

Lazy - C Water Quality Report - 2011

To comply with Safe Drinking Water Act amendments and the Washington State Department of Health 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's understanding of drinking water and heighten awareness of the need to protect precious water resources. If you have any specific water system questions please feel free to contact the Lazy-C water system manager, Mike McClure, at 385-5800 ext 305 or 301-0248 (cell). **Additionally, the PUD Board meets** on the first and third Tuesday of each month at 5:00 p.m. at the PUD office; feel free to attend. Your district is District 3 and your commissioner is Wayne G King. **Please use water wisely. You can find conservation tips on our web site at jeffpud.org. FREE water conservation kits are available at the PUD office upon request.**

Is my water safe? In 2010, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The PUD safeguards its water supplies and once again we are proud to report that your system has never violated a maximum contaminant level standard.

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 mineral and, in some cases, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

Your water comes from three municipal wells, two are located along near the community club house (wells 1 & 2) near the Dosewallips River; the third deep bedrock well is located near the mid-level water tanks, along the Dosewallips Road (well #4). A fourth well is located at the upper level tank site, but it is not used. The lower riverside wells are only to be used in cases of emergency; Washington State Department of Health considers them too close to the river to be safe without expensive filtration. All the wells are part of a wellhead protection plan that restricts activities that could contaminate them. Because of the high quality of the water from well#4 we are not required to disinfect it. If we have to use wells 1 & 2 we would need to chlorinate.

High Mineral Content in Well #4

Water from Well #4 has unusually high mineral content. A survey of 20 local wells including Well#4 was done to assess groundwater quality in Hood Canal area wells, and Well #4 was the most unusual. Although the well is nearly a mile inland, there is a possibility some of the water is mixing with seawater. Chloride levels hover around 100 mg/l. However, this could also be water from its initial geologic formation. The PUD will continue to monitor Well#4 and will alert customers if trends worsen.

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 Safe Water Drinking Hotline (800-426-4791).

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 (800-426-4791), or Donna Freier at the State DOH (360-236-3162).

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain 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 contaminant in bottled water which must provide the same protection for public health.

Water Quality Data Table

The table below lists all the drinking water contaminants that we detected during the 2010 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2010 (unless noted otherwise). 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. **Gross Alpha:** measure of radionuclides that emit alpha particles, a measure of radioactivity; **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 Contaminant)

EPA Primary Contaminant	MCL	MCLG	Well#4	Sample Date	Violation	Typical Source
*Chloride (mg/l)	250	NA	133.0 mg/l	Oct 2007	NO	Natural deposits and seawater
			128 mg/l	Oct 2010	NO	Natural deposits and seawater
Nitrate (mg/l)	10	10	<0.5 mg/l	6/3/2011	NO	Naturally present in the environment as well as human and animal fecal waste.

* Chloride is an EPA unregulated secondary contaminant. Well #4 consistently has high levels of chloride which could be the result of formation water or seawater intrusion. More recent analysis suggests this is probably formation water. However, this well is developed below sea level and despite its distance to the shoreline it is potentially susceptible to seawater intrusion. **Maintaining steady water levels in this well may be critical to preventing seawater intrusion and ensuring a sustainable supply of water in the future. We ask you to please use water wisely. Thank you!**

You can search all our water test results at Washington Department of Health's Sentry Database at www4.doh.wa.gov/SentryInternet/.