



MPART PFAS Town Hall  
Eagle Ottawa Newaygo Farms  
We'll begin Shortly

July 19, 2022

MPART

# MPART PFAS Town Hall

## Eagle Ottawa Newaygo Farms

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Michigan PFAS Action Response Team  
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# Introductions and Agenda

- Introductions – Abigail Hendershott, MPART Executive Director
- Agenda:
  - MPART Overview – Abby
  - Health – Amber Klase, Michigan Department of Health and Human Services
  - Investigation Area – Aaron Assmann, Michigan Department of Environment, Great Lakes, and Energy
  - MPART Website – Abby
- Q&A

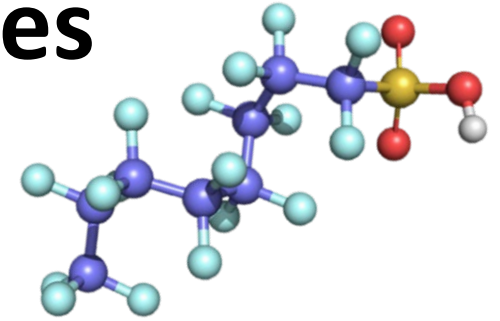
*\*\* Presentation slides will be made available. \*\**

# Michigan PFAS Action Response Team (MPART)



- Executive Order 2019-03
- Unique Multi-Agency Approach
- Leads Coordination and Cooperation Among All Levels of Government
- Directs Implementation of State's Action Strategy

# 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
- 5,000+ Compounds Today

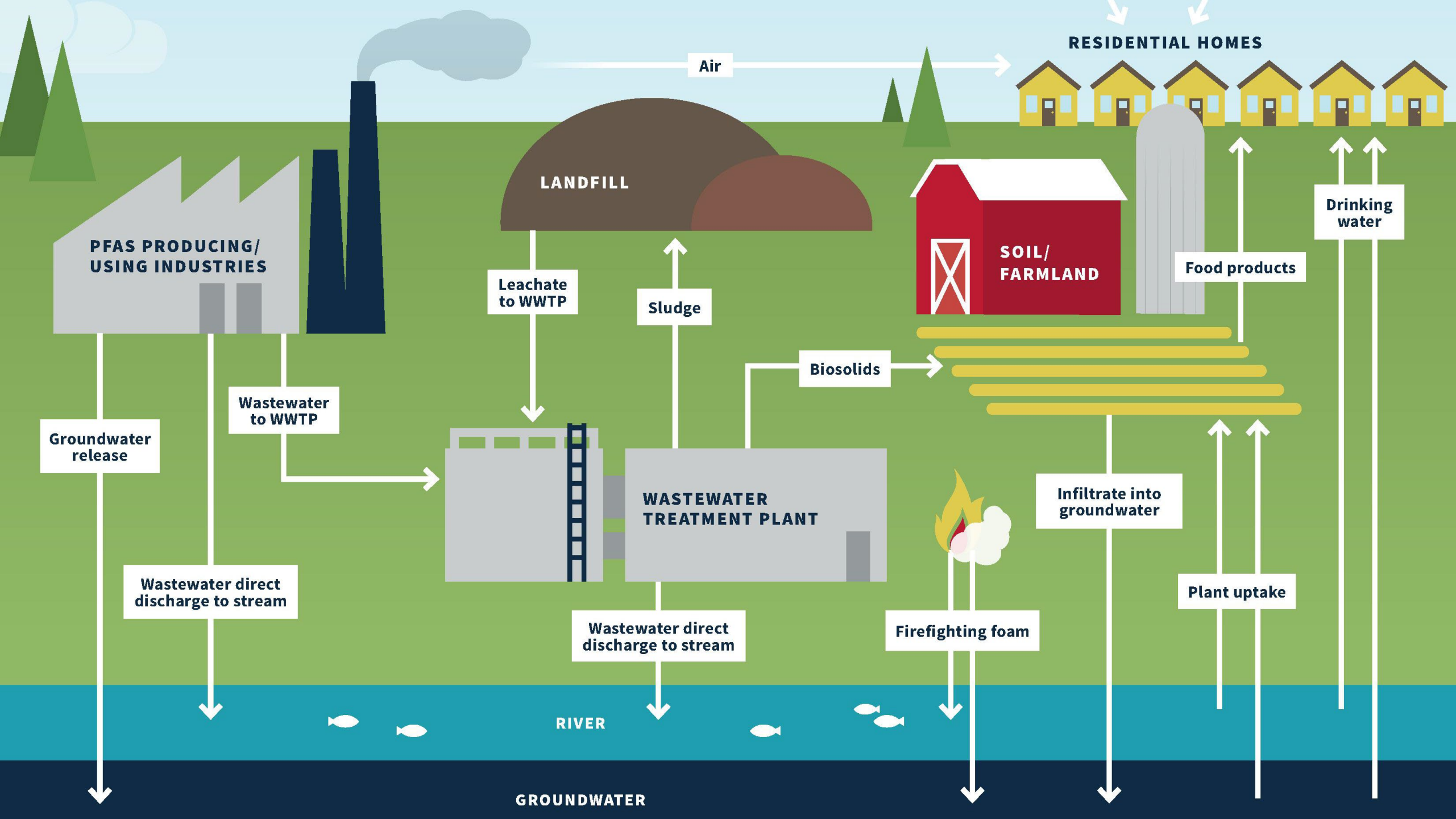
## Why the concern?

- 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
- Lack of Federal Standards

# PFAS Uses



<https://www.sixclasses.org/videos/pfas>



# Michigan PFAS Standards

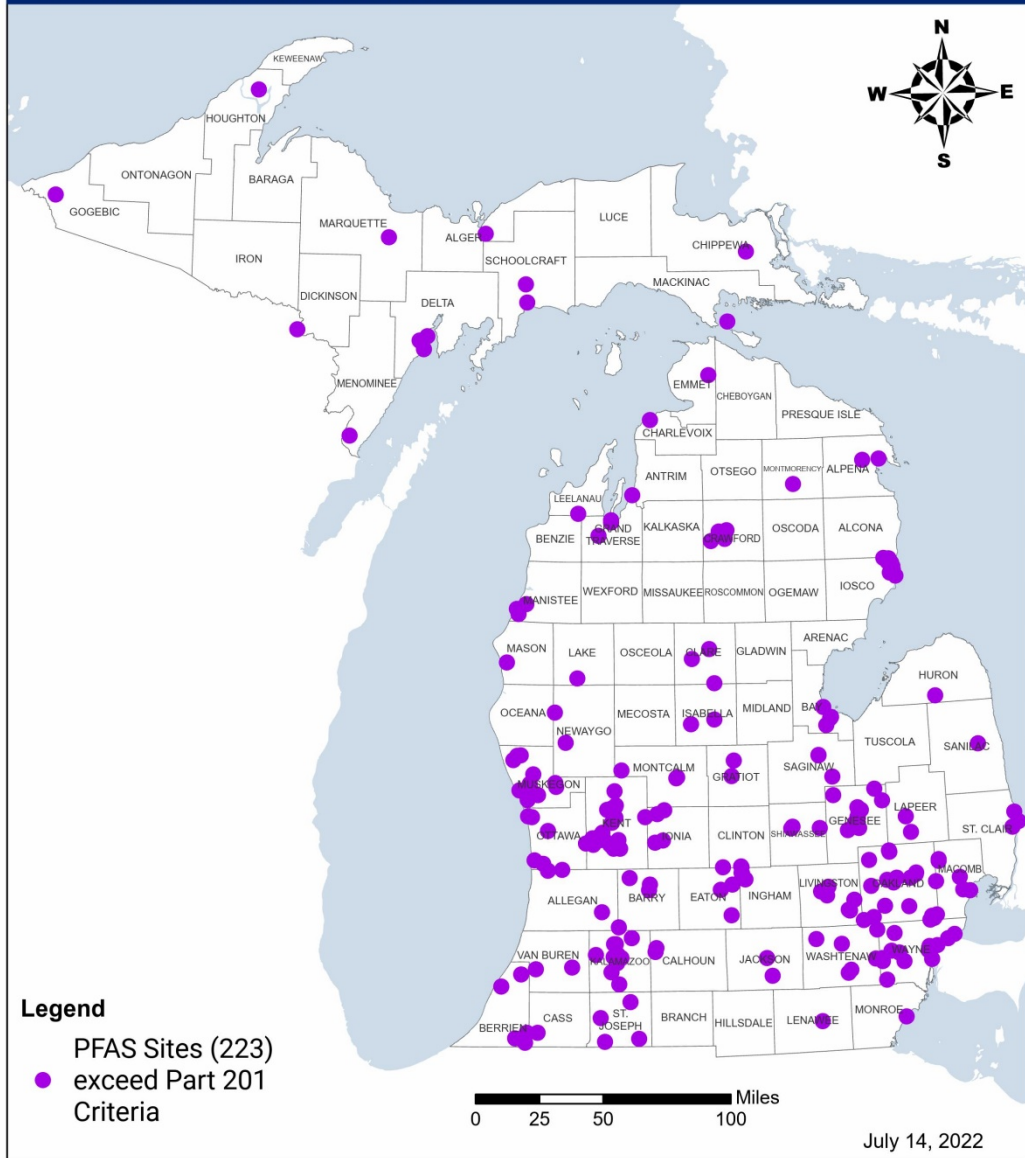
Compound	Michigan Standards
PFNA	6 ppt
PFOA	8 ppt
PFOS	16 ppt
PFHxS	51 ppt
GenX (HFPO-DA)	370 ppt
PFBS	420 ppt
PFHxA	400,000 ppt





