



TRI - REGIONAL JETS 2025



Innovative Outreach Approaches to Address Potential PFAS Impacts to Drinking Water: A Case Study

Moderator: Doug Harper, P.E., Gilbane Building Company

Speakers:

Juliana Dean, P.E., Jacobs Engineering

Speaker 2, NAVFAC Southeast



Jacobs

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SAME
American Military Engineers



SPEAKER

Juliana Dean, P.E.

Jacobs Engineering

Project Manager, PFAS Subject Matter Expert

Jacobs

- **Vacation Spots:** Anywhere in the mountains!
- **Did You Know:** I coached my first youth volleyball team this year (even though I have never played volleyball)
- **Hobbies:** Fostering puppies, knitting, and all things outside!
- **Coollest Project(s):** Working on top secret facilities...shh....

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SPEAKER

Speaker 2

NAVFAC Southeast

Project Manager, PFAS Subject Matter Expert

- My husband and I seek vacation spots where we can hike active volcanoes.
- I spend most of my free time gardening.
- I volunteer at a local state park beach conducting sea turtle nest surveys.

Have you supported PFAS community outreach?

- a) Of course, is there other work out there??
- b) Yes, once or twice
- c) Not yet but it is in my future
- d) I'm just here to relax



PFAS Regulatory Overview and DoD/Navy Directives



PFAS Regulatory Evolution

January 2009

EPA Provisional Lifetime Drinking Water Health Advisories issued (400 ppt for PFOA and 200 ppt for PFOS)

May 2016

EPA Lifetime Drinking Water Health Advisories Issued (70 ppt for PFOA and/or PFOS)

June 2022

Updated interim drinking water health advisories issued for PFOA (0.004 ppt) and PFOS (0.02 ppt)

March 2023

Proposed MCLs released for six PFAS (4 ppt individually for PFOA and PFOS)

April 2024

Final MCLs announced for six PFAS (4 ppt individually for PFOA and PFOS)

