

**WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health risks can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline; 1-800-426-4791. For more information about your drinking water, you may also call us at (360) 876-2545.

**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, who have undergone organ transplants, or 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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

**IRON AND MANGANESE IN DRINKING WATER** There are no adverse health effects from iron in drinking water at the levels found. The primary impact of iron and manganese has been to impair the aesthetic quality of the drinking water by forming precipitates in the water distribution system. Elevated levels of iron and manganese can cause reddish to black colored water, stain laundry and porcelain fixtures, promote bacterial growth in the distribution system, and in high concentrations may cause metallic tastes. The District flushes the distribution system at least annually to maintain water quality.

**LEAD IN DRINKING WATER** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. West Sound Utility District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 two (2) minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>. To ensure that tap water is safe to drink, the Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

## Water Use Efficiency Performance Report for 2019

Efficient water use benefits the environment, public health, maintains aquatic ecosystems, and protects water resources. West Sound Utility District (WSUD) collaborates with the Department of Health to encourage water conservation by establishing Water Use Efficiency goals and takes steps toward achieving these goals. These goals are set in a public hearing and evaluated annually to track our progress.

- **Goal:** Limit distribution system leakage to less than 10% of total production on a three (3)-year annual average.  
**Progress:** Distribution system leakage from 2016 thru 2019 is 8.8% of total production.
- **Goal:** Maintain water consumption per equivalent residential unit (ERU) to less than 200 gallons per day.  
**Progress:** Residential water consumption for 2019 was 158 gallons per day per ERU.
- **Goal:** Educate rate payers and the general public on the importance of water conservation.  
**Progress:** West Sound Utility District strives to educate our ratepayers through newsletters, billing messages, and on our website. District staff participates with other purveyors within Kitsap County at public events such as the annual Kitsap Water Festival and the WaterPAK booth at the Kitsap County Fair.

Through these efforts and a dedicated staff, it is estimated that several million gallons of water from 2016 thru 2019 has been conserved. We will continue to work to responsibly manage and promote water use efficiency of your water system, which is a valuable natural resource.

West Sound Utility District is governed by three Commissioners elected by the voters within the District. The District Board of Commissioners meet on the first and third Mondays of each month at 3:00 pm. The public is invited to participate.

A team of dedicated professionals is responsible for your water system. If you have any questions or concerns, please call (360) 876-2545



Port Orchard, Washington  
PWS ID #02600W

## Drinking Water Quality Report for 2019



West Sound Utility District is pleased to provide you with its annual Water Quality Report for 2019. The purpose of this report is to provide our customers information about:

- Where our water comes from
- What it contains, and
- How it compares to standards set by state and federal regulatory agencies

Safe drinking water is essential. Citizens need to be well informed to wisely utilize water resources and to support the improvements necessary to maintain high quality drinking water.

Included is a summary of the test results for the water provided to customers in the year 2019. It is our hope that you find the information provided informative and interesting.

West Sound Utility District's water system is supplied entirely by groundwater. Our water supply is pumped from underground aquifers, which are then replenished by the local rains. We do not get our water from snowpack on the Olympic or Cascade Mountains, nor do we use surface water sources. As water demand increases and as more area is developed, protecting our aquifers becomes even more important. In 2019, the District pumped over 605 million gallons of water from our aquifers and over 3.2 million gallons was used by customers on a peak day in the summer of 2019.

Check out our web page at [www.wsud.us](http://www.wsud.us)

Safe Drinking Water  
Hotline  
1-800-426-4791  
[www.epa.gov/ogwdw](http://www.epa.gov/ogwdw)

## Water Quality Summary

Your drinking water is regularly tested in accordance with all federal and state regulations for more than fifty (50) contaminants in both the water sources and throughout the distribution system. In 2019, West Sound Utility District conducted in excess of four hundred (400) tests for the parameters listed below. Only those contaminants that were detected are included in the water quality summary.