## Lakes and Streams Investigations

- Collecting water and fish samples

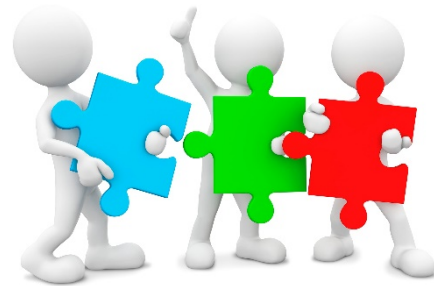
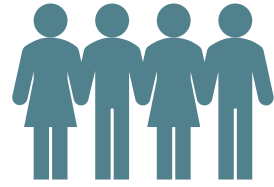


## Sites Being Investigated

- Prioritized Investigations Based on Known or Suspected Sources, Potential for Exposure
- Protect Drinking Water Pathway
- Multiple Other Investigations Underway

# Citizens Advisory Workgroup

- Residents From Impacted Communities
- Key Charges:
  - Recommend How to Engage and Empower Communities
  - Recommend How to Educate the General Public



# PFAS and Health

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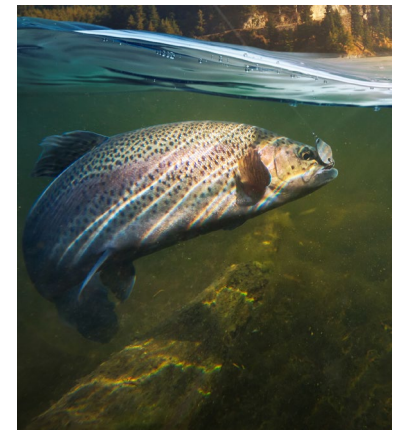
Amber Klase, Toxicologist  
Michigan Department of Health and Human Services  
517-331-1681  
[KlaseA@Michigan.gov](mailto:KlaseA@Michigan.gov)

# The Role of MDHHS/ Local Health Department (LHD)

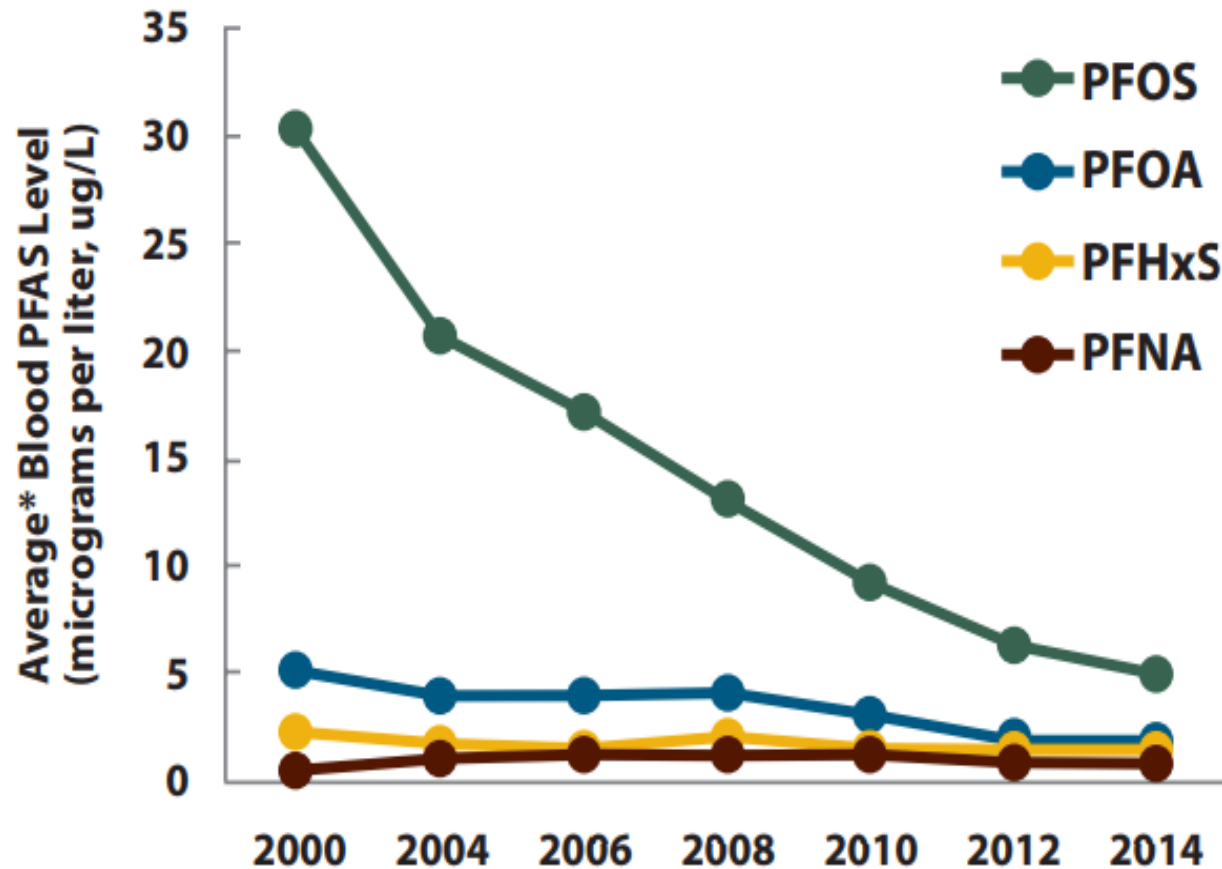
- Understand the health concerns facing your community
- Develop a plan to investigate and address health risks
  - EGLE leads the site investigation
  - MDHHS and the Local Health Department lead the public health planning and response
- Evaluate PFAS exposures to residents in the community
  - Recommend public health actions as needed

# Exposure to PFAS Chemicals

- Drinking contaminated water
- Eating fish caught from water contaminated by PFAS
  - “Eat Safe Fish” Guidelines
- Incidental swallowing of contaminated soil or dust
- Eating food packaged in materials containing PFAS
- Using some consumer products
- PFAS absorption through skin is typically not a concern



# Blood levels of the most common PFAS in people in the United States 2000-2014



\* Average = geometric mean

**Data Source:** Centers for Disease Control and Prevention. Fourth Report on Human Exposure to Environmental Chemicals, Updated Tables, (January 2017).

# Associated Human Health Outcomes PFOA and/or PFOS

- Reduced fertility
- High blood pressure or pre-eclampsia in pregnant women
- Small decreases in infant birth weight
- Higher cholesterol
  - Especially total cholesterol and LDL cholesterol



# Associated Human Health Outcomes PFOA and/or PFOS

- Thyroid disease
- Liver damage
- Decreased immune system response to vaccines
- Developing certain types of cancer
  - In particular, kidney and testicular cancers\*

\* PFOA only

# Multiple Lines of Consideration for Determining Public Health Response Actions

- MDHHS Comparison Values
- Residential Well Results (individually and collectively)
- Site-specific information (e.g., known source, geology, etc.)

