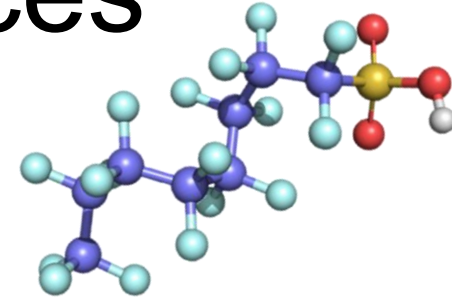


Per- and Polyfluoroalkyl Substances (PFAS)



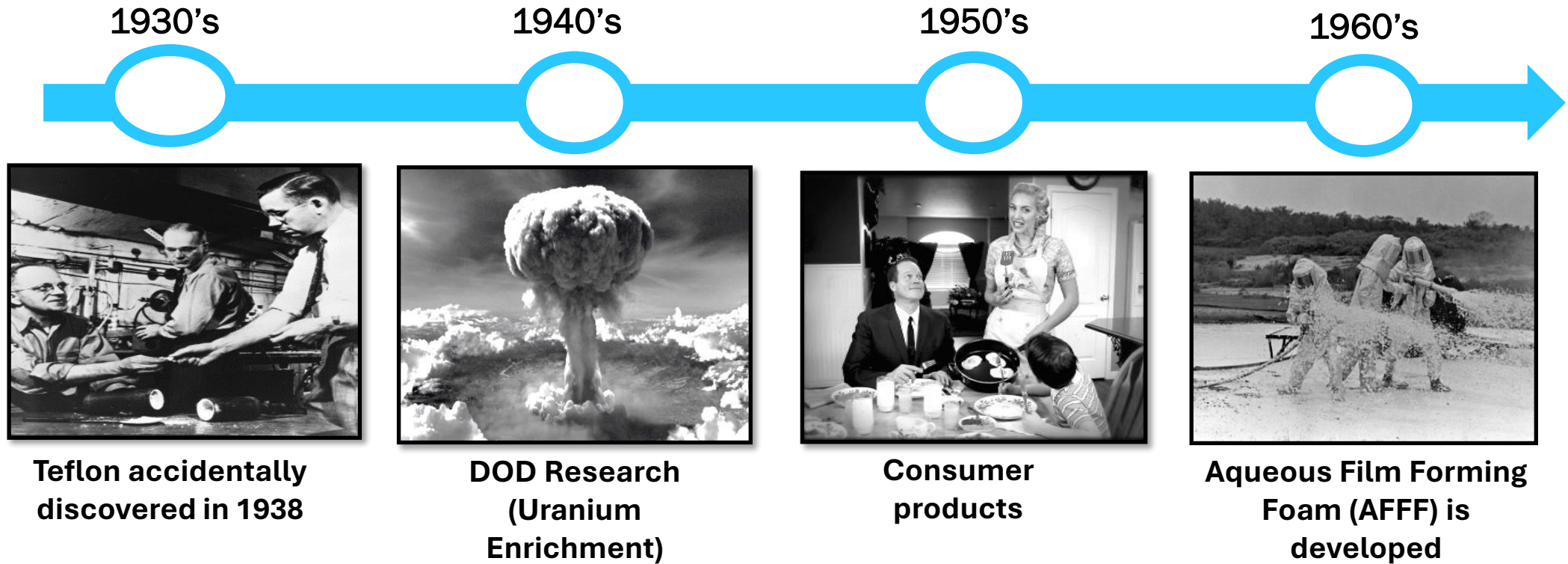
What are they?

- Strong Carbon-Fluorine Bonds
- Surfactants
- Highly Stable
- Repel Water, Oil, Fat, and Grease
- Began Developing in 1940s
- Thousands of Compounds Today

Why the concern?

- Widespread through the ecosystem
- Don't Break Down Easily - Hard to Get Rid of
- Bioaccumulate – Build Up in Our Bodies
- Some PFAS May Affect Health
- Some emerging science/information
- Need for additional Federal Standards

PFAS Development....

