



Naval Weapons Station (NWS) Earle Colts Neck, New Jersey Drinking Water Sampling for PFAS



February 2023

The Navy is requesting permission to sample drinking water obtained from wells within sampling areas near NWS Earle for certain per- and polyfluoroalkyl substances, commonly known as PFAS.

PFAS are a family of thousands of different chemicals which have been widely used in many household and industrial products since the 1950s. The Navy developed a proactive policy to address past releases of PFAS at installations nationwide, as several PFAS are of emerging public health concern.

The most common activity associated with the historical release of PFAS to the environment at NWS Earle (Figure 1) is the use of firefighting foam (specifically aqueous film-forming foam, or AFFF) for testing, training, firefighting, and life-saving emergency responses. Because of this historical use, PFAS are present in the groundwater on-base, and they may also be present in nearby off-base drinking water wells located in the direction that groundwater flows away from the base.

In 2015, the Navy conducted an on-base groundwater study at the Military Sealift Command Fire Training School (Site 46) (Figure 2), and confirmed that PFAS had been released and had reached shallow groundwater in this area. Site 46 is located near the southwest boundary of NWS Earle, and off-base drinking water wells were identified in the direction that groundwater flows from Site 46. As a result, in 2016, 29 drinking water wells were sampled. Perfluorooctanoic acid (PFOA) and/or perfluorooctane sulfonate (PFOS) were detected above 70 parts per trillion (ppt) combined in two wells. Bottled water was initially provided for drinking and cooking; in 2017, these properties were connected to public water (New Jersey American Water Company – North Coastal [NJ American]).

In 2020, a comprehensive basewide PFAS Preliminary Assessment was completed, which identified eight known and potential releases of PFAS to the environment. These known and potential release areas were investigated further as part of a basewide Site Inspection (SI) that began in 2021. The SI included on-base sampling to confirm if a release of PFAS to the environment occurred. PFOA and/or PFOS were detected in groundwater above 70 ppt combined at two of the release areas, Site 46 and Building C-63 (Figure 2) where off-base drinking water wells are present within a mile downgradient. As a result, off-base sampling areas have been established 1 mile in

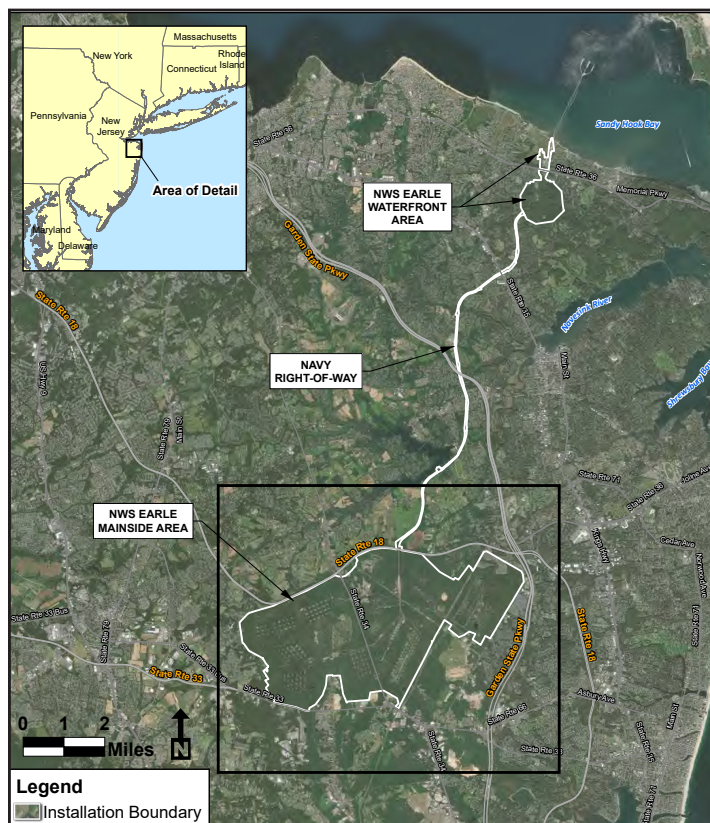


Figure 1- NWS Earle

the direction that groundwater flows away from these two release areas. The Southwest Sampling Area is located in the direction groundwater flows off-base from Site 46 and is an expansion of the 2016 sampling area, and the North Sampling Area is located in the direction groundwater flows off-base from Building C-63 (Figure 2).

