Correspondence From the Field: Working with Communities Impacted by PFAS Contamination

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Freshwater Collaborative OF WISCONSIN

UNIVERSITY OF WISCONSIN-LA CROSSE RIVER STUDIES CENTER

Research funded by a UWL Faculty Research Grant

Assessing Institutional Response and Household Coping Strategies to PFAS Water Contamination on French Island, Wisconsin

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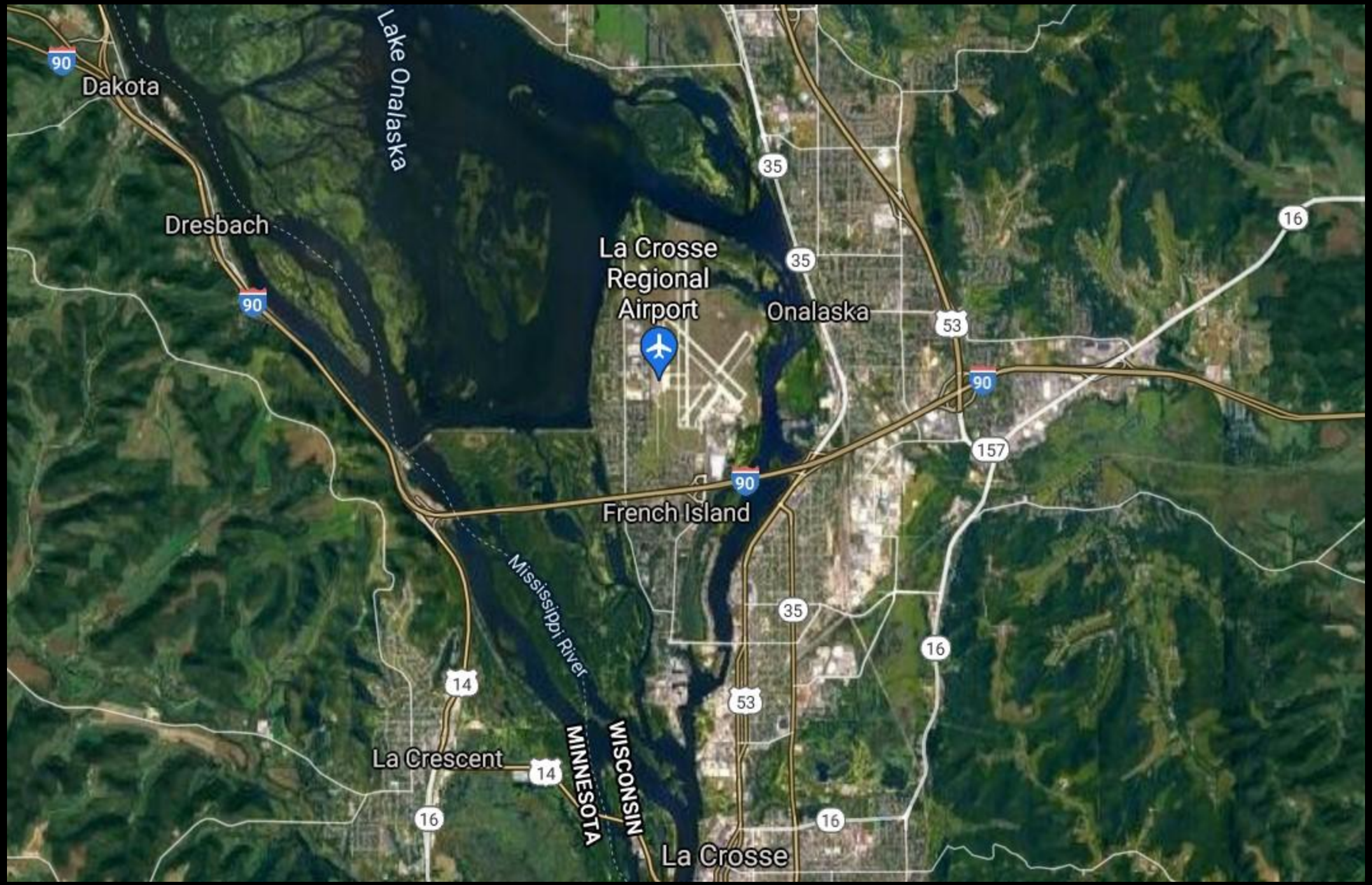

Dakota
Lake Onalaska
Dresbach
La Crosse
Regional
Airport
Onalaska
French Island
Mississippi River
La Crescent
MINNESOTA
WISCONSIN
La Crosse
90
35
53
16
157
14

Research Objectives

- 1. Identify specific coping strategies adopted by households dealing with PFAS contamination