SAMPLING SCHEDULE			
Parameter	Frequency	Parameter	Frequency
Chlorine Residual	Daily Monitoring	Inorganic Chemicals	Every 3 Years
Fluoride Residual	Daily Monitoring/Monthly Sampling	Volatile Organic Compounds	Every 3 Years
Total Coliform Bacteria	Twice Monthly Sampling	Lead & Copper	Every 3 Years
Disinfection By-products	Annually	Radionuclides	Every 6 Years
Nitrates	Annually	Asbestos	Every 9 Years

Listed below are the few contaminants detected in West Sound's water in the most recent set of samples taken. All results meet protective standards set by federal and state agencies. Not listed are the contaminants that were tested but NOT detected. The amounts allowed in drinking water are so small that they are measured in parts per million or parts per billion. The Department of Health has granted testing waivers for dioxin, endothal, glyphosate, diquat, insecticides and soil fumigants (Kitsap County) as the source susceptibility to contamination is sufficiently low. WSUD strives to make this report informative and easy to understand; however, drinking water quality issues can be complex and technical. For additional water quality information, please call our Customer Service Department at 360-876-2545.

CONTAMINANTS DETECTED						
Parameter	Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Potential Sources	Highest Level Detected in Most Recent Samples (to Determine Compliance)	Range of Levels Detected in Most Recent Samples	Meets Standards
<i>Regulated at the Groundwater Sources</i>						
Arsenic (2019)	10 ppb	0	Erosion of natural deposits	5.3 ppb	2 ppb to 5.3 ppb	Yes
Nitrate (2019)	10 ppm	10 ppm	Runoff from fertilizer use, leaching from septic, sewage, erosion of natural deposits	1.53 ppm	ND to 1.53 ppm	Yes
Manganese (2019)	50 ppb	N/A	Leaching from natural deposits	40 ppb	ND to 40 ppb	Yes
Sodium (2018)	No limit set	N/A	Naturally occurring	10.7 ppm	10.7 ppm	Yes
Iron (2019)	300 ppb	N/A	Erosion of natural deposits	100 ppb	ND to 100 ppb	Yes
Hardness (2018)	No limit set	N/A	Dissolved ions from sedimentary rocks. Seepage and runoff from soils	49 ppm	49 ppm	Yes
Conductivity (2018)	700	N/A	Dissolved salts and inorganic materials	139 umhos/cm	139	Yes
Turbidity (2018)	1	N/A	Natural erosion and human activities	.45 ntu	.45 ntu	Yes
<i>Regulated in the Distribution System</i>						
Trihalomethanes	80 ppb	N/A	By-product of drinking water chlorination	39 ppb	28 to 39 ppb	Yes
Haloacetic Acids	60 ppb	N/A	By-product of drinking water chlorination	15 ppb	9.5 to 15 ppb	Yes
Chlorine	4 ppm	4 ppm	Water additive used to control microbes	0.77 ppm annual average	0.02 to 1.53 ppm	Yes
Fluoride	4 ppm	4 ppm	Water additive to promote dental health	0.68 ppm annual average	0.50 to 0.86 ppm	Yes
<i>Regulated at the Customer Tap</i>						
Lead (2018)	Action Level = 15 ppb	0	Household plumbing	2.6 ppb 90 <sup>th</sup> percentile	No sample sites exceeded the Action Level	Yes
Copper (2018)	Action Level = 1300 ppb	1.3	Household plumbing	120 ppb 90 <sup>th</sup> percentile	No sample sites exceeded the Action Level	Yes

**Action Level** is the concentration of a contaminant that, if exceeded, triggers treatment or other requirements a water system must follow. Ninety percent (90%) of all samples must be below this amount.

**MCL (Maximum Contaminant Level)** is 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.

**MCLG (Maximum Contaminant Level Goal)** is the level of a contaminant in drinking water below, which no known or expected risk to health exists. MCLG's allow for a margin of safety.

**pCi/L** stands for picocuries per liter. This is expressed in parts per trillion.

**ppb** stands for parts per billion and is the same as micrograms per liter (ug/L). (1.0 ppb is equivalent to one penny in \$10,000,000)

**ppm** stands for parts per million and is the same as milligrams per liter (mg/L). (1.0 ppm is equivalent to one penny in \$10,000)

**N/A** means not applicable

**ND** means the laboratory did not detect this contaminant.

**EPA** Environmental Protection Agency

**NTU**-Nephelometric Turbidity Unit. Used to measure turbidity or the presence of suspended particles in water.

## EPA-Required Unregulated Contaminant Monitoring Rule

WSUD and other large water systems throughout the United States are required by the EPA to periodically monitor for thirty (30) chemical contaminants that are not currently regulated. This requirement is called the Unregulated Contaminant Monitoring Rule (UCMR) and we are currently sampling and testing in EPA's fourth unregulated contaminant monitoring (UCMR 4). These contaminants do not yet have drinking water standards and the results of this nationwide monitoring will help the EPA determine which contaminants should have a set health standard. In 2019, WSUD completed the first set of sampling and testing for UCMR 4 and some contaminants were detected, but at very low levels (parts per billion) as described below.

