







Why is the Navy Sampling Drinking Water Wells Nationwide?

Additional information can be found online at https://www.secnav.navy.mil/eie/Pages/PFAS_Home.aspx

For updates as more information becomes available, visit https://go.usa.gov/xmM9q

If you have questions, please contact the Public Affairs Office at 717-605-2448 or christopher.t.cleaver.civ@us.navy.mil

The Navy is committed to protecting our neighbors near NSA Mechanicsburg.

- In 2016, the EPA established a drinking water lifetime health advisory (70 ppt) for two PFAS, specifically PFOA and PFOS.
- The Navy issued a policy to address PFOA and PFOS in drinking water.
- The most common Navy historical source of PFOA and PFOS was in firefighting foam, which is no longer used for firefighting training.
- The Navy initiated basewide investigations for all Navy installations to address potential exposure to PFOA and PFOS.

To make a sampling appointment, please call 833-737-7267 (833-REQSAMP).



EPA U.S. Environmental Protection Agency ppt parts per trillion

PFAS per- and polyfluoroalkyl substances
PFOA perfluorooctanoic acid
PFOS perfluorooctane sulfonate









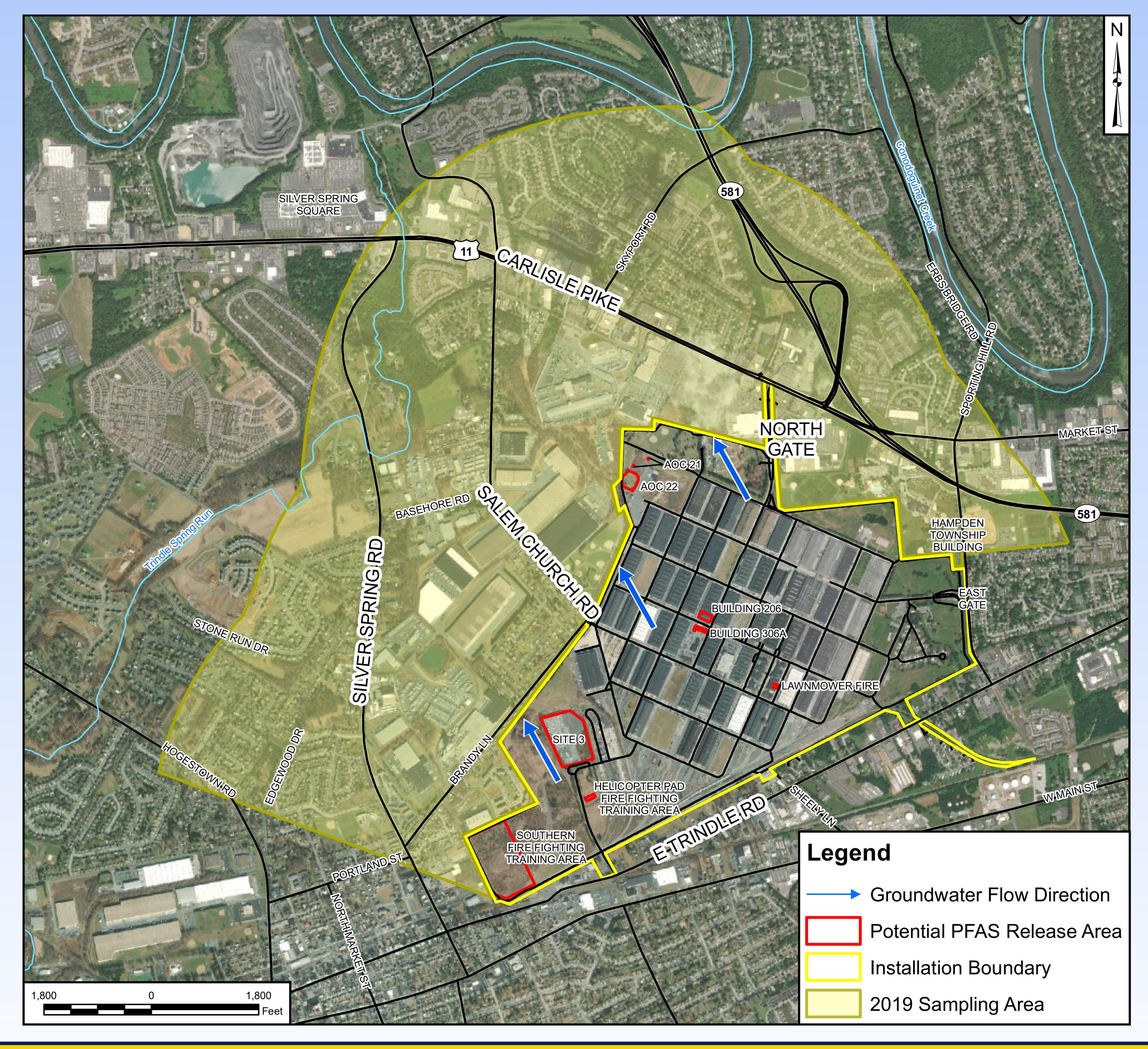
2019 Off-Base PFAS Drinking Water Investigation

