2021 WATER QUALITY REPORT

CITY OF GRANDVIEW
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CITY OF

Grandview, Washington

PUBLIC WORKS DEPARTMENT

This report describes the quality of Grandview's drinking water, sources, and programs that protect our water quality. This publication complies with federal law, which requires water utilities to provide water quality information to customers every year.

While most of the content is required by regulation, we also include information that responds to typical questions our customers ask about the system. We support the public's right to know the results of our water quality monitoring. We also recognize that a report dominated by technical information is not inviting reading to most people.

We've made an effort to provide the information in a clear and useful format. While our customers appreciate a well-designed publication, most are concerned about costs. Therefore we continue to provide a quality report at an affordable price similar to last year's **$0.62** per copy.

Safe drinking water is essential to our community. Providing safe drinking water is a complex business. For those of you who are not interested in all the detail we provide, here is the summary:

GRANDVIEW'S WATER MEETS OR SURPASSES ALL STATE AND FEDERAL STANDARDS.

We test our water regularly through Eurofins Cascade Analytical, in Yakima, Washington. State and federal regulators routinely monitor our compliance and testing protocols to assure that we deliver safe drinking water to our customers.

Cus Arteaga
City Administrator/Public Works Director
W.D.M. 3

Hector Mejia
Public Works Foreman
W.D.M. 1

Frank Rodriguez
Public Works Water Operator
W.D.M. 1

CROSS CONNECTION CONTROL PROGRAM

What is it and why is it important?

One of the measures the City of Grandview takes to ensure the safety of your drinking water is the implementation of a **Cross Connection Control Program** as per WAC 246-290-490. This program is designed to prevent water or other substances from back flowing into the potable water supply.

Cross connection is a temporary or permanent connection between drinking water piping and/or plumbing fixtures, tanks, or devices through which it may be possible for used water or other substances to re-enter the potable water supply.

Backflow is the reversal of flow of non-potable water or other substances through a cross connection into the piping of the potable water system .

Some examples of potentially dangerous cross connections are lawn irrigation systems, fertilizer spray attachments, or a garden hose used to fill a bucket. These cross connections require the installation of mechanical devices called **backflow prevention assemblies** which are designed to prevent water from flowing backwards.

As a water customer, it is your responsibility to maintain your own plumbing system according to the plumbing code and/or other state regulations. Plumbing permits are required when working on a plumbing system, and this includes the installation of a backflow prevention assembly. Obtaining the proper permits minimizes your liability in the event of a backflow incident. The permit process ensures that work done on a plumbing system is carried out in a safe and correct manner. This protects you, your loved ones, your investment, your community, and your water supply.

YOU ARE REQUIRED TO HAVE YOUR BACKFLOW ASSEMBLY TESTED ANNUALLY BY A CERTIFIED BACKFLOW ASSEMBLY TESTER AND A COPY OF THE RESULTS MUST BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT .

If you have any questions regarding our Cross Connection Control Program, please contact the Public Works Department at (509) 882-9211.

"Prevents contaminated water from getting back into drinking water."

EDUCATIONAL PROGRAMS

The City of Grandview believes education is a very important tool. Numerous times during the year, representatives from the Public Works Department attend the Career Day at our local schools and help teach the children about the many ways we protect and conserve water. The Public Works Department also offers, by appointment, public and educational tours of our well sources.

