



Why Is the Navy Sampling your Drinking Water?

For informational updates please visit
<https://www.cnic.navy.mil/NWADrinkingWaterInfo>

If you have questions, please contact Katisha Draughn-Fraguada
katisha.draughn-frag@navy.mil or 757-836-1484

The Navy developed a PFAS drinking water policy to protect our neighbors, personnel, and families.

- In 2016, the EPA established a drinking water lifetime health advisory (70 ppt) for PFOS and PFOA.
- In 2016, the Navy issued policy to identify and prioritize locations with potential exposure to PFOS and PFOA in drinking water.
- The Navy continues to take action to identify and protect our neighbors, personnel, and families from drinking water that has PFOS and/or PFOA above the EPA lifetime health advisory.
- In December 2018, PFOS and PFOA were detected in groundwater at Naval Support Activity (NSA) Northwest Annex, which could impact on- and off-base drinking water.

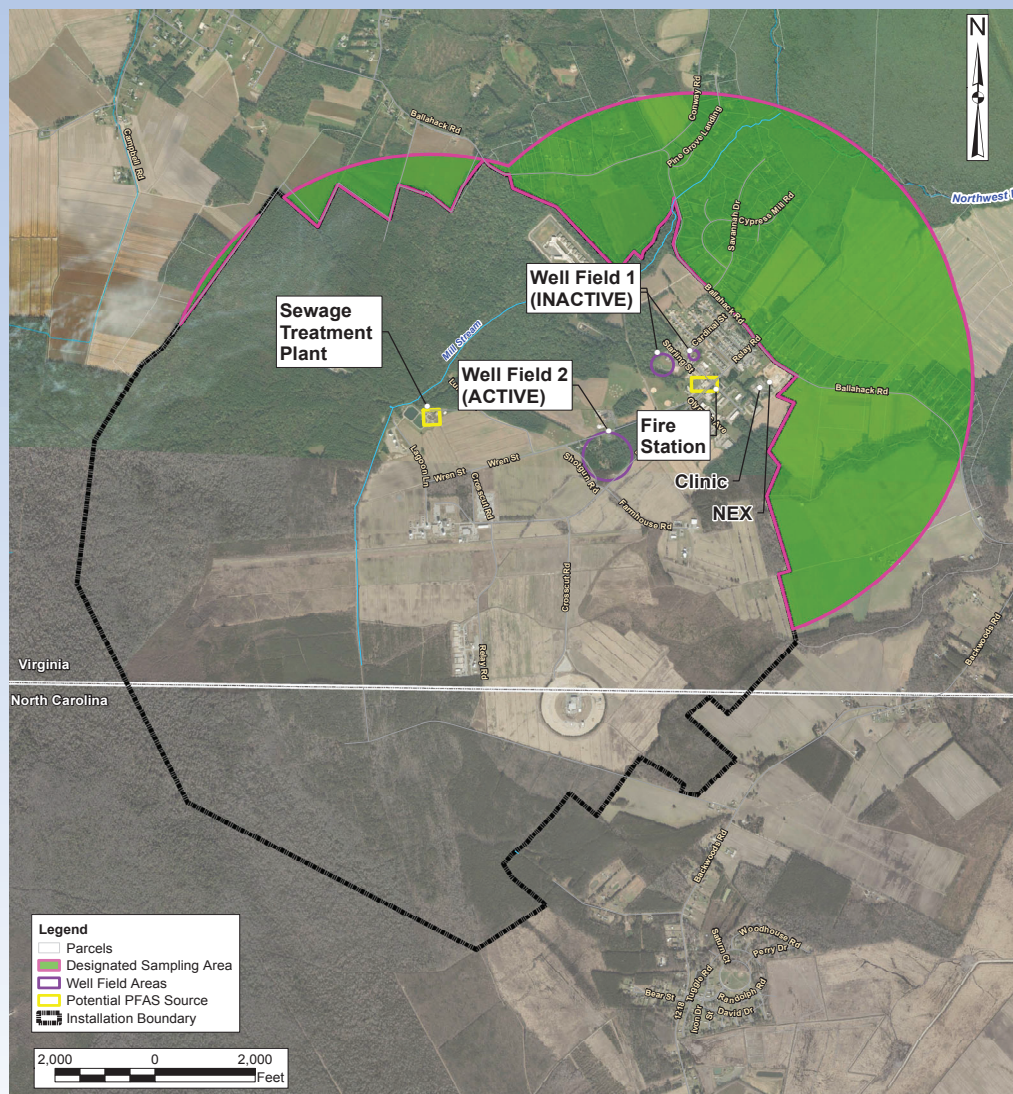




Off-base Private Drinking Water Well Sampling

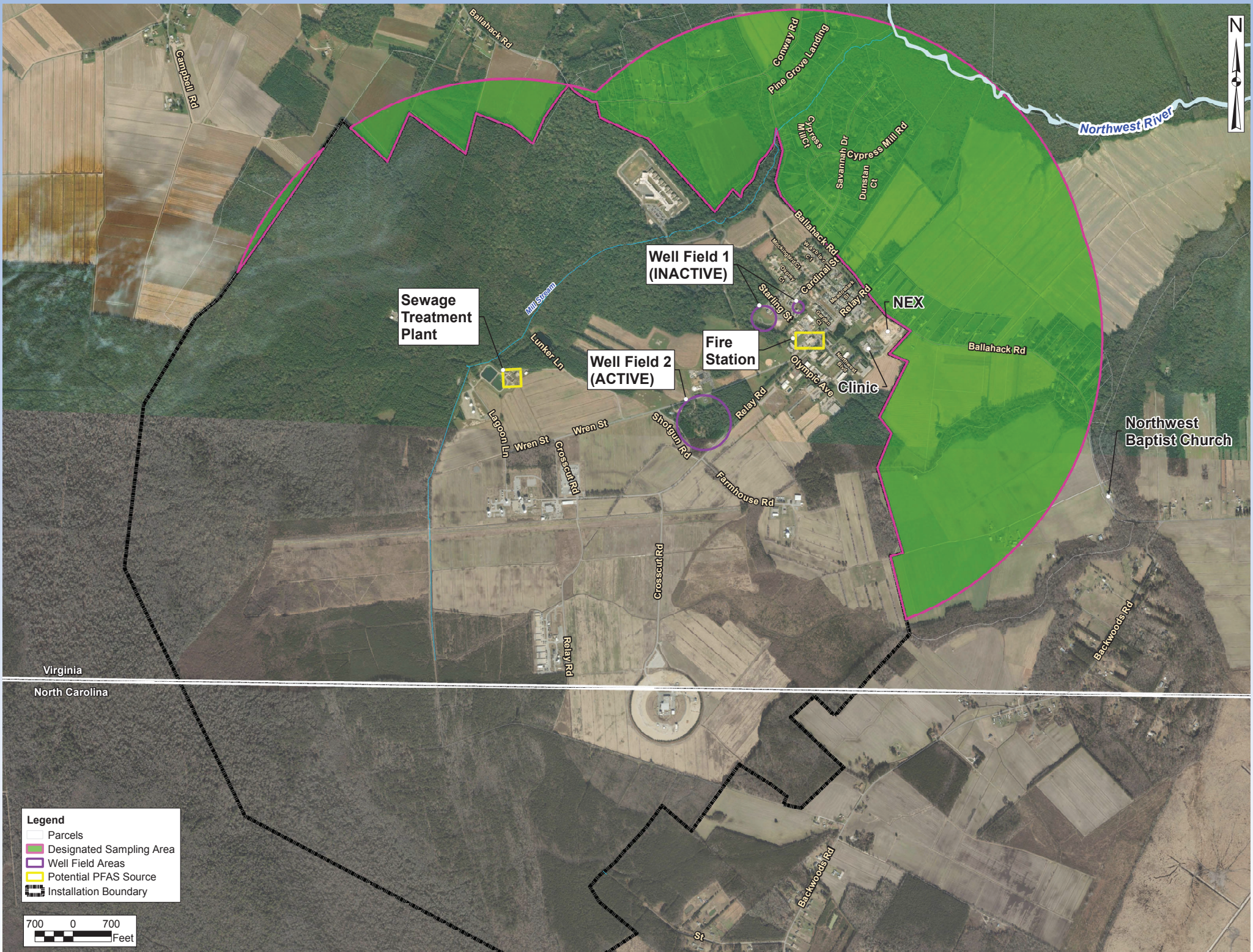
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The Navy Needs Your Cooperation to Sample Your Private Drinking Water Well