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- NSA Mechanicsburg started a PFAS investigation in 2018.
- In 2019, 8 potential PFAS release areas were identified, which could impact nearby drinking water.
- The sampling area included properties within 1 mile in the direction of groundwater flow as understood at the time.



EPA U.S. Environmental Protection Agency

opt parts per trillion

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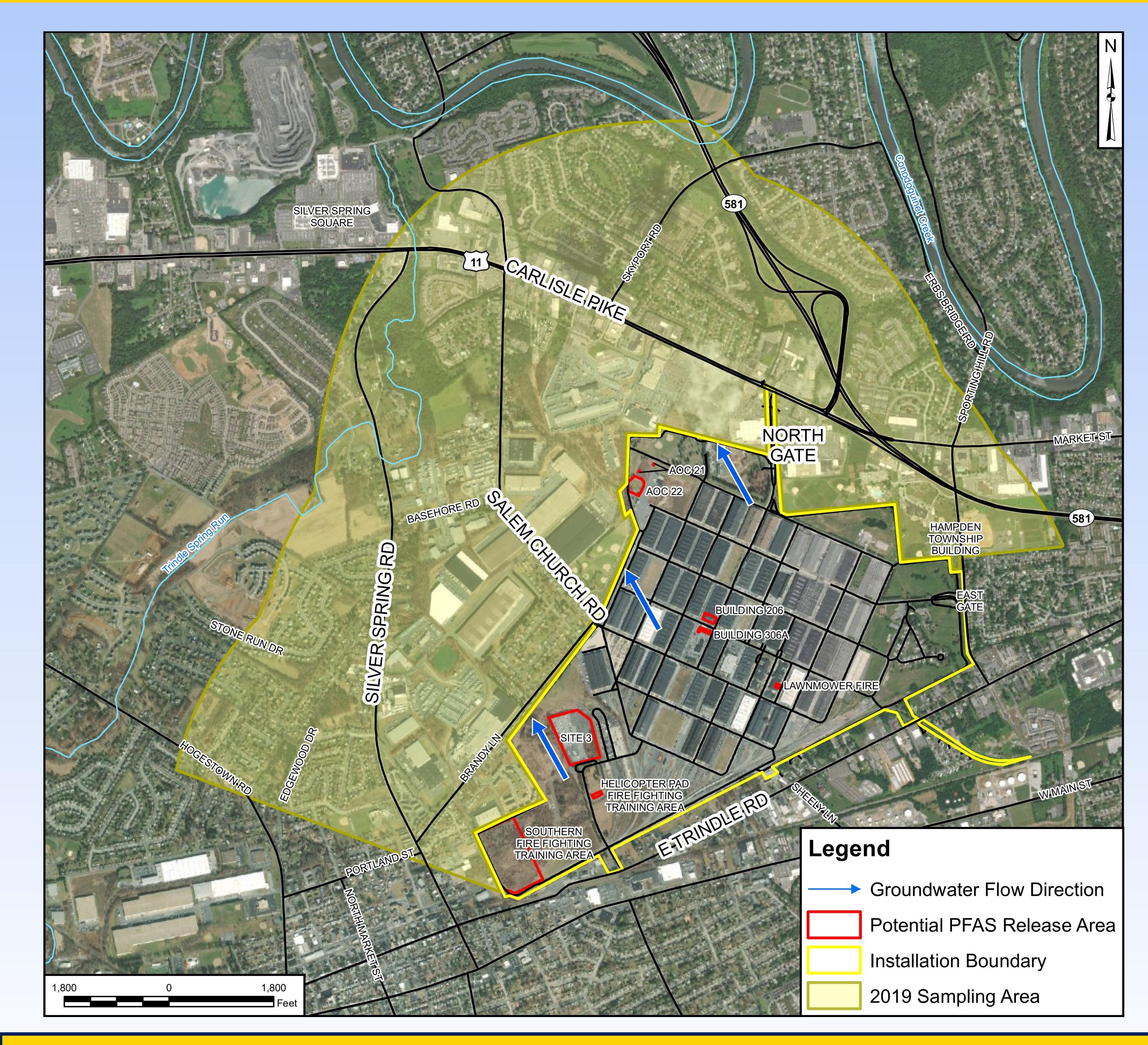
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- 62 drinking water wells were sampled.
 - PFOA and PFOS were detected above the lifetime health advisory (70 ppt) in 1 well at 206 ppt. Bottled water is being provided.
 - PFOA and PFOS were detected below the EPA lifetime health advisory in 58 wells ranging from 0.58 ppt to 50.7 ppt.
 - PFOA and PFOS were not detected in 3 wells.



