

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. PFOS and/or PFOA were not detected in any wells sampled during Phase 2. Additional step-out sampling is not planned near OLF Coupeville at this time.

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, then the Navy will provide bottled water or an alternate water supply until a long-term solution is implemented.

PUBLIC MEETINGS

The Navy is hosting two Open House Public Meetings to discuss the Phase 2 results. 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

ON-SITE GROUNDWATER INVESTIGATION

The Navy conducted sampling of 27 newly installed on-base groundwater monitoring wells in February and March 2017. PFOS and/or PFOA were detected above the EPA health advisory in three wells located near the center of the runway at OLF Coupeville. This on-base investigation also confirmed that the primary groundwater flow direction from OLF Coupeville is to the south toward Admiralty Bay. Based on the

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.

information collected, a Phase 3 sampling area is not recommended at this time. The Phase 1 and 2 sampling areas already include the off-base drinking water wells downgradient (in the direction of groundwater flow) from groundwater wells on OLF Coupeville with PFOS and/or PFOA above the EPA health advisory level. If your property is within either Phase 1 and 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 to ensure that your drinking water well is not impacted with PFOS and/or PFOA 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
OLF Coupeville**

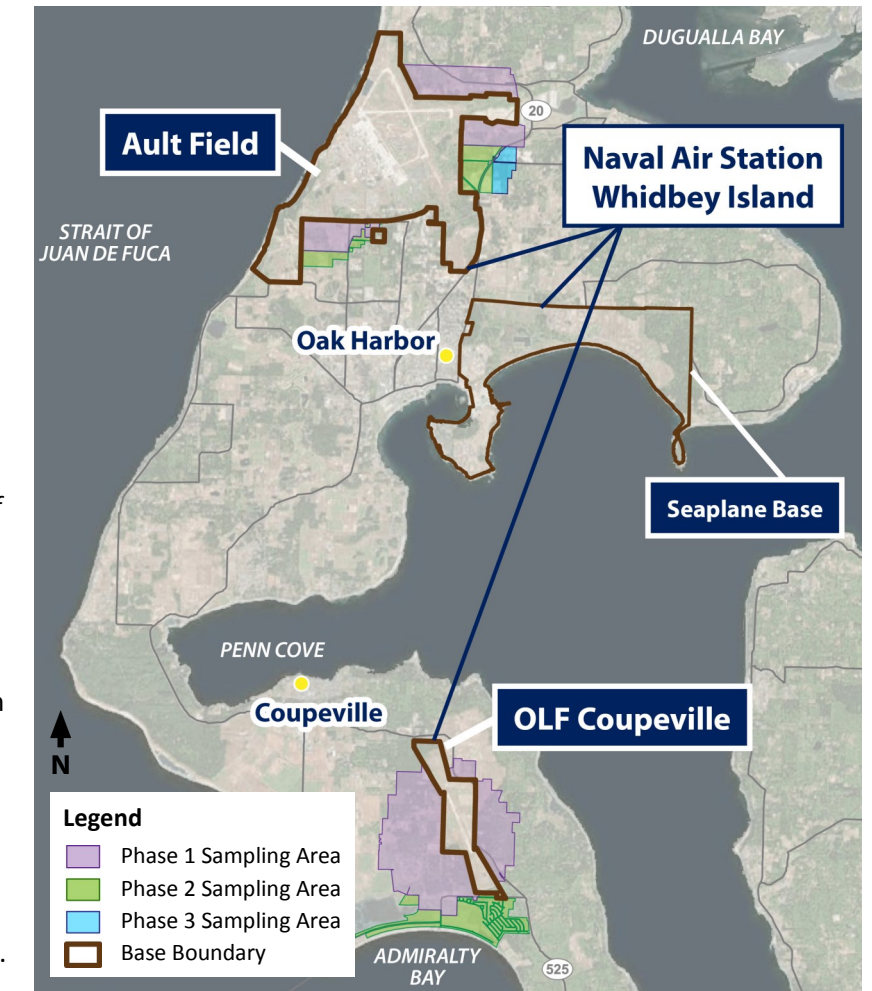
Drinking Water Investigation

INTRODUCTION

The Navy is addressing past releases of per- and 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 off-base 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 sample 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.

Figure 1



This fact sheet focuses on the OLF Coupeville Drinking Water Investigation. **The Navy is requesting access to sample all private drinking water wells within the Phase 1 and 2 areas (see Figure 2) that have not been previously sampled.**

A separate fact sheet is available with information on the NASWI Ault Field 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.

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.