- The designated sampling area is within one (1) mile of potential sources.
 - Fire Station
 - Sewage Treatment Plant
 - Groundwater sample results from Well Field 1
- We will expand the sampling area if needed based on results.





What are PFAS?

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Where Do PFAS Come From?



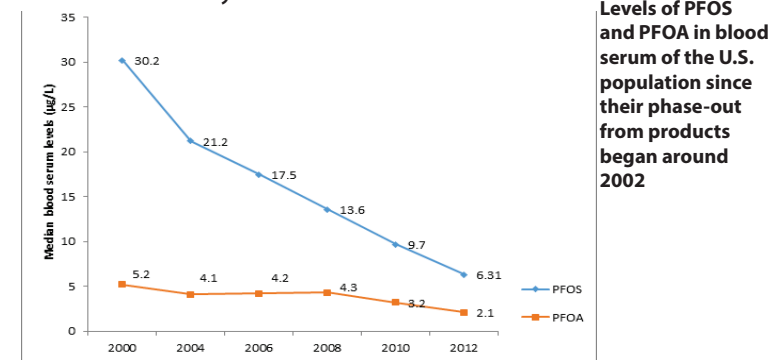
- Man-made compounds, used since 1950s in many products.
- Last a long time in the environment.
- Found in people, animals, and fish and appear to be widespread around the world.
- PFAS can accumulate in a person's body while they are being exposed.
- Babies can be exposed through nursing or during the mother's pregnancy.
- People are exposed primarily through:
 - Ingestion of contaminated food, water, or soil.
 - Use of carpets, upholstery, clothing, etc. treated with PFAS.
- Skin contact while bathing and showering is not a significant way that people are exposed.

What is an EPA lifetime health advisory?

- Establishes concentrations in drinking water that are protective of the most sensitive populations and the general public, for lifetime exposure.
- Based on the latest studies of lab animals and exposed human populations.
- Provides information to state agencies and public health officials on health effects and water treatment so they can take steps to reduce exposure.
- Is non-enforceable.

PFAS in People

- CDC monitoring estimates that most people in the U.S. have PFAS in their bodies.
- Levels of PFOS and PFOA are decreasing following their phase-out from use.
- Some PFAS stay in the body a long time.
- There is no recommended medical treatment to reduce PFAS in the body.



Source: CDC National Health and Nutrition Examination Survey

What is the EPA lifetime health advisory level for PFOS and PFOA?

- The lifetime health advisory is only for two types of PFAS (PFOS and PFOA).
- The lifetime health advisory for drinking water is 70 ppt. meaning that added together the concentrations of PFOS and PFOA should not be higher than 70 ppt.



Exposure and Health Effects

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Potential Health Effects

- More research is needed to confirm or rule out possible links between exposure and health effects.
- Animals exposed to high levels of PFOS and PFOA had changes in liver, thyroid, and pancreas function; altered hormone levels; and increased rates of certain cancers.
- Based on **LIMITED** evidence from studies with people, **POTENTIAL** health effects can include:

General

- Increased cholesterol levels
- Altered hormone function (specifically thyroid)
- Increased risk in certain types of cancers
- Increased liver enzyme levels
- Increased uric acid levels

Women and Children

- Decreased fertility
- Decreased birth weight
- Increase in blood pressure during pregnancy
- Decreased response to vaccines

- The levels of PFOS or PFOA in drinking water do not predict what, if any, health impact might occur as a result of exposure.