EPA U.S. Environmental Protection Agency opt parts per trillion

ppt parts per trillion

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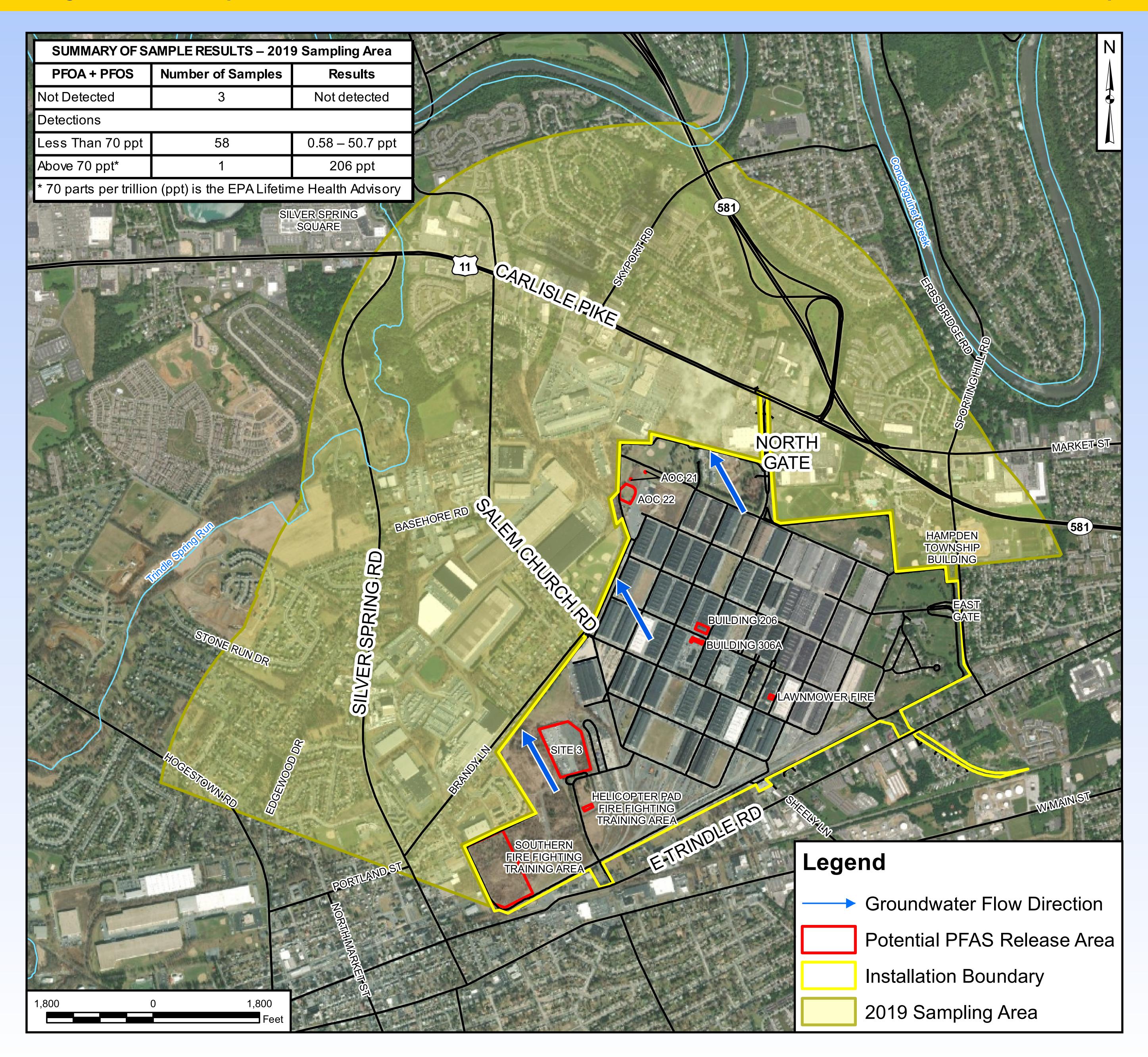


