

# Bywater Bay Water Quality Report - 2017

**To comply with Safe Drinking Water Act amendments and the Washington State Department of Health (DOH) mandates,** Jefferson County Public Utility District #1 annually issues a report on monitoring performed on each of its water systems. The purpose of this report is to advance consumer understanding of drinking water and heighten awareness of the need to protect water resources. If you have any specific water system questions please feel free to contact the Bywater Bay water system manager, Doug Reeder at 385-8347 or 301-0708 (cell). The PUD Board meets on the first and third Tuesday of each month at 5:00 p.m. at the PUD office; please feel free to attend these meetings. Your district is District 3 and your commissioner is Wayne G King. **Please conserve and use water wisely. You can find conservation tips at [jeffpud.org](http://jeffpud.org).**

**Is my water safe?** In reporting year 201, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The PUD takes pride in providing its customers with safe, high quality drinking water. **However, arsenic has been detected in your water in previous years. Please read below about arsenic in your water.**

**The sources of drinking water** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

**Examples of contaminants that may affect 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 metal, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining or farming, **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses, **Radioactive contaminants**, which are naturally occurring, and **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

**Do I need to take special precautions?** 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 who have undergone organ transplants, people 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 drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA Safe Water Drinking Hotline (1-877-481-4091).

**Your water comes from two municipal wells**, one located at the end of Alpine Court (well#2), the other is located about 2 mile west of Stark Road and 750 feet north of State Route 104(Well#1). Water to Bywater wells ultimately comes from fall and winter rainfall in the area that infiltrates to the water table. Both wells are part of a wellhead protection plan that restricts any activity that could contaminate them. We remove the iron and manganese from the water (these minerals cause staining and odors from the water) and add disinfectant to protect you against microbial contaminants. In addition to all the other tests required by the State and Federal governments we have also been testing for chloride levels in the wells to predict possible salt water intrusion. To date all tests indicate that no change has occurred.

**Drinking water, including bottled water**, may reasonably be expected to contain at least small amount of some 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 (1-877-481-4091) or Sophia Petro at the State DOH (360-236-3046).

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same public health protections as the water from your public water system.

**Regarding the arsenic detected in your water:** While your drinking water meets EPA's health standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is an element known to cause cancer in humans at high concentrations and is linked to skin damage and circulatory problems. The EPA standard for arsenic changed from 0.05 mg/l (or 50 ppb) to 0.01 mg/l (10 ppb) effective January 2001. Low levels of arsenic such as those found in the Bywater wells are common in local wells. Water from well#1 samples at about 6 ppb and well#2 at about 7 ppb. **To date, no water sample at Bywater has tested above the MCL for arsenic.**

## Water Quality Data Table

Unless otherwise noted, the table below lists all the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done January 1 - December 31, 2016. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

**Terms & abbreviations used below:** **Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is not known or expected risk to health. MCLGs allow for a margin of safety. **Maximum Contaminant Level (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. **Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. **N/a:** not applicable; **nd:** not detectable at testing limit **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **pCi/l:** picocuries per liter (a measure of radiation); **mg/L:** milligrams per liter (same as ppm)

EPA Regulated Primary Inorganic	MCL	MCLG	Well#1	Well#2	Sample Date	Violation	Typical Source
<b>Arsenic</b>	10 ppb	Zero		<b>6.2 ppb</b>	5/13/2015	No	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production
<b>Radium 228</b>	5 pCi/l	zero	<b>1 pCi/l</b>	<b>ND</b>	9/21/2016	No	Erosion of natural deposits.
<b>Nitrate (mg/l)</b>	10 mg/l	na	<b>ND</b>	<b>ND</b>	9/21/2016	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits

Notes: Coliform bacteria testing was performed monthly in 2016. No coliform bacteria were present. You can search all our water quality test results at Washington Department of Health's Sentry Database at [www4.doh.wa.gov/SentryInternet/](http://www4.doh.wa.gov/SentryInternet/). Search for "Bywater Bay".