Consumer Confidence Report
Naval Air Station Whidbey Island
January 1 – December 31, 2017

Naval Air Station (NAS) Whidbey Island owns and operates a community drinking water system, providing 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 2017, the drinking water distributed through the Navy water system consistently met all federal and state drinking water health standards.**

Where does my drinking water come from? The NAS Whidbey Island water supply comes from the water treatment plant 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 NAS Whidbey Island water system. The water system aboard NAS Whidbey Island 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 additional chlorine as required to ensure adequate disinfection. In July 2016 fluoridation was temporarily discontinued while the fluoridation system was being replaced. The new fluoridation system was back in operation in July of 2017.

What's 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 from 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 which 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, copper, and asbestos. During calendar year 2017, there were no elevated levels of these substances or violations of drinking water regulations in your delivered tap water. 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 the 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).

How 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).

What about lead in my drinking water? EPA and Washington State regulations require NAS Whidbey Island to monitor for presence of lead and copper at household and building taps every 3 years. Lead was last tested in 2016 and one exceedance, in a building on Ault Field, was detected out of 30 locations sampled. This means more than 90% of results were less than EPA's action level of 15 parts per billion (ppb), NAS Whidbey Island is in full compliance with the EPA's lead and copper rule.

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 coliform bacteria, cryptosporidium, giardia, radionuclides, turbidity, and inorganic or organic chemicals in the treated drinking water during the calendar year of 2017. You can find the City of Anacortes' Consumer Confidence Report at the following link: https://www.cityofanacortes.org/Archive.aspx?AMID=47

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. Executive Order (EO) 13693, "Planning for Federal Sustainability in the Next Decade", requires the Navy to reduce potable water consumption intensity by 36 percent by fiscal year 2025. Since 2007, NASWI has exceeded water conservation goals every year. At this rate, NASWI is on track to meet the 2025 water use reduction goals. Let's continue the conservation effort, by saving water every day! For more information on water conservation techniques please contact Jaime Jensen at 360-257-5631.

How can I find out more? For drinking water quality 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 - Tested at customers' taps. Testing is done every 3 years; last done in 2016 and due again in 2019.						
Contaminant	**EPA's Action Level**	**Ideal Goal (EPA's MCLG)**	**90% of Test Levels Were Less Than**	**Samples Exceeding EPA's Action Level**	**Violation**	**Typical Sources**
Lead	90% of homes less than 15 ppb	0 ppb	3 ppb	1 out of 30	NO	Corrosion of household plumbing systems.
Copper	90% of homes less than 1.3 ppm	1.3 ppm	0.089 ppm	0 out of 30	NO	Corrosion of household plumbing systems.
INORGANIC CHEMICALS - Chloride and Fluoride tested daily						
Contaminant	**Highest Level Allowed (EPA's MRDL)**	**Ideal Goal (EPA's MRDLG)**	**Highest Result**	**Range of Test Results**	**Violation**	**Typical Sources**
Chlorine	4 ppm	4 ppm	1.10 ppm	0.10-1.10 ppm	NO	Added as a drinking water disinfectant.
Contaminant	**Highest Level Allowed (EPA's MCL)**	**Ideal Goal (EPA's MCLG)**	**Highest Result**	**Range of Test Results**	**Violation**	**Typical Sources**
Fluoride (ppm)	4 ppm	4 ppm	1.10 ppm	0.15-1.10 ppm	NO	Erosion of natural deposits or water additive which promotes strong teeth.
DISINFECTION BY-PRODUCTS - Tested quarterly at 4 locations in the water system						
Contaminant	**Highest Level Allowed (EPA's MCL)**	**DOH Trigger Level**	**Average Level Detected**	**Range of Average Results**	**Violation**	**Typical Sources**
Total Trihalomethanes	80 ppb	60	38.2 ppb	16.4-52.3 ppb	NO	By-product of drinking water disinfection.
Total Haloacetic Acids	60 ppb	45	17.7 ppb	15.4-21.5 ppb	NO	By-product of drinking water disinfection.

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 with the exception of total coliform bacteria, which was not detected in 2017.

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 parts per million = mg/L; ppb is parts per billion= ug/L.

Household Cross Connection Protection

A cross connection happens when your drinking water plumbing is connected or in contact with a non-drinking water system such as a lawn sprayer, soap dispenser, sprinkler system, swimming pool, irrigation system, or water heating and cooling system. When water flows back from the non-drinking water system into your drinking water plumbing system, your drinking water becomes contaminated. Signs of contamination include discolored water and unusual smells.

How Contamination Occurs:
Water normally flows in one direction, from the public water system through the customer's cold or hot water plumbing to a sink tap or other plumbing fixture. The plumbing fixture is the end of the potable water system and the start of the waste disposal system. Under certain conditions water can flow in the reverse direction. This is known as backflow. Backflow occurs when a *backsiphonage* or *backpressure* condition is created in a water line.

Backsiphonage may occur due to a loss of pressure in the water distribution system during a high withdrawal of water for fire protection, a water main or plumbing system break, or a shutdown of a water main or plumbing system for repair. A reduction of pressure below atmospheric pressure creates a vacuum in the piping. If a hose bib was open and the hose was submerged in a wading pool during these conditions, the non-potable water in the pool would be siphoned into the house's plumbing and back into the public water system.

Backpressure may be created when a source of pressure, such as a pump, creates a pressure greater than that supplied from the distribution system. If a pump supplied from a non-potable source, such as a landscape pond, was accidentally connected to the plumbing system, the non-potable water could be pumped into the potable water supply.

How to Prevent Contamination of Your Drinking Water:
Protect your drinking water by taking the following precautions:

Don't:

- Submerge hoses in buckets, pools, tubs, sinks, ponds, etc.
- Use spray attachments without a backflow prevention device.
- Connect waste pipes from water softeners or other treatment systems to the sewer, submerged drain pipe, etc.
- Use a hose to unplug blocked toilets, sewers, etc.

Do:

- Keep the ends of hoses clear of all possible contaminants.
- If not already equipped with an integral (built-in) vacuum breaker, buy and install hose bib type vacuum breakers on all threaded faucets around your home. These devices are inexpensive and are available at hardware stores and home improvement centers.
- Install an approved backflow prevention assembly on all underground lawn irrigation systems. Remember, a plumbing permit is required for the connection of an underground lawn irrigation system to your plumbing system.