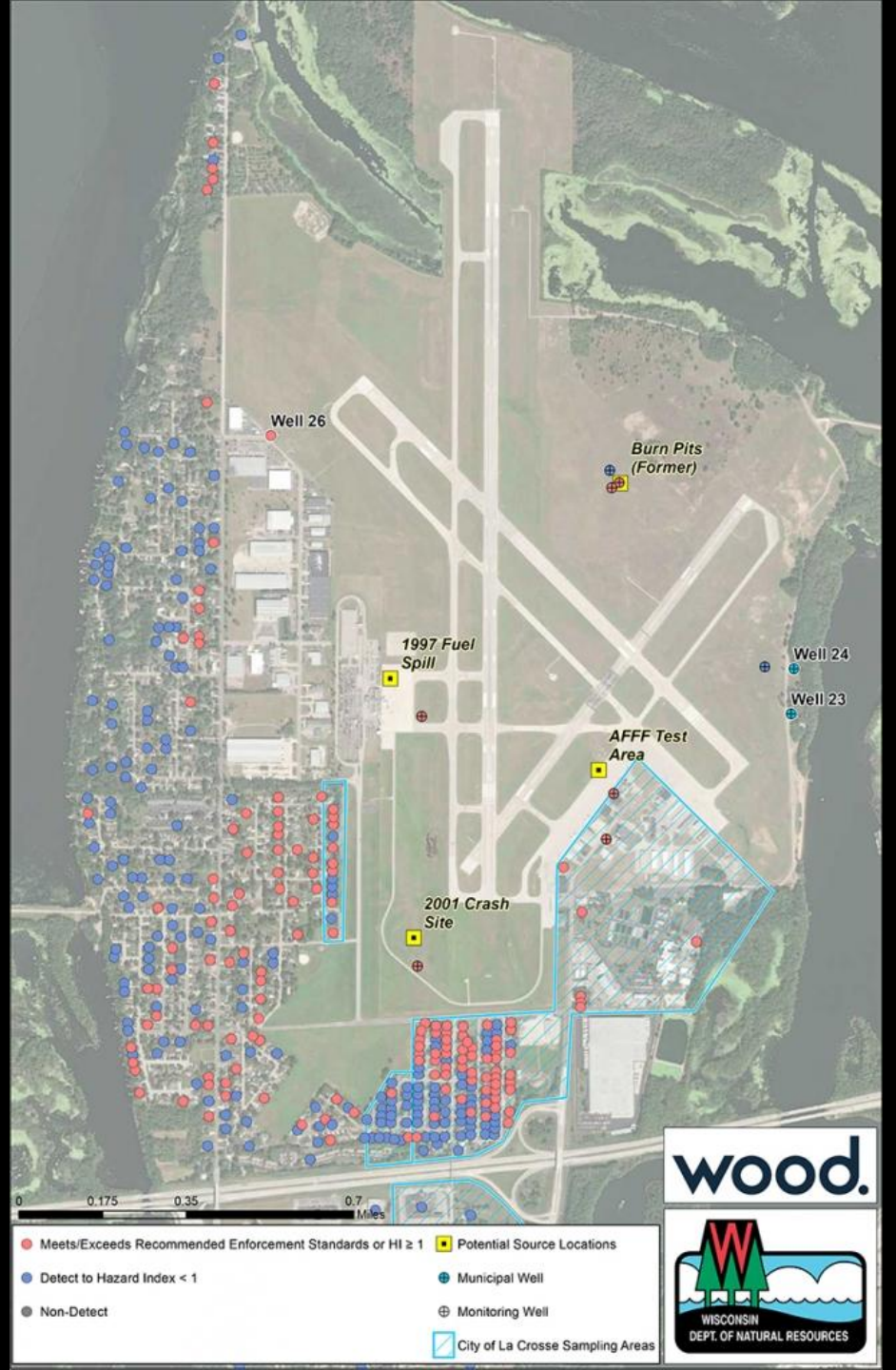
- 2. Assess the unmet needs in terms of institutional response to the contamination issue