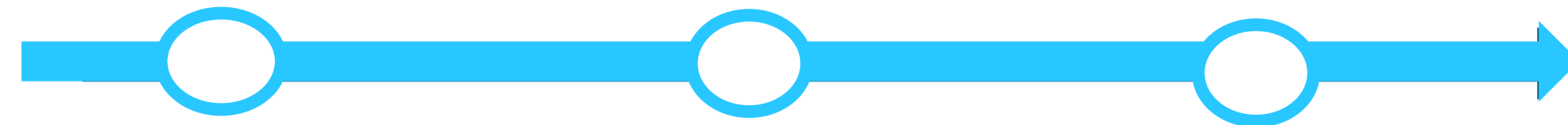


... and Evolution

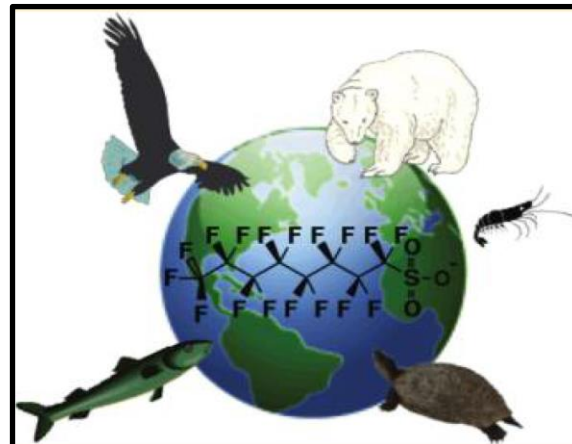
1970's

2000's

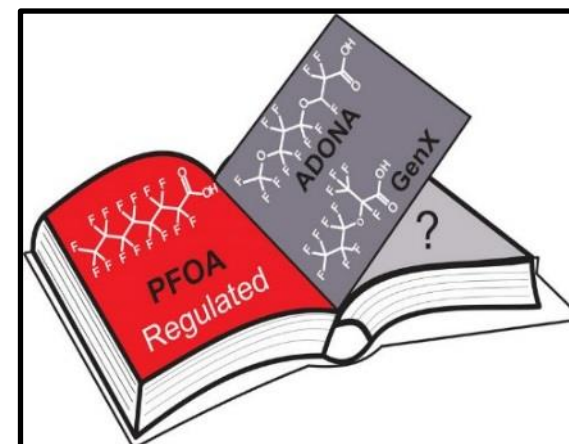
Current



Product enhancement expands



Global distribution of certain PFAS in biota



Public scrutiny
Changing regulatory climate
Lawsuit settlements
Development of new PFAS

PFAS Uses



Michigan's Drinking Water and Groundwater Cleanup Standards

Compound	Standards
PFNA	6 ppt
PFOA	8 ppt
PFOS	16 ppt
PFHxS	51 ppt
GenX (HFPO-DA)	370 ppt
PFBS	420 ppt
PFHxA	400,000 ppt

Michigan Surface Water Quality Values

Compound	Water Quality Value
PFNA	30 ppt
<i>If Drinking Water Source</i>	<i>19 ppt</i>
PFOA	170 ppt
<i>If Drinking Water Source</i>	<i>66 ppt</i>
PFOS	12 ppt
<i>If Drinking Water Source</i>	<i>11 ppt</i>
PFHxS	210 ppt
<i>If Drinking Water Source</i>	<i>59 ppt</i>
PFBS	670,000 ppt
<i>If Drinking Water Source</i>	<i>8,300 ppt</i>