2019 Off-Base PFAS Drinking Water Investigation Results

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pennsylvania On-Base PFAS Investigation

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Since 2019

- Soil and shallow groundwater samples were tested for PFAS at the 8 potential PFAS release areas.
 - Groundwater results confirmed PFOA and PFOS in on-base groundwater above the EPA lifetime health advisory.
- New groundwater flow information indicated PFAS may be moving off-base and impacting drinking water wells in areas not previously sampled.











On-Base Environmental Cleanup Process

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

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PRIORITY: Protect Human Health and the Environment

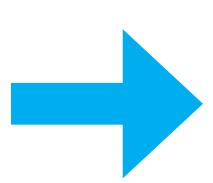
- The structured regulatory process, shown below, will be used to identify and clean up past environmental releases at NSA Mechanicsburg.
- The Navy is working closely with the EPA and the Pennsylvania Department of Environmental Protection at every step of the process.
- Public input is welcome throughout the process and is formally solicited at certain points.
- From the beginning to end, this process can be lengthy.

PFAS Environmental Cleanup Process



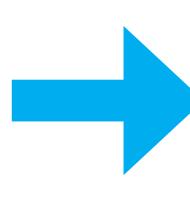
INVESTIGATION

- Evaluate potential releases.
- Determine impacts and delineate extent of identified release.
- Determine potential exposures and risks.



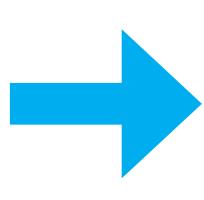
OPTIONS **EVALUATION &** RESPONSE SELECTION

- Determine appropriate technology.
- Consider protectiveness, time to clean up, and cost.
- Solicit public input.



DESIGN, CONSTRUCTION, & IMPLEMENTATION

- Put response in place.
- Provide long-term management, as needed.



CLEANUP COMPLETION

- Maintain land use controls, as needed.
- Achieve cleanup goals.

The on-base PFAS investigation is in its early stages. Potential PFAS release areas have been identified and are being further investigated at this time.









