



# Naval Air Station Whidbey Island Ault Field

## Drinking Water Investigation

November 7, 2016

### INTRODUCTION

The Navy has developed a protective policy to address 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), including response to plane crashes, equipment testing, and/or training, as well as 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).*

The Navy recognizes the potential for people to be exposed to drinking water impacted by our use of AFFF. Therefore, our first priority is to sample drinking water sources that are close to confirmed or potential AFFF releases. NASWI was identified for sampling under this Navy policy because PFAS have been found in the groundwater at Ault Field and drinking water at OLF Coupeville. The Navy is working in conjunction with Region 10 Environmental Protection Agency (EPA), Agency for Toxic Substances and Disease Registry, Washington State Department of Health, and Island County Public Health to conduct drinking water investigations at Ault Field and OLF Coupeville. The Navy will continue to work with agencies until long-term solutions are implemented.

**If your drinking water is found to contain PFAS above the EPA health advisory level, the Navy will provide alternate drinking water (for example, bottled water) until a long-term solution is implemented.**



The Navy is conducting this voluntary measure to ensure we protect drinking water quality both on- and off-base. There is no legal requirement to conduct the planned drinking water testing.

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 1 sample area near Ault Field (Figure 2) and will be coordinating with the community water purveyors to sample the 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.

**BACKGROUND**

PFAS are man-made 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 present virtually everywhere 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 “emerging” contaminants, which have no Safe Drinking Water Act regulatory standards or routine water quality testing requirements. The EPA is currently studying PFAS to determine if regulation is needed.

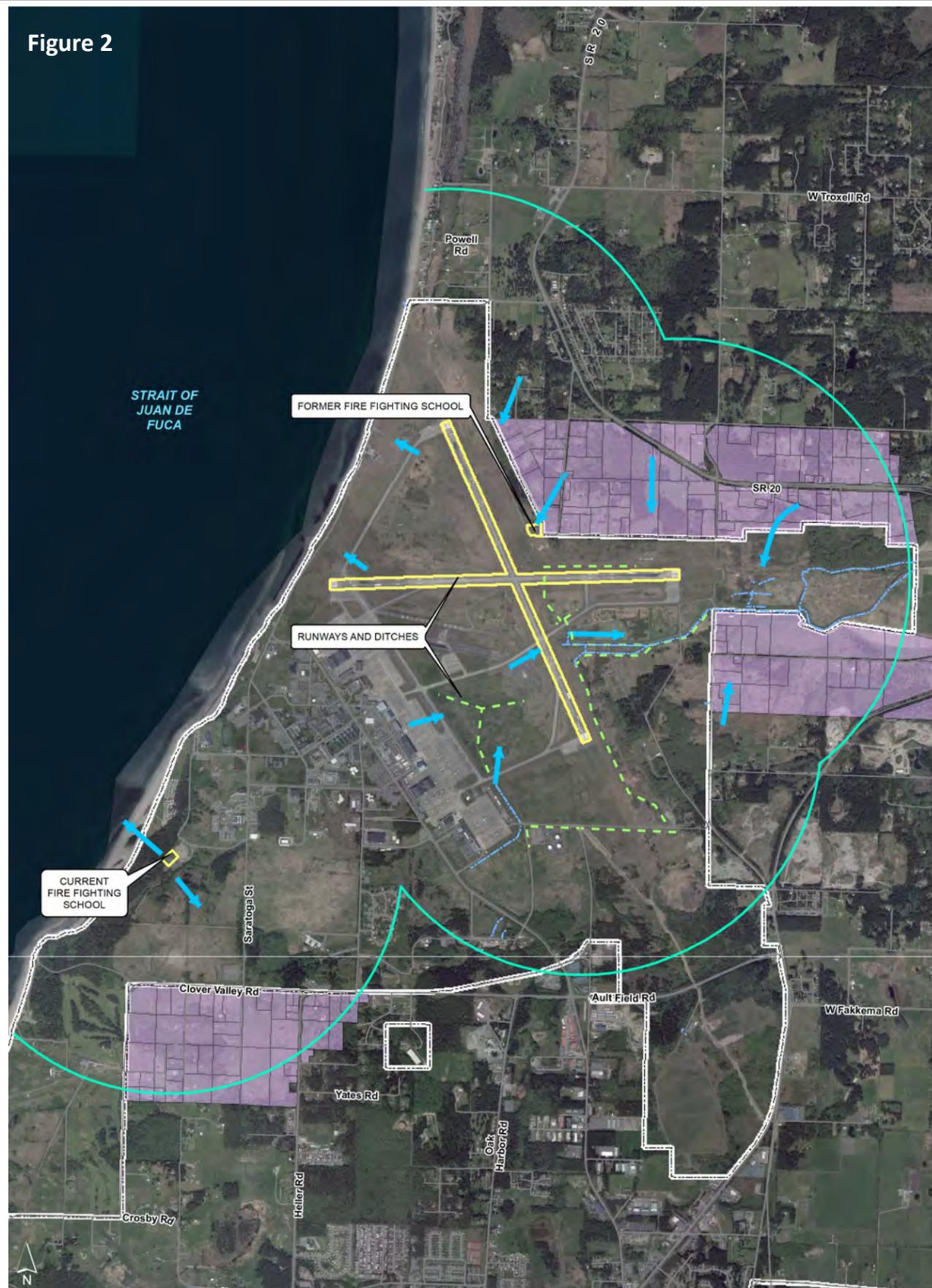
In May 2016, the EPA announced lifetime health advisory levels for two PFAS, specifically perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). According to the EPA: **Health advisory levels are not regulatory standards. They are health-based concentrations which should offer a margin of 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 will focus on PFOS and PFOA because these are the only PFAS for which the EPA has established a health advisory level in drinking water.