Records indicate that drinking water for many properties within the sampling areas is provided by NJ American; however, other properties within the sampling areas use private wells for their drinking water. The Navy would like to sample these drinking water wells to determine if PFOA and/or PFOS are above 70 ppt combined in these drinking water wells.

The Navy will provide bottled water for drinking and cooking to any property owner or tenant in the sampling area whose well contains drinking water with PFOA and/or PFOS above 70 ppt combined. The Navy will provide bottled water until a long-term solution is implemented.

There is no legal requirement to conduct this drinking water testing. We are conducting the sampling in collaboration with partners such as the United States Environmental Protection Agency (EPA), New Jersey Department of Environmental Protection (NJDEP), and the Agency for Toxic Substances and Disease Registry (ATSDR).

PFAS

PFAS have been used in many household and industrial products because of their stain- and water-repellent properties. PFAS are now present virtually everywhere in the world because of the large amounts that have been manufactured and used.

Once these compounds are released, many of them tend to stay in the environment for a very long time. Several PFAS are chemicals of emerging concern. Although the EPA has started the process to establish regulatory levels for several PFAS in drinking water, there are currently no federal Safe Drinking Water Act regulatory standards. The EPA has developed drinking water health advisories for a small number of PFAS; these advisories are non-enforceable and non-regulatory. These advisories provide technical information to states and other public health officials on health effects, analytical methodologies, and treatment technologies. More information about EPA's actions for PFAS in drinking water is online at: <https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>.

NAVY POLICY

The EPA issued lifetime drinking water health advisories for PFOA and PFOS in May 2016. These health advisories recommended that concentrations of PFOA and PFOS, whether individual or combined, in drinking water should not be above 70 ppt. In response, the Navy proactively developed a policy in June 2016 to conduct investigations at installations where there has been a known or suspected release of PFAS to the environment. The first priority with these investigations is to ensure that concentrations of PFOA and/or PFOS, whether individual or combined, in drinking water are not above 70 ppt, as a result of a Navy PFAS release.

In June 2022, the EPA issued new, interim drinking water health advisories for PFOA and PFOS. Because these

interim health advisories are below detectable limits and are non-regulatory levels, the Department of Defense (DOD) is instead looking to EPA to propose a regulatory drinking water standard. DOD is currently evaluating its efforts to address PFAS in drinking water, and what actions we can take to be prepared to incorporate this standard.

ACTIONS BASED ON RESULTS

Preliminary drinking water sample results are typically received from the laboratory within 30 days after the samples are collected, and final laboratory reports are typically available within 3 months. Property owners and tenants will be called to notify them of their preliminary drinking water sample results. Final drinking water sample results will be mailed to property owners and tenants. Property information will be kept confidential to the extent permitted by law. For transparency with the public, final drinking water sampling results are also available online at: <https://denix.osd.mil/dod-pfas/section-345-data-search/section-345-data-reporting>. Individual drinking water sample results cannot be linked with the sampled property on this website.

The Navy will provide bottled water for drinking and cooking to any property owner or tenant in the sampling areas whose drinking water well contains PFOA and/or PFOS above 70 ppt combined and will continue to provide bottled water until a permanent solution is implemented.

The Navy continues to investigate the presence of PFAS on NWS Earle and evaluate if actions are needed on base. The public can find out more about all on-base environmental investigations, including those for PFAS, by visiting <https://go.usa.gov/xJt6F>.