2022 Off-Base Drinking Water Investigation

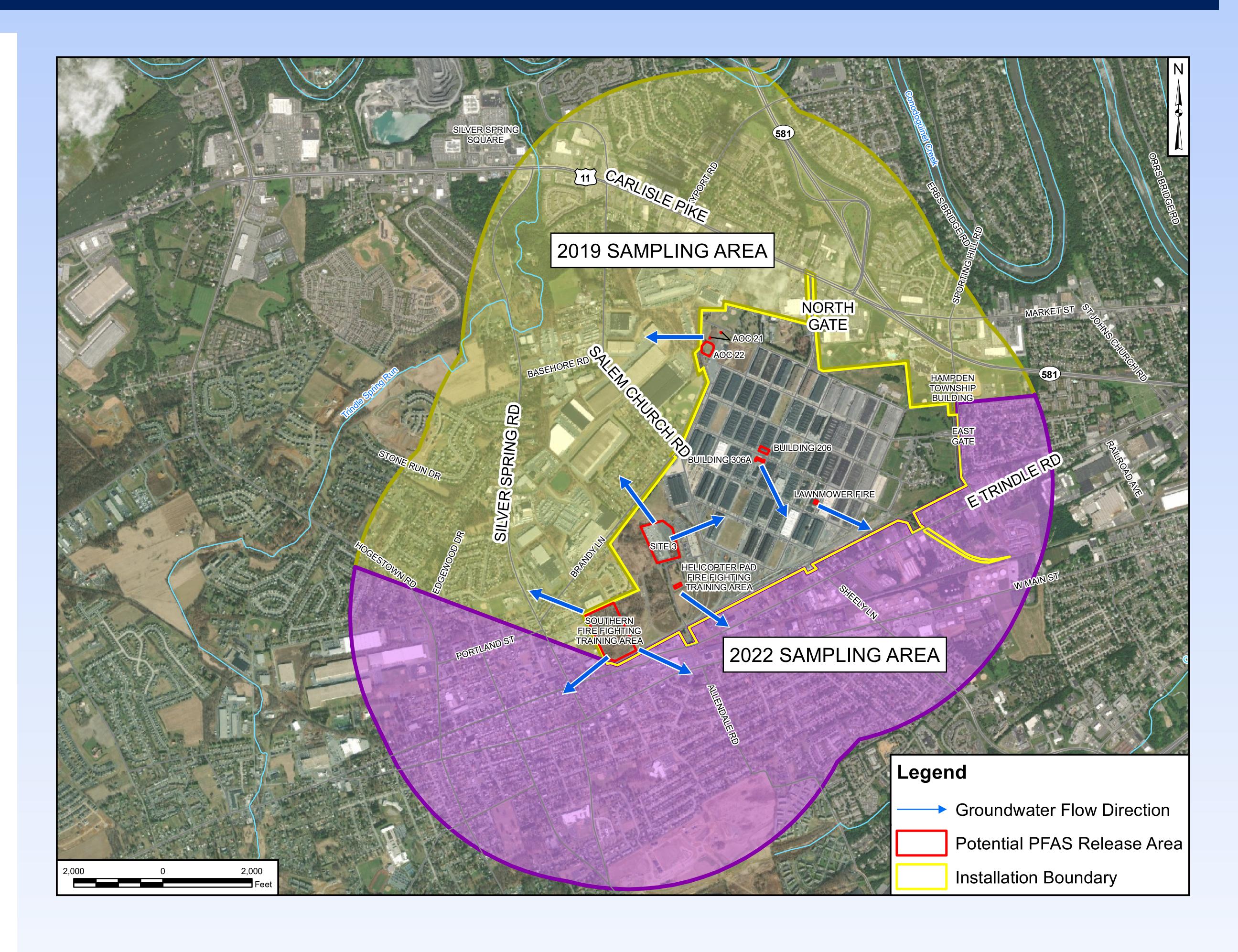
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The Navy needs your permission to sample your drinking water well

- The 2019 and 2022 sampling areas include properties with drinking water wells within 1 mile in the direction of groundwater flow from potential PFAS release areas.
- The Navy would like to sample all drinking water wells located in the 2022 sampling area and wells not previously sampled in the 2019 sampling area.
- Based on the results, the Navy may expand the sampling area.
- If your drinking water is provided by SUEZ Water Company or PA American-West, it does not need to be sampled.