# MDHHS Comparison Values

- MDHHS Comparison Values are the lowest of:
  - MDHHS Public Health Drinking Water Screening Level
  - MPART Health-Based Value or Maximum Contaminant Level (MCL)
- Both the MDHHS screening levels and the MCL were set to protect everyone
  - including those most at risk of harm to their health: fetuses and breastfed babies

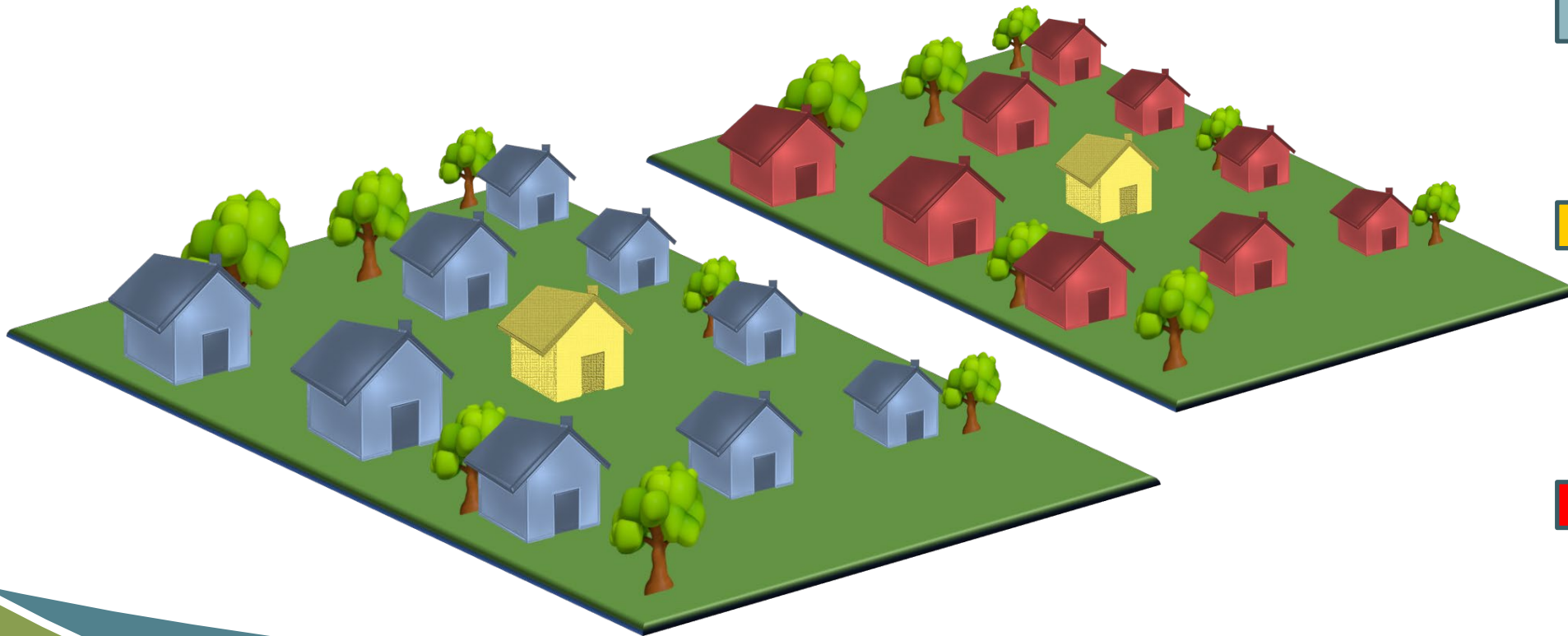
# MDHHS Comparison Values




PFAS	Comparison Values
PFOS	8 ppt <sup>A</sup>
PFOA	8 ppt <sup>B</sup>
PFNA	6 ppt <sup>B</sup>
PFHxS	51 ppt <sup>B</sup>
PFBS	420 ppt <sup>B</sup>
PFHxA	400,000 ppt <sup>B</sup>
GenX	370 ppt <sup>B</sup>

A. MDHHS Public Health Drinking Water Screening Level

B. MPART Health-Based Value or Maximum Contaminant Level (MCL)

# Residential Well Results (individually and collectively)



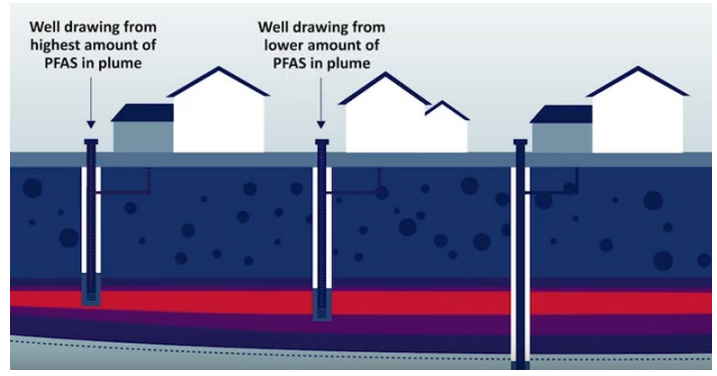
-  No Detection
-  Detected but less than the comparison value
-  Exceedance

# Site-Specific Information

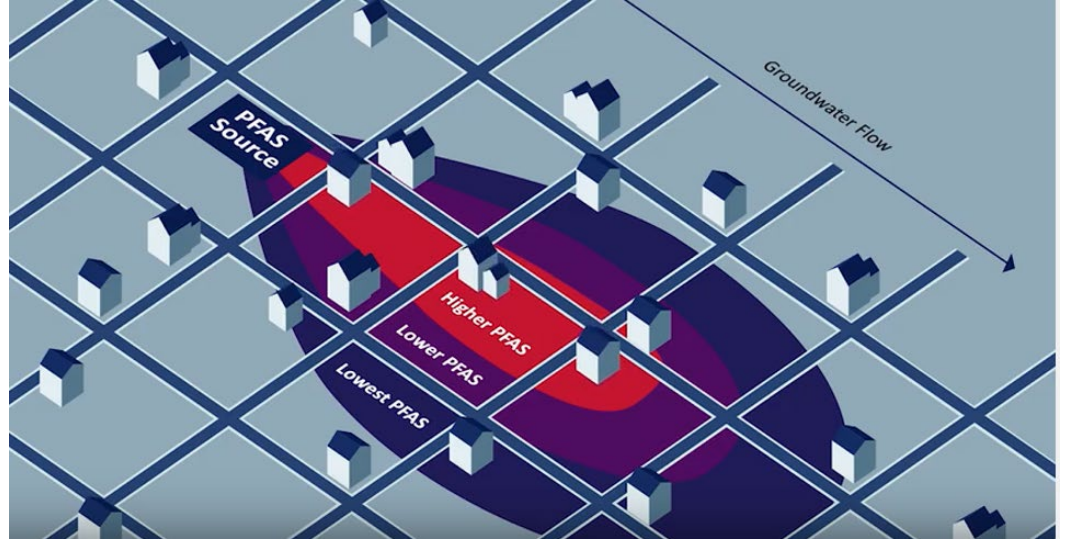
## Known Source



## Geology



## Plume



# MDHHS/LHD

## Public Health Response Actions

- No public health actions necessary
- Recommend filter or use of alternate water
  - Need time to conduct investigation
  - Provides residents with protection from potential fluctuations in PFAS levels, if any, while investigation is ongoing
- Education
  - Provide information on PFAS in drinking water



**District Health  
Department #10**  
*Healthy People, Healthy Communities*

# Point-of-Use Home Filters

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DISTRICT HEALTH DEPARTMENT #10 (DHD#10)

JULY 19, 2022

KATIE HANER  
231-902-8528

[KHANER@DHD10.ORG](mailto:KHANER@DHD10.ORG)



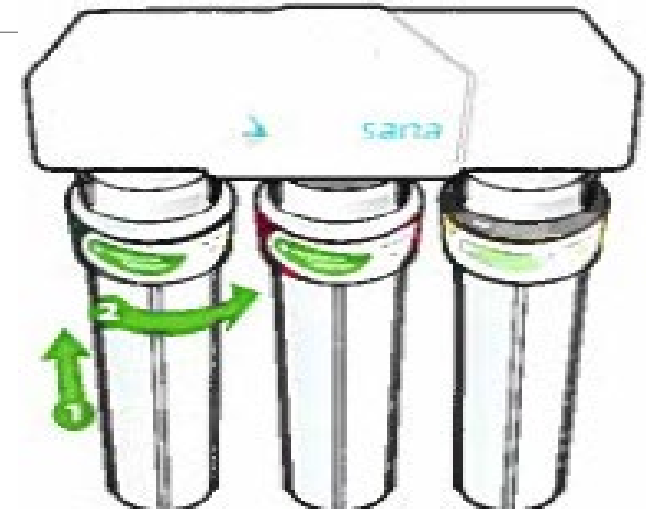
# MDHHS Point-of-Use Filters

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NSF P473 Certification/Standard 53

Certified to remove up to 96% of PFOA and PFOS

Certified to reduce PFOA + PFOS concentrations up to 1,500 ppt



Full system certified to NSF/ANSI Standards 42, 53, 401 and conforms to NSF protocol P473.

