



DEPARTMENT OF PUBLIC WORKS

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Ryderwood Water System

(WATER SYSTEM I.D. NO. 75100N)

2019 Water Quality Report

(Required by 1996 Federal Safe Drinking Water Act Amendments)

Summary

The following report provides detailed information concerning the Ryderwood Water System which serves the Ryderwood Community. The quality of drinking water is sampled and tested from January 1, 2019 through December 31, 2019. The Ryderwood Water System provides domestic drinking water to 290 customers. This system met or exceeded all federal and state drinking water standards and testing requirements during 2019. This report is provided to each of the customers via paper copy upon request and at the Cowlitz County website URL address: <http://wa-cowlitzcounty.civicplus.com/index.aspx?nid=1520> If you have any questions about this report or the water system, please contact Cowlitz County at (360) 577-3030 email: publicworks@co.cowlitz.wa.us, or Southwest Region Tumwater 360-236-3030 email: ccr.swro@doh.wa.gov.

Water Source Information

The water system withdraws water from Campbell Creek at an intake dam located approximately one-half mile upstream of the community. The quality of the source water is very good. The system withdraws water at an average rate of 100 gallons per minute and has a water right to withdraw a maximum flow of 157 gallons per minute.

Water Treatment Information

The source water is filtered and disinfected at the water treatment plant located at the southeast corner of the community. Alum, soda ash and a polymer filter aid are added to the source water as it enters the treatment plant. These chemicals create a FLOC that catches contaminants within the water. This creates a heavier particle that will settle out of the water in the settling tank or be trapped in the filter tank, which consists of a layer of anthracite coal placed over a layer of silica sand and a layer of special high-density sand. A turbidity meter is used to monitor the clarity of the water after it has passed through the filter. The final treatment process is the addition of chlorine as a disinfectant. Sufficient chlorine is added to kill any bacteria that have passed through the filter and to maintain a residual level of chlorine in the distribution system. The residual chlorine kills bacteria that could enter the system through the storage reservoir or water line breaks in the distribution system. The reservoir tank was vacuumed clean in 2014.

Water Sampling

Your water is sampled on a regular basis according to both State and Federal regulations. The purpose of the sampling is to ensure that treatment methods are adequate. It also insures that harmful substances don't exceed regulated amounts and identifies if they are present or entered the water supply. In 2019 we sampled for the following constituents below.

ANNUAL TESTING

The chart in this report provides representative analytical results of water samples, collected from your system. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

Distribution System Detected Elements Table						
ELEMENT	VIOLATION Y/N	RESULTS	UNIT	MCLG	MCL	TYPICAL SOURCES OF ELEMENT
THMs	N	18.7	ppb	NA	80	By-product of drinking water chlorination
HAA5s	N	26	ppb	NA	60	By-product of drinking water chlorination
Arsenic	N	ND	ppb	--	10	Erosion of natural deposits.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to a single penny in \$10,000,000.

Maximum Contaminant Level or 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.*

Maximum Contaminant Level Goal or MCLG: *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.*

Action Level: *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.*

General Information about Contaminants

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, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses, parasites, and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.

Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides, which may come from various sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. They can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can occur naturally or result from oil and gas production and mining activities.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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/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).

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. Cowlitz County Public Works 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 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>.