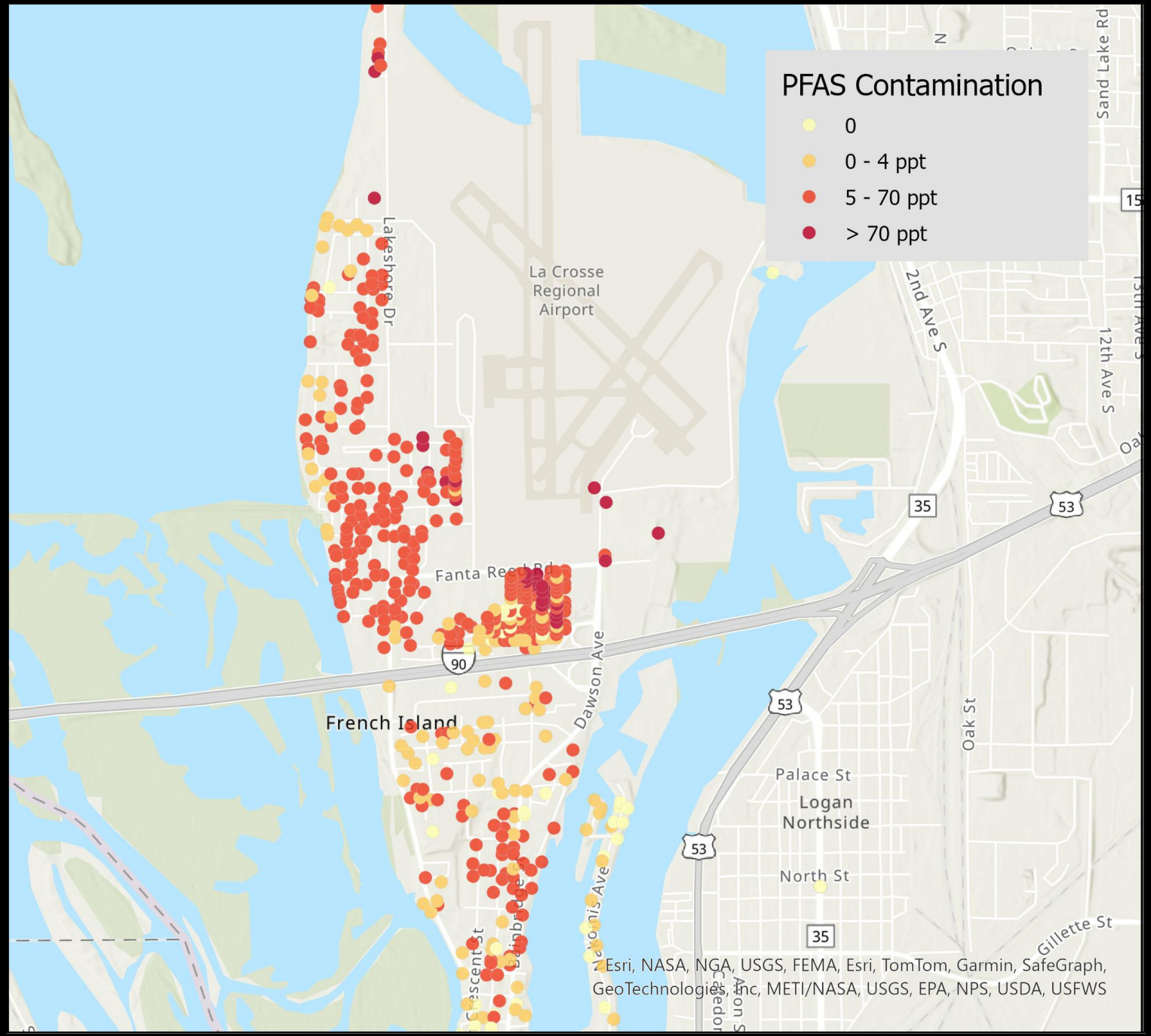
Timeline

2014: Wells 23 & 24 found to have high levels of PFAS

2020: The City of La Crosse tells the community of French Island

Today: Still receiving water bottle drop-off from Culligan Water Company




PFAS Contamination
0
0 - 4 ppt
5 - 70 ppt
> 70 ppt
La Crosse Regional Airport
Lakeshore Dr
Fanta Reed Rd
French Island
Dawson Ave
Palace St
Logan Northside
North St
Oak St
2nd Ave S
12th Ave S
Sand Lake Rd
Gillette St
Crescent St
Cambridge Ave
Avon St
90
53
35
Esri, NASA, NGA, USGS, FEMA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