# How do you know if you qualify for a free point-of-use filter?

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1

You will receive communication from the Michigan Department of Health and Human Services (MDHHS) recommending use of a water filtration system.

2

You will receive a follow-up communication from DHD#10 encouraging you to pick up a free point-of-use filter from your local DHD#10 office.

Your local office is:

**DHD#10 Newaygo Office,  
1049 Newell, White Cloud**

3

If you have questions or concerns about receiving a filter, filter installation, or filter maintenance contact:

**Katie Haner  
231-902-8528  
khaner@dhd10.org**

# What to expect when picking up your filtration system

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## What to bring:

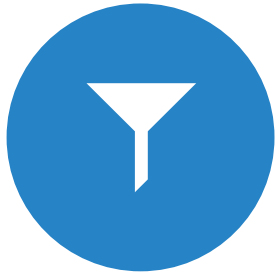
Your MDHHS or DHD#10 letter as proof you are eligible to receive a filter

## What you'll receive:

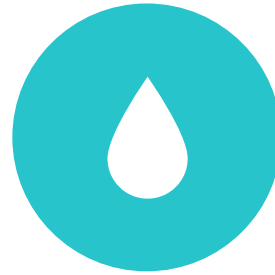
- A filter and one box of replacement cartridges, good for one year
- A phone number for you to call to have a plumber install your filter, free of charge
- Instructions on how to maintain your filter, replace cartridges, and what to do if a part breaks

# About your filter

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Your filter is certified by both NSF and the American National Standard Institute (ANSI).



Each filter cartridge is set to last for about 6 months, or through 800 gallons of water. You will need to get a new set of cartridges from DHD#10 every 6 months.



It is to be installed under the kitchen sink and stay within the home where drinking water is found to contain PFAS.



You may dispose of used cartridges in your household trash as they are not considered hazardous material.

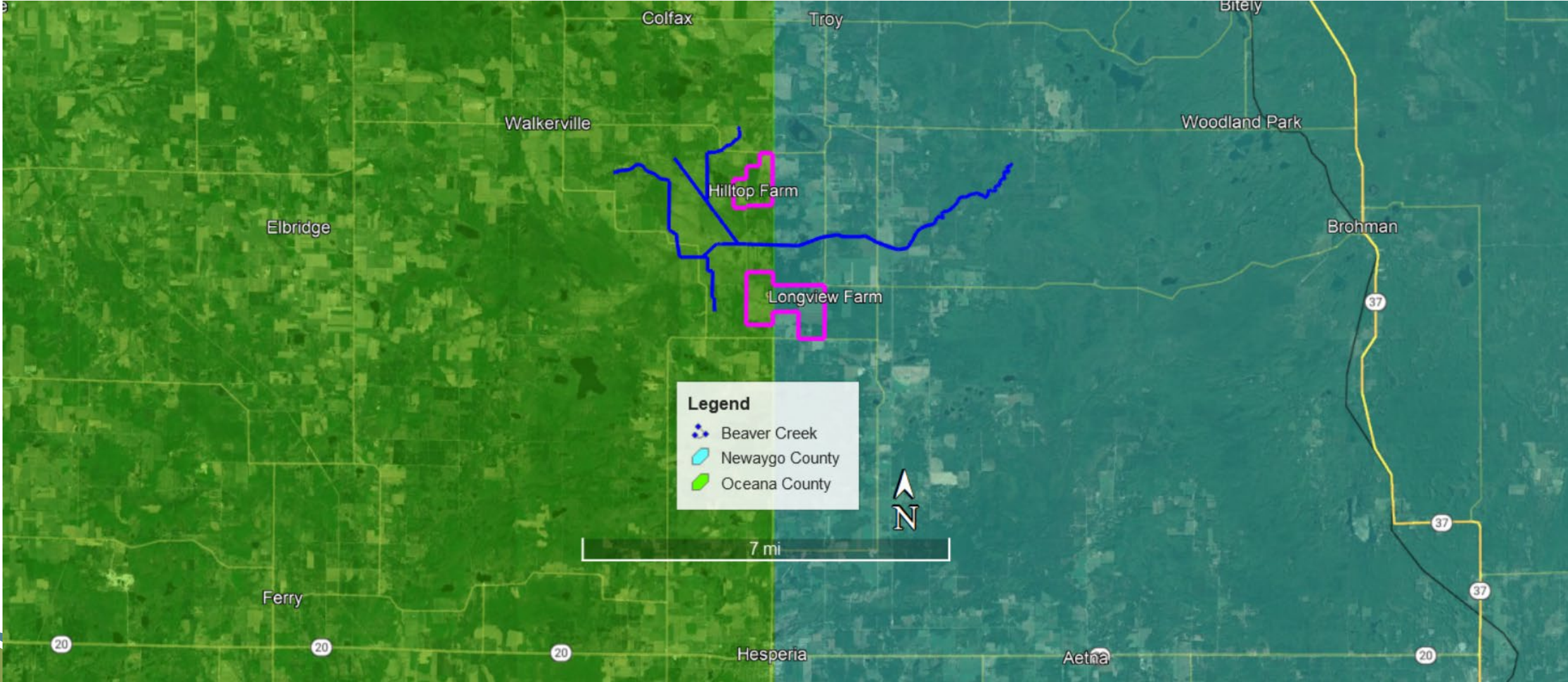
# Eagle Ottawa Newwaygo Farms PFAS Site Investigation

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Aaron Assmann, PFAS Site Lead  
Michigan Department of Environment, Great Lakes, and Energy  
616-430-5275

[AssmannA@michigan.gov](mailto:AssmannA@michigan.gov)

# Eagle Ottawa Newwaygo Farm Locations



# Background

- Eagle Ottawa Leather Company – operations ceased 2007
  - Mid-1990s to 2006/2007
    - Tannery wastewater residuals transported from Grand Haven
      - Agricultural Use Authorization (AUA)
    - Composted and then land applied to Longview and Hilltop fields
      - Eagle Ottawa Newaygo Farms
      - Leavitt (Oceana Co.) and Beaver (Newaygo Co.) Townships
    - 2004 to Present – Concentrated Animal Feeding Operations (CAFO) - swine
    - 2007 – Eagle Ottawa Newaygo Farms sells Longview and Hilltop locations
    - December 2021 – New owner submits Baseline Environmental Assessment (BEA) to EGLE
      - Ownership starting June 2021
      - Initial PFAS data

# Baseline (BEA) Investigation

## Longview

- Max concentrations
  - Shallow groundwater (depth 0.5' to 10')
    - 1,800 parts per trillion (ppt) – PFOA
    - 80 ppt – PFOS
    - 8.3 ppt – PFNA
  - Surficial soil (depth 1' to 2')
    - 240,000 ppt – PFOS
  - Drinking water well (depth unknown)
    - Non-detect