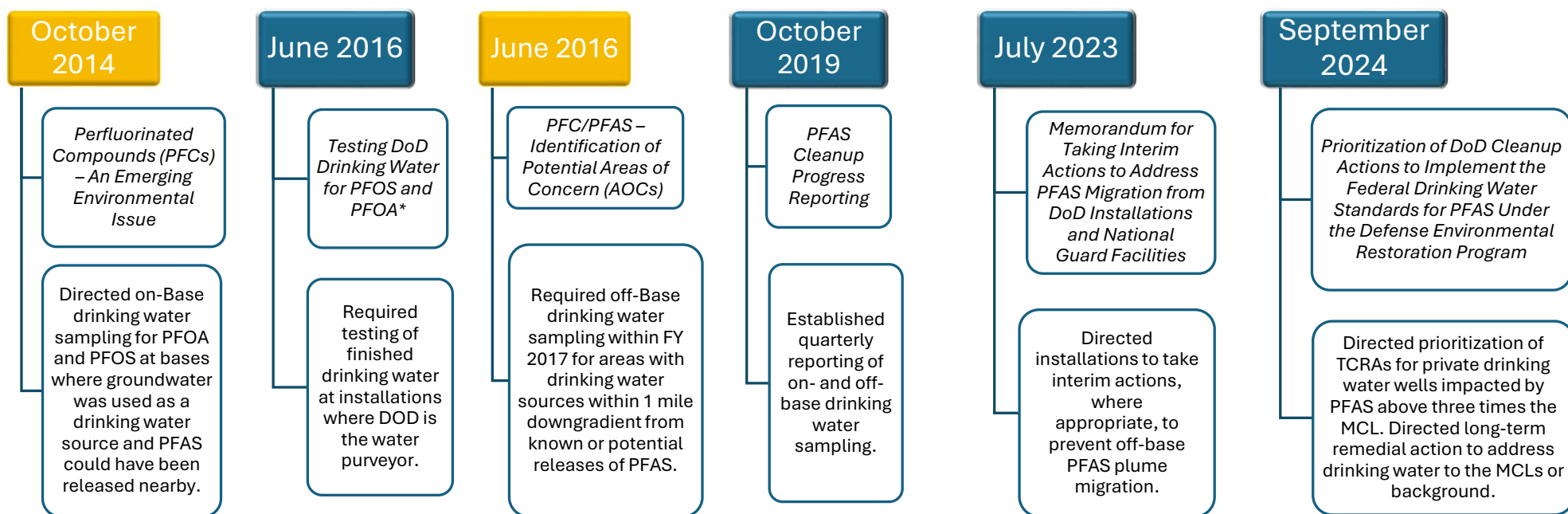
June 2024
MCLs effective

October 2025
JETS

2029

MCLs enforceable for municipal water systems?

Select DoD and Navy Direction on Drinking Water Sampling



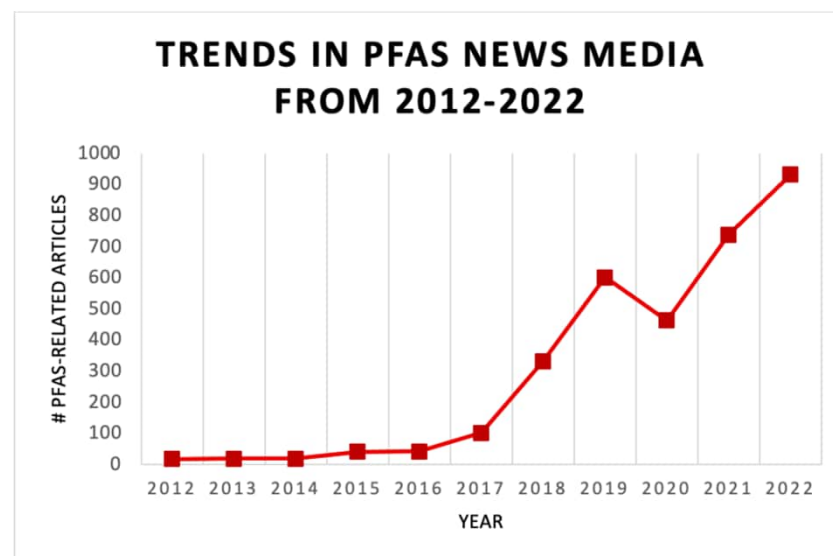
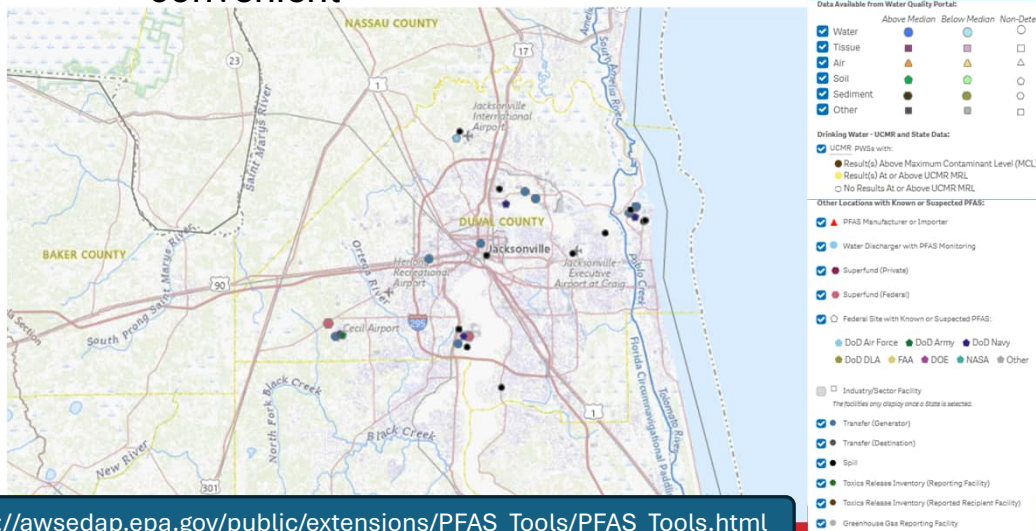
All DoD PFAS policies are available at: <https://www.acq.osd.mil/eie/eer/ecc/pfas/tf/policies.html>

