





Why Are the Navy and Marine Corps Sampling **Drinking Water Wells Nationwide?**

We are addressing potential exposure to PFOA and PFOS in drinking water near Marine Corps Auxiliary Landing Field Bogue.

- In May 2016, the EPA established drinking water lifetime health advisories* (70 ppt) for two PFAS (PFOA and PFOS).
- In June 2016, the Navy and Marine Corps issued a policy for PFOA and PFOS in drinking water.
- Firefighting foam was the main historical release of PFOA and PFOS for the Navy and Marine Corps.
 - No longer released during training and testing.
 - Currently used for lifesaving emergency measures.
- Investigations are ongoing for all installations to identify PFOA and PFOS exposure.

On March 14, 2023, the EPA proposed a draft regulatory drinking water standard for certain PFAS, including PFOA and PFOS. In response, DoD has issued the following statement: "DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to the clarity that a final regulatory drinking water standard for PFAS will provide. In anticipation of the final standard that EPA expects to publish by the end of 2023, the DoD is assessing what actions DoD can take to be prepared to incorporate EPA's final regulatory standard into our current cleanup process, such as reviewing our existing data and conducting additional sampling where necessary. In addition, DoD will incorporate nationwide PFAS cleanup guidance, issued by EPA and applicable to all owners and operators under the federal cleanup law, as to when to provide alternate water when PFAS are present."

TO REQUEST

FOR MORE INFORMATION visit http://www.navfac.navy.mil/BoguePFAS



ACRONYMS & ABBREVIATIONS				
DoD	Department of Defense	PFOA perfluorooctanoic acid		
EPA	U.S. Environmental Protection Agency	PFOS perfluorooctane sulfonate		
PFAS	per- and polyfluoroalkyl substances	ppt part(s) per trillion		







Locations of Completed Off-Base Drinking Water Sampling for PFOA and PFOS



Our team is committed to a long-term solution.

PFAS

TO REQUEST DRINKING WATER **SAMPLING** call 877-MCBOGUE (877-622-6483)

FOR MORE INFORMATION visit http://www.navfac.navy.mil/BoguePFAS or scan the **QR code** —



ACRONYMS & ABBREVIATIONS

EPA U.S. Environmental Protection Agency MCALF Marine Corps Auxiliary Landing Field

per- and polyfluoroalkyl substances

PFOA perfluorooctanoic acid perfluorooctane sulfonate ppt part(s) per trillion







MCALF Bogue On-Base PFAS Release Areas



- 15 areas investigated
 - Runways
 - Fire training areas
 - Disposal areas
 - Wastewater treatment plant areas
 - Crash locations
 - Crash crew operations areas
- PFOA and PFOS detected in groundwater above 70 ppt
 - 26 of 36 surficial aquifer wells (total depth of 13-20 feet below ground surface) above 70 ppt
 - All 8 Yorktown aquifer wells (total depth of 71–117 feet below ground surface) below 70 ppt

FOR MORE INFORMATION

to access the Preliminary Assessment Report. visit the Administrative Record at https://go.usa.gov/xJtFE or scan the QR code -



LEGEND

Base boundary

Shallow well – PFOA and/or PFOS above 70 ppt in groundwater Shallow well – PFOA and/or PFOS below 70 ppt in groundwater

Deep well – PFOA and/or PFOS below 70 ppt in groundwater

PFAS release area **TO REQUEST**

> **SAMPLING** call 877-MCBOGUE (877-622-6483)