*Michigan's Rule 57 Water Quality Values
apply to NPDES discharges*

Overview of Thompson Pond PFAS Results: 04-01-25 Surface Water Sampling

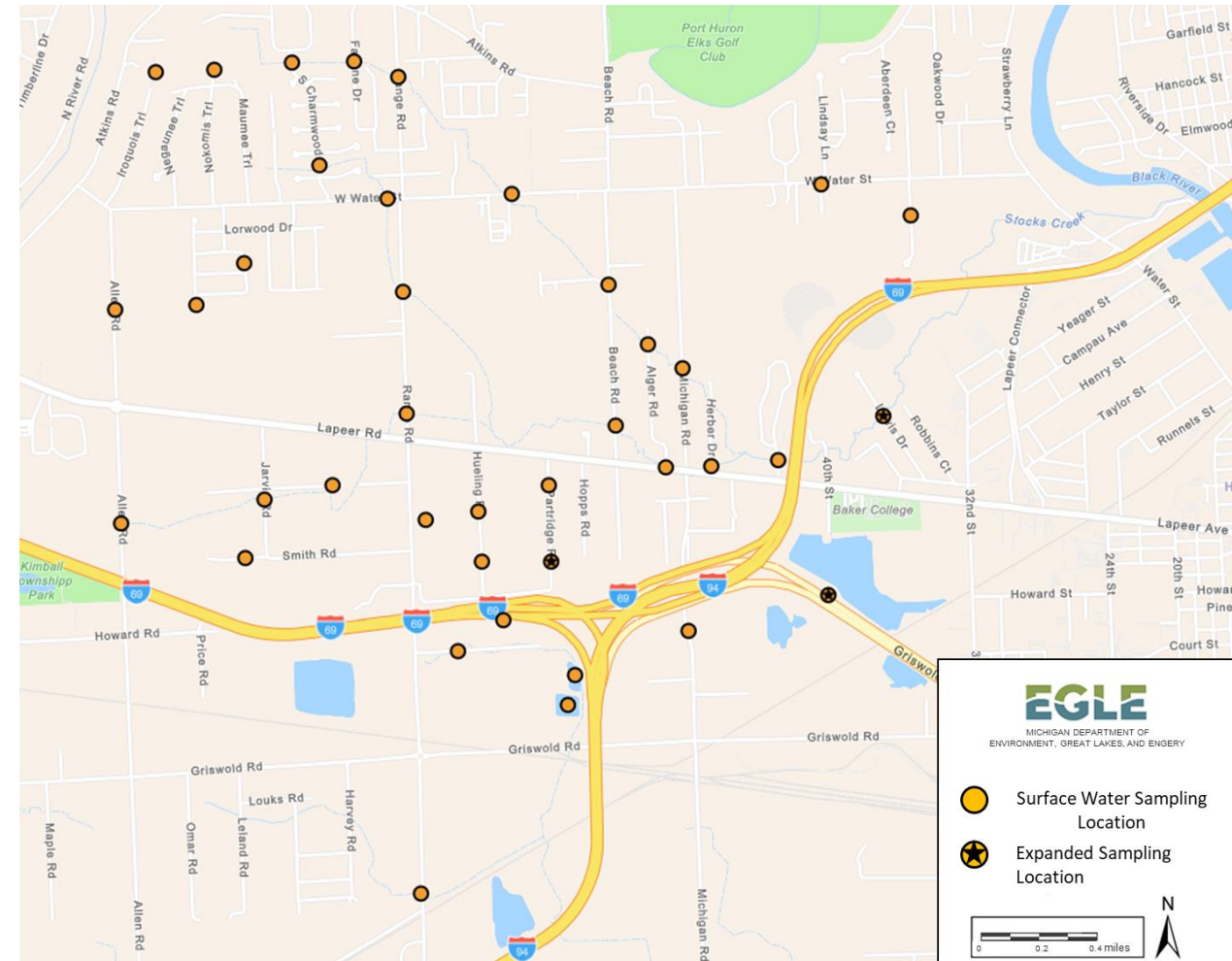
Prepared by Emma Rieb, 05-13-25

Background:

- 2023: Wm.P. Thompson Pond gets a “Do Not Eat” fish consumption advisory for PFOS
 - Surface waters from 8 locations around the pond: 20-330 ng/L PFOS and 25-120 ng/L PFOA
- Paper sludge waste received by Techni-Comp (Composting Specialists) is one possible source of PFAS to these surface waters
- No known biosolids applications

Sampling details:

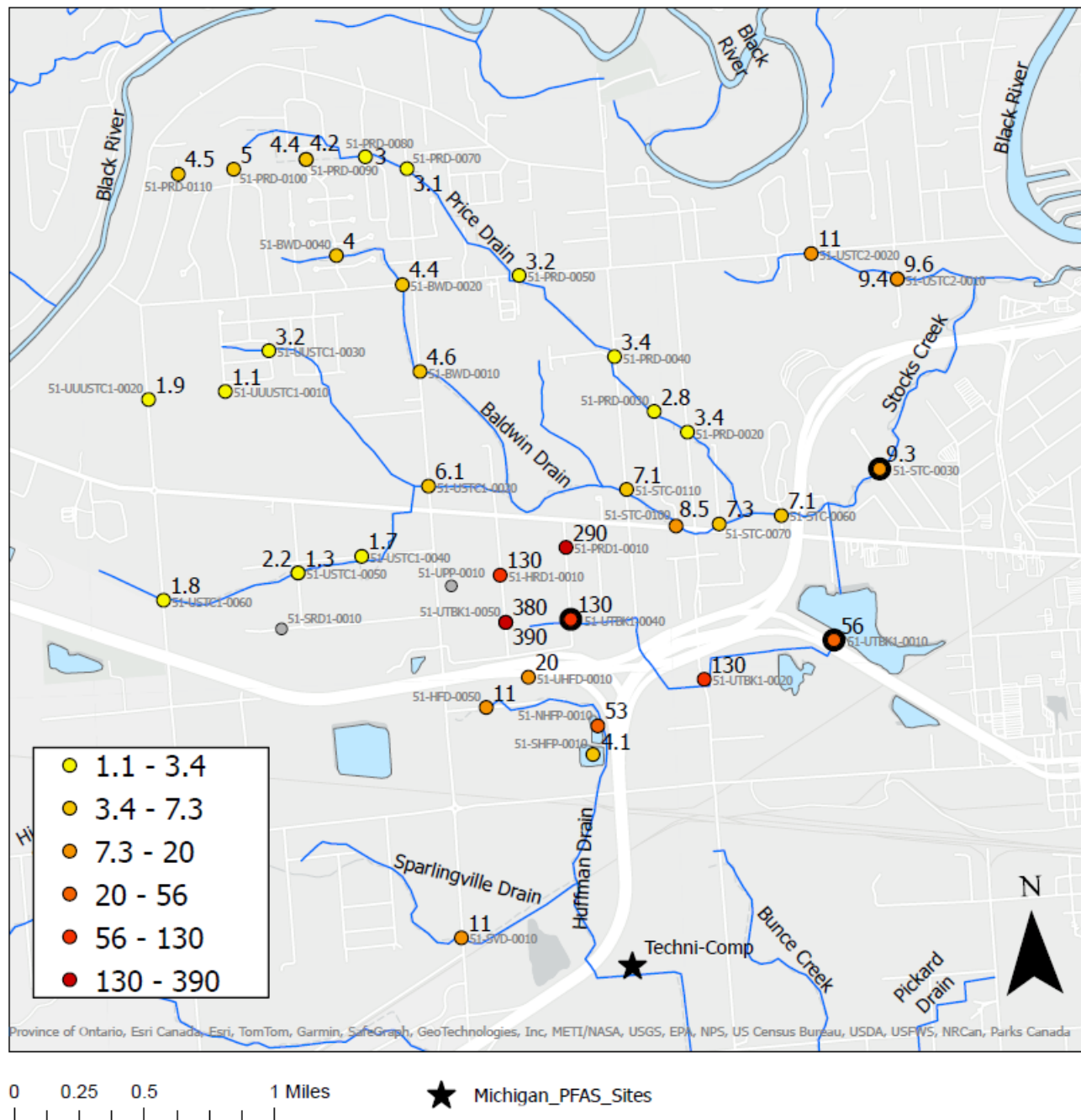
- 39 surface water sampling locations.
- Analyzed for 34 PFAS compounds using US EPA Method 8327



PFOS (ng/L)