## Hilltop

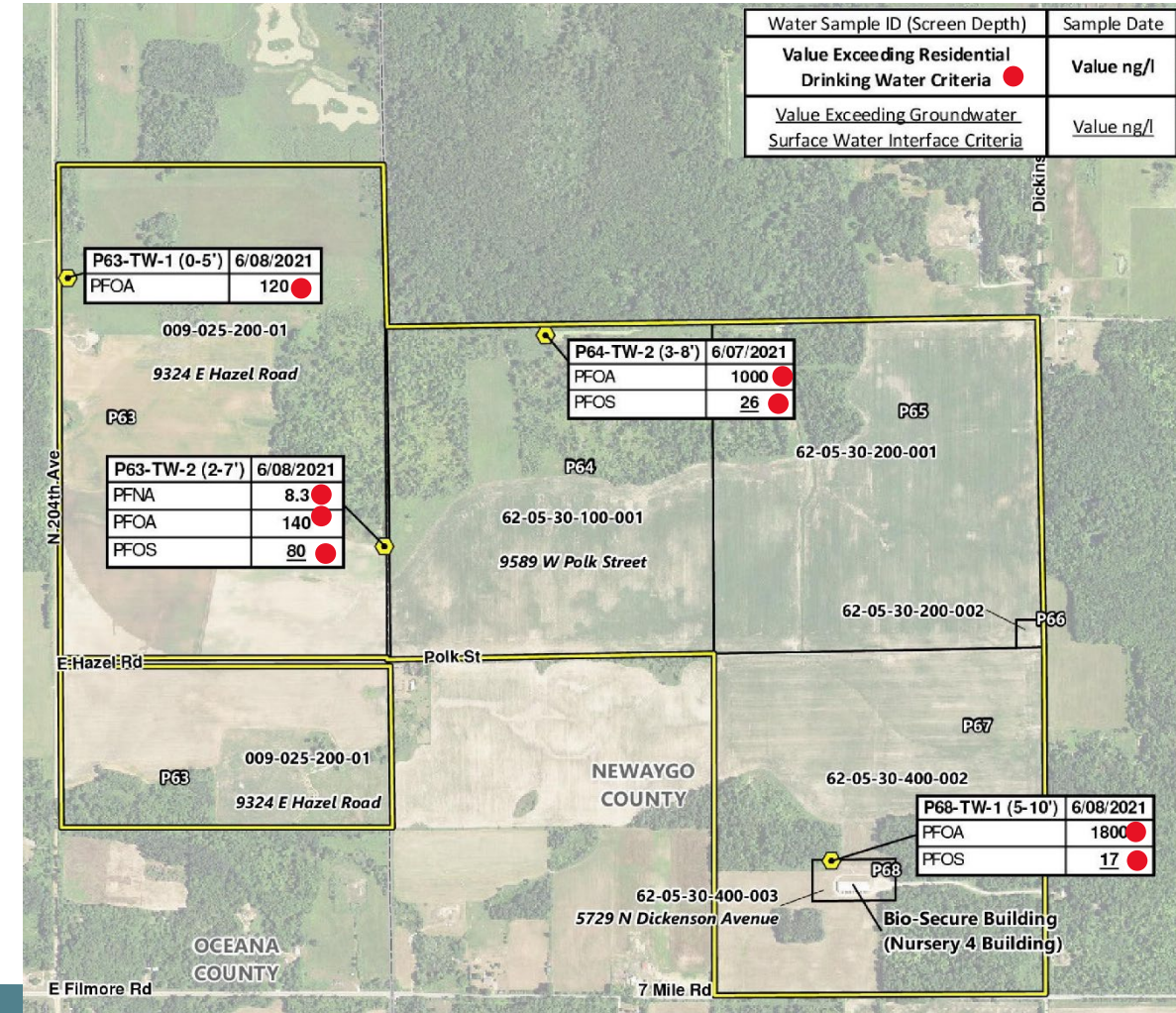
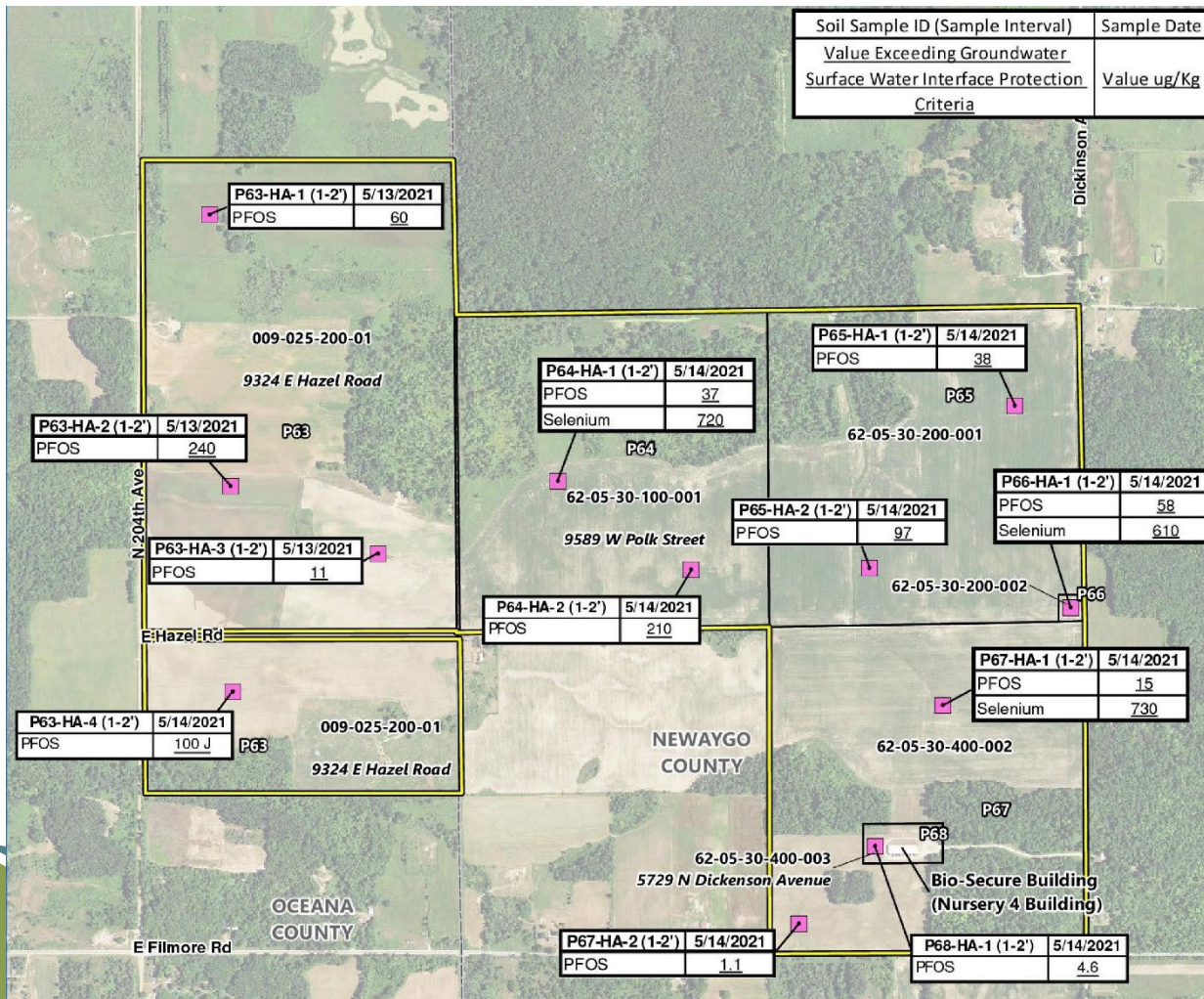
- Max concentrations
  - Shallow groundwater (depth 4.5' to 19')
    - 307 ppt – PFOA
    - 680 ppt – PFOS
    - 20 ppt – PFNA
  - Surficial soil (depth 1' to 2')
    - 200,000 ppt – PFOS
  - Drinking water well (depth 50' - unconfirmed)
    - 307 ppt – PFOA
      - 740 ppt (resample) – PFOA