How To Reduce Exposure from Drinking Water

- If water contains PFOS and PFOA above the health advisory level, you can reduce exposure by using a different water source for drinking, cooking, and brushing teeth.
- A home water filtration system may reduce the contaminant levels in drinking water, manufacturers of the filtration system may be able to make recommendations to optimize removal of PFOS and PFOA.

Should I Have My Blood Tested?

While it is understandable that you may want to know the level of PFAS in your body, there are some limitations with blood tests to consider:

- Test results will not provide clear answers for existing or possible health effects or aid in patient-care decisions.
- Blood testing for PFAS is not a routine test that health care providers offer.
- Consult with your doctor for more information.



On-base Groundwater Sampling

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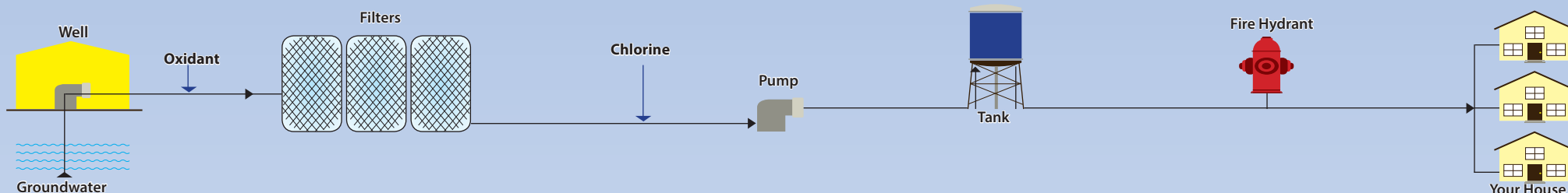
- Three potential release areas identified during a 2018 basewide assessment.
- Fire station: Firefighting foam stored onsite and carried in truck.
- Inactive Well Field 1:
 - PFOS and PFOA discovered during sampling conducted to support design of drinking water system upgrades.
 - PFOS and PFOA exceeded the lifetime health advisory level.
- Sewage Treatment Plant: Wastewater containing PFAS may have been processed.



