NASWI Ault Field Phase 3 Drinking Water Investigation

May 2017

ACTIONS BASED ON RESULTS

Results from the Phase 2 drinking water sampling were received in spring 2017, and property owners were notified of their individual results. Results from Phase 3 drinking water sampling are expected in summer 2017. The Navy will provide notification to each property owner of their personal drinking water results and follow-up actions if needed. We will keep the results private to the greatest extent possible.

The EPA recommends that water containing PFOS and/or PFOA above the health advisory levels not be used for drinking or cooking. If your preliminary results show that your drinking water contains PFOS and/or PFOA above the EPA health advisory level, the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.

The Phase 3 sampling area, as shown on Figure 2, may be expanded in one or more directions in the future depending on the results.

PUBLIC MEETINGS

The Navy is hosting two Open House Public Meetings to discuss the Phase 2 sampling results and the Phase 3 sampling plan. Representatives from the Navy, the EPA, the ATSDR, the Washington State DOH, and Island County Public Health will be at the Open House Public Meetings to discuss this important project with you.

Please attend at any time during one of the following meetings to have your questions answered.

Oak Harbor

Wednesday, May 31, 2017, 5–7 p.m. Hillcrest Elementary School, 1500 NW 2nd Avenue

Coupeville

Thursday, June 1, 2017, 5–7 p.m. Camp Casey Conference Center, 1276 Engle Road

HEALTH INFORMATION

Exposure to

PFOS and PFOA appears to be global. Studies have found both compounds in the blood samples of the general population. Studies on exposed populations indicate that PFOS and/or PFOA may cause elevated cholesterol levels and possibly low infant birth weight. In studies conducted using laboratory animals, effects on developmental, neurological, immune, thyroid, and liver function were observed. Evidence linking PFOS and/or PFOA with cancer is inconclusive.

Health effects from exposure to low levels of PFAS are not well known and studies are continuing. At this time, it is not possible to link exposures to PFOS and/or PFOA to a person's individual health issues. Blood tests are available to measure these chemicals, but they are not routinely done because the results can be inconclusive and test results do not predict health effects. Long-term exposure effects are still being investigated by the EPA.

Based on what is known and still unknown about PFOS and PFOA, it is recommended that people not drink or cook with water that contains these compounds above the EPA health advisory level.

FOR MORE INFORMATION

www.secnav.navy.mil/eie/pages/pfc-pfas.aspx

The Navy has established the following website to keep you updated as more information becomes available: http://go.usa.gov/xkMBc

You may schedule drinking water sampling for your residence by leaving a voicemail at **360-396-1030** or by sending an email to **PAO** feedback@navy.mil.



Naval Air Station Whidbey Island Ault Field

Phase 3 Drinking Water Investigation

May 2017

INTRODUCTION

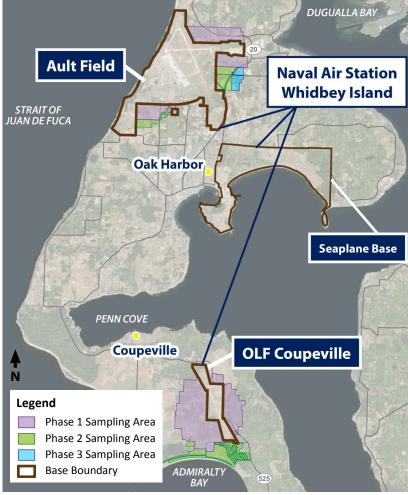
The Navy is addressing past releases of perand poly-fluoroalkyl substances, commonly known as PFAS, under the Navy Environmental Restoration Program. These substances may be present in the soil and/or groundwater at Navy sites as a result of historical fire fighting activities using aqueous film forming foam (AFFF). This film was used for plane crashes, equipment testing, and training, as well as in other operations such as plating shops and hangars where AFFF was used in the fire suppression system. Based on historical use of AFFF, there are two areas of PFAS investigation at Naval Air Station Whidbey Island (NASWI): Ault Field and Outlying Landing Field (OLF) Coupeville (see Figure 1).

Since drinking water sources may have been impacted by our past use of AFFF, our first step has been to sample drinking water sources that are close to known or suspected releases of AFFF. The Navy is conducting this voluntary measure to determine if our past operations on the base have impacted offbase drinking water. The Navy continues to request access to private drinking water wells that have not yet been sampled within

the Phase 1 and Phase 2 sampling areas. The Navy is working closely with the Environmental Protection Agency (EPA) Region 10, the Agency for Toxic Substances and Disease Registry (ATSDR) Region 10, the Washington State Department of Health (DOH), and Island County Public Health to assess the potential releases and the impact to drinking water near Ault Field and OLF Coupeville. The Navy will continue to work with these agencies to protect public health.

This fact sheet focuses on the Ault Field Drinking Water Investigation. *The Navy is requesting access to sample*





all private drinking water wells within the Phase 3 sampling area near Ault Field and all private drinking water wells within the Phase 1 and Phase 2 areas (see Figure 2) that have not been previously sampled. The Navy will be coordinating with the community water purveyors to sample the drinking water supply wells in this area for those residents receiving their drinking water from a community system.

A separate fact sheet is available with information on the OLF Coupeville investigation.

If your preliminary results show that your drinking water contains PFOS and/or PFOA above the EPA health advisory level, then the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.

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BACKGROUND

PFAS are manufactured chemicals that have been used since the 1950s in many household and industrial products because of their stain- and water-repellant properties (for example, fabric in upholstered furniture, carpet, nonstick cookware, floor wax, and the lining of microwave popcorn bags). PFAS are now widespread in the world because of the large amounts that have been manufactured and used. Once these compounds are released to the environment, they remain there for a long time.

