Snow Creek 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'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 Snow Creek 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; feel free to attend. Your district is District 3 and your commissioner is Wayne G King. Please conserve and use water wisely. You can find conservation tips on our web site at jeffpud.org. Also FREE conservation kits are available at the PUD office.

Your water comes from a single well located on community property in the field to your right as you drive into the Snow Creek Ranch. Because of its proximity to Snow Creek and shallow depth, DOH does not consider it completely safe to drink without treatment. The well exceeds the DOH levels for manganese and sometimes iron. Although not detrimental to your health, DOH has ordered that we treat the water to bring the iron and manganese levels within State standards. The PUD is continuing its efforts to prevent corrosion of household plumbing. Tests show that concentrations of copper in Snow Creek Ranch homes have since been reduced.

Is my water safe? In 2016, the Snow Creek system met all U.S. Environmental Protection Agency (EPA) and Washington State drinking water health standards.

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.

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 (1-877-481-4091).

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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We will treat your 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 2016 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, 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. Lead and copper results from 2014 are reported below.

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 or below testing limit ppb: parts per billion or micrograms per liter ppm: parts per million or milligrams per liter pCi/I: picocuries per liter (a measure of radiation); mg/L: milligrams per liter (same as ppm).

EPA Regulated (Primary Contaminants)	MCL	MCLG	Source and Sample Results	Sample Date	Violation	Typical Source
Nitrate	10 mg/l	<10 mg/l	Well #1 (Pre-treatment), 0.39 mg/l	10/5/2016	NO	Runoff from fertilizer use; Leaching from septic tanks, natural deposits.
Radium 226	5 pCi/L	zero	Well #1 (Post-treatment), 0.2 pCi/L	11/16/2016	NO	Erosion of natural deposits.
Radium 228	5 pCi/L	zero	Well #1 (Pre-treatment), 5.9 pCi/L	10/5/2016	YES	Erosion of natural deposits.
Gross alpha	15 pCi/L	zero	Well #1 (Pre-treatment), 1.9 pCi/L	10/5/2016	NO	Erosion of natural deposits of certain minerals that emit alpha radiation.
Secondary Contaminants (Not enforceable)	Secondary Standard		Source and Sample Results	Sample Date	Over standard?	Typical Source
Manganese	0.05 mg/l	NA	Well #1 (Pre-treatment). 0.282 mg/l	10/5/2016	YES*	Erosion of natural deposits.
Chloride	250 mg/l	NA	Well #1 (Pre-treatment); 3.08 mg/l	10/5/2016	NO	Erosion of natural deposits; seawater intrusion

Fluoride	2.0 mg/l	NA	Well #1 (Pre-treatment); 0.1 mg/l	10/5/2016	NO	Erosion of natural deposits.

Notes: Fluoride sample result is likely nothing more than erosion from natural deposits. PUD does not add fluoride to any of its water supplies. Manganese sample taken prior to treatment; actual concentration in distribution is much less and does not constitute a water quality violation. All bacteria samples taken in 2016 indicated an absence of total coliform bacteria. You can search all our water test results at Washington Department of Health's Sentry Database at. Search for "Snow Creek" and click on the "Samples" tab.