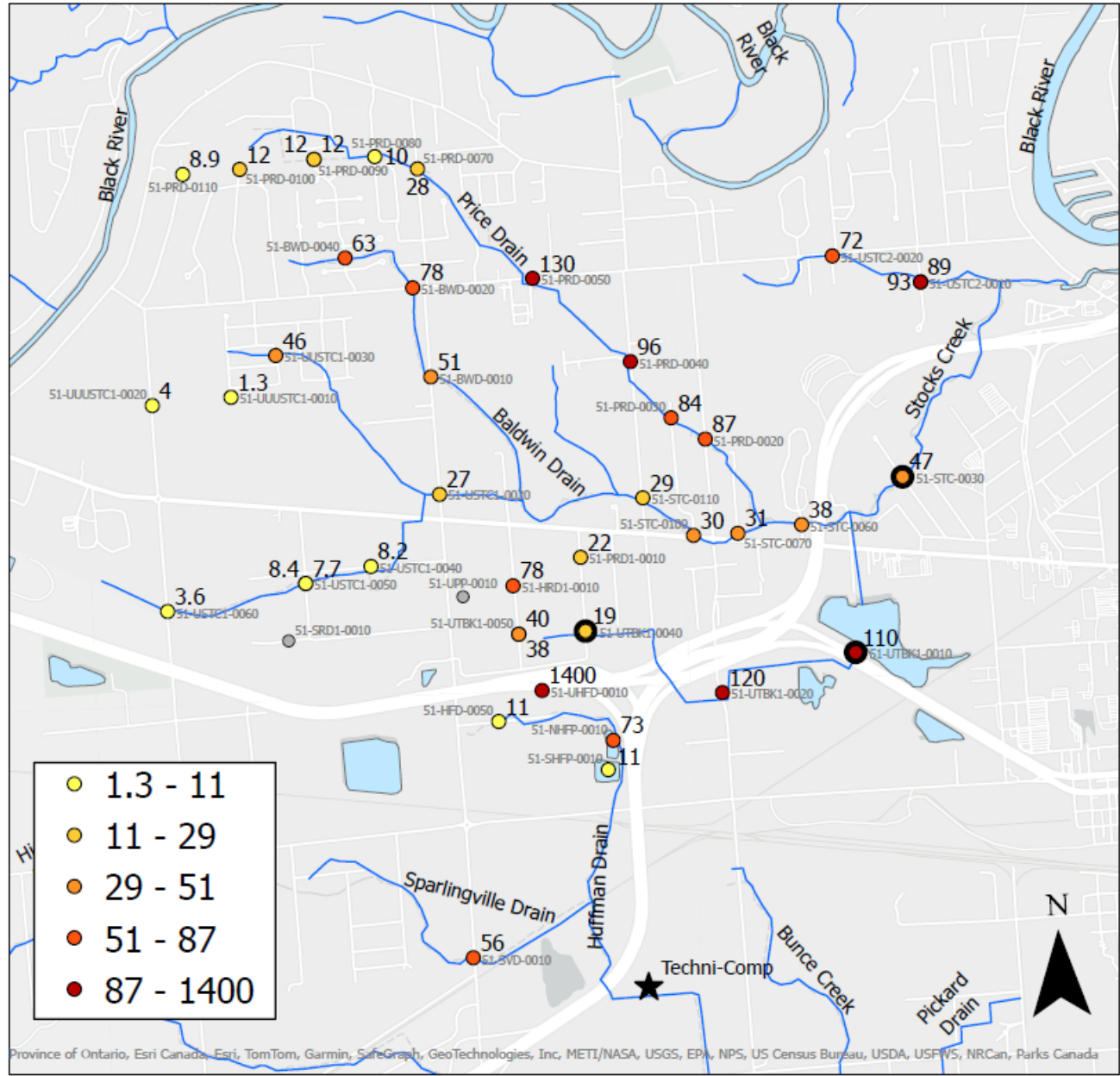
Comparing these
values to 12 ppt

Surface water flow is
from west to east



PFOA (ng/L)