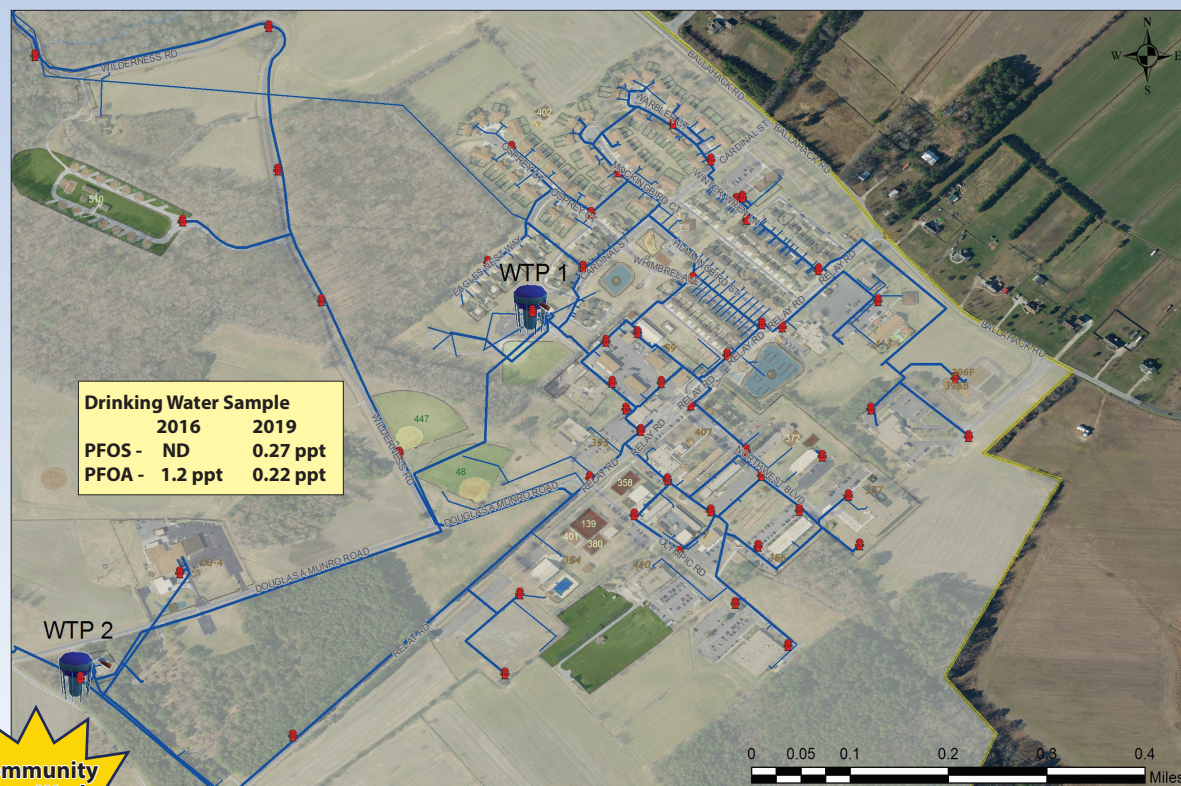
On-base Drinking Water

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- Well Field 1 taken out of service in 2014 pending upgrades.
- Well Field 2 provides the drinking water to NSA Northwest Annex. In 2016 the drinking water was sampled for PFOS and PFOA; results were below the lifetime health advisory.
- The treatment system meets all Safe Drinking Water Act Requirements.
- The treatment system is upgraded as regulations change/update.
- Routine testing performed monthly; Consumer Confidence Report distributed annually.



**Community
Water Works
System
Permit #
3550620**

NSA Northwest Annex Water System



Actions Based on Sample Results

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We need your cooperation to identify and sample private drinking water wells.

Sequence of Events

Sample Date

Collect Off-base private drinking water well sample.

14 Days

Navy receives preliminary results.

Notifies property owner within 24 hours from receipt of results.

If results are **greater** than the EPA's drinking water lifetime health advisory (70 ppt), begin bottled water delivery.

60 Days

Navy mails official results to property owner once validation is completed.

PFOS and/or PFOA
70 ppt
or Below

No action is
needed.

PFOS and/or PFOA
Above
70 ppt

The Navy
will provide
alternate water
for drinking
and cooking.

Future Ongoing Actions

- Potentially expand off-base sampling area based on sampling results.
- Continue to communicate with residents.
- Further investigate groundwater to assess PFAS source locations and movement in the environment.
- Continue to partner with Federal, State, and local agencies.

