# NAVAL AIR STATION WHIDBEY ISLAND

DRINKING WATER SYSTEM
CONSUMER CONFIDENCE REPORT
2020



system, which provides purchased, treated, drinking water to employees, residents, and visitors. The following water quality information is being provided to you, our consumer, in accordance with the Federal Safe Drinking Water Act, as implemented by the U.S. Environmental Protection Agency (EPA) and Washington State Department of Health (DOH) regulations.

Throughout 2020, the drinking water distributed through the Navy water system consistently met federal and state drinking water health standards.



### Where does my drinking water come from?

The NASWI water supply comes from the water treatment facility at Mount Vernon, owned and operated by the City of Anacortes. Raw water from the Skagit River is pumped to the plant where it undergoes full treatment including screening, filtration, and disinfection to make it safe. The treated water is then pumped to Whidbey Island via pipeline and enters the NASWI water system. The drinking water system aboard NASWI is operated by the base operating services contractor, whose contract is managed by the base Public Works Department. The Environmental Division reports water sampling results to ensure compliance with EPA and DOH regulations. Water treatment aboard NAS Whidbey Island includes adding fluoride to strengthen teeth and chlorine to ensure adequate disinfection.

## What is in my drinking water?

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up other substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- © Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- © Organic chemical contaminants, including synthetic and volatile organic chemicals, are the potential by-products of various industrial processes, petroleum storage and handling, gas station operations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production, and mining operations.

## How is the safety of my drinking water ensured?

To ensure your tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Your water is monitored daily for chlorine and fluoride treatment levels, monthly for the presence of coliform bacteria, and quarterly in four locations for chlorine disinfection by-products. It is monitored every three years for lead and copper, and once every 6 years for asbestos.

During calendar year 2020, there was no confirmed coliform positive sample during initial sampling. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).



#### Can my health be affected?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons with HIV/AIDs or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about their drinking water from their health care providers. EPA and Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline (1-800-426-4791).

#### Is there lead in my drinking water?

EPA and Washington State regulations require NAS Whidbey Island to monitor for the presence of lead and copper at household and non-residential taps every 3 years. Lead was tested in 2019 with no exceedances detected out of 30 locations sampled. If present in your drinking water, lead can cause serious health problems, especially for pregnant women and children. It is possible that lead levels in your home may be higher compared to others due to plumbing construction and service lines. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using it for drinking or cooking. Additional information about lead in your water is available from the EPA Safe Drinking Water Hotline (1-800-426-4791).

#### What about other contaminants?

The City of Anacortes Water Treatment Plant, as NAS Whidbey Island's water supplier, is required to test for water contaminants at the water source. They reported no detected levels or exceedances of total coliform bacteria, total organic carbon, nitrate, haloacetic acids, total trihalomethanes, sodium, barium, fluoride, or turbidity in the treated drinking water. Click on the link for more information on the City of Anacortes' water quality: <a href="https://www.cityofanacortes.org/Archive.aspx?AMID=47">https://www.cityofanacortes.org/Archive.aspx?AMID=47</a>.

Due to the consistently high quality of your drinking water, there has been no need for a public meeting to discuss decisions affecting the water quality. If such a meeting becomes necessary in the future, it will be publicized in the NAS Whidbey Island Plan of the Week, NAS Whidbey Island website, and social media.

#### What can I do to save water?

Water is one of our most precious resources. As summer approaches and rainfall becomes scarce, it is particularly important to conserve water at home. Saving water minimizes the effects of drought and water shortages, helps to preserve the environment, and makes water available for recreational purposes.

Things you can do to save water at home include:

- Turn off the water while brushing teeth or shaving.
- Take shorter showers.
- © Use your dishwasher and washing machine for full loads only.
- © Check pipes, faucets, and outdoor spigots for slow leaks.

For drinking water quality or conservation comments or questions, please contact the Environmental Division, Public Works Department, Whidbey Island at (360) 257-5631.

The following table presents the regulatory limits and sampling results for contaminants, which NAS Whidbey Island routinely monitors:

LEAD AND COPPER – Testing is completed through the customer's taps every 3 years. 2019 results are posted in the table below.