All Navy PFAS policies are available at:

<https://www.navfac.navy.mil/Divisions/Environmental/Products-and-Services/Environmental-Restoration/PFAS-Reading-Room/>

PFAS and Community Outreach

- Since 2015 the Navy has sampled drinking water near 61 installations
- Public concern is increasing
 - 5700% increase in news stories over 10 years
 - Publicly available information increasing and convenient



Haley, Madison, "PFAS in News Media: A Quantitative and Qualitative Analysis" (2023). *University Honors Theses. Paper 1363.*
<https://doi.org/10.15760/honors.1392>

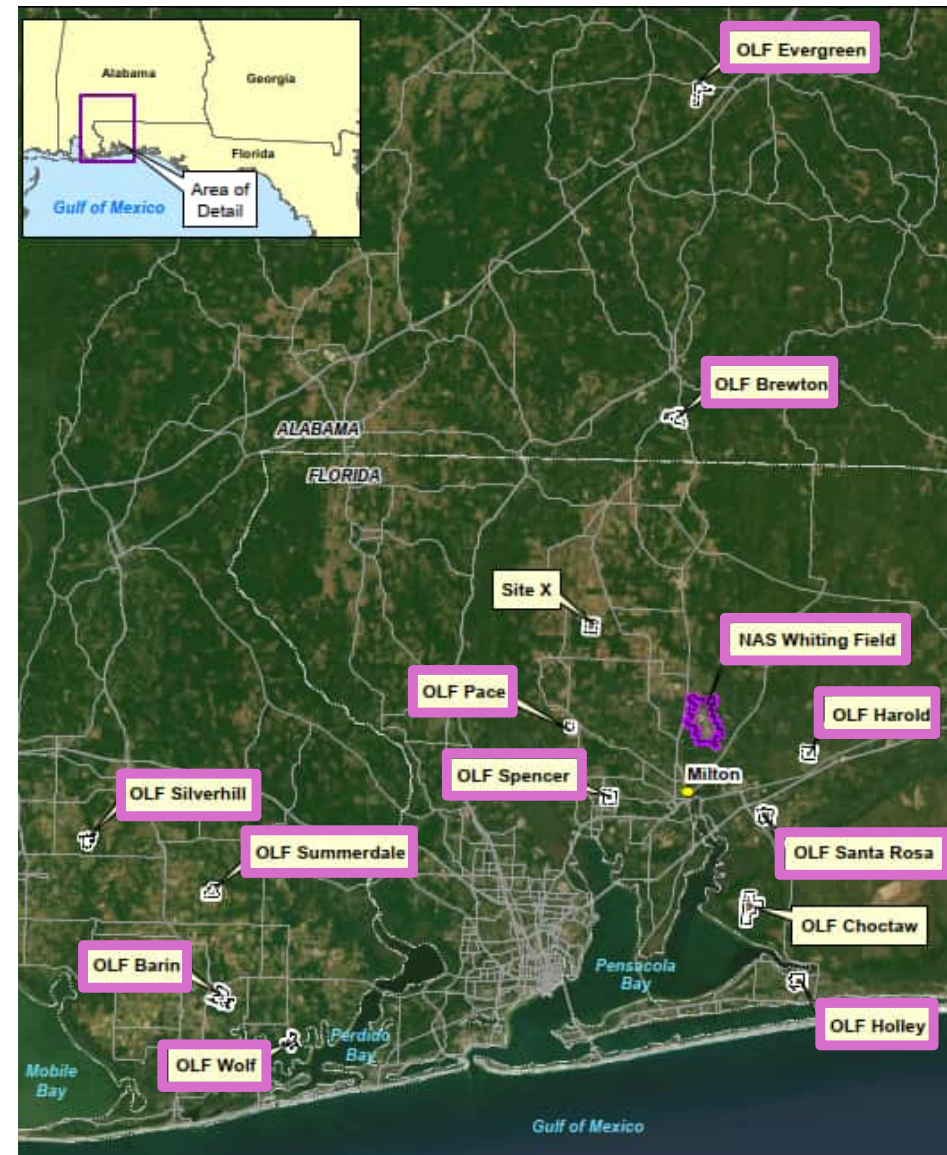
NAS Whiting Field