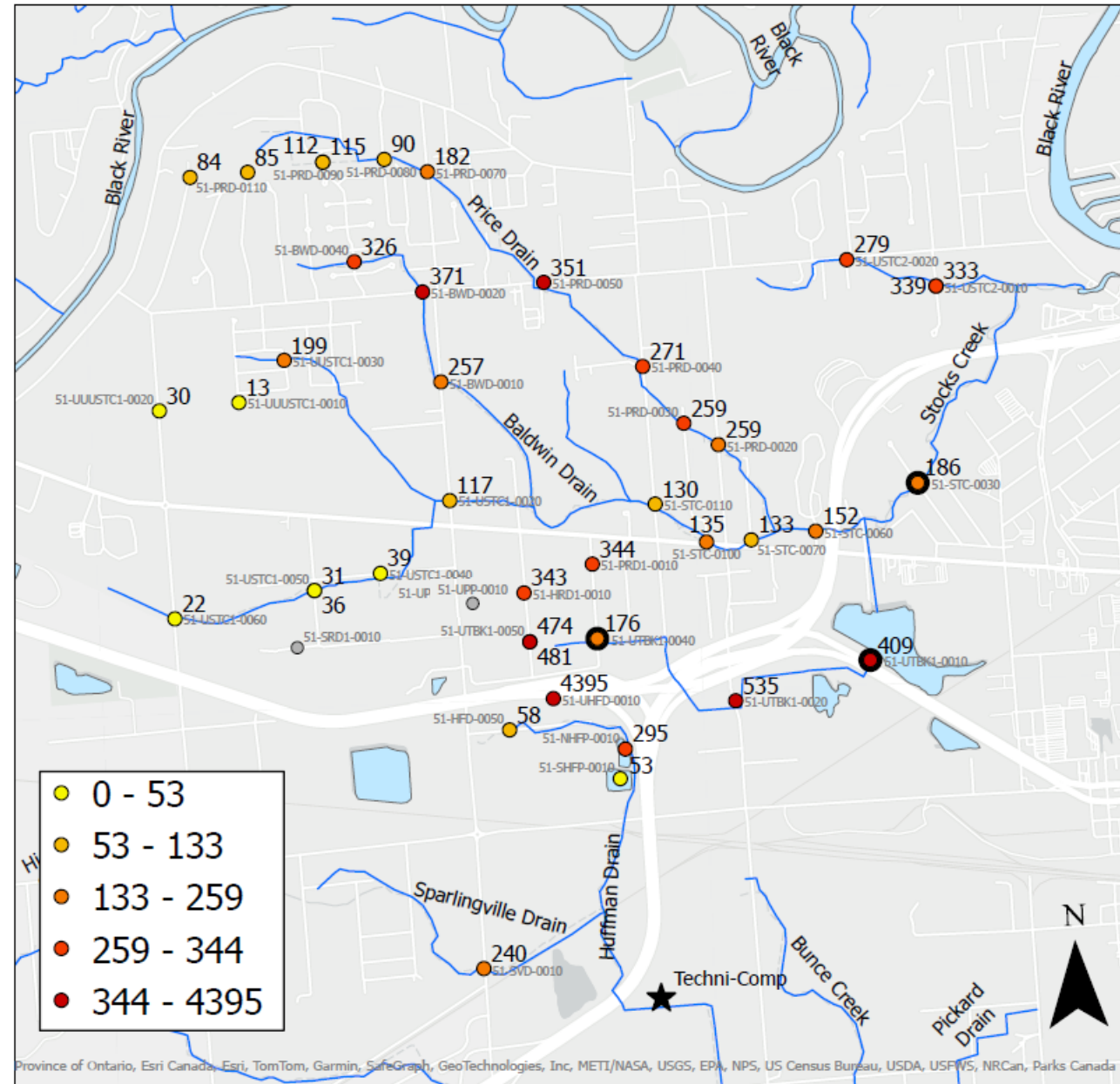
Comparing these values to 170 ppt



0 0.25 0.5 1 Miles

★ Michigan_PFAS_Sites

Total PFAS (ng/L)