Contaminant	Action Level	MCLG	90 <sup>th</sup> percentile	Samples Exceeding Limits	Violation	Typical Sources	
Lead	90% of homes less than 15 ppb	0 ppb	2 ppb	0 out of 30	NO	Corrosion of household plumbing systems.	
Copper	90% of homes less than 1.3 ppm	1.3 ppm	0.182 ppm	0 out of 30	NO	Corrosion of household plumbing systems.	
INORGANIC CHEMICALS - Chloride and Fluoride tested daily							
Contaminant	EPA's MRDL	MRDLG	Highest Result	Results Range	Violation	Typical Sources	
Chlorine	4 ppm	4 ppm	1.1 ppm	0.1-1.1 ppm	NO	Added as a drinking water disinfectant.	
Contaminant	MCL	Ideal Goal	Highest Result	Range Results	Violation	Typical Sources	
Fluoride (ppm)	4 ppm	4 ppm	0.93 ppm	0.61-0.93 ppm	NO	Erosion of natural deposits, or water additive that promotes strong teeth.	
DISINFECTION BY-PRODUCTS - Tested quarterly at 4 locations in the water system							
Contaminant	MCL	Trigger Level	Average Detected	Range Results	Violation	Typical Sources	
Total Trihalomethanes	80 ppb	60	21.87 ppb	16.55-26.5 ppb	NO	By-product of drinking water disinfection.	
Total Haloacetic Acids	60 ppb	45	17.59 ppb	16.45-21.95 ppb	NO	By-product of drinking water disinfection.	
	Lead  Copper  INORGANIC CHEMIC  Contaminant  Chlorine  Contaminant  Fluoride (ppm)  DISINFECTION BY-PR  Contaminant  Total  Trihalomethanes  Total Haloacetic	Lead  Pow of homes less than 15 ppb  Copper  Pow of homes less than 1.3 ppm  INORGANIC CHEMICALS - Chloride and Fluo  Contaminant  Contaminant  Contaminant  MCL  Fluoride (ppm)  DISINFECTION BY-PRODUCTS - Tested quart  Contaminant  MCL  Total  Total  Total  Total Haloacetic  Total Haloacetic  Total for pph	Lead  90% of homes less than 15 ppb  Copper  90% of homes less than 1.3 ppm  Popm  INORGANIC CHEMICALS - Chloride and Fluoride tester  Contaminant  EPA's MRDL  MRDLG  Chlorine  4 ppm  4 ppm  Contaminant  MCL  Fluoride (ppm)  4 ppm  4 ppm  DISINFECTION BY-PRODUCTS - Tested quarterly at 4 level  Contaminant  MCL  Trigger  Level  Total  Trihalomethanes  Total Haloacetic  60 pph  45	Contaminant       Action Level       MCLG percentile         1       90% of homes less than 15 ppb       0 ppb       2 ppb         2       1.3 ppm       0.182 ppm       0.182 ppm         1       1.3 ppm       1.3 ppm       0.182 ppm         1       1.3 ppm       1.3 ppm       1.3 ppm         1       1.3 ppm       1.3 ppm       1.3 ppm         1       1.0 ppm       1.0 ppm       1.0 ppm         1       1.0 ppm       1.1 ppm       1.1 ppm         1       1.1 ppm       1.1 ppm       1.1 ppm         1       1.1 ppm       1.1 ppm       1.1 ppm         2       1.1 ppm       1.1 ppm       1.1 ppm         3       1.1 ppm       1.1 ppm       1.1 ppm         4       1.1 ppm       1.1 ppm       1.1 ppm	ContaminantAction LevelMCLG percentilepercentileExceeding LimitsLead90% of homes less than 15 ppb0 ppb2 ppb0 out of 30Copper90% of homes less than 1.3 ppm1.3 ppm0.182 ppm0 out of 30INORGANIC CHEMICALS - Chloride and Fluoride tested dailyContaminantEPA's MRDLMRDLGHighest ResultResults RangeChlorine4 ppm4 ppm1.1 ppm0.1-1.1 ppmContaminantMCLIdeal GoalHighest ResultRange ResultsFluoride (ppm)4 ppm4 ppm0.93 ppm0.61-0.93 ppmDISINFECTION BY-PRODUCTS - Tested quarterly at 4 locations in the water systemContaminantMCLTrigger LevelAverage DetectedRange ResultsTotal Trihalomethanes80 ppb6021.87 ppb16.55-26.5 ppbTotal Haloacetic60 ppb4517.59 ppb16.45-21.95 ppb	Contaminant     Action Level     MCLG percentile     Exceeding Limits     Violation       Lead     90% of homes less than 15 ppb     0 ppb     2 ppb     0 out of 30     NO       Copper     90% of homes less than 1.3 ppm     1.3 ppm     0.182 ppm     0 out of 30     NO       INORGANIC CHEMICALS - Chloride and Fluoride tested daily       Contaminant     EPA's MRDL     MRDLG     Highest Result     Results Range     Violation       Chlorine     4 ppm     4 ppm     1.1 ppm     0.1-1.1 ppm     NO       Contaminant     MCL     Ideal Goal Result     Range Results     Violation       Fluoride (ppm)     4 ppm     4 ppm     0.93 ppm     0.61-0.93 ppm     NO       DISINFECTION BY-PRODUCTS - Tested quarterly at 4 locations in the water system       Contaminant     MCL     Trigger Level     Average Packeted     Range Results     Violation       Total Total Total Total Total Total Total Haloacetic     80 ppb     60     21.87 ppb     16.55-26.5 ppb     NO       Total Haloacetic     60 nph     45     17.59 nph     16.45-21.95 nph     NO	