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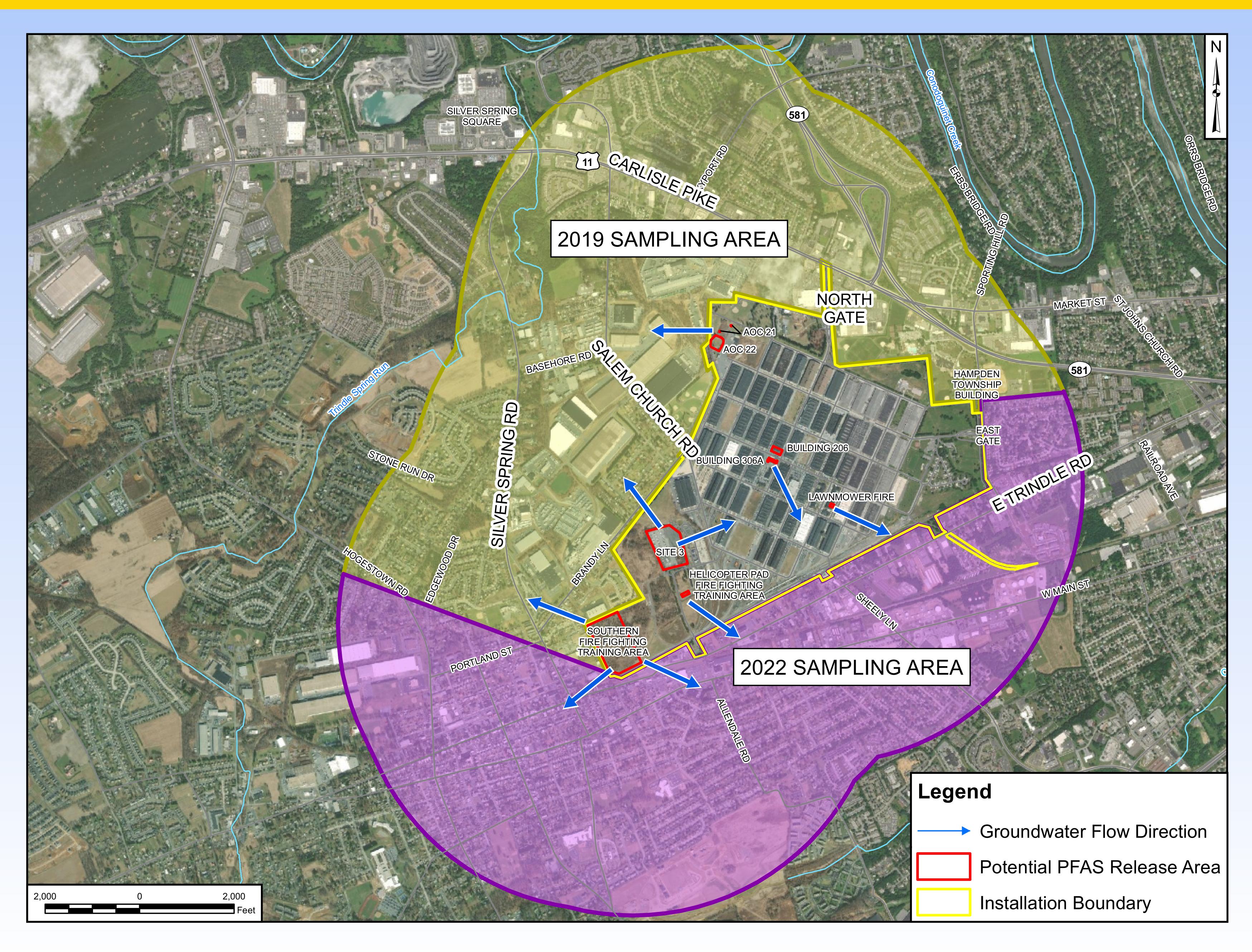


2019 and 2022 Off-Base PFAS Sampling Areas

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Per- and Polyfluoroalkyl Substances (PFAS) and Advisory Level

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What are PFAS?