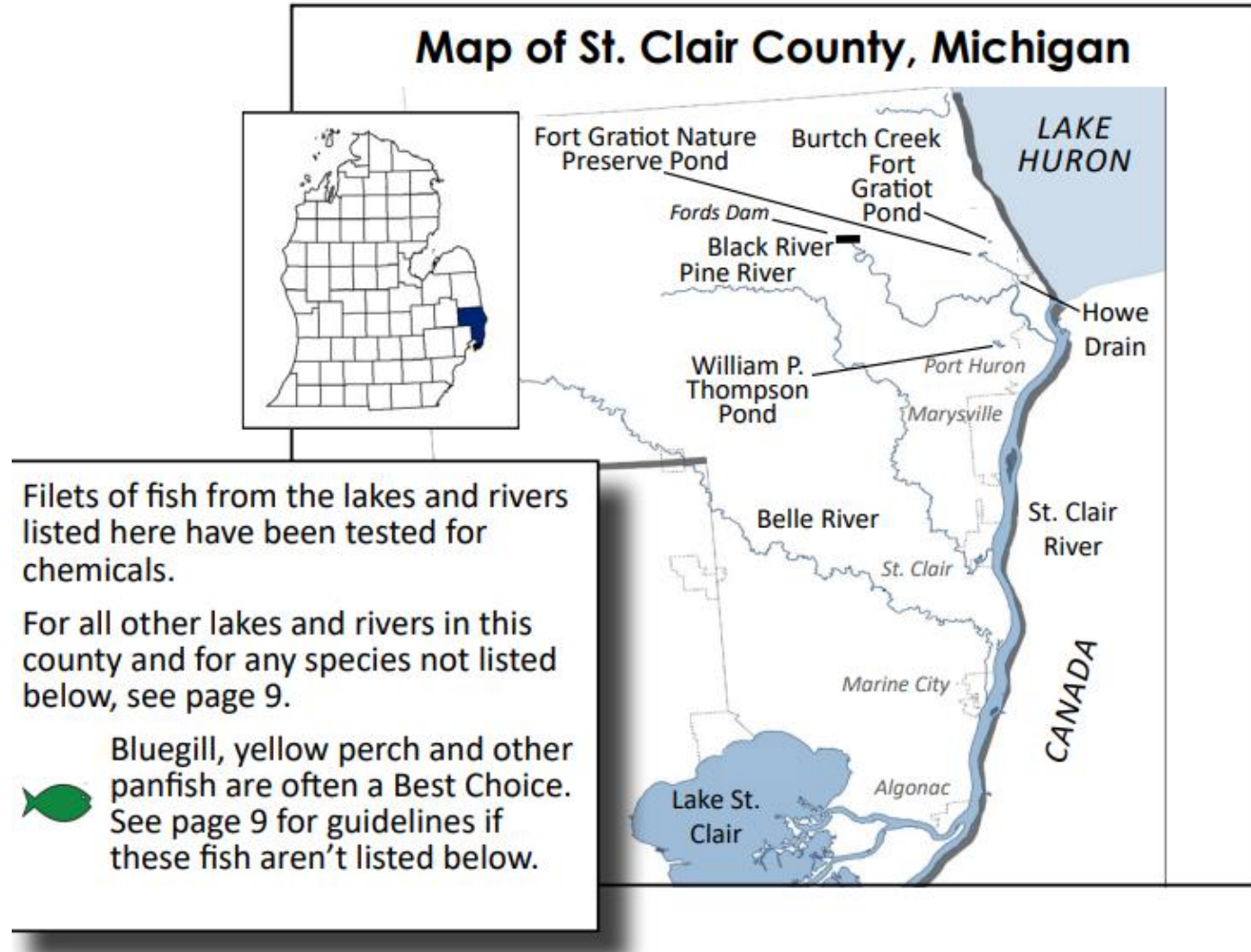


Next Steps

- Targeted Residential Well sampling
 - 11 wells selected
 - 2 homes granted access: AECOM sampling July 24th
 - Others may have municipal water
- Future public meeting