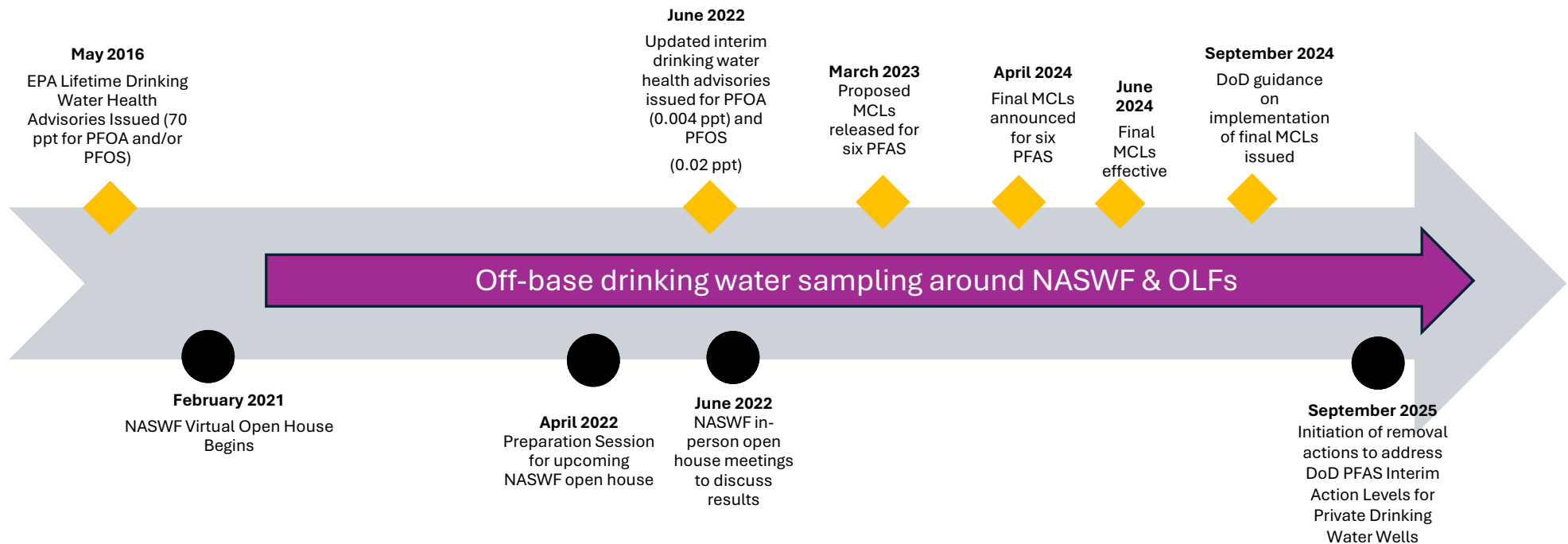


Outreach Areas

- NAS Whiting Field and 11 outlying landing fields (OLFs)
- Diverse education and socioeconomic
- Residential and agricultural land uses
- Over 16,000 parcels



Keeping up with Regulations



What do the residents want to know?

I use an irrigation well to fill my pool. Will you sample it?

Is it safe for my dog to drink this water?

Is it safe to water my garden with well water?

Is it safe to eat the fish I catch in this river?

Why are you only telling us about this now?

Will you buy my property?

Did this cause my cancer?!

What will you do if there is PFAS in my drinking water?