- Family of thousands of man-made chemicals; no natural occurrence.
- PFOA and PFOS are the most studied and understood; they are being gradually phased out of use in materials in the U.S.
- Found in the environment around the world (in air, water, soil, animals, plants, as well as in people).
- Last a long time in the environment.
- Used since 1940s in many products, such as:



firefighting foam



stain-resistant carpets



water-resistant fabrics



personal care products

EPA

PFAS



nonstick cookware



food packaging

What is the EPA Lifetime Health Advisory Level for PFOA and PFOS?

- It is a combined level of PFOA and PFOS of 70 ppt in drinking water.
- It is intended to protect against harmful health effects to sensitive populations and the public, for lifetime exposure.

How was the EPA Lifetime Health Advisory Level Calculated?

- It is based on studies of health effects from PFOA and PFOS in laboratory animals.
- It assumes 20 percent of overall exposure is from drinking water, and 80 percent of overall exposure is from other sources.
- It considers information regarding health effects in people exposed to PFOA and PFOS, including the fetuses or nursing infants of mothers who are exposed.









Pennsylvania Possible Health Effects and Exposure

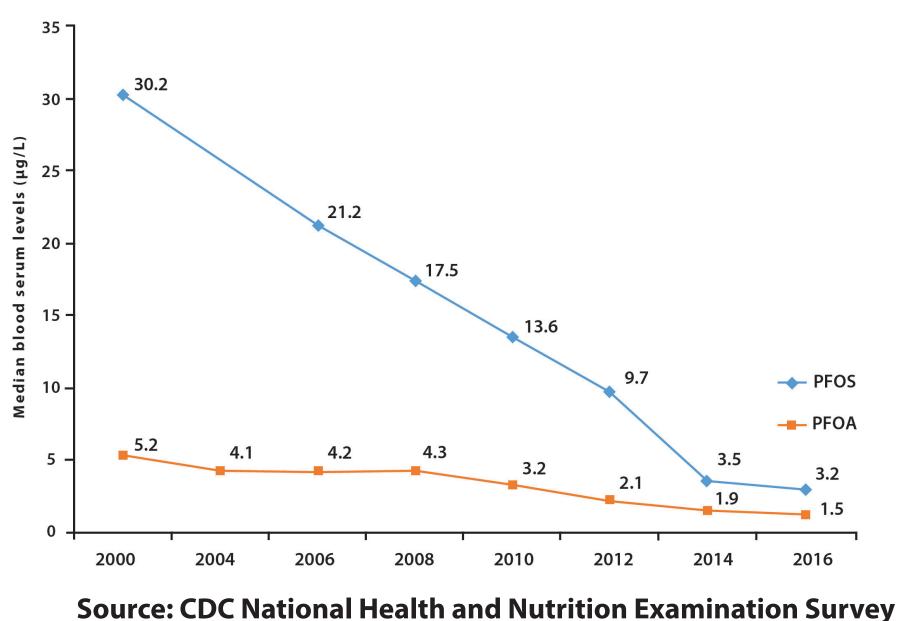
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PFAS in People

- CDC estimates that most people in the U.S. have PFAS in their bodies from various sources.
- Levels of PFOA and PFOS are decreasing following their phase-out from use.
- Some PFAS stay in the body a long time.
- PFAS will build up in the body until exposure stops.





Exposures to PFAS

- PFAS can be in drinking water, food, indoor dust, some consumer products, and workplaces.
- Most non-occupational exposures occur by drinking water or eating food that contains PFAS.
- Exposure is minor through skin contact when bathing, showering, or swimming.
- PFAS reach the fetuses or nursing infants of mothers who are exposed.
 - However, based on current science, the benefits of breastfeeding appear to outweigh the risks for infants exposed to PFAS in breastmilk.

How to Reduce Exposure

- There are no medical treatments that will remove PFAS from the body.
- The best intervention is to stop the source of exposure (such as drinking water if it contains PFAS).
- There are at-home treatment systems that can reduce PFAS in contaminated drinking water, such as certain filters certified for PFAS removal.
 - For more information about PFAS filtration systems certified by NSF International, a public health organization, visit http://www.nsf.org.