How to Read the Water Quality Data Table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances not detected are not included in the table.

Action Level (AL). Action Level is the concentration of lead or copper in drinking water which, if exceeded, may trigger additional water treatment or other corrective actions.

**DOH Trigger Level.** If substances are detected above this level, WA DOH requires more frequently sampling.

Maximum Contaminant Level or MCL. The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG. The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL). The highest level of a disinfectant allowed in drinking water.

**Maximum Residual Disinfectant Level Goal (MRDLG).** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A = not applicable; ND = non-detectable by EPA required lab analysis method (DOH reporting limit is 1 ppb).

Units in the Table: ppm is an abbreviation for parts per million; ppb is an abbreviation for parts per billion.

#### Per- and polyfluoroalkyl Substances (PFAS)

#### What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the United States, since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. PFAS chemicals are persistent in the environment and some are persistent in the human body – meaning they do not break down and they can accumulate over time.

#### Is there a regulation for PFAS in drinking water?

There is currently no established federal water quality regulation for any PFAS compounds. In May 2016, the EPA established a health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Both chemicals are types of PFAS.

Out of an abundance of caution for your safety, the Department of Defense's (DoD) PFAS testing and response actions go beyond EPA Safe Drinking Water Act requirements. In 2020 the DoD promulgated a policy to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every three years.

The EPA's health advisory states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should quickly undertake additional sampling to assess the level, scope, and localized source of contamination to inform next steps.

## Has NAS Whidbey Island tested its water for PFAS?

Yes. In November 2020 samples were collected from Outlying Landing Field (OLF) Coupeville in two locations.

Based on the sampling results, PFOA tested higher than the EPA HA on 23 November 2020 in one of the two wells sampled. The results are provided below. Public notification of this sample result was initially provided on January 11, 2021 via the NAS Whidbey Island website:

https://www.cnic.navy.mil/regions/cnrnw/om/environmental support/water quality information.html

The EPA HA is the health-based concentration above which action should be taken to reduce exposure to PFOA and PFOS. In accordance with the DoD policy, alternate water is provided until the drinking water is tested and is consistently below the HA. At this time, personnel working at OLF Coupeville are receiving bottled water until sampling indicates PFOS and PFOA levels are below the HA. NAS Whidbey Island will be sampling quarterly to monitor the situation, and periodic updates will be available on the link above.

Sample results at OLF Coupeville well: PFOS = Non-Detect; PFOA = 250 ppt