CECOS Training

- 3-day training course
- Approved by the Interservice Environmental Education Review Board (ISEERB)
- Open to a broad range of personnel across branches



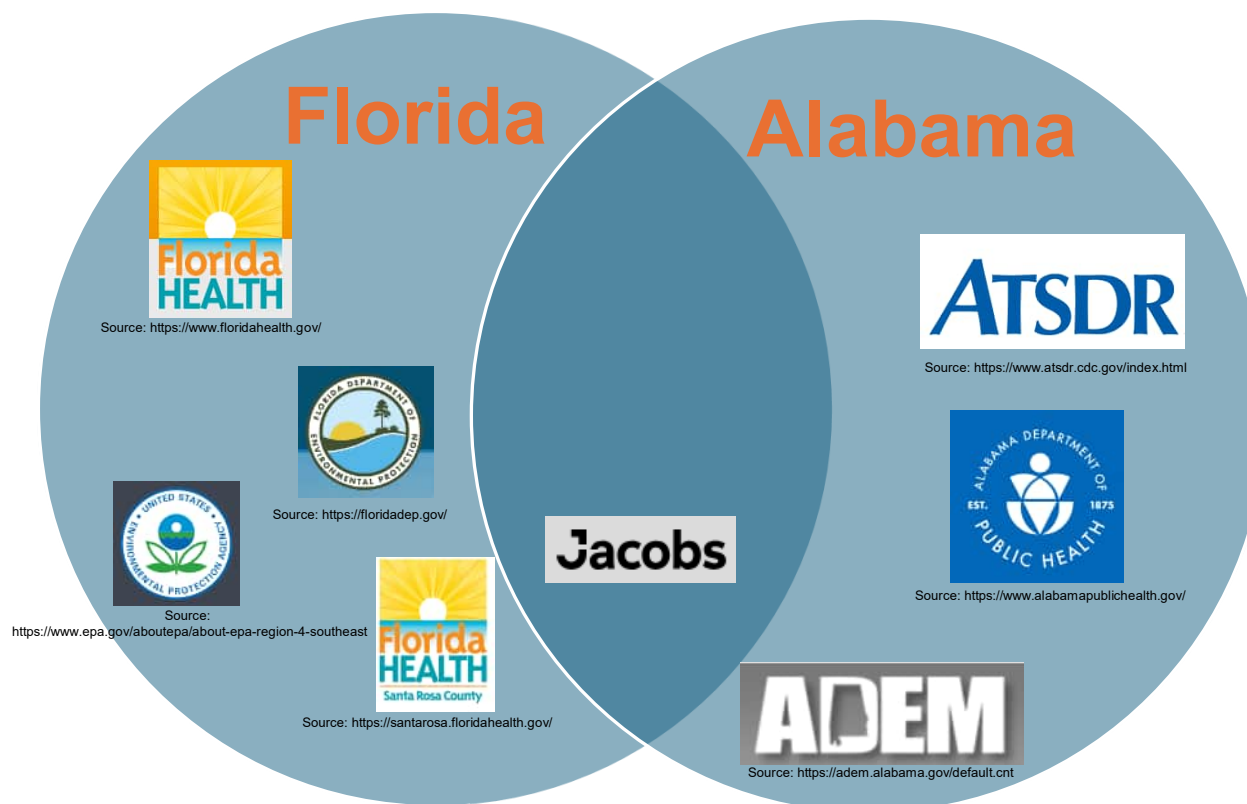
Environmental Training

Health & Environmental
Risk Communication
Workshop

Learn More:

<https://www.denix.osd.mil/cecos/management/herc/>

Stakeholder Engagement



***Everyone
gets a seat
at the table!***

Outreach Formats

Town Hall

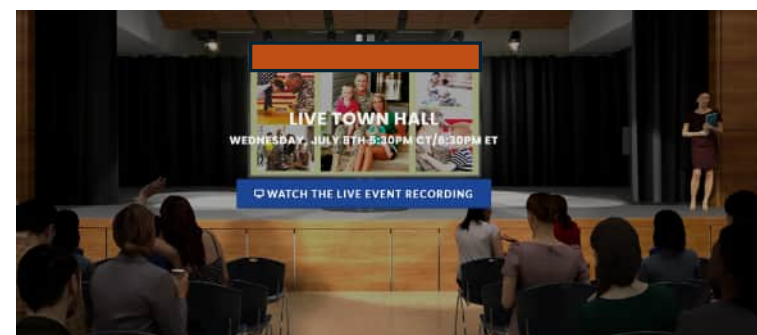


Open House



Virtual Outreach

- Stand alone or supplement in-person
- Scalable
- Increases engagement time
- Increases accessibility



