



WATER QUALITY REPORT 2021

WOODLAND'S DRINKING WATER SURPASSES ALL STATE AND FEDERAL HEALTH STANDARDS

The City of Woodland's water quality report is here to inform you, the consumer, about the City of Woodland's public water system. This annual publication gives the consumer mandatory information regulated by the State Department of Health (DOH) as well as the Environmental Protection Agency (EPA).

The City of Woodland supports the consumers right to know the results of our water quality monitoring and encourages you to attend our city council meetings with any questions or ideas on how to help preserve our water resources. City council meetings are held at 200 East Scott Avenue on the 1st and 3rd Monday of every month at 7PM.



WHERE DOES WOODLAND'S PUBLIC WATER COME FROM?

The source of Woodland's water supply is the aquifer beneath the North Fork of the Lewis River. The water collection system, called a horizontal collector well, is located below the river bottom and is relatively safe from any potential contamination or flood damage which may take place in the river. The Lewis River watershed is fed by glacier melt from Mt. Adams and smaller tributaries such as Cedar Creek. The Lewis River is one of the cleanest and most pristine rivers in the region; however, the source is naturally high in iron.

"We are proud to say our water treatment plant exceeds state regulatory requirements."

- Tracy Coleman, Public Works Director

HOW TO CONTACT US

Public Works Office:

(360)-225-7999
236 Davidson Avenue STE B
Woodland, WA 98674

City of Woodland Website:
ci.woodland.wa.us

EPA's Website

<https://www.epa.gov/ccr>

EPS's Safe Drinking Water Hotline

1-(800)-426-4791

Department of Health Website

<https://www.doh.wa.gov/>

Attention Non-English Speaking Consumers

-Spanish

Este informe contiene informacion importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

WHAT IS IN OUR WATER?

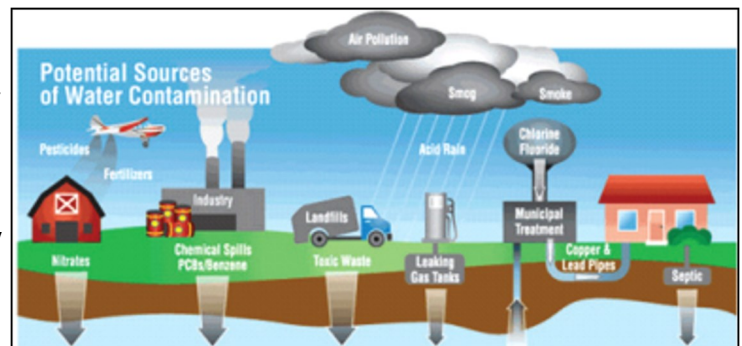
The sources of drinking water (both tap and bottled water) include, rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and in some cases, radio-active material. It can also pick up substances resulting from the presence of animals or from human activity. All types of drinking water is expected to have small amounts of contaminants within its molecules. 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.

Some individuals may be vulnerable to contaminants in drinking water than the general populations. For example, individuals with cancer, undergoing chemotherapy treatment, had organ transplants, has a immune system disorder, and some infants can be particularly at risk of infections. These individuals should seek advice about drinking water from their health care providers.

The security and emergency response for proper management of our drinking water system is essential. The City of Woodland complies with the required risk and resilient assessment for the City's drinking water system. The City continually updates the emergency water system response plan, which is submitted to the Environmental Protection Agency (EPA)

Contaminates that may be present in a water source BEFORE it is treated.

- ◇ Microbial Contaminants: Viruses and bacteria from human and animal waste.
- ◇ Inorganic Contaminants: Salts and metals from industrial or domestic wastewater discharges, oil production, and mining or farming.
- ◇ Pesticides and Herbicides: Comes from a variety of sources such as residential and agricultural uses.
- ◇ Radio-Active Contaminants: Naturally occur
- ◇ Organic Chemical Contaminants: Synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production. It can also come from gas stations, urban storm runoff, and septic systems



WHAT ARE THE BENEFITS OF CHLORINATION?

The chemical process of disinfecting drinking water from microorganisms is the most important step in delivering clean drinking water to our consumers. Before cities in the United States (U.S) began routinely treating drinking water with chlorine, thousands of U.S. residents died annually from dangerous diseases. The process of chlorination has helped eliminate these diseases in the U.S., such as Cholera, Typhoid Fever, Dysentery, and Hepatitis A.

WHAT DOES CHLORINE TREAT?

- ◇ Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.
- ◇ Taste and odor reduction, such as foul-smelling algae secretions, sulfides, and decaying vegetation.
- ◇ Biological Growth Elimination of slime, bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.
- ◇ Chemical removal of hydrogen sulfide, ammonia, and other nitrogenous compounds that have unpleasant odors.

WATER QUALITY MONITORING RESULTS

Contaminant	Most Recent Test	Unit	Detected Level	MLC or MRDL	MRDLG or MCLG	Major Source(s)
<i>* 20 Water samples were collected from resident homes and tested by an independent laboratory for lead and copper.</i>						
Lead*	9/24/2021	Ppb	0.0036	Action Level 15	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper*	9/24/2021	Ppm	0.73	Action Level 1300	1.3	Corrosion of household plumbing systems; erosion of natural deposits, leaching of wood preservatives.
Disinfection Byproducts — <i>The detected level is the average of the range of all samples during the year . The range is provided below.</i>						
Haloacetic Acid	11/8/2021	Ppb	11.4 Range 9.8-13	60	60	By-product of chlorination; used for drinking water disinfection.
Total Trihalomethanes	3/25/2021	Ppb	24.4 Range 9.8-13	80	N/A	
Radionuclides						
Gross Alpha	6/14/2016	Ppb	3	15	0	Erosion of natural deposits.
Combined Radium	6/14/2016	Ppb	1	5	N/A	
Inorganic Chemicals						
Nitrate	10/5/2020	Ppm	ND	10	N/A	Runoff from fertilizer use' leaching from septic tanks, sewage, erosion of natural deposits.
Unregistered Volatile Organic Compounds						
Chloroform	11/2/2020	Ppb	10	—	—	Unregulated contaminants are those which EPA has not established drinking water standards. The purpose is to help EPA to determine their occurrence in drinking water and potential need for future regulations.
Bromodichloromethane	11/2/2020	Ppb	6.1	—	—	
Dibromochloromethane	11/2/2020	Ppb	3.6	—	—	