Potential Health Effects

- At this time, scientists are still learning about how exposure to PFAS might affect people's health.
- Studies indicate possible health effects could include:
 - Increased cholesterol levels.
 - Increased risk of high blood pressure and preeclampsia in pregnant women.
 - Changes in growth, learning, and behavior of the developing fetus and child.
 - Small decrease in infant birth weight.
 - Immune system effects (possible decreased response to some vaccines).
 - Decreased fertility.
 - Altered hormone function.
 - Increased risks of certain types of cancers (testicular, kidney and prostate).
- The levels of PFOA or PFOS in drinking water do not predict what, if any, health impact might occur as a result of exposure.

Should I Have My Blood Tested?

- Blood testing for PFAS is available but is not a regular test offered by a doctor.
 - PFAS blood tests will not provide information on health problems, nor will they provide information for treatment.
 - PFAS blood test results can't tell you if PFAS exposure has caused your health condition.

To make a sampling appointment, please call 833-737-7267 (833-REQSAMP).

Centers for Disease Control and Prevention CDC U.S. Environmental Protection Agency **EPA** per- and polyfluoroalkyl substances PFAS

perfluorooctanoic acid **PFOA** perfluorooctane sulfonate **PFOS**









pennsylvania Drinking Water Sampling Process Drinking Water Sampling Process

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Drinking water well sampling is voluntary

Sampling Process

- We need the property owner's help to:
 - Make the sampling appointment.
 - Fill out the questionnaire prior to the appointment.
- An adult (18 years or older) must be present at the property during sampling.
- Samples will be collected by a team of experienced contractors:
 - Team will consist of two members.
 - The water sample will be collected as close to well as possible.
 - Water will run for 3 to 5 minutes prior to collection.
- Samples will be collected and analyzed according to EPA guidelines.
- Sampling takes less than an hour.

COVID-19 Precautions

- The sampling team will take the necessary precautions.
 - A sampling team member will call you upon arrival; you do not need to directly interact with the team.
 - Sampling team members may arrive in separate cars.
 - Sampling team members will be wearing masks and gloves.
 - One team member will collect the sample; the second team member will likely remain in the car to assist with documentation.
 - Upon completion of sampling, a team member will call you to let you know that sampling is complete.

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COVID-19 PFAS PFOA

PFOS

coronavirus disease 2019 per- and polyfluoroalkyl substances perfluorooctanoic acid perfluorooctane sulfonate









Pennsylvania Sampling and Results Timeline

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Sequence of Events	Approximate Timeframe
1. Property owner signs up for drinking water well sampling.	Beginning early January 2022.
2. Navy contractor samples well.	Beginning January 18, 2022.
3. Navy receives preliminary results.	Approximately 1 month after sample collected.
	Within 24 hours of results received.
4. Navy calls property owner with preliminary results.	Bottled water delivered if PFOA and/or PFOS are above the EPA lifetime health advisory (70 ppt) and no alternate source of drinking water is available.
5. Lab data is verified and Navy mails final results to property owner.	
 Information to understand the data packets will be included. 	Approximately 3 months from sampling.
 Results will be kept confidential to the extent permitted by law. 	

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EPA









pennsylvania Department of Health Sign Up for Your Sampling Appointment

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Off-Base Drinking Water Sampling

- The Navy will be sampling drinking water wells in the sampling areas.
- Sampling is at no cost to you.
- Drinking water samples will be collected beginning January 18, 2022.
- Sampling appointments are available from 8 a.m. - 5 p.m. Additional times are available upon request

- The property owner must give permission for sampling and complete the questionnaire.
- Sampling takes less than an hour.
- An adult (18 years or older) must be present at the property during sampling.

Off-Base Drinking Water Sampling Activity Timeline - 2022

Virtual Open House Public Meeting

January 2022 (Sign Up for Sampling)



Off-Base Drinking Water Well Sampling

Beginning January 18, 2022

Communication of Preliminary Results

Beginning February 2022

Early January

Mid-January

February