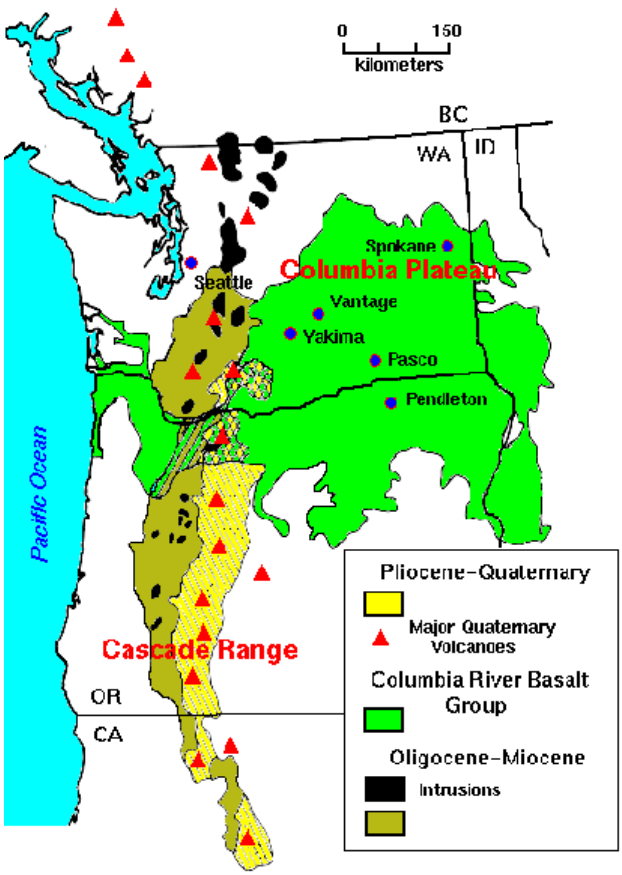
Water drawn from various units

1) Grandview's primary source of water is withdrawn from the Columbia River Basalt Group. This geologic formation consists of four distinct hydro-geologic units.

Starting with the oldest, these four units are known as the Grande Ronde, Wanapum, and Saddle Mountain Units (Made up primarily of basalts of the same name but also include sedimentary inter-beds) and the Overburden Unit.

2) The Grande Ronde, Wanapum, and Saddle Mountain Units vary in thickness in South-central Washington. Each Unit is composed of numerous to several hundred individual basalt flows, which can range in thickness from a few inches to more than 300 feet, with sedimentary inter-beds. Distinct, thick sedimentary interbeds separate the Grande Ronde, Wanapum, and Saddle Mountains.

3) Our shallowest wells draw water from the Overburden Unit. This unit consists of undivided unconsolidated to semi-consolidated sedimentary deposits and minor basalt and adesite. The deeper wells penetrate into the Saddle Mountain Unit, and perhaps into the Wanapum or Grande Ronde Units.



What the EPA Says About Drinking Water Contaminants

Drinking water, including bottled water, may reasonably be expected to contain small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health affects can be obtained by calling the Environmental Protection Agency 's (EPA) Safe Drinking Water hotline at (800) 426-4791 or online at http://www.epa.gov/safewater.

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.

Environmental Protection Agencies/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline at (800) 426-4791 or online at http://epa.gov/safewater.

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 land or through the ground it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presences of animals or from human activity.

Possible contaminants in Grandview's Columbia River Basalt Group Water may include:

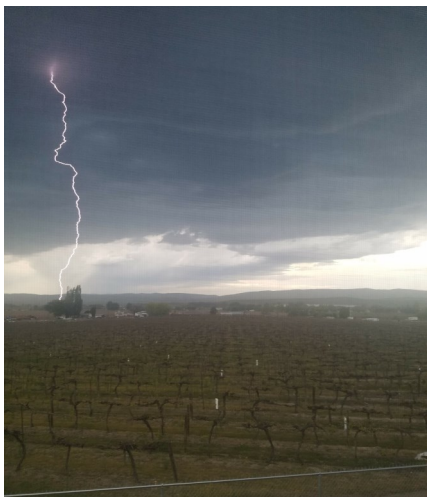
- **Microbial Contaminants** such as viruses and bacteria which may come from septic systems or wildlife. **122 samples were collected in 2021.**
- **Inorganic Contaminants** such as salts and metal, which can occur naturally, or result from urban storm water runoff, industrial or domestic waste disposal, or farming. **79 samples were collected in 2021.**

- **Pesticides and Herbicides** which may come from a variety of sources such as farming, urban storm water runoff, home or business use, and storm drains. **7 samples were collected in 2021.**
- **Organic Chemical Contaminants** including synthetic and volatile organic chemicals, which are by-products of industrial processes, solvents, or they can come from gas stations. **5 samples were collected in 2021; no contaminates above the trigger and MCL levels were detected. Total Trihalomethanes were below the MCL.**

- **<u>Radioactive Contaminants</u>** which can occur naturally. **8 samples were collected in 2021; no contaminates above the trigger and MCL levels were detected.**

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.

The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.



The Fourth Unregulated Contaminant Monitoring Rule (UCMR 4