



Water Quality Report

Western Wahkiakum Water System

Owned and Operated by Public Utility District No. 1 of Wahkiakum County

Message from Management: The District is pleased to present the year 2018 Annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of potable drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

This report presents a summary of our water quality data, describes what the data means, and indicates our level of compliance with State and Federal drinking water requirements. If you have any questions about this report or concerning your water utility, please contact us at 360-465-2171. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Tuesdays of the month at 8:30 a.m. at the Public Utility District office in Cathlamet (45 River Street).



Our Water Supply: Western Wahkiakum Water provides water from our well field. The facility has new technology that required a concerted effort by our employees to master all of the essential skills required to operate the plant. Each of the two wells has a pump adequate of supplying water for the entire system. These pumps are run alternately which keeps them in good working condition. The well heads are 4 ft. above ground, which provides adequate protection from potential flooding.



Our Water Quality: *The Western Wahkiakum Water System routinely monitors for constituents in your drinking water according to Federal and State laws.*

The table on the back of this page shows the results of monitoring to December 31, 2018. Complete Inorganic samples were tested in March 2018 with all results below MCL. All drinking water may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose 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 at 1-800-426-4791.*

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. In some cases, it dissolves radioactive materials and can pick up substances resulting from the presence of animals or from human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune

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 microbiological contaminants are available from the *Safe Drinking Water Hotline (800-426-4791).*



Year 2018 Operations: Wahkiakum PUD replaced the 3" water main crossing Covered Bridge using HDPE (High Density Poly Ethylene) pipe. HDPE pipe was welded together to make one continuous pipe. HDPE is stronger and more durable than PVC, increasing its life, and using one continuous pipe eliminates connections and presents less opportunity for leaks to occur, helping to reduce water loss.



Water Use Efficiency: Water conservation may not seem necessary in our climate but the reality is that our clean potable water is a finite resource. It is up to each one of us to protect these resources for future generations. We are working tirelessly to reduce our water consumption and appreciate our customers' help in reporting any issues concerning water conservation. A benefit to reduced consumption is lower operating costs which may help defray future rate impacts.

TEST RESULTS

Contaminant	Year Tested	Violation	Level Detected	Unit	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	2018	N	None Detected	Absence	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Nitrate	2018	N	0.40	ppm	5	10	Runoff from fertilizer use, leaching from septic tanks, sewage; erosion of natural deposits.
Haloacetic Acids (HAA)	2018	N	None Detected	ppt	n/a	60,000	By-Product of drinking water disinfection
TTHM (total trihalomethanes)	2018	N	3,600	ppt	n/a	80,000	By-Product of drinking water disinfection
Contaminant	Year Tested	Violation	90 th Percentile	Units	Samples >AL	AL	Major Sources in Drinking Water
Lead	2018	N	1	ppb	0 of 10	15	Corrosion of household plumbing systems; erosion of natural deposits
Copper	2018	N	1.15	ppm	0 of 10	1.3	Corrosion of household plumbing systems; erosion of natural deposits

Note: In this table you will find terms and abbreviations. To help you better understand these terms we have provided the following definitions:

Parts per million (ppm) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

Maximum Contaminant Level Goal (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.

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. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Significance of Contamination

Microbiological Contaminants:

Total Coliform - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were not detected in any samples taken over the course of 12 months. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, we must notify the public by newspaper, television or radio, and take action to find the source of the problem, and disinfect the system.

Volatile Organic Contaminants:

TTHMs [Total Trihalomethanes] - Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

VOCs [Volatile Organic Compounds] - Because there are so many types of VOCs, potential health effects are varied. In addition, not much is known about what health effects occur from the levels of organics typically found in the home. According to the EPA, exposure to VOCs can cause eye, nose, and throat irritation; headaches, loss of coordination, nausea; damage to liver, kidney, and central nervous system.

Nitrate - Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill, and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Inorganic Contaminants:

Lead - Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the *Safe Drinking Water Hotline (1-800-426-4791)*. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

Copper - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

The mission of Public Utility District No. 1 of Wahkiakum County is to provide the most reliable electric and water service at the most reasonable cost along with quality customer service to the District's ratepayers. This institution is an equal opportunity provider and employer.