

## 2023 JPUD Annual Consumer Confidence Report: Quimper Water System Water ID # 05783U

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The Quimper water system is owned, operated, and managed by PUD No.1 of Jefferson County. Your District Commissioner is Kenneth Collins. If you wish to attend a board meeting, the PUD board currently meets remotely via Zoom and at its conference room at 310 Four Corners Road every first and third Tuesday and second Tuesday in December. For details, go to [jeffpud.org](http://jeffpud.org) for more information on how to attend.

### Your Water Sources

Your water comes from eight interconnected groundwater wells. Sources (SO) S05, S06, S011, S014, S015, S018, S019 and S020 are approximately 113, 133, 217, 120, 175, 468, 501 and 95 feet deep respectively in glacially derived sands and gravels. The Sparling wells (S05 and S020) and treatment plants at the corner of Rhody Drive and Kennedy St. in Port Hadlock provide the most water to the system at over 1,000 gallons per minute during peak season. Your principal source depends on where you live and how it's valved at the time: Woodland Hills/Kala Point are served primarily by four wells: the Airport well (S014); Willison Ave well (S011, seasonal) and two Kala Point wells (S018 and S019). Marrowstone Island is mostly served by the Kivley well (S06) behind Mountain Propane in Port Hadlock. The Four Corners area south and to the west are served a mix of sources (S014, S015, S018 and S019). Treatment is required to remove iron and manganese at most sources to reduce staining. Most source wells are treated with orthophosphate to minimize the corrosion of lead and copper plumbing and fixtures in your home.

Source	Susceptibility Rating
S014, S018, S019	Low
S05, S06, S020	Moderate
S011, S015	High

A copy of the source susceptibility reports submitted to Washington State Dept of Health is available on request.

### Water Quality Data

The tables below list the drinking water tests for the 2023 calendar year. We are required to test for certain compounds less than once per year because we are granted waivers for certain types of compounds that are highly unlikely to occur at a particular location. The law requires us to monitor certain contaminants once a year and most others once every three to nine years. However, if the source has low susceptibility to types of contamination, we can receive a waiver to sample less frequently. 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 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 (see phone number above). The water quality tests are commonly referred to as microbiological (total coliform bacteria), nitrate, arsenic, lead and copper, radionuclides, disinfectant byproducts (both alone and with all VOC tests), inorganic contaminants (IOC), volatile organic contaminants (VOC) and synthetic organic contaminants (SOC) such as herbicides, insecticides, and pesticides. PFAS was tested in our sources both in 2022 and 2023.

### Arsenic in your drinking water

While no arsenic testing was required in 2021, several sources over the years have shown levels of arsenic below the maximum contaminant level (MCL) of 0.010 mg/L (or 10 ppb). The largest sources serving Quimper (S05 and S020) are

below the detection limit for arsenic and no source has ever been at or above the MCL. Active, permanent sources that have tested between 5 and 10 ppb in the last 20 years are SO6 (New Kivley well), SO19 (Kala Point), and SO15 (Olympic Mobile Village well). Your drinking water currently meets EPA's drinking water standard for arsenic. However, it does contain very low levels of arsenic. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory diseases are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing it from drinking water.

**Lead in Your 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. The PUD 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 2 minutes before using the water for drinking or cooking. Never use your hot water tap for any food or drink preparation. 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>.

**PFAS In Your Drinking Water**

The PUD participated in WA Department of Health (DOH) program in 2022 to test public water sources for a chemicals called per and polyfluoroalkyl substances (PFAS), also known as “forever chemicals”. Developed for their water resistance and stability, PFAS are found in non-stick cookware, clothing, carpets, personal care products, etc. Prolonged exposure to certain PFAS could lead to increased cholesterol, high blood pressure, reduced birth weights and decreased vaccine response in infants, kidney and testicular cancer, liver enzyme disfunction according to the Center for Disease Control. Of the eight Quimper sources tested, trace amounts of these chemicals were detected in SO5, SO6 and SO20 in concentrations measured in parts per trillion (ppt). Additional follow up sampling was performed on each of those three sources where PFAS was detected and follow up tests also resulted in detections. The PUD also tested all sources in 2023 as well. See results at the end of this report.