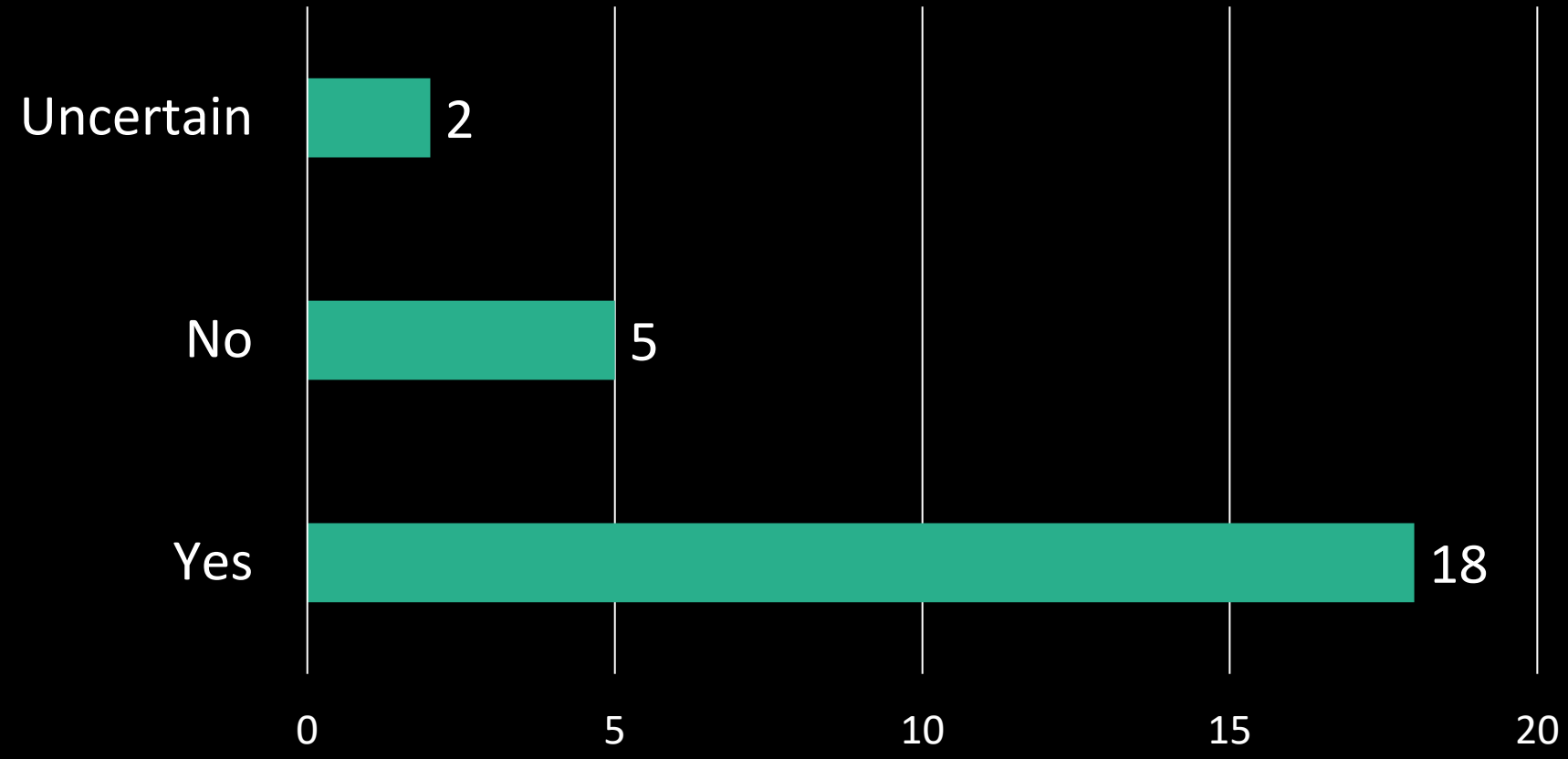
Objectives:

- ✓Household Coping Strategies
- ✓Household Stress
- ✓Perceptions of Response
- ✓Unmet needs of Response

- Interviewed 25 Households
- Representing 89 island residents

Photos Courtesy: Lee Donahue

Is there a health issue in your household that you think could be attributed to PFAS contamination?



n=25

Perception of Institutional Response:

How do you feel about the actions taken to respond to PFAS contamination?

Perception of Response	# of Respondents	%
Views Campbell response favorably	19	76%
Taking too long	15	60%
Poor communication	12	48%
Comments on Joint Finance Committee	**8**	**32%**
Views Campbell response unfavorable	6	24%

Unmet Needs

	# of Respondents	%
Storying/Carrying Large Bottles	11	44%
Filtration Concern	9	36%
Lack of Regulation	8	32%
Corporate Accountability	7	28%
Lack of Scientific Knowledge	6	24%
PFAS still on-site at airport	5	20%

Unmet Needs

	# of Respondents	%
Storying/Carrying Large Bottles	11	44%
Filtration Concern	9	36%
Lack of Regulation		
Corporate Accountability		
Lack of Scientific Knowledge		
PFAS still on-site at airport		

LA CROSSE Tribune

“Two Spills of Chemical firefighting foam occurred at the La Crosse Regional Airport earlier this year, reports say” by Saskia Hatvany, July 6, 2024.

The first spill, on Feb. 1, occurred during a routine test on firefighting equipment. According to the report, the airport’s operations coordinator mistakenly engaged the wrong switch, releasing four to six gallons of water containing AFFF foam into a grassy area southeast of the airport. Cleanup efforts began within two hours of the spill, and a layer of contaminated grass and soil was removed and stored in steel drums.

Less than four months later, during another routine test May 9, an airport mechanic mistakenly engaged the flow of water for approximately 60 seconds, releasing 125 gallons of foam solution onto the airport tarmac.

AFRICAN-AMERICAN, ENVIRONMENT, INCOME INEQUALITY, POLLUTION, POVERTY, RACE, SOCIAL ISSUES

Wisconsin cleanup shifts toxic PFAS burden to Alabama Black Belt community

'Father of environmental justice' says sending fluorinated firefighting foam to a landfill in the mostly poor, Black town of Emelle perpetuates racism

BY BENNET GOLDSTEIN | WISCONSIN WATCH, SARAH WHITES-KODITSCHEK AND DENNIS PILLION | AL.COM • OCTOBER 10, 2023

"The state is trucking more than 38,500 gallons of PFAS-containing firefighting foam more than 700 miles to Emelle, Alabama…

Sumter County is now home to 12,345 residents, about 70 percent of whom are Black and nearly a third of whom live in poverty."