MDHHS 2025 Eat Safe Fish Guide

St. Clair County



William P. Thompson Pond

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	PFOS	Any	Do Not Eat▲
Sunfish	PFOS	Any	Do Not Eat▲
All Other Species	PFOS	Any	Do Not Eat▲

Belle River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	PFOS	Any	2
Rock Bass	PFOS	Under 7"	2
	Mercury, PFOS	Over 7"	2
Sunfish	PFOS	Any	2
Yellow Perch	PFOS	Any	2

Black River

(downstream of Fords Dam)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	PFOS	Any	Do Not Eat▲
Largemouth Bass	PFOS	Any	Do Not Eat▲
Rock Bass	PFOS	Any	6 Per Year

Black River

(downstream of Fords Dam, continued from page 80)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Smallmouth Bass	PFOS	Any	Do Not Eat▲
Suckers	PFOS	Any	1
Sunfish	PFOS	Any	Do Not Eat▲
Yellow Perch	PFOS	Any	2

Burtch Creek

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Rock Bass	PFOS	Any	Do Not Eat▲

Fort Gratiot Nature Preserve Pond

(west of Parker Road)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	PFOS	Any	Do Not Eat▲
Sunfish	PFOS	Any	Do Not Eat▲

Fort Gratiot Pond

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Bluegill	Mercury, PFOS	Any	4
Sunfish	Mercury, PFOS	Any	4

Howe Drain

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Rock Bass	PFOS	Any	Do Not Eat▲

Pine River

(including Rattle Run)

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Black Crappie	PFOS	Any	Do Not Eat▲
Bluegill	PFOS	Any	Do Not Eat▲
Carp	PFOS	Any	Do Not Eat▲
Rock Bass	PFOS	Any	Do Not Eat▲
Sunfish	PFOS	Any	Do Not Eat▲
White Crappie	PFOS	Any	Do Not Eat▲
All Other Species	PFOS	Any	Do Not Eat▲

St. Clair River

Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Carp	PCBs	Any	Limited [▲]
Freshwater Drum	Mercury, PCBs	Any	2
Largemouth Bass	Mercury, PFOS	Under 18"	2
	Mercury	Over 18"	1
Rock Bass	PFOS	Any	2
Smallmouth Bass	Mercury, PFOS	Under 18"	2
	Mercury	Over 18"	1
Sturgeon	PCBs	Any	Limited [▲]
Walleye	Dioxins, PCBs, PFOS	Any	6 Per Year
White Bass	PCBs	Any	Limited [▲]
Yellow Perch	PFOS	Any	4

Lake St. Clair

(If you're fishing within 2 miles of the outlet of the Lange-Revere Canals in Macomb Co., see page 51 for a special notice. This area is between Lakefront Park and Veteran's Memorial Park and out into open water.)



Type of Fish	Chemicals of Concern	Size of Fish (length in inches)	MI Servings per Month*
Black Crappie	Mercury	Under 9"	8
		Over 9"	4
Bluegill	PFOS	Any	6 Per Year
Carp	PCBs	Any	Limited [▲]
Catfish	Dioxins	Any	Limited [▲]
Freshwater Drum	Mercury, PCBs	Any	2
Largemouth Bass	PFOS	Any	6 Per Year
Muskellunge	Mercury	Any	Do Not Eat [▲]
Northern Pike	Mercury	Any	2
Rock Bass	PCBs	Any	1 ^{2x}
Smallmouth Bass	PFOS	Any	6 Per Year
Sturgeon	PCBs	Any	Limited [▲]
Sunfish	PFOS	Any	6 Per Year
Walleye	Dioxins, PCBs, PFOS	Any	6 Per Year
White (Silver) Bass	PCBs	Any	Limited [▲]
White Crappie	Mercury	Under 9"	8
		Over 9"	4
Yellow Perch	Mercury	Any	4



Contact Information

- MDHHS Eat Safe Fish Guide:
 - Lisa Fischer: FischerL@michigan.gov, 517-284-4287
- EGLE WRD Emerging Pollutants Section
 - Anne Tavalire: TavalireA@michigan.gov, 248-508-1102