◇ **Picocuries per Liter (pCi/L):** Measurement of radioactivity.

◇ **Parts per Billion (Ppb):** One part substance per billion parts water.

◇ **Parts per Million (PPM):** One Part substance per million parts water.

◇ **Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

◇ **Milligrams per liter (mg/L):** Approximately equal to parts per million (PPM) or 1 milliliter per 1,000 liters of water.

◇ **Micrograms per Liter (ug/L):** Approximately equal to parts per billion (PPB) or 1 milliliter per 1,000,000 liters of water.

◇ **Synthetic Organic Compounds (SOC's):** A class of man-made contaminants including herbicides, pesticides, and other chemicals that come from agriculture, urban storm water runoff, or industrial activities.

◇ **Volatile Organic Compounds (VOC's):** Chemical solvents or cleaners (and their byproducts) that are derived from petroleum products; man-made contaminants from industrial processes.

◇ **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water.

◇ **Active Level (AL):** The concentration of a contaminant which, if exceeded triggers treatment or other requirements that a water system must follow.

◇ **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG allows for a margin of safety.

◇ **Maximum Residential Disinfectant Level Goal (MRDL):** The highest level of a disinfectant allowed in drinking water to control microbial contaminants.

◇ **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of drinking water disinfectant below which there is no known or expected risk to health.

◇ **Not Detected (ND):** No substance was found by laboratory analysis.

◇ **Nephelometric Turbidity Units (NTU):** Measures the clarity of water. 5 NTU is noticeable to the average person.

◇ **Removal Ratio:** Ratio between the percentages of a substance actually removed to the percentage required to be removed.

DEFINITIONS & ABBREVIATIONS

THE WATER TREATMENT PLANT

The City of Woodland Water Filtration Plant began operation in May of 1999. Our treatment process consists of two steps. First, chlorine is added to remove iron from the source water (Lewis River) and as a precaution against any bacteria that may enter the system through line breaks or low pressure events. We carefully monitor the residential chlorine levels, adding the lowest quantity necessary to protect the safety of your water without compromising the taste. The second step is the addition of sodium carbonate (Soda Ash), to adjust the PH level to minimize the natural corrosion of pipes and plumbing fixtures. After treatment, the water is pumped to closed reservoirs, then to the distribution system, and into your home or business.

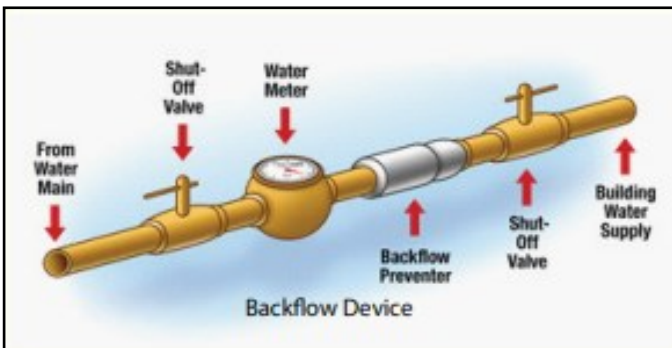


CROSS CONNECTION

One of the many threats to our drinking water supply is known as a Cross Connection (CC). A CC is the point at which a non-drinking water substance can possibly come in contact with drinking water. Connections such as lawn sprinkler systems or fire sprinkler systems can easily allow contaminants to enter potable (drinking) water lines, via backflow, if they are not properly equipped with Department of Health (DOH) approved backflow preventers. Citizens are often unaware of the potential danger that can lurk in their pipes by improperly installing water-using equipment that allows backflow.

WHAT IS BACKFLOW?

Drinking water normally flows in one direction, from the City's water system to the consumers home and out the consumer's fixtures/faucets for use. Under certain conditions, water could flow in the reverse direction; this is known as backflow. Backflow occurs when there is a vacuum in the pipes caused by a loss of pressure in the City's water system due to a high use in the community, such as firefighting activities or a water main break. Backflow can allow bacteria, chemicals or physical contaminants to enter the water system if CCs are uncontrolled. The City of Woodland's Water Department takes every precaution possible to prevent CC backflow from entering our distribution system.



HOW DO WE PREVENT CROSS CONNECTION?

Some commercial and residential customers are required to have a backflow device depending on the degree of hazard to the water. In general, the installation of the plumbing is in compliance with the code, which adequately protects against non-potable (dirty/used) water flowing back into the water system

The City's Cross Connection Control (CCC) Program ensures that customers eliminate CCs

whenever possible and control CCs that can't be eliminated by installing Department of Health (DOH) approved backflow preventers. To better protect public health, the Washington State DOH has revised the CCC regulations for public water systems. All public water systems are required to develop and implement CCC programs.

Do you have a water leak? For information on how to detect a leak, visit our website at

<https://www.ci.woodland.wa.us/clerktreasurer/page/how-detect-leaks>