-Bennet Goldstein

Coping Strategies:
Strategies that aim to minimize the hazard

Coping Strategy	# of Respondents	%
Bottle Water Delivery	22	86%
“Researched” PFAS	14	56%
Tested water	12	48%
Installed Filter	9	36%
Stopped Gardening	7	28%
Attending Public Meetings	7	28%

Household Stress:

How has PFAS impacted day-to-day life in your household?

	# of Respondents	%
Financial stress	18	72%
The uncertainty, the unknown	8	32%
Frustrated	8	32%
Annoyed	6	24%
Fatigued	5	24%
Anxiety	4	20%

Interpreting the Results

1. Financial stress is the dominant burden

2. Uncertainty and frustration are the main emotional stressors

3. Annoyance and fatigue reflect ongoing, daily disruption

Comparing local understandings and perceptions of health risks to PFAS contamination in Peshtigo, WI and French Island, WI

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Research Objectives

1. Assess and compare self-reported health outcomes and risk perceptions among households exposed to PFAS.

2. Examine the spatial variability of vulnerability to potential health impacts related to PFAS exposure

Method: 3,838 health surveys sent to every household on French Island and Peshtigo

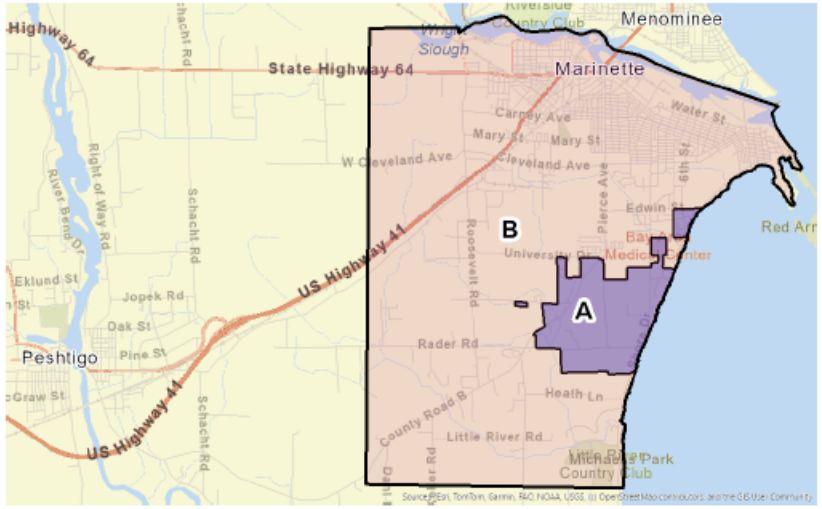
Please provide the age and sex of each person living in your household, listing yourself first. Do not include names. If you have more than seven people in your household, you may add multiple per line. If you do not have seven people in your household, you may leave spaces blank.

Example: You: 35 year old female, Person 2: 5 year old male

You (Person 1)	
Person 2	
Person 3	
Person 4	
Person 5	
Person 6	
Person 7	

Do you live in either of the marked areas in the map below?

- ☐ I live in area A
- ☐ I live in area B
- ☐ I do not live in A or B
- ☐ I do not know