**None of our sources have ever tested above proposed state and federal regulatory levels that require treatment.**

<p><i>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 can dissolve naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.</i></p> <p><i>Contaminants that may be present in source water include:</i></p> <ul style="list-style-type: none"> <li><i>• Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</i></li> <li><i>• Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>• Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.</i></li> <li><i>• 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.</i></li> <li><i>• Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.</i></li> </ul> <p><i>In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human health.</i></p>
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Definitions:	
<p><b>Maximum Contaminant Level (MCL):</b> The highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.</p> <p><b>Maximum Contaminant Level Goal (MCLG):</b> 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.</p> <p><b>Maximum Residual Disinfectant Level (MRDL):</b> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.</p> <p><b>Maximum Residual Disinfectant Level Goal (MRDLG):</b> 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.</p> <p><b>SO:</b> Source number listed with WA Dept of Health</p>	<p><b>Action Level (AL):</b> The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.</p> <p><b>Treatment technique (TT):</b> A required process intended to reduce the level of a contaminant in drinking water if MCL is exceeded.</p> <p><b>Lead and Copper 90th Percentile:</b> Out of every 10 homes sampled, 9 were at or below this level.</p> <p><b>pCi/l: Pico curies per liter, measure of radioactivity</b></p> <p><b>ppm: parts per million or milligrams per liter (mg/L).</b></p> <p><b>ppb: parts per billion or micrograms per liter (ug/L)</b></p> <p><b>ppt: parts per trillion or nanograms per liter (ng/L)</b></p> <p><b>Presence/Absence:</b> Indicates positive/negative test for bacteria.</p> <p><b>ND:</b> none detected</p>

Microbial	MCLG	MCL	Your Water Results (Distribution)	Sample Date	Violation (Y/N)	Typical Sources
Total Coliform Bacteria	Absence	Presence	<b>Absence</b>	10 sites sampled monthly	N	Animal and human fecal waste; naturally present in the environment
Inorganic Contaminants	MCLG	MCL	Your Water Results (Sources)	Sample Date	Violation (Y/N)	Typical Sources
Nitrate (mg/L)	10	10	<b>ND</b> (SO5, SO11, SO14, SO15, SO18, SO19, SO20)	4/20/2023	N	Septic discharge, runoff, animal waste
Nitrate (mg/L)	10	10	<b>1.8 mg/l</b> (SO6)	4/20/2023	N	Septic discharge, runoff, animal waste
Lead & Copper	MCLG	AL	Results (Distribution)	Sample Date	Violation	Typical Sources
Lead (ppb)	Zero	15	<b>9 of 20 detected, 1 over AL, 90<sup>th</sup> percentile</b>	7/28-7/29/2022	N	Corrosion of Household Plumbing

			7.85 ppb			
Copper (mg/l)	1.3	1.3	18 of 20 detected, zero over AL, 90 <sup>th</sup> percentile 0.52 mg/l	7/28-29/2022	N	Corrosion of Household Plumbing
Arsenic (ppb)	Zero	10 ppb	3 ppb (SO6)	4/11/2022	N	Erosion of natural deposits, industrial sources, wood treatment
			4 ppb (SO15)		N	
			3 ppb (SO18)		N	
			3 ppb (SO19)		N	
<b>Disinfectant Byproducts</b>	<b>MCLG</b>	<b>MCL</b>	<b>Your Water Results (Distribution)</b>	<b>Sample Date</b>	<b>Violation (Y/N)</b>	<b>Typical Sources</b>
Haloacetic acids (HAA5) (ppb)	N/A	60	1.3 (Oak Rd.)	5/9/2023	N	Byproduct of chlorination
Total Trihalomethanes (TTHMs) (ppb)	N/A	80	5.63 (Oak Rd.)	5/9/2023	N	Byproduct of chlorination
<b>Radionuclides</b>	<b>MCLG</b>	<b>MCL</b>	<b>Your Water Results (Sources)</b>	<b>Sample Date</b>	<b>Violation (Y/N)</b>	<b>Typical Sources</b>
Gross Alpha (pCi/L)	N/A	15	ND (SO20)	4/21/2023	N	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
			2.85 (SO11)	4/11/2022	N	
			0.231 (SO15)	4/11/2022	N	
			ND (SO5)	4/15/2020	N	