Parameter	Average Level Detected	Range of Levels Detected (ppb)	Potential Sources
Bromide	11.92 ppb	5-30 ppb	By-product of drinking water chlorination
Total Organic Carbon	710 ppb	310-2900 ppb	By-product of drinking water chlorination
Bromochloroacetic Acid	1.02 ppb	0.53-1.5 ppb	By-product of drinking water chlorination
Bromodichloroacetic Acid	1.6 ppb	1.1-2.1 ppb	By-product of drinking water chlorination
Chlorodibromoacetic Acid	0.43 ppb	0.43 ppb	By-product of drinking water chlorination
Dichloroacetic Acid	6.45 ppb	1.9-11 ppb	By-product of drinking water chlorination
Total HAA5	16.05 ppb	8.1-24 ppb	By-product of drinking water chlorination
Total HAA6Br	2.8 ppb	1.6-4 ppb	By-product of drinking water chlorination
Total HAA9	18.85 ppb	9.7-28 ppb	By-product of drinking water chlorination
Trichloroacetic Acid	9.6 ppb	6.2-13 ppb	By-product of drinking water chlorination
Manganese Total ICAP/MS	18.83 ppb	11-37 ppb	Leaching from natural deposits
O-Toluidine	0.024 ppb	0.024 ppb	Used in production of dyes, rubber, pharmaceutical, pesticides
Germanium Total ICAP/MS	0.53 ppb	0.3 ppb	Naturally occurring

**IS MY DRINKING WATER SAFE?** WSUD meets or exceeds all Federal and State water quality standards. Each month the highly trained Utility Specialist collects twenty-five (25) routine samples throughout the distribution system to test for coliform bacteria. The presence of coliform bacteria in drinking water indicates that disease-causing organisms could be present in the water system. These samples are analyzed by an independent laboratory and the results are reported directly to the State Department of Health (DOH). All of the three hundred (300) routine coliform bacteria samples that were taken in 2019 were satisfactory. Your water is tested daily to maintain proper chlorine and fluoride levels, and is sampled regularly for a long list of potential contaminants. Some of these potential contaminants include Disinfection Byproducts, Herbicides, Inorganics, Lead & Copper, Pesticides, Radionuclides, Synthetic Organics, Unregulated Contaminants, and Volatile Organics. **Public safety is always our number one priority.**

**WHAT IS THE SOURCE OF MY DRINKING WATER?** Your water comes from fourteen (14) wells located throughout the water district.

DOH Source number	Commonly Used Name	Status
S01	Well #1	Active
S02	Well #5	Active
S05	Well #16	Active
S06	Well #8 (VG 1)	Active
S09	Well #11	Active
S14	Well #8A (VG 2)	Emergency
S15	Well #17	Active
S16	Well #18	Active
S17	Well #19	Active
S18	Well #20	Active
S19	Well #14	Active
S20	Krista Firs	Active
S23	Well #21	Active
S25	Well #22	Active

The wells range in depth from 350 to 1,525 feet deep. Depending on your location, the water you receive may be a blend of several wells or it may be primarily from one well.

A Source Water Assessment Program (SWAP) report was developed by the Department of Health to highlight significant sources of contamination in all community Public Water Systems in Washington.

This data is available on the DOH website: <https://fortress.wa.gov/doh/swap/index.html>

The District's wells susceptibility rating is low to moderate, but awareness by the District and the customer, is required to maintain that rating.

**HOW IS MY WATER TREATED?** Some of our wells contain elevated levels of hydrogen sulfide. Hydrogen sulfide is a naturally occurring gas that produces an odor that is commonly referred to as a "rotten egg smell". Water from these wells is initially treated by a process called "Aeration". Simply put, the water is pumped into the top of an aeration tower and allowed to cascade through a series of racks while air is circulated to strip the hydrogen sulfide from the water. Your water is disinfected in order to create a barrier of safety against potential contamination in the distribution system and to help with taste and odor issues. This is achieved through the use of gaseous chlorine, liquid sodium hypochlorite, or a combination of the two depending on your location within the distribution system. Finally, your water is fluoridated with sodium fluoride. Fluoride treatment was added to the distribution system by a vote of the customers of the District in 1969. While fluoride levels can vary somewhat throughout the District, we strive to maintain a level of 0.7 ppm.