Managing Your Private Well

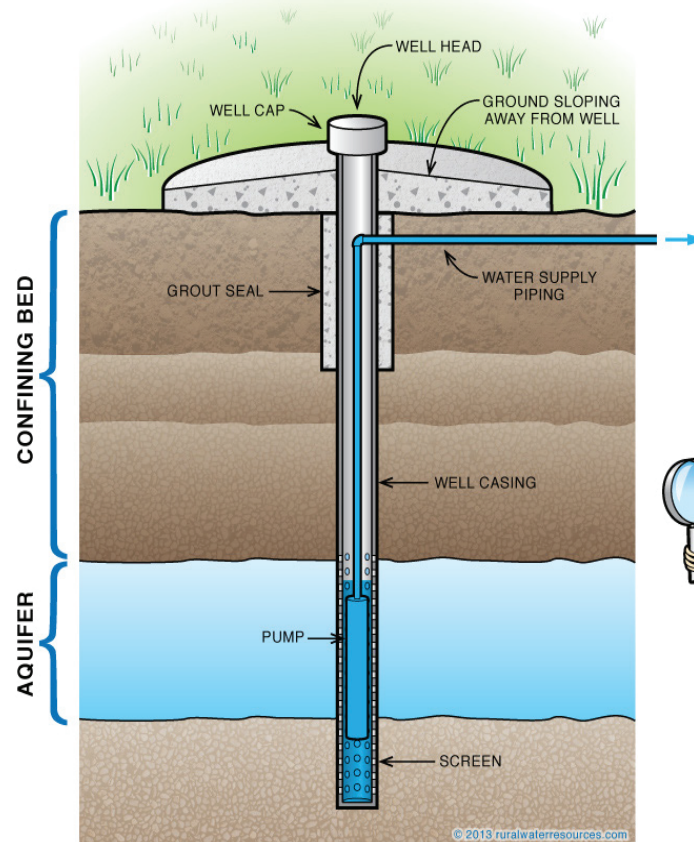
If you have specific questions, please contact Chesapeake Health Department
757-382-8661 | ChdEnvHlth@vdh.virginia.gov | www.vdh.virginia.gov/chesapeake

Managing the Risks

- Analytical testing of private wells is recommended to ensure water quality.
- Testing once a year is a good idea. Regular testing can tell you the quality of the water.
- More frequent testing is recommended if your water changes in taste, odor, or appearance; or if you have recurrent incidences of gastrointestinal illness, infants living in the home, or a failing septic system.
- The National Groundwater Association recommends you test for bacteria, nitrates/nitrites, and any other contaminants of local concern.
- Never connect a private well to a public water supply.
- If using water conditioner (aka, "water softener") equipment, it should be maintained and kept in working order.
- Do not dispose of hazardous materials or chemicals on your property or near your well.

Typical Well Design

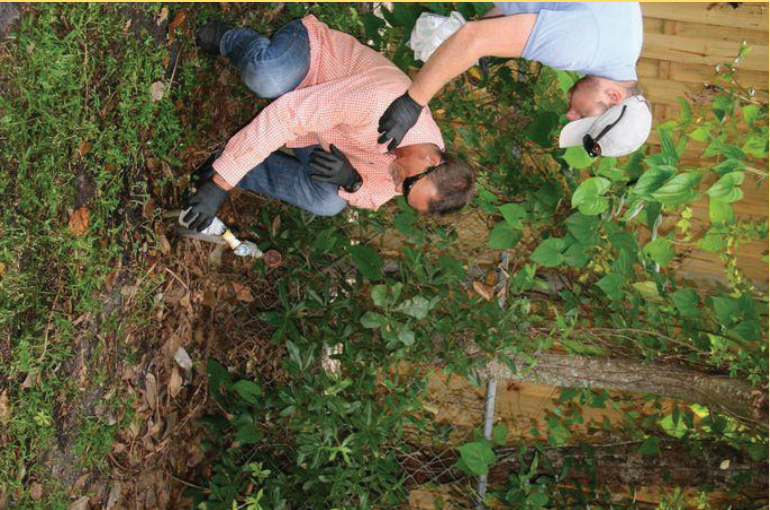
Typical Well Design



Information gathered from Sonoma County Dept. of Health Services

WE NEED YOUR COOPERATION

SCHEDULE YOUR APPOINTMENT HERE TODAY



Schedule an appointment
after today by calling:

1-833-H2O-SAMP
(1-833-426-7267)



Drinking Water Sampling Process

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Off-base Drinking Water Well Sampling

- The Navy is sampling drinking water wells in the designated area starting **March 1** through **March 14, 2019** from 8:00 a.m. - 7:00 p.m.
- The homeowner is asked to complete a questionnaire and must give permission for sampling to occur.
- Sampling will follow EPA guidelines for analysis following strict quality control and quality assurance protocols.
- An adult (18 years or older) must be present during sampling.
- Samples will be collected by a team of qualified professionals.
- Sampling takes less than one hour and will be collected from the point closest to the well.