HEALTH INFORMATION

Studies on PFOA and PFOS have found both compounds in the blood samples of the general population. Research to better understand health effects from exposure to low levels of PFOA, PFOS, and other PFAS is ongoing. Federal agencies such as the ATSDR and the EPA continue to conduct and support research into health effects associated with PFAS exposure. More information about health effects can be found online at:

ATSDR:
<https://www.atsdr.cdc.gov/pfas/index.html>

EPA:
<https://www.epa.gov/pfas>

**FOR MORE INFORMATION ABOUT THIS
OFF-BASE DRINKING WATER SAMPLING**

www.navfac.navy.mil/nwsearlepfas

IF YOU HAVE QUESTIONS, PLEASE CONTACT

NWS Earle Public Affairs Office
833-737-7267 or
colt.wpnstaeearlepao@navy.mil

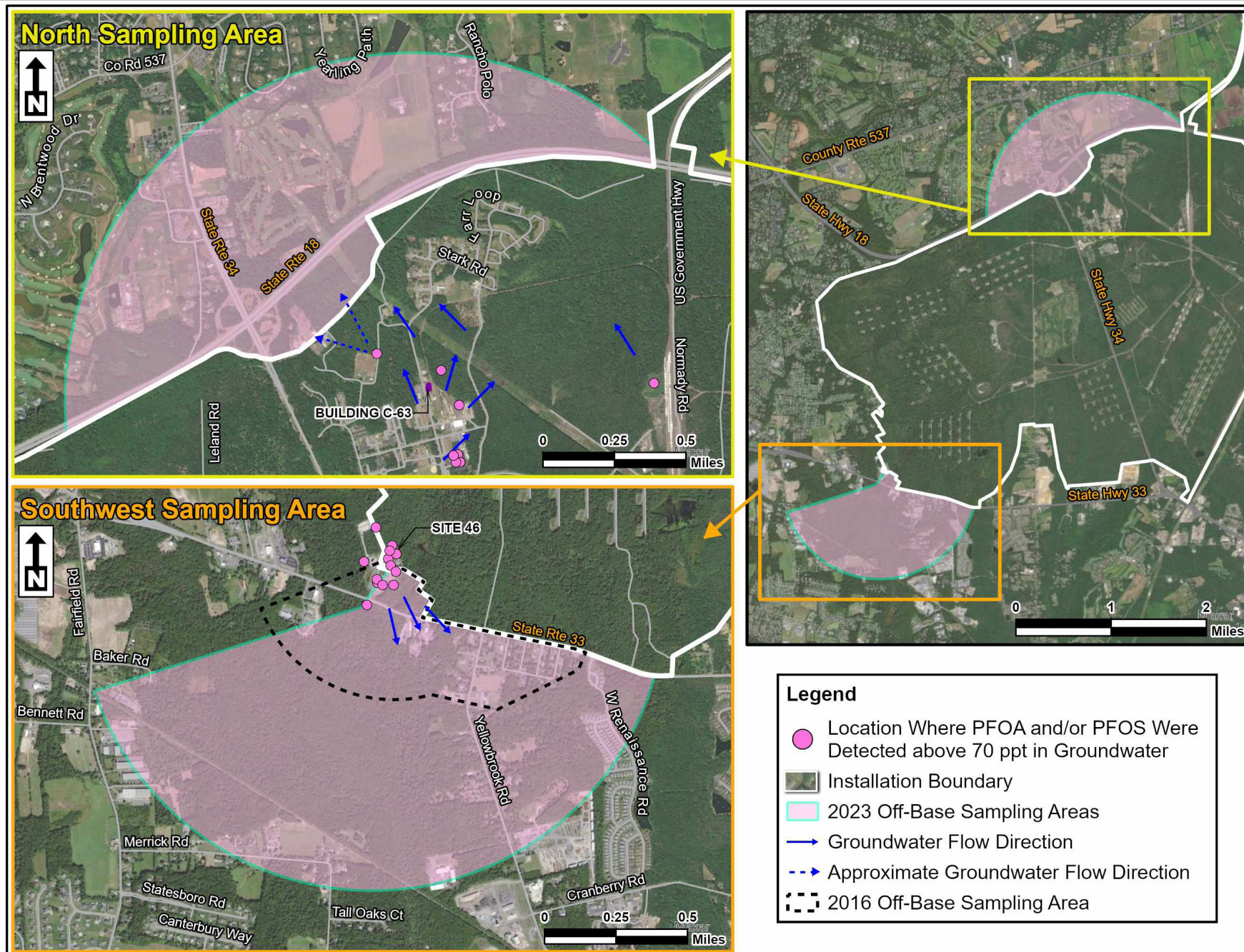


Figure 2 - Sampling Areas