DRINKING WATER

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PFAS

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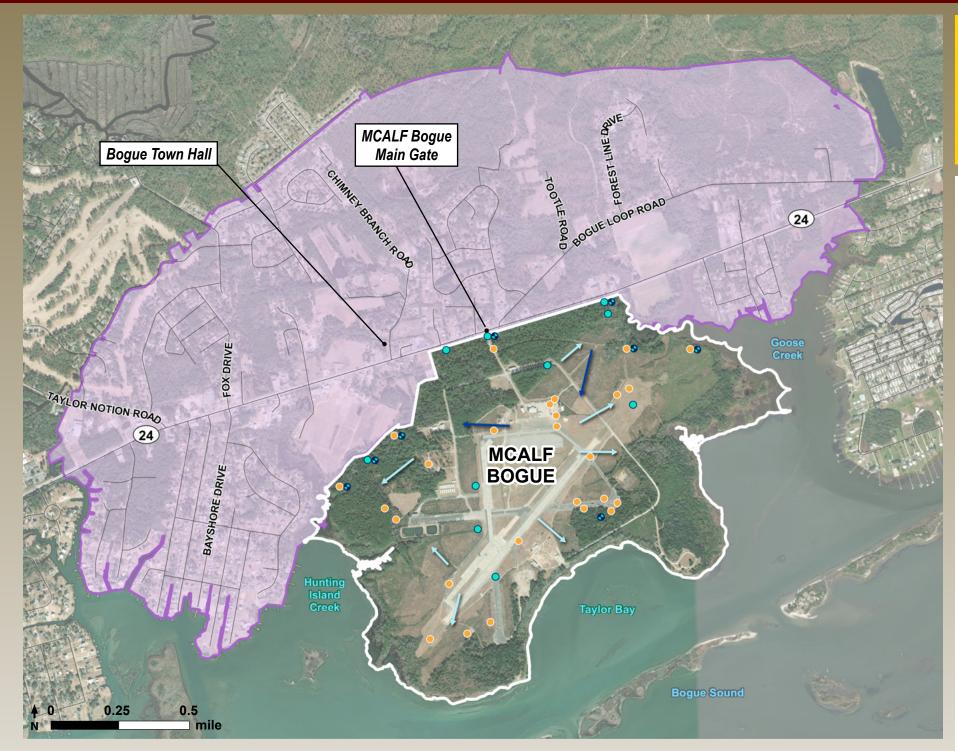
PFOA perfluorooctanoic acid perfluorooctane sulfonate part(s) per trillion







Off-Base PFAS Drinking Water Sampling



LEGEND

- Base boundary
- Shallow well PFOA and/or PFOS above 70 ppt in groundwater
- Shallow well PFOA and/or PFOS below 70 ppt in groundwater
- Deep well PFOA and/or PFOS below 70 ppt in groundwater
- Shallow groundwater flow direction
- Deep groundwater flow direction
- Sampling area

The Navy and Marine Corps need your assistance to sample drinking water wells.

- The sampling area is within 1 mile of on-base wells where PFOA and/or PFOS were above 70 ppt in the direction groundwater may flow.
- If your drinking water is provided by the West Carteret Water Corporation, the Navy and Marine Corps do not need to sample your water.
- Our team may expand the sampling area based on the results.