# BEA Data Maps – Longview (800 acres)

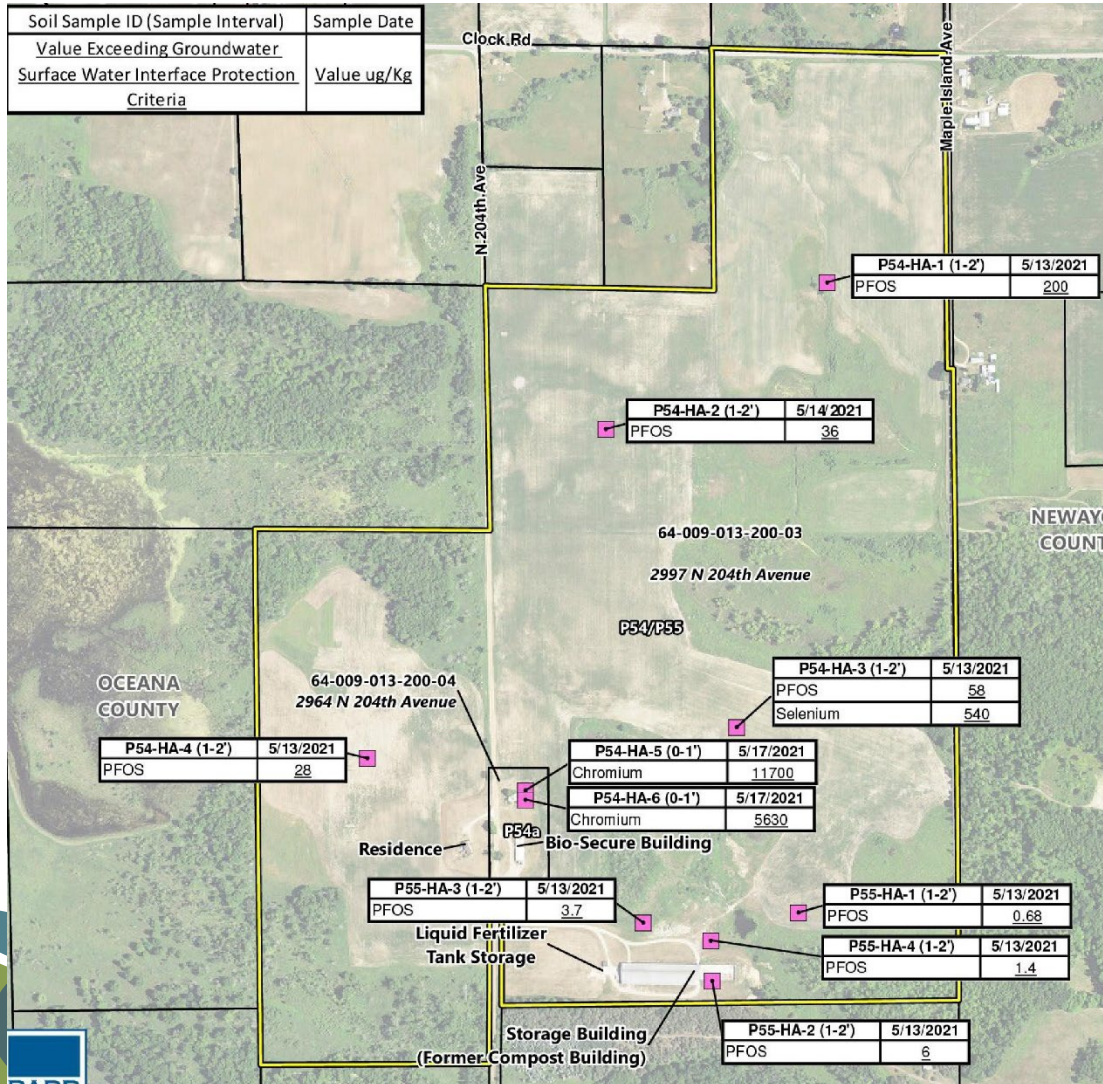
## Soil

## Shallow Groundwater

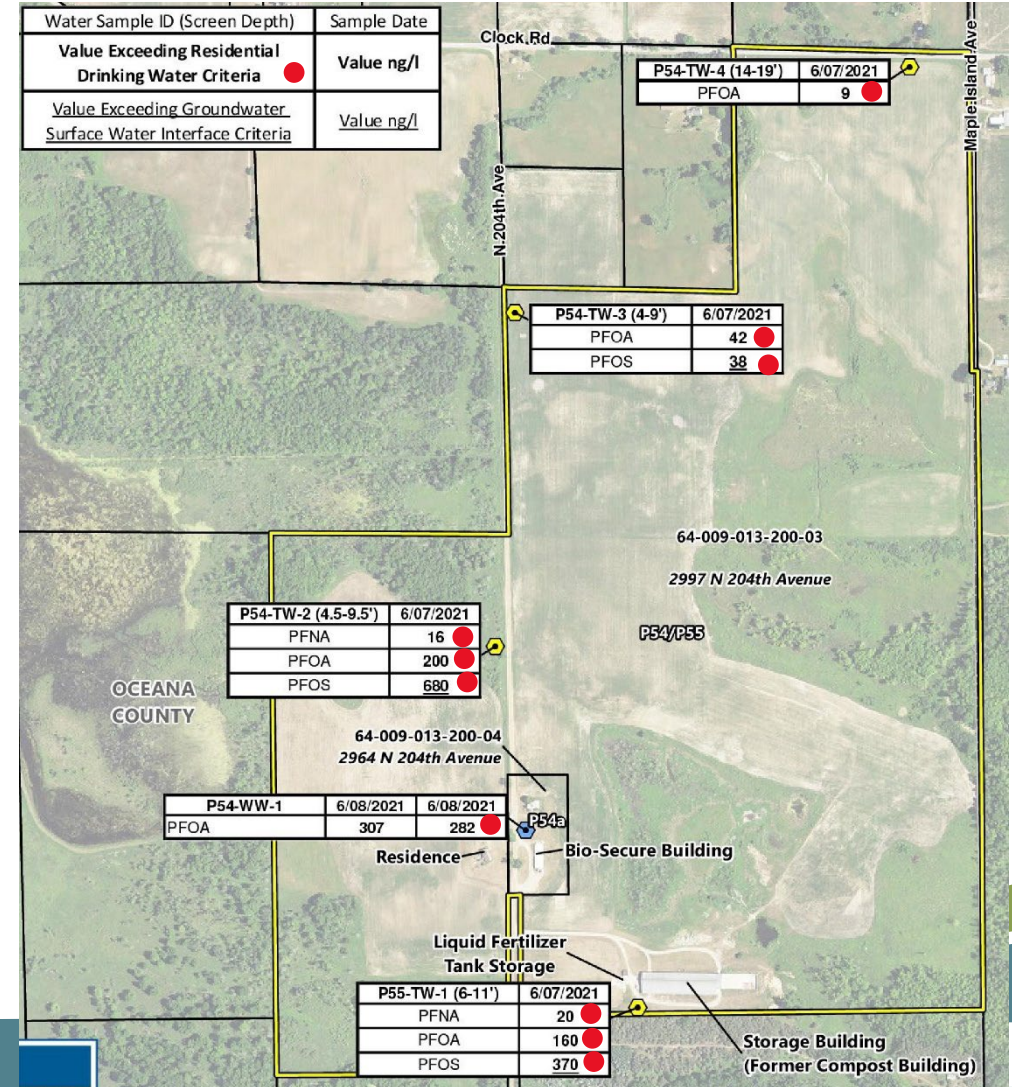


# BEA Data Maps – Hilltop (300 acres)

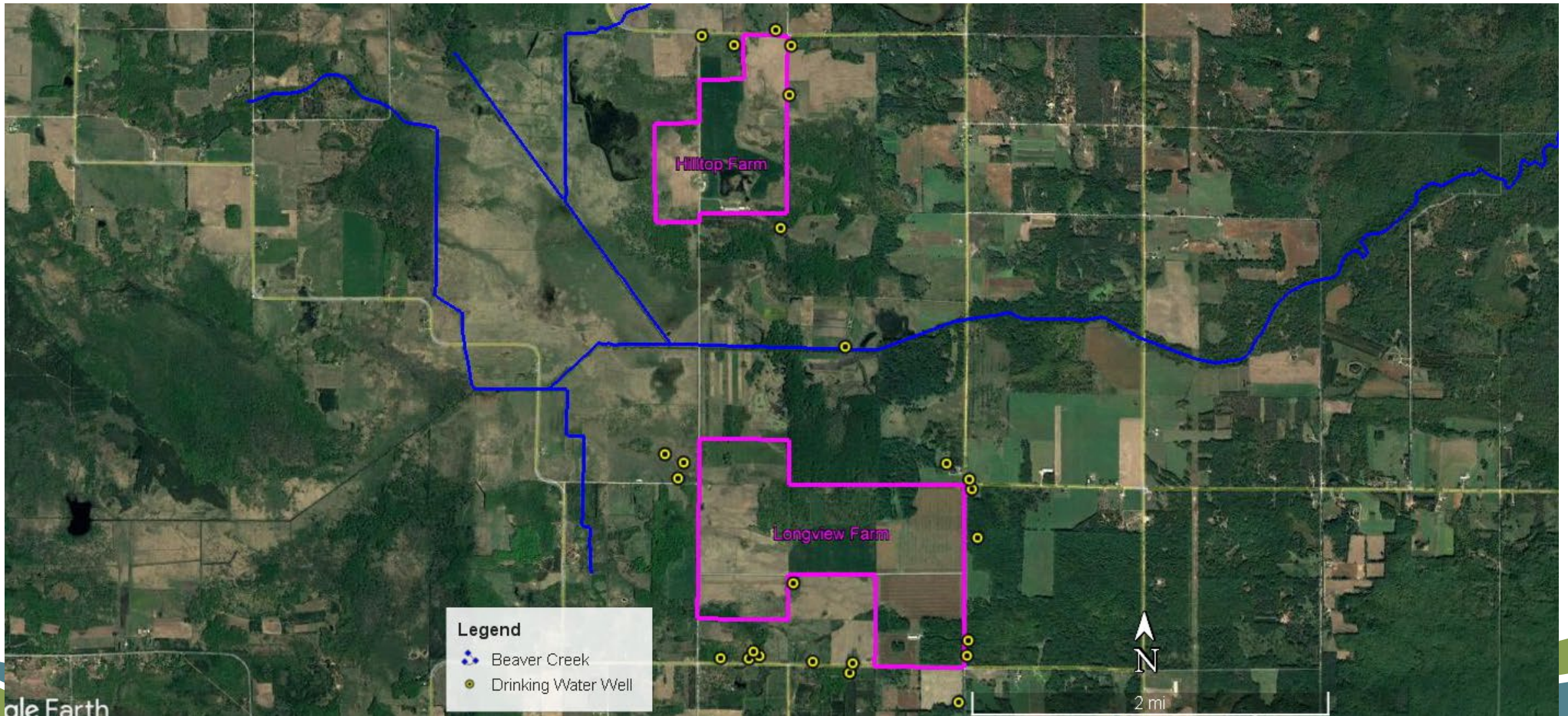
## Soil



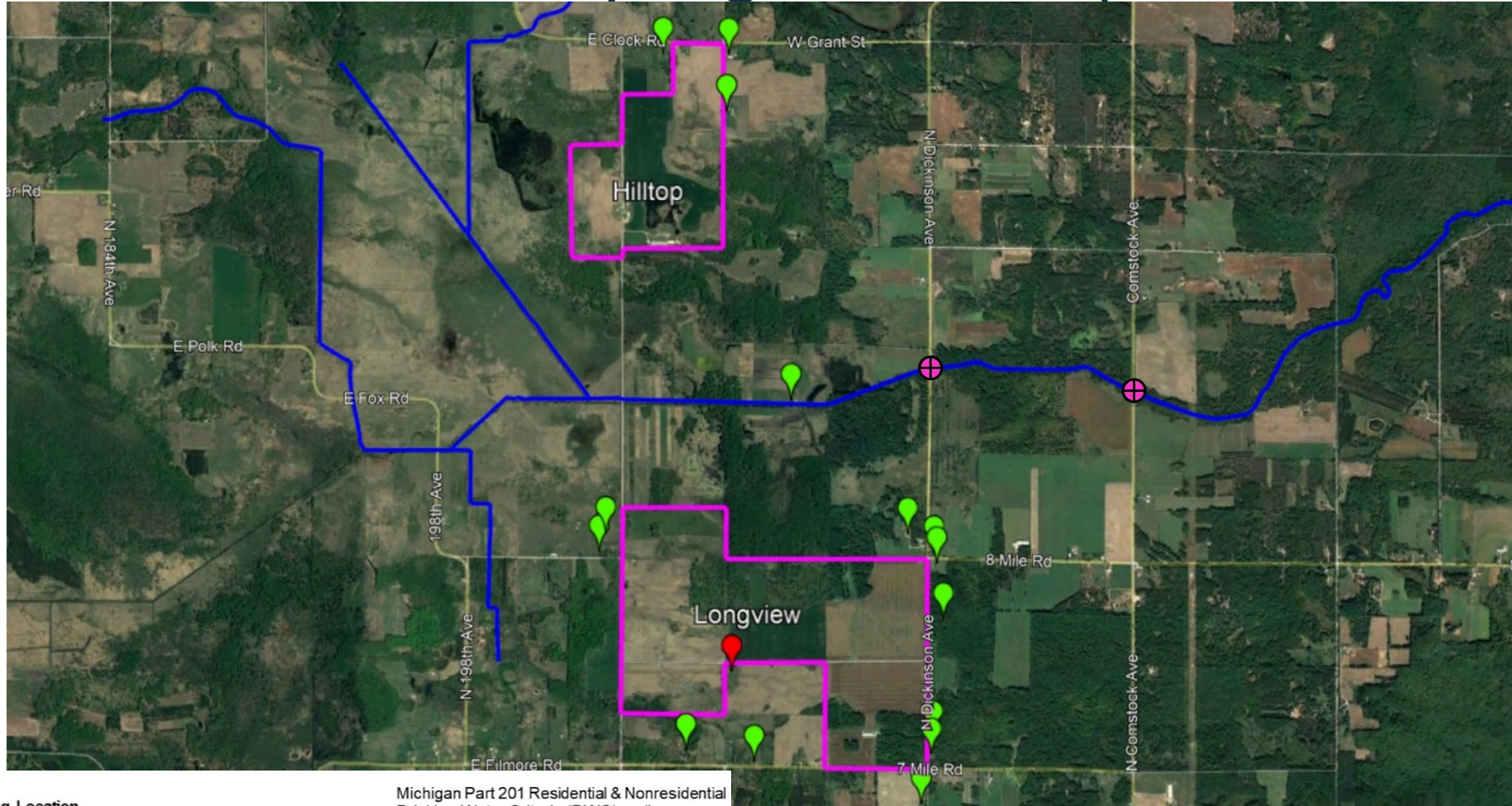
## Shallow Groundwater



# Residential Well Sampling Requests – 25 Locations



# Residential Well Sampling – Results (16 Locations)



## Legend

### Well Sampling Location

- No Detections of the 18 Analyzed PFAS
- One or more of the 18 Analyzed PFAS Detected
- One or more of the 7 PFAS with Michigan Part 201 Drinking Water Criteria Detected Above Criteria