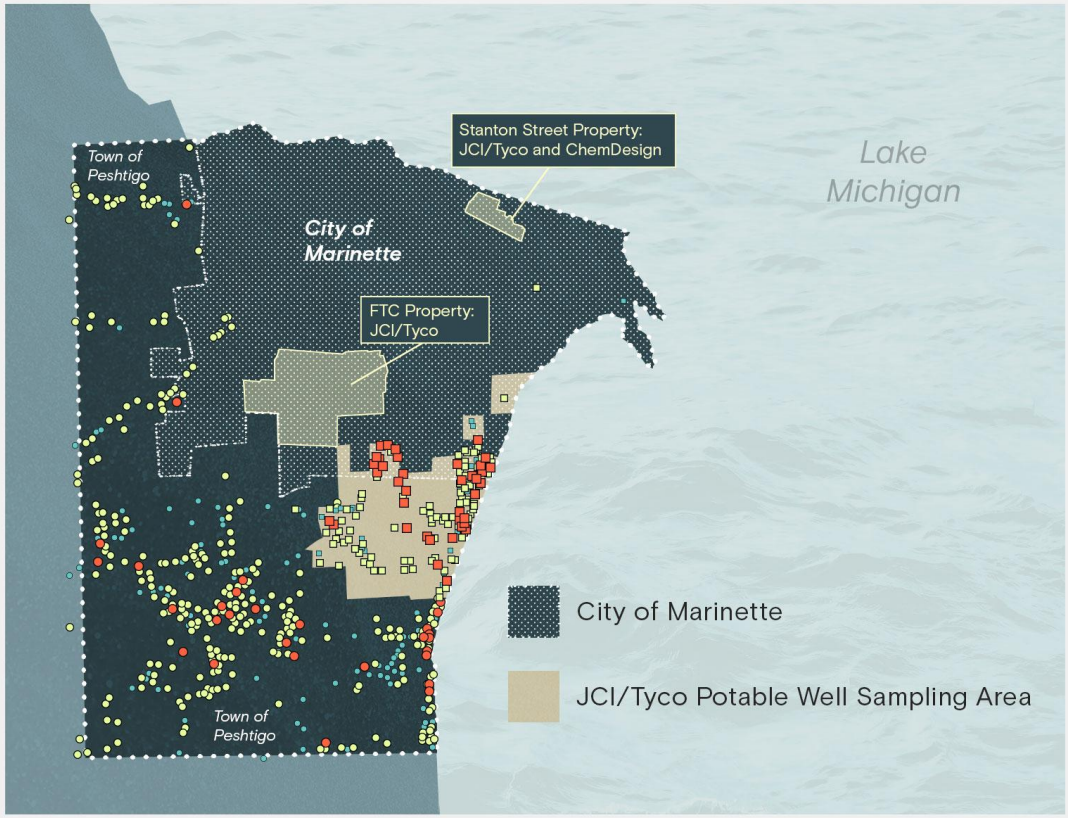
Have you or anyone in your household been diagnosed with any of the following conditions since living in the community? Please select all that apply.

- ☐ Pregnancy-related difficulties (eg. low birth weight, preterm birth, miscarriage)
- ☐ Reproductive organ disorders (eg. Polyendocrine metabolic ovarian syndrome (PMOS)/PCOS)
- ☐ Endocrine disorders (eg. Thyroid disorders, diabetes)
- ☐ Neurodegenerative disease (eg. Parkinson's, Alzheimer's)
- ☐ Neurodevelopmental disorders (eg. Autism, ADHD)
- ☐ Cancers (Please specify type): _____
- ☐ Kidney disorders (eg. kidney failure)
- ☐ Blood disorders (eg. Sickle cell anemia, hemophilia)
- ☐ Developmental delays (eg. Late walking or crawling)
- ☐ Cardiovascular disorders (eg. heart attack, arrythmia)
- ☐ Difficulties with weight (eg. over or underweight)
- ☐ Immune system disorders (eg. rheumatoid arthritis, immunodeficiency)
- ☐ Bone disorders (eg. osteoporosis, arthritis)
- ☐ Respiratory disorders (eg. asthma, COPD)
- ☐ Liver disorders (eg. liver failure)
- ☐ Other: Please explain _____
- ☐ None

If more than one member of your household has been diagnosed with one of these conditions, please elaborate here.