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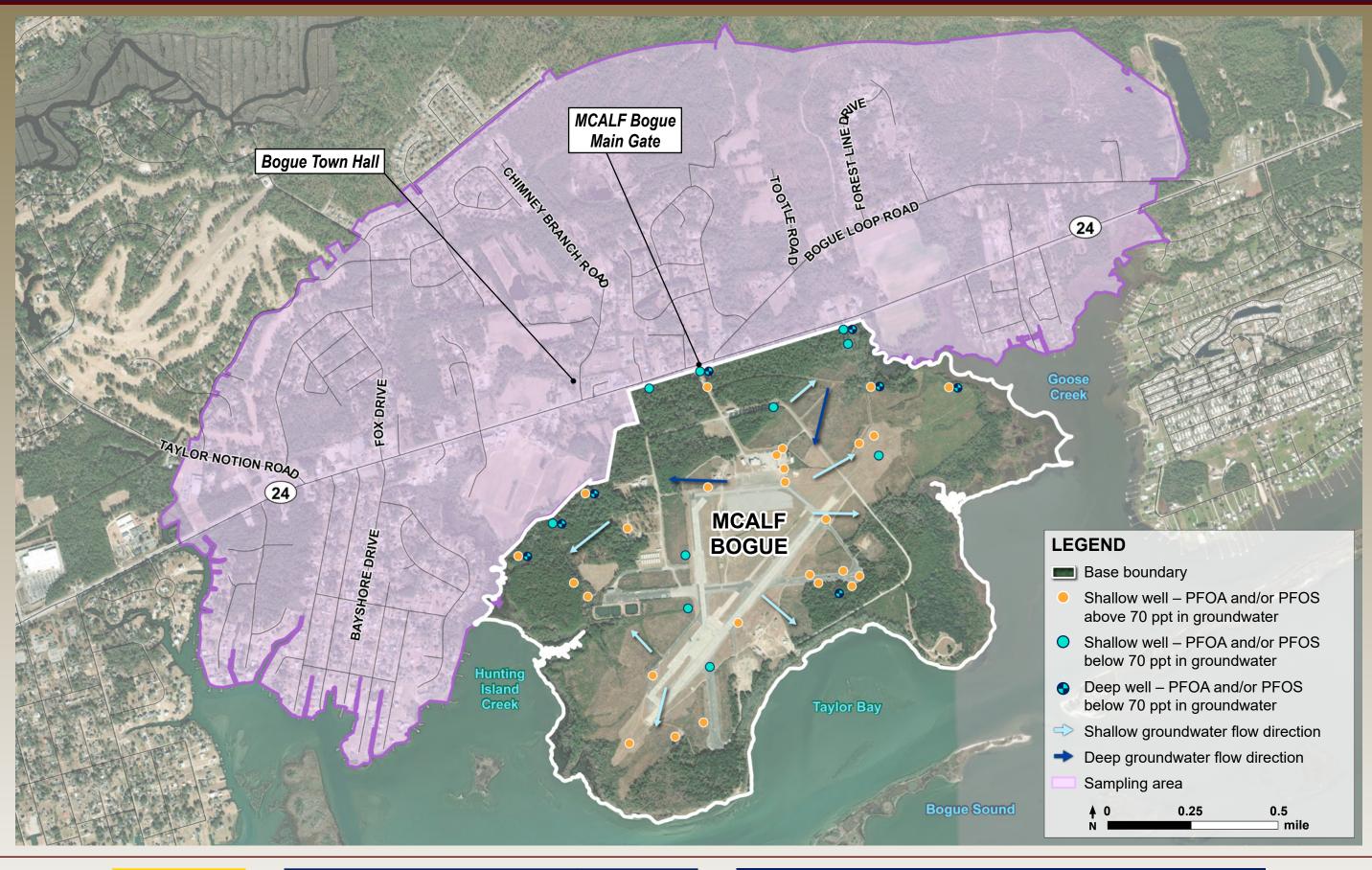
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Off-Base PFAS Drinking Water Sampling



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EPA	U.S. Environmental Protection Agency	PFOA	perfluorooctanoic acid
MCALF	Marine Corps Auxiliary Landing Field	PFOS	perfluorooctane sulfonate
PFAS	per- and polyfluoroalkyl substances	ppt	part(s) per trillion

Exposure to Per- and Polyfluoroalkyl Substances (PFAS)

What Are PFAS?

- Family of man-made chemicals.
- PFOA and PFOS are most studied and understood.
- 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.
- Widely used since 1950s in many products, such as:



firefighting foam



stain-resistant carpets and fabrics



water-resistant fabrics



personal care products



nonstick cookware



food packaging

How Can We Be Exposed to PFAS?

- PFAS may be in some drinking water, food, indoor dust, consumer products, and workplaces.
- Most non-occupational exposures occur by drinking water or eating food that contain PFAS.
- Exposure is minor through skin contact when bathing, showering, or swimming.
- Mothers with PFAS in their bodies can transfer PFAS to their babies during pregnancy and nursing.
- Based on current science, the benefits of breastfeeding appear to outweigh the risks for infants exposed to PFAS in breastmilk.

How Can We Reduce Exposure Proactively?

- Have your drinking water well tested.
- Use an alternative water source for drinking, cooking, and making baby formula.
- Certain certified filters can reduce PFAS in drinking water.