**INVESTIGATION**

As of now, the Navy has identified three areas on Ault Field where AFFF releases occurred or are suspected to have occurred. These include the Former Fire Fighting School, the Ault Field Runway and associated drainage ditches, and the Current Fire Fighting School (Figure 2). PFOS/PFOA have been detected in the shallow groundwater at the Former Fire Fighting School above the EPA’s health advisory levels, confirming the past release of these compounds. (NOTE: The on-base shallow groundwater wells are not drinking water wells). Although PFOA and PFOS were **not** detected in the groundwater at the Ault Field Runway Ditches, AFFF may have reached the runway ditches through piping associated with an oil-water separator or during emergency response firefighting activities on the runways. As such, it is possible that AFFF could have infiltrated the groundwater in the vicinity. Additionally, AFFF has been used at the Current Fire Fighting School, but to date no sampling for PFOS/PFOA has been conducted at this location. Because of the AFFF released at this site, it is possible that it has infiltrated the groundwater at this location.

Figure 2



Navy policy is to sample drinking water sources 1 mile downgradient (in the direction of groundwater flow) from a known or suspected release of AFFF. Because of the complex groundwater flow at Ault Field, the confirmed or potential release of AFFF, and the nearby private and community drinking water wells, the Navy has cautiously expanded the area both up- and cross-gradient to groundwater flow. This extends the sampling area approximately 1 mile to the east and ½ mile to the north of the Former Fire Fighting School. We will also sample a 1-mile area downgradient from the Current Fire Fighting School. Sampling in these areas will allow the Navy to identify if our neighbors are exposed to PFOA/PFOS in drinking water above the EPA health advisory levels. The Navy has initially identified more than 150 properties within the three Ault Field investigation areas (Figure 2) that are in the initial sampling area. The shaded areas in Figure 2 depict the Phase 1 drinking water sampling area.

**With permission, the Navy would like to sample all drinking water wells in the designated sampling area. The Navy is seeking the public’s assistance to identify all drinking water wells within the sampling area.**

**If your property is within the designated sampling area and you have a drinking water well on your property, you may schedule sampling of your well at the Open House or by leaving a voicemail at 360-396-1030 or emailing the Navy’s Public Affairs Office at PAO\_Feedback@navy.mil.**

Representatives from the Navy, EPA, Agency for Toxic Substances and Disease Registry, Washington State Department of Health, and Island County Public Health will be available at the Open House Public Meetings to discuss this important project.

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

**Oak Harbor**  
Monday, November 21, 2016, 5–9 p.m.  
Oak Harbor Elementary School, 151 SE Midway Blvd

**Coupeville**  
Tuesday, November 22, 2016, 11 a.m.–2 p.m. and 5–9 p.m.  
Camp Casey Conference Center, 1276 Engle Road

- Legend**
- Surface Water
  - Drainage Ditch
  - Assumed Regional Groundwater Flow Direction
  - Ault Field 1-mile zone
  - Suspected Source Area
  - Phase 1 Sample Areas
  - Base Boundary

**ACTIONS BASED ON RESULTS**

Results from drinking water sampling are expected in early 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 confidential 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 drinking water is found to contain PFOS and/or PFOA above the EPA health advisory level, the Navy will provide bottled water or an alternate water supply after receiving the preliminary analytical results. The Navy will continue to provide the alternate water source until a long-term solution is implemented.

**The phase 1 sampling area, as shown on Figure 2, may be expanded in one or more directions in the future depending on the results.**

**FOR MORE INFORMATION**

***[www.secnav.navy.mil/eie/pages/pfc-pfas.aspx](http://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](mailto:PAO_feedback@navy.mil)**.

**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. When laboratory studies give rats or mice large doses, they exhibit developmental, reproductive, and liver effects. Other studies suggest a link with certain cancers.

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.

***Consuming water above the EPA lifetime health advisory level may be a health concern.***