught in these canals
  - Based on 12 carp, 1 LM bass (as of mid-May 2011)
- Lake St. Clair
  - “No consumption” of carp or catfish
  - As a caution (carp and catfish are fatty fish)

# Fish Advisory – Actions Taken/Planned

- \*Letters to canal homeowners
- \*Media announcement of advisory
- \*"Preventing Exposures to PCBs in the 10 Mile/Lange/Revere Canals"
- Scoping area for sign placement
- \*Notice to schools for students
- \*St. Clair Shores-specific "Eat Safe Fish" brochure

\*Handouts and/or on MDCH and City's websites

# Do Not Eat Fish From These Canals

The Michigan  
Department of Community Health  
has found unsafe levels of  
chemicals (PCBs) in fish from the  
Lange and Revere Canals.



**Eating these fish may  
harm your health.**

*Michigan Department  
of Community Health*



For more information, call  
MDCH at 1-800-648-6942.



## Advisory sign location possibilities

- MDCH remaining involved until no public health threat posed by site
- Future “Public Health Assessment” report(s) will be released for public review and comment
- Contact:
  - Christina Bush ([bushcr@michigan.gov](mailto:bushcr@michigan.gov))
  - 517-335-9717 (direct), 800-648-6942
  - [www.michigan.gov/mdch-toxics](http://www.michigan.gov/mdch-toxics), “Health Assessments and Related Documents,” St. Clair Shores