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Virtual Outreach

FIND MY PROPERTY MAP

To find your property and determine if it is in the designated sampling area, type your address or Parcel ID into the search bar.

OPEN MAP ON SEPARATE TAB

State of Florida, Earthstar Geographics | Esri, HERE

On-Base Confirmed and Potential PFAS Release Areas

TO REQUEST SAMPLING
call
844.NAS.WFLD
(844.627.9352)
visit
<http://go.usa.gov/xAEQF>
or scan the QR code

ACRONYMS & ABBREVIATIONS
NAS Naval Air Station
PFAS per- and polyfluoroalkyl substances

LEGEND
Confirmed PFAS release area
Potential PFAS release area
Installation boundary

- Further investigation is underway because of previous uses at NAS Whiting Field of PFAS-containing materials, such as firefighting foam.
- The Navy is following the well-established federal statutory/regulatory environmental cleanup process for assessment of and response to PFAS releases.
- 23 on-base areas have been identified as confirmed or potential PFAS release areas.
- Findings are documented in a Preliminary Assessment Report, which will be completed in 2021 and available in the Administrative Record:
<http://go.usa.gov/xAEQF>

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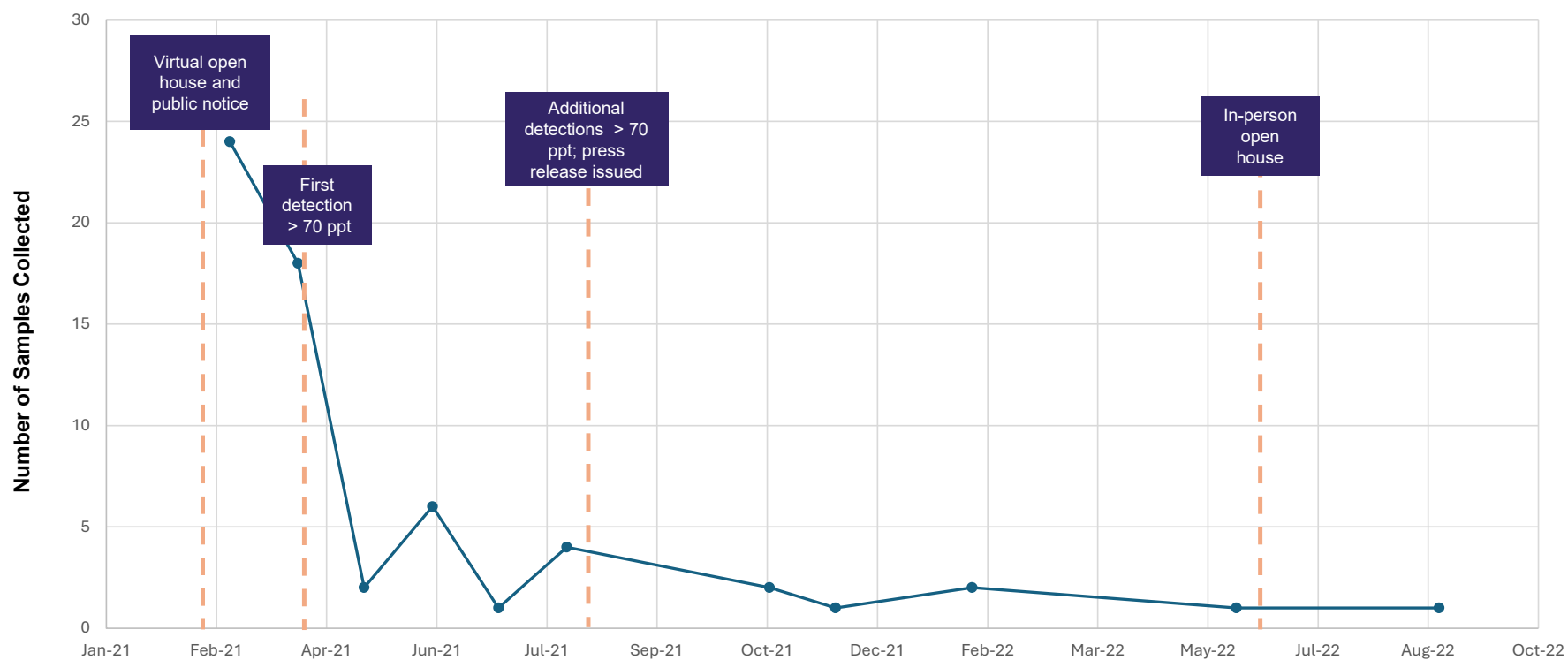
VIDEO OVERVIEW OF THE POSTERS