Gross Beta (mrem/yr)	N/A	4	<b>1.17 (SO15)</b>	4/11/2022	N	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as beta radiation or photons.
			<b>1.17 (SO11)</b>	4/11/2022	N	
Radium 228 (pCi/L)	N/A	5	<b>ND (SO20)</b>	4/21/2023	N	Erosion of natural deposits
			<b>0.549 (SO15)</b>	4/11/2022	N	
			<b>0.193 (SO11)</b>	4/11/2022	N	
			<b>ND (SO5)</b>	4/15/2020	N	
<b>Synthetic Organic Contaminants</b>	<b>MCLG</b>	<b>MCL</b>	<b>Your Water Results (Sources)</b>	<b>Sample Date</b>	<b>Violation (Y/N)</b>	<b>Typical Sources</b>
Herbicides	Zero	Varied	<b>ND (SO5)</b>	4/13/2022	N	Agricultural and horticultural runoff.
Herbicides			<b>ND (SO6)</b>	9/12/2023	N	

<b>Per and Polyfluoroalkyl Substances (PFAS)</b>	<b>MCLG</b>	<b>MCL* (ppt)</b>	<b>Your Water Results in ppt (Source)</b>	<b>Sample Date</b>	<b>Violation (Y/N)</b>	<b>Typical Sources</b>
PFAS (25 chemicals tested)	Zero	NA	<b>ND (All 8 sources)</b>	9/5/2023	N	See all below
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>2.92 (SO6)</b>	7/26/2022	N	Wastewater discharge, runoff from landfills, fire extinguishing foam, electronics,
(PFNA) PFnonanoic acid (ppt)	Zero	NA	<b>2.44 (SO6)</b>		N	

(PFOA) PFOctanoic acid (ppt)	Zero	NA	<b>2.26 (SO6)</b>		N	textiles, food, packaging, etc.
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>3.06 (SO6)</b>	5/5/2022	N	Wastewater discharge, runoff from landfills, fire extinguishing foam, electronics, textiles, food, packaging, etc.
(PFNA) PFnonanoic acid (ppt)	Zero	NA	<b>4.33 (SO6)</b>		N	
(PFOA) PFOctanoic acid (ppt)	Zero	NA	<b>2.75 (SO6)</b>		N	
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>3.12 (SO6)</b>	3/15/2022	N	Wastewater discharge, runoff from landfills, fire extinguishing foam, electronics, textiles, food, packaging, etc.
(PFBS) PFhexane sulfonic acid (ppt)	Zero	NA	<b>2.34 (SO6)</b>		N	
(PFNA) PFnonanoic acid (ppt)	Zero	NA	<b>4.06 (SO6)</b>		N	
(PFOS) PFOctane sulfonic acid (ppt)	Zero	NA	<b>2.55 (SO6)</b>		N	
(PFOA) PFOctanoic acid (ppt)	Zero	NA	<b>2.9 (SO6)</b>		N	
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>2.32 (SO20)</b>	5/5/2022	N	Used as wood preservative, also for electroplating
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>2.49 (SO5)</b>	5/5/2022	N	
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>2.15 (SO5)</b>	3/15/2022	N	
(PFBS) PFbutane sulfonic acid (ppt)	Zero	NA	<b>2.15 (SO20)</b>	3/14/2022	N	
PFAS (25 different contaminants) (ppt)	Zero	NA	<b>ND (SO11, SO14, SO15, SO19)</b>	3/14/2022, 3/15/2022	N	Wastewater discharge, runoff from landfills, fire extinguishing foam, electronics, textiles, food, packaging, etc

\* Note that the new rule establishing MCLs for PFAS compounds was not released by EPA until April 2024, after systems were tested. As stated earlier, no PUD sources have ever tested at or above the new MCLs or other associated regulatory levels for the 25 PFAS compounds tested.

All PUD water system water quality data for sources and distribution can be found at the WA Department of Health Sentry Internet website at <https://fortress.wa.gov/doh/eh/portal/odw/si/>. In search, type: "Quimper".