

Cloverdale Water District 2019 Annual Drinking Water Quality Report

We are pleased to provide you this year's Annual Water Quality Report. This report complies with federal and state law, which requires water utilities to provide water quality information to customers every year. We want to keep you informed about 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.

Our Source: The District is supplied by a spring fed ground water well located on Misty Drive. In 2008 a new 309 foot deep well was constructed and put into service in April 2014. The water from this new well was found to be high in natural occurring Fluoride and pH. This water is to be blended with the spring well water to reduce the Fluoride level to 1 ppm which is the recommended treatment level which promotes strong teeth. This well was not used in 2018 and is maintained to supplement the spring well in case of a drought or other water emergency. The well-head protection area for our wells extends uphill southeast of the well for 5000 feet, covering an area 1700 feet in width. The Oregon Health Authority Drinking Water Services completed a Source Water Assessment Interim Report in June 2005. The water assessment identified that our ground water is most susceptible to contamination from activity in a gravel pit and managed forest lands. You can obtain a copy of our source water assessment from Cloverdale Water District by calling (503) 392-3515.

We encourage our customers to help in our protection of the source by properly disposing of waste products such as unused pesticides, solvents and petroleum-based products.

Water Treatment: The District treats our drinking water with liquid chlorine for disinfection and soda ash for pH adjustment to help prevent customer's plumbing from leeching lead and copper into the water. The new deep well water is aerated to strip out hydrogen sulfide gas (sulfur) before it is blended with the existing well water.

Pipes, Pumps and Reservoirs: The District's 126 connections are served by several miles of main distribution water line. Two well pumps provide the necessary water to the distribution piping and the 103,000 gallon storage reservoir.

Water Quality Standards: The federal Safe Drinking Water Act of 1974 and the 1986 and 1996 amendments were developed to ensure the quality and safety of the nation's drinking water. The federal government, through the U.S. Environmental Protection Agency (EPA), has the authority to regulate public water systems to protect public health. The EPA sets national drinking water standards and establishes drinking water testing methods. The Oregon Health Authority Drinking Water Services administers the drinking water regulations for the EPA in the State of Oregon. The Cloverdale Water District routinely monitors for contaminants in your drinking water as required. A contaminant is defined as any substance in water however, not all contaminants are harmful. Some contaminants are a concern only if they are detected above certain levels. In order to be in compliance with EPA regulations, Cloverdale Water District drinking water must have contaminant levels at or below all drinking water quality standards.

We are pleased to report that our drinking water meets all federal and state requirements!

This report shows the results and what it means for the monitoring period of January 1st to December 31st, 2019. If you have any questions about this report or concerning your water utility, please contact the Cloverdale Water District's System Operator, Larry Chitwood, at (503) 392-3515 or cell # (503)812-3781 We want our valued 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 second Monday of each month at 7:00 P.M. at the Cloverdale Sanitary District Office, 34540 Hwy. 101 South, Cloverdale, Oregon.

As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily

pose a health risk. To help you to better understand testing terms we have provide the following definitions:

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

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

pCi/L – picocuries per liter (a measure of radioactivity).

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

Treatment Technique (TT) - treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) – The “Maximum Allowed” (MCL) is 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 (MCLG) - The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for margin of safety.

Maximum Residual Disinfectant Level (MRDL) – 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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 contamination.

TEST RESULTS

Disinfection By-products (2017 Test Result)

Contaminant	Violation Yes/No	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Total Trihalomethanes (TTHM's)	No	ND	ppb	N/A	80	By-product of drinking water chlorination

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.

Inorganic Contaminants (2019 Test Result)

Contaminant	Violation Yes/No	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Nitrate (as Nitrogen)	No	2.01	ppm	10	10	Runoff from fertilizer use; leeching from septic tanks, sewage; erosion of natural deposits.
Fluoride	No	ND	ppm	4	4	Erosion of natural deposits

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High Nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

Radioactive Contaminants (2015 Test Result)

Contaminant	Violation Yes/No	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
Alpha emmitters (pCi/L)	No	3.6	pCi/L	0	15	Erosion of natural deposits.
Combined radium (pCi/L)	No	0.4	pCi/L	0	5	Erosion of natural deposits.
Combined Uranium	No	1	ppb	0	30	Erosion of natural deposits.

Certain minerals are radioactive and may emit forms of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing Uranium in excess of the MCL over many years may have an increased risk of getting cancer.

Lead and Copper Test Results (2019 Test Results)

Substance	Units	Action Level (AL)	90 th Percentile	Homes Exceeding Action Level	Complies	Source of Contaminant
Lead	ppb	15	.0015	0	Yes	Corrosion of Household Plumbing
Copper	ppm	1.3	1.21	0	Yes	Corrosion of Household Plumbing

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.

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 90th percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customer’s taps most likely to contain these substances based on when the house was built. The EPA determined that if the sample’s results exceeded the Action Level (AL), the system must take action in reducing the risk of leaching lead and/or copper. As you can see by the table above, your water was well below the action level on our last round of testing.

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. Cloverdale Water District 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 (1-800-426-4791) or at www.wpa.gov/safewater/lead.

Cloverdale Water District treats its drinking water with soda ash to adjust the water pH to help prevent the leeching of lead and copper from customer's plumbing into the water. It is recommended that customers with copper plumbing in their households take the following preventive measures:

1. **Each morning run your cold water taps for several minutes to flush out all the water that has been standing overnight.**
2. **Never use water from hot water taps for food preparation, drinking water or for preparing beverages or for beverage ice.**
3. **Always run the cold water for a minute or two before drinking or before using the water in a food or beverage product.**
4. **Use the same precautions in preparing bottles, formula or other baby foods or beverages.**

As you can see by the tables above, our system had no violations. We are proud that our drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined your water IS SAFE at these levels.

We constantly monitor for various constituents in the water supply to meet all regulatory requirements. This past year or upon most recent scheduled testing we did not exceed in any area of testing. We did detect a small amount of Nitrate (2.16 ppm), there was no Fluoride or Total Trihalomethanes detected, Alpha Emitters (3.6 pCi/L), Radium (.4 pCi/L), and Uranium (1 ppb) which were well below the MCL. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals, pesticides, herbicides, and radioactive contaminants. 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 (1-800-426-4791).

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

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 *Cyptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. If you have questions please call the contact number for Cloverdale Water District: (503) 392-3515.

One way to be aware of water issues is to get involved with the local watershed group. The Nestucca, Neskowin & Sandlake Watersheds Council welcomes your interest and may be contacted at (503) 965-2200. Web site: <http://www.nestuccawaters.org>

We at the Cloverdale Water District work hard to provide top quality drinking water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Esto es una informacion importante. Por favor, si lo puedes traducirlo.