**Naval Air Station Whiting Field
Off-Base Drinking Water Investigation**

**Virtual Open House
February–April 2021**

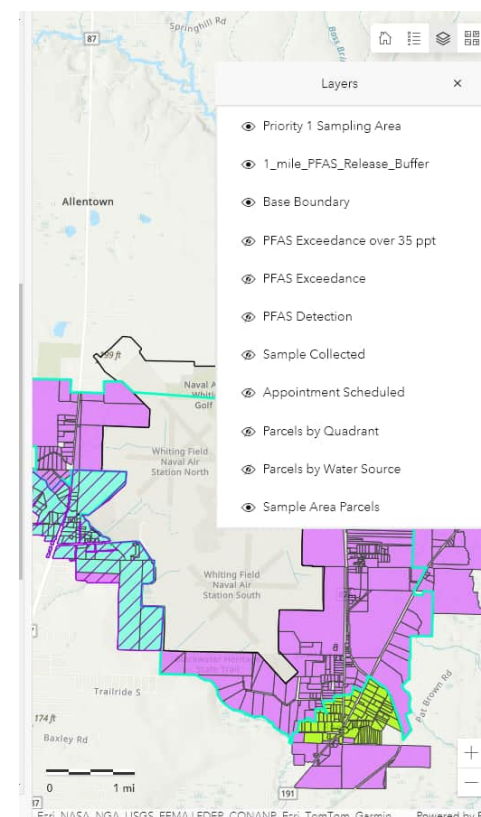
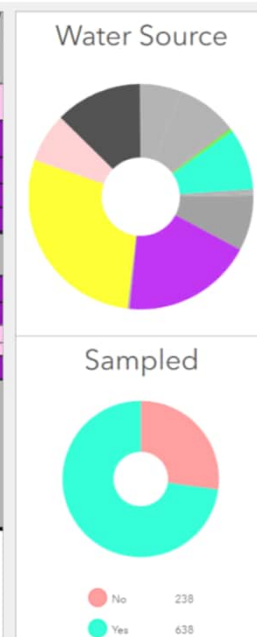
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Sampling Requests Over Time