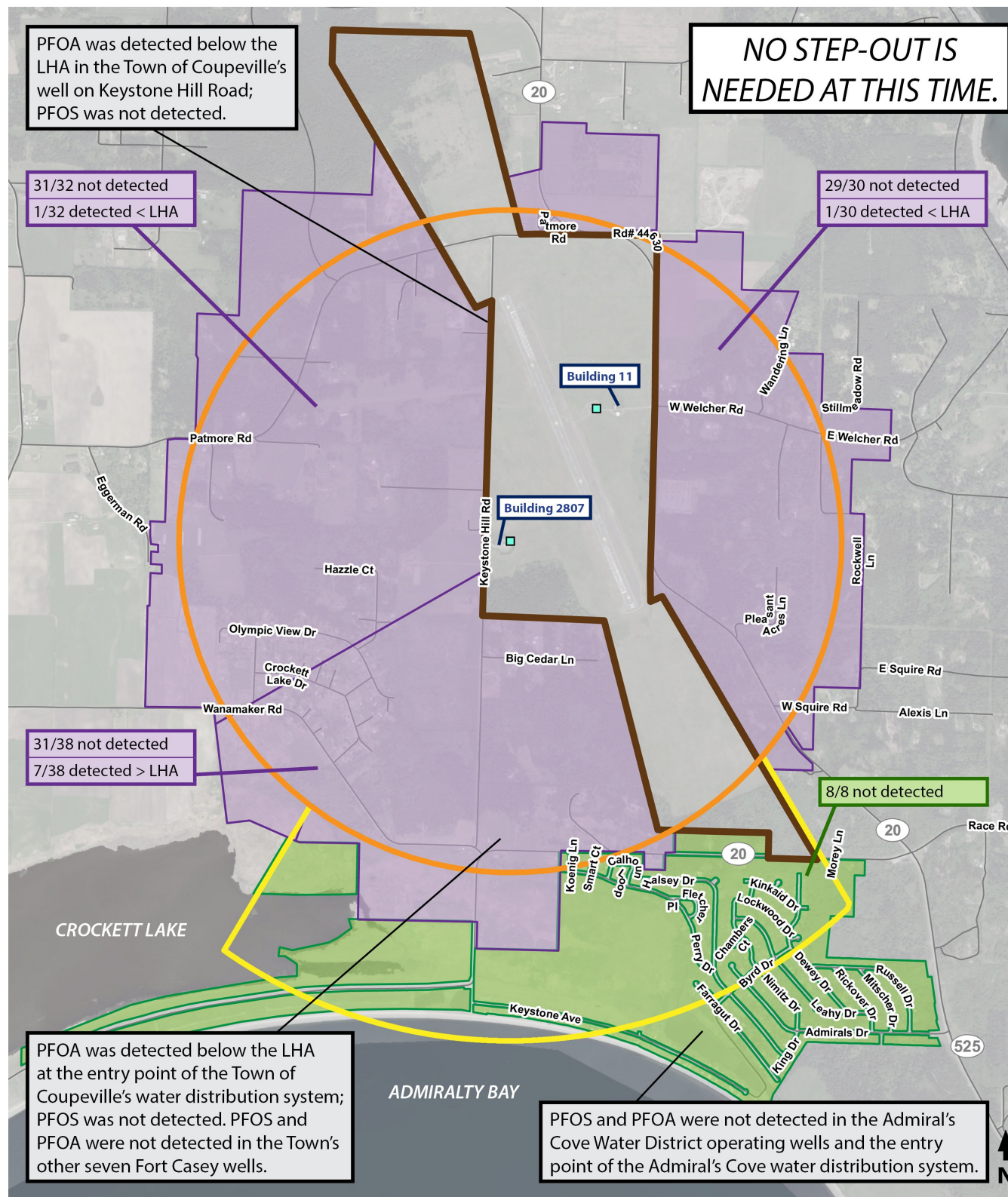
The drinking water investigation for OLF Coupeville has focused on PFOS and PFOA because these are the only PFAS for which the EPA has established a health advisory level in drinking water.

PHASE 1 AND 2 INVESTIGATIONS

The Navy conducted on-base drinking water sampling at OLF Coupeville in September 2016. PFOA was detected in one on-base drinking water well below the EPA health advisory, which indicates a potential previous release of AFFF near Building 2807 (see Figure 2). No previous groundwater investigations were conducted at OLF Coupeville, so there was significant uncertainty regarding groundwater flow direction. Due to this uncertainty, the Navy used Building 2807 as the center point to draw a 1-mile radius to initiate off-base drinking water sampling.

The Phase 1 sampling area included more than 397 properties. Phase 1 drinking water sampling occurred from November 2016 to March 2017. The Phase 1 results indicate that PFOS and/or PFOA are above the EPA health advisory in seven off-base drinking water wells located south of the OLF runway. Based on the Phase 1 results, the Navy expanded the drinking water investigation a half-mile downgradient of this area. This additional area is referred to as the Phase 2 sampling area (see Figure 2).

Figure 2



Legend

- Base Boundary
- OLF Drinking Water Well
- 1-mile Zone
- Half-mile Step-out Downgradient
- Phase 1 Sampling Area
- Phase 2 Sampling Area

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

The Phase 2 sampling area included more than 795 properties, including 768 properties in Admiral's Cove which are provided water by a common community drinking water system. Phase 2 drinking water well sampling occurred from February to March 2017. Nine drinking water samples were also collected to the south of OLF Coupeville. Of those samples, PFOS and/or PFOA were not detected in any wells, including the Admiral's Cove water supply wells and water distribution system. Based on the Phase 2 results, the Navy does not plan to expand the drinking water sampling area near OLF Coupeville at this time. The table below summarizes the results for Phase 1 and 2 drinking water sampling.

If your property is 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 sample 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 OLF Coupeville				
	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	103	92	4*	7
Phase 2	9	9†	0	0
Total	112	101	4	7

Note: Values in the table also include results from two on-base drinking water supply wells and the Town of Coupeville and Admiral's Cove water distribution system wells.

** One sample was collected from the entry point of the Town of Coupeville water supply distribution system.*

† One sample was collected from the entry point of the Admiral's Cove water supply distribution system.