Private Drinking Water Well Sampling Results

Through December 2021



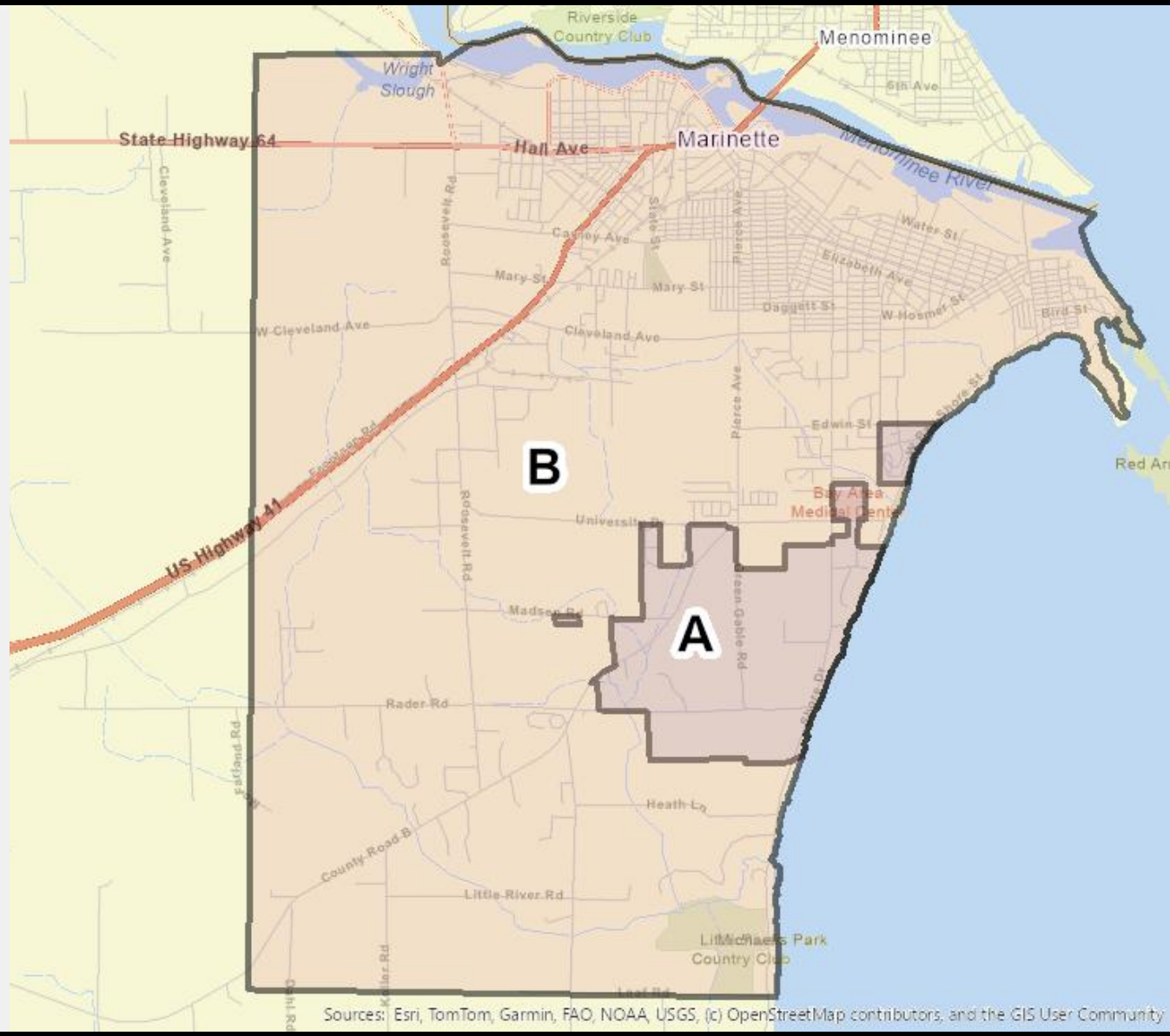
○ Sampled by DNR □ Sampled by JCI/Tyco

■ ● PFAS >= Recommended Enforcement Standards

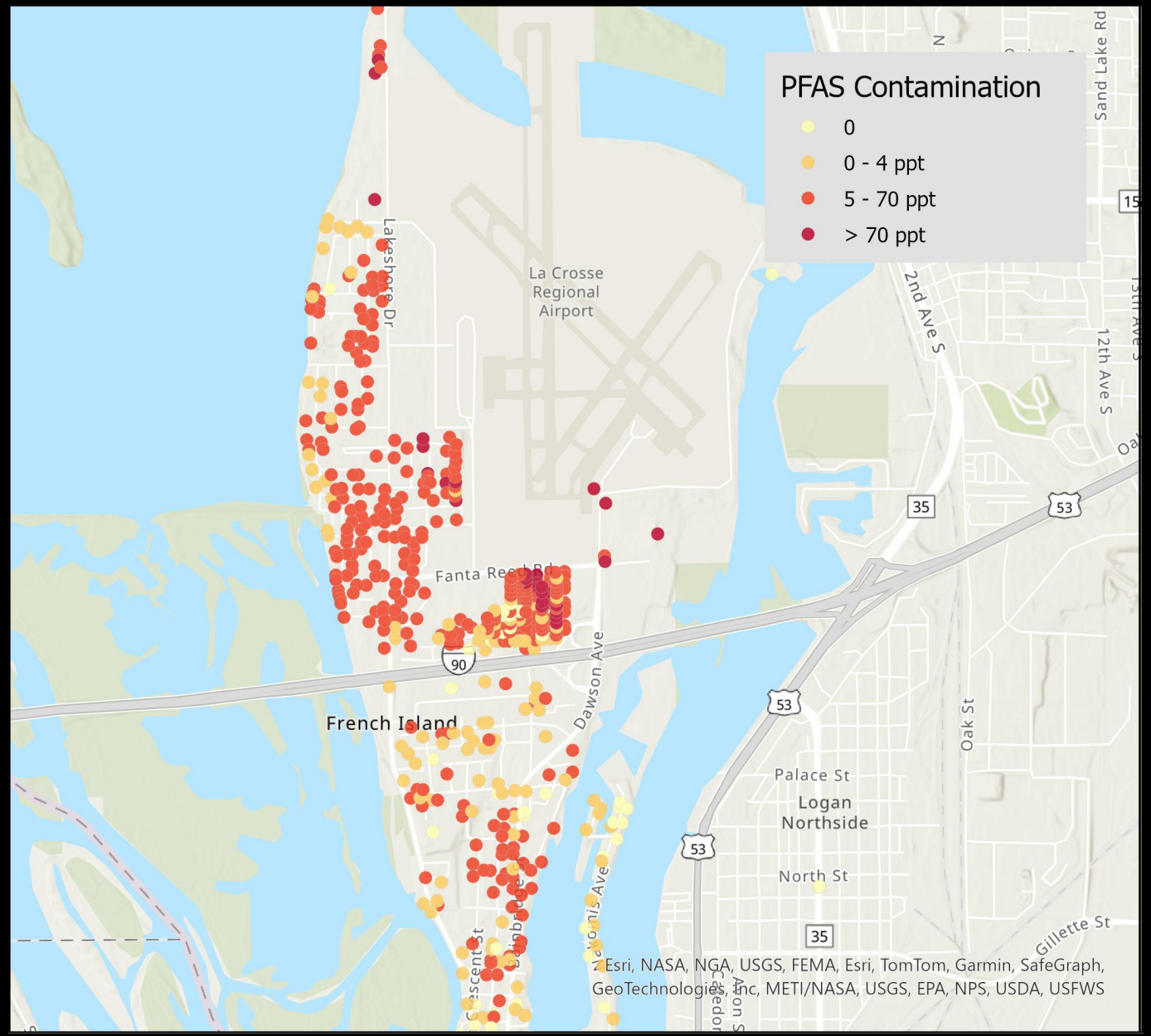
□ ○ PFAS < Recommended Enforcement Standards