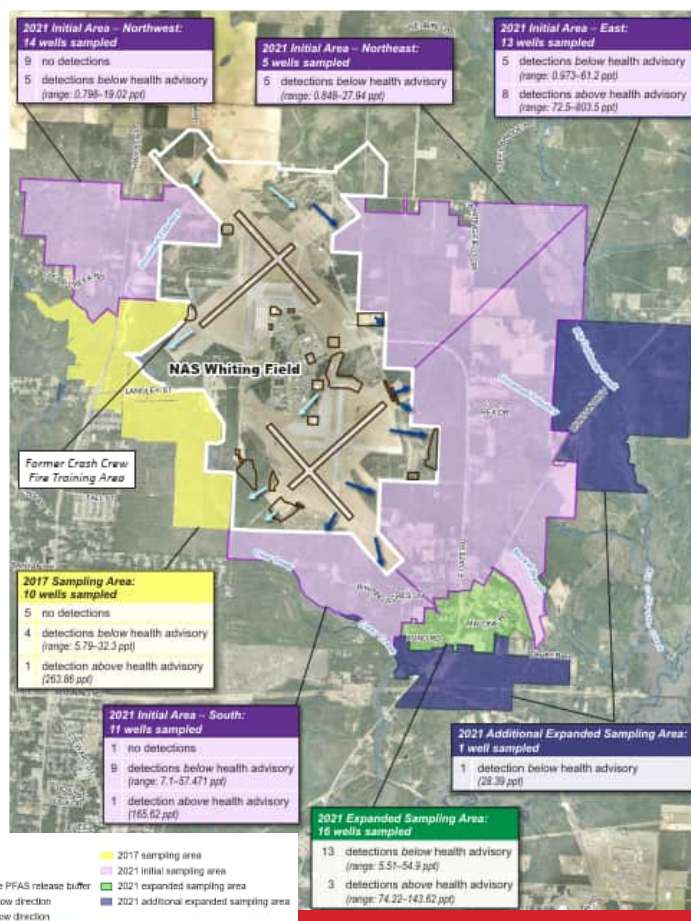


Technology Integration into Public Outreach

Total Scheduled Sampled	Scheduled Sample Cost	Total Collected Samples	Total Collected Sample Cost
20	\$12,000	678	\$406,800



Results Communication



2021 – 2022 OFF-BASE DRINKING WATER SAMPLING RESULTS

In March 2021 the Navy team initiated the sampling of drinking water from wells within a designated area near NAS Whiting Field. Table 1 summarizes the drinking water sampling results to date. We call each property owner and tenant upon receipt of their preliminary results to let them know if their water contains PFOA and/or PFOS above or below 70 ppt. Bottled water is typically provided within 24 hours of the preliminary results being received by the Navy. Final laboratory results are mailed to each property owner and tenant after all data is verified and final. Out of respect for the privacy of the property owner and tenant, individual results are provided only to each property owner and tenant.

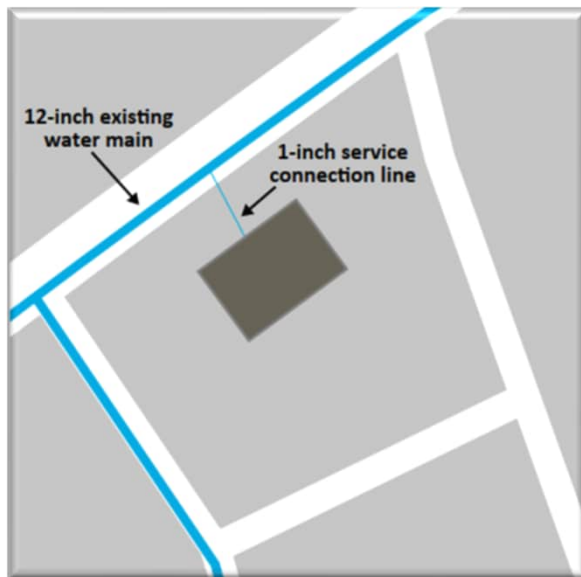
Table 1. NAS Whiting Field Off-Base Drinking Water Results as of January 17, 2024

Year	Number of Wells Sampled	Number of wells with no detections of PFOA or PFOS	Number of wells with detections of PFOA and/or PFOS below 70 ppt	Number of wells with detections of PFOA and/or PFOS above 70 ppt
2017	10	5	4	1
2021 - 2022	62	10	40	12

Individual sampling results linked to a property are not made public!

Project website available at <http://go.usa.gov/xAEQF>

Enduring Solutions



Municipal water connection



Point of entry GAC treatment system



Point of use reverse osmosis treatment system

Lessons Learned

- Build the proper team
- Engage with the media
- Plan for atypical water use
- Know your area
- Security concerns
- Be consistent!
- Be flexible!



Q&A / Discussion





Contact Us

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