PFAS are a type of "emerging contaminant," which is a chemical or material characterized by a perceived, potential, or real threat to human health or the environment or by a lack of published health standards. PFAS have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The EPA continues to study PFAS to determine if regulation is needed.

In May 2016, the EPA announced lifetime health advisory levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). According to the EPA: *Health advisory levels are not regulatory standards. They are health-based concentrations which should offer a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOS and PFOA in drinking water.* The EPA health advisory level for lifetime exposure is 70 parts per trillion (ppt) for PFOS and 70 ppt for PFOA. When both PFOS and PFOA are found in drinking water, the combined concentrations should not exceed 70 ppt.

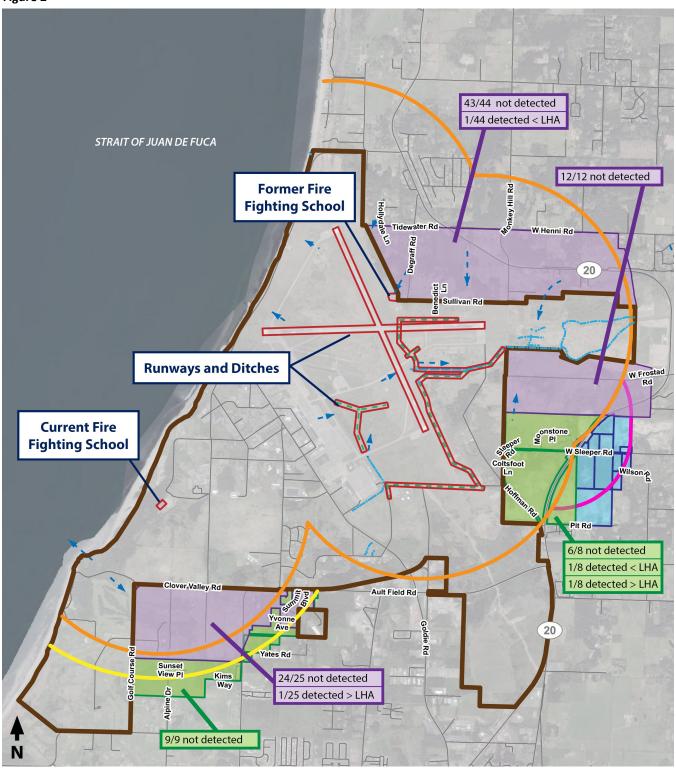
The drinking water investigation for Ault Field has focused on PFOS and PFOA because these are the only PFAS for which the EPA has established a health advisory level in drinking water.

PHASE 1, 2, AND 3 DRINKING WATER INVESTIGATIONS

The Phase 1 off-base drinking water sampling area was selected based on groundwater flow direction and the on-base locations of known or suspected releases of AFFF. The Phase 1 area extends approximately 1 mile to the east of the Ault Field runway, a half-mile to the north of the former Fire Fighting School, and 1 mile downgradient from the current Fire Fighting School (see Figure 2).

The Phase 1 sampling area included more than 176 properties. Phase 1 drinking water sampling occurred from November 2016 to February 2017. The results indicate that PFOS and/or PFOA are above the EPA health advisory in one off-base drinking water well located south of the current Fire Fighting School. Based on these results and other information made available to the Navy, the Phase 1 drinking water investigation area was extended an additional half-mile downgradient from the current Fire Fighting School and to include additional parcels east of the runway and runway ditches on the east side of Ault Field. This additional area is referred to as the Phase 2 sampling area (see Figure 2).

Figure 2



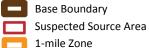
The Phase 2 sampling area included 60 properties. Phase 2 drinking water sampling occurred from February to March 2017. The results indicate that PFOS and/or PFOA are above the EPA health advisory in one additional off-base drinking water well located east of the Ault Field runway. Based on the Phase 2 results, the Navy will expand the drinking water investigation a half-mile downgradient of this area. This additional area is referred to as the Phase 3 sampling area (see Figure 2). The Navy also resampled the Phase 1 well with the health advisory exceedance; this result confirmed that exceedance. The table below summarizes the results for Phase 1 and 2 drinking water sampling.

If your property is within the Phase 3 sampling area or within either the Phase 1 or the Phase 2 designated sampling areas and you have a drinking water well that has not previously been sampled by the Navy, the Navy encourages you to schedule sampling of your well at the Open House Public Meetings, by leaving a voicemail at 360-396-1030, or by emailing the Navy's Public Affairs Office at PAO_feedback@navy.mil. If your property is within the designated Phase 1 or 2 sampling areas and a drinking water well is not present on your property, we would like you to confirm that information by contacting the Navy at the phone number and email address above.

Phase 1 and 2 Sampling Area Drinking Water Results at Ault Field				
	Samples Collected	PFOS and/or PFOA Not Detected	PFOS and/or PFOA Detected Below EPA Health Advisory	PFOS and/or PFOA Detected Above EPA Health Advisory
Phase 1	82	79	1	2*
Phase 2	17	15	1	1
Total	99	94	2	3*

* Number represents two samples collected from one well, both of which exceeded the EPA health advisory. Two samples from one well exceeded the EPA health advisory in the Phase 1 sampling area, and one well exceeded the EPA health advisory in the Phase 2 sampling area.





Half-mile Step-out
Downgradient (Phase 2)
Half-mile Step-out
Downgradient (Phase 3)

Phase 1 Sampling Area
Phase 2 Sampling Area
Phase 3 Sampling Area

Surface WaterDrainage Ditch

Approximate Groundwater Flow Direction

Note: Figure 2 represents PFOS and/or PFOA detection results for unique wells sampled.