FOR MORE INFORMATION
about PFAS filtration systems,
visit https://epi.dph.ncdhhs.gov/loee/a_z/pfas.html
or scan the QR code →



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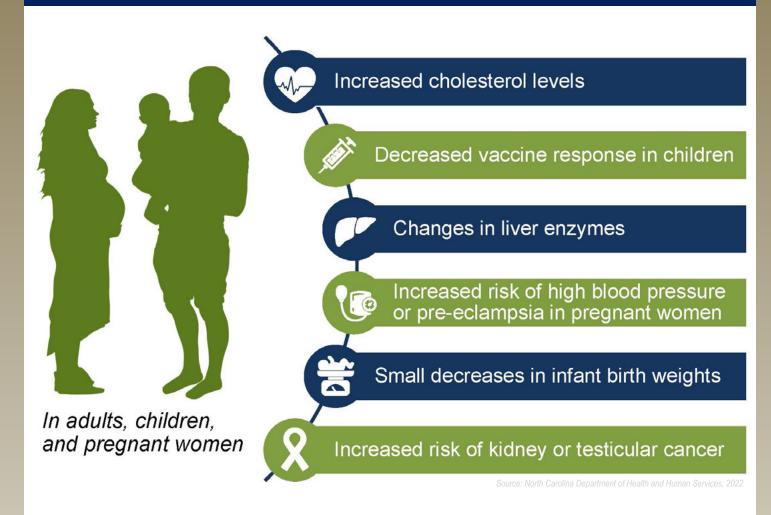
PFOA perfluorooctanoic acid
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S per- and polyfluoroalkyl substances

opt part(s) per trillion

Health Effects

What Are the Potential Health Effects?



- Scientists are still learning about how exposure to PFAS affects people's health.
- Levels of PFAS in drinking water do not predict health effects.

Are Blood Tests Available for PFAS?

- Blood testing for PFAS is available but is not a regular test offered by a doctor.
- Blood test results will not tell you if PFAS exposure causes health problems.

Chemical exposures do not always lead to health effects.

FOR MORE INFORMATION

visit the North Carolina Department of Health and Human Services

PFAS website at

https://epi.dph.ncdhhs.gov/oee/az/pfas.html

or scan the **QR code** →



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On-Base Environmental Cleanup Process

PRIORITY: Protect Human Health and the Environment

- The regulatory process, shown below, is being used to identify and clean up past environmental releases at MCALF Bogue.
- The North Carolina Department of Environmental Quality is working closely with the Navy and Marine Corps to provide oversight at every step of the process.
- Public input is welcome throughout the process and is formally solicited at certain points.
- From beginning to end, this process can be lengthy. Science and policy continue to evolve.

PFAS Environmental Cleanup Process



Investigate

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

Evaluate remedial options

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

Design, construct, and implement

- Put remedy in place.
- Implement treatment.
- Provide long-term management, as needed.
- Solicit public input.

Cleanup complete

- Achieve cleanup goals.
- Implement land use controls as needed.



The on-base PFAS evaluation is in its early stages.

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Sampling Results Timeline

Sequence of Events **Approximate Timeline** 1. Navy and Marine Corps receive Within 1 month preliminary results after sample collected Within 24 hours of 2. Navy and Marine Corps call results received by with results Navy and Marine Corps 3. Bottled water delivered if PFOA Within 24 hours of and/or PFOS above 70 ppt results notification 4. Lab data verified and Navy and Marine Corps mail final results 3 months after sampling to property owner and tenant

Bottled water will be provided until a long-term solution is in place.

TO REQUEST



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Sign Up for Your Sampling Appointment

Sampling Appointment

- No cost to you.
- Available daily Wednesday, June 28– Sunday, July 2 and Thursday, July 6-Thursday, July 13, 2023, from 8 a.m. to 5 p.m.

Additional times are available upon request

What We Need from You

- Signed access authorization form.
- An adult must be present at the property during sampling.

The Navy and Marine Corps will provide bottled water to properties for cooking and drinking if PFOA and/or PFOS are above 70 ppt until a long-term solution can be put in place.

Sampling Process

- Samples collected by a team of two experienced contractors:
 - Takes less than an hour.
 - Collected as close to the well as possible.
 - Water will run prior to sample collection.
- Collected and analyzed according to EPA guidelines.
- Team will take health precautions during sampling if requested.

To schedule an appointment after the Open House, call 877-MCBOGUE (877-622-6483).

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