Beaver Creek

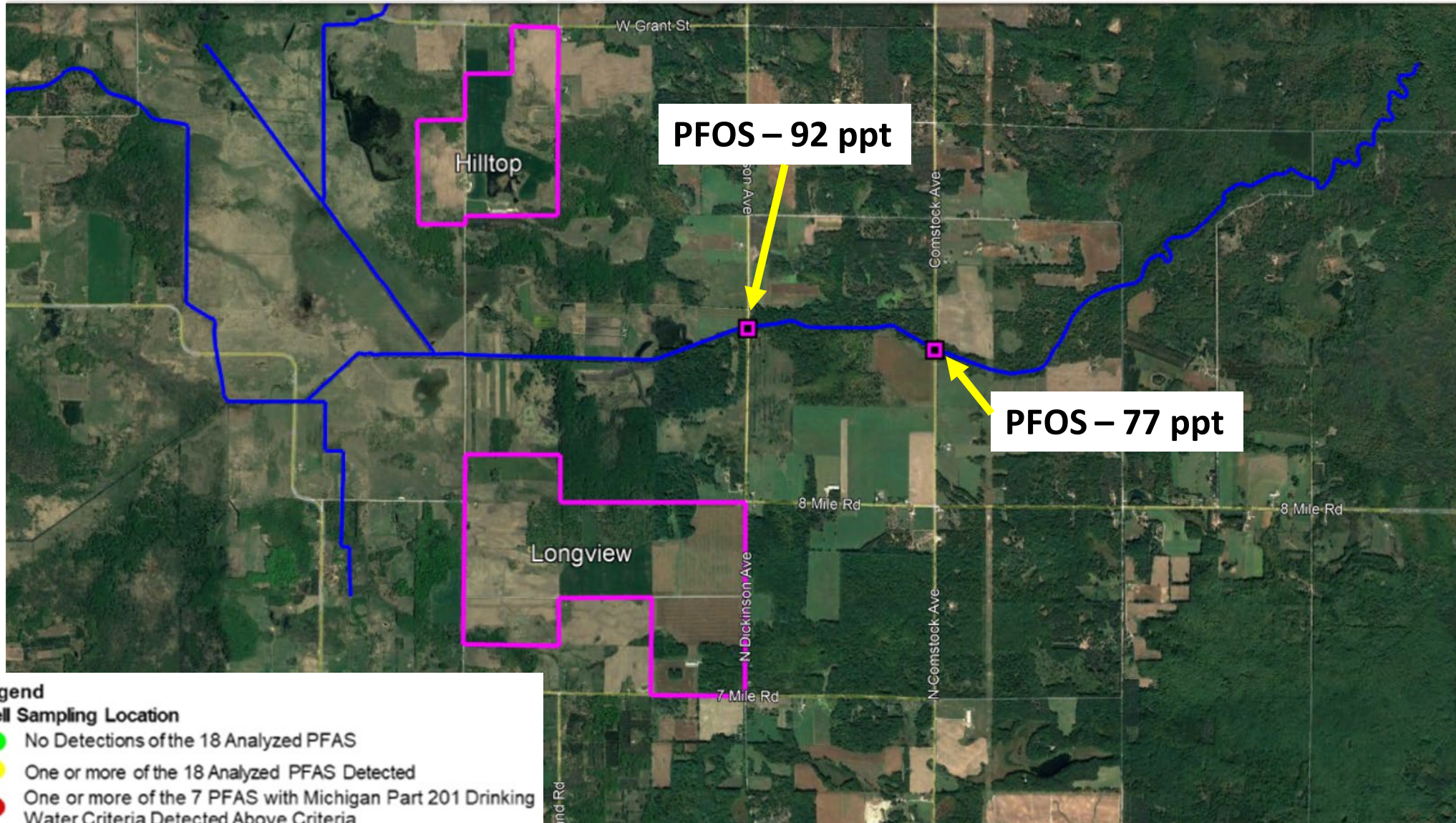
Surface water sample location

Michigan Part 201 Residential & Nonresidential Drinking Water Criteria (DWC), ng/L

- PFHxA = 400,000
- PFOA = 8
- PFNA = 6
- PFBS = 420
- PFHxS = 51
- PFOS = 16
- GenX = 370






# Surface Water Results




## Legend

### Well Sampling Location

-  No Detections of the 18 Analyzed PFAS
-  One or more of the 18 Analyzed PFAS Detected
-  One or more of the 7 PFAS with Michigan Part 201 Drinking Water Criteria Detected Above Criteria

 Beaver Creek

 Surface water sample location

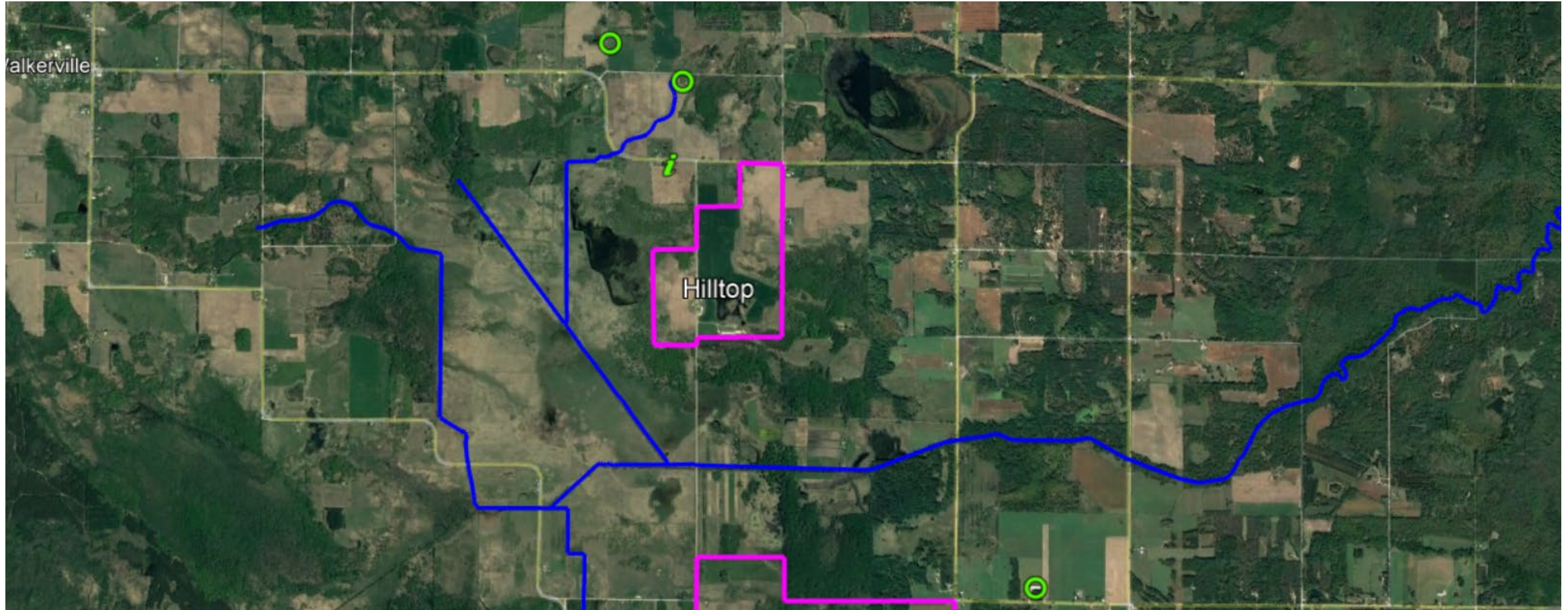


North

# Additional Information – Due Care

- Current owner
  - Installed granular activation carbon (GAC) filter
    - Hilltop water well
  - Assessed recent pig feed grown from Hilltop and Longview
    - 0.7% to 2% - mostly corn kernels
    - 98% to 99.3% grown from other sources
  - Irrigation wells analyzed for PFAS
    - Hilltop – non-detect
    - Longview – PFHxA = 5.4 ppt < drinking water criteria (400,000 ppt)

# Additional Information – Due Care



## Legend

### Well Sampling Location

- No Detections of the 32 Analyzed PFAS
- One or more of the 32 Analyzed PFAS Detected
- One or more of the 7 PFAS with Michigan Part 201 Drinking Water Criteria Detected Above Criteria

- Beaver Creek
- ⊕ Surface water sample location
- Farm Water Well
- Ⓜ Irrigation Well

# Next Steps and Additional Info.

- March 1, 2022
  - EGLE letter to Lear Mexican Seating Corporation (Lear)
- June 10, 2022
  - Lear response to EGLE
  - Commits to undertake investigative response activities (TBD)
- June 28, 2022
  - MDARD letter to Jack Pine Farms (request for information)
- Compliance oversight
  - Updates posted to MPART webpage (available to public)
    - <https://bit.ly/3uAAEOr>
- Beaver Creek
  - EGLE to collect additional surface water and fish samples (TBD)



# MICHIGAN PFAS ACTION RESPONSE TEAM (MPART)

[www.Michigan.gov/PfasResponse](http://www.Michigan.gov/PfasResponse)



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY



# Questions?

## **Other Resources:**

Eagle Ottawa Newaygo Farms PFAS Response Page:

<https://www.michigan.gov/pfasresponse/investigations/sites-aoi/oceana-county/eagle-ottawa-newaygo-farms>