■ ● PFAS not detected

Source: Wisconsin Department of Natural Resources



Map from Grist.com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Crescent St
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French Island, Wisconsin
N
LA CROSSE REGIONAL AIRPORT
2
3
1
French Island
Onalaska
Main Street
2nd Avenue South
I-90 W
West George Street
Rose Street
George Street
Copeland Avenue
Lang Drive
0
0.5
1 Miles
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS
Map Credits: Jacquelyn Oetterer

In the past year, how often have you felt anxious about PFAS contamination in your community?

- ☐ Never
- ☐ A few days
- ☐ Some days
- ☐ Most days
- ☐ Every day

In the past year, how often have you felt depressed about PFAS contamination in your community?

- ☐ Never
- ☐ A few days
- ☐ Some days
- ☐ Most days
- ☐ Every day

Who do you trust most to give you important information regarding the impact of PFAS contamination on your health? Please select all that apply

- ☐ A PFAS researcher
- ☐ Your doctor
- ☐ Other members of your community
- ☐ The municipal board
- ☐ The Department of Natural Resources (DNR)
- ☐ The Department of Health Services (DHS)
- ☐ The federal government
- ☐ Private corporations
- ☐ Nonprofit organizations
- ☐ Other: Please explain _____

How satisfied are you with the current response to the PFAS water contamination:

By the Department of Natural Resources (DNR):

- ☐ Not at all satisfied
- ☐ Somewhat dissatisfied
- ☐ Neutral
- ☐ Somewhat satisfied
- ☐ Very satisfied

By the Department of Health (DHS):

- ☐ Not at all satisfied
- ☐ Somewhat dissatisfied
- ☐ Neutral
- ☐ Somewhat satisfied
- ☐ Very satisfied

By your legislator:

- ☐ Not at all satisfied
- ☐ Somewhat dissatisfied
- ☐ Neutral
- ☐ Somewhat satisfied
- ☐ Very satisfied

By Tyco Fire Products/Johnson Controls:

- ☐ Not at all satisfied
- ☐ Somewhat dissatisfied
- ☐ Neutral
- ☐ Somewhat satisfied
- ☐ Very satisfied

What would you like to know about PFAS contamination in your area?

How would you like to learn about PFAS?

- ☐ Social Media Posts
- ☐ Educational Videos
- ☐ Flyers
- ☐ Town hall meetings
- ☐ Other: Please explain

Thank you for your time spent taking this survey.

	French Island (n=318)	%	Peshtigo (n=289)	%	Total (n=607)	%
Cancer	91	28.6%	81	28.0%	172	28.3%
Bone	64	20.1%	50	17.3%	114	18.8%
Endocrine	59	18.6%	54	18.7%	113	18.6%
Cardiovascular	55	17.3%	52	18.0%	107	17.6%
Weight	61	19.2%	46	15.9%	107	17.6%
Immune	30	9.4%	36	12.5%	66	10.9%
Respiratory	34	10.7%	31	10.7%	65	10.7%
Pregnancy	17	5.3%	16	5.5%	33	5.4%
Kidney	16	5.0%	17	5.9%	33	5.4%
Neurodevelopmental	15	4.7%	16	5.5%	31	5.1%
Neurodegenerative	12	3.8%	10	3.5%	22	3.6%
Reproductive	12	3.8%	9	3.1%	21	3.5%
Liver	6	1.9%	7	2.4%	13	2.1%
Blood	3	0.9%	8	2.8%	11	1.8%
Developmental	3	0.9%	1	0.3%	4	0.7%

UNIVERSITY OF WISCONSIN-LA CROSSE
RIVER STUDIES CENTER

Questions or Comments?

Thank You!

- Residents of French Island & Peshtigo
- Lee Donahue
- Save Our Water (S.O.H20)
- River Studies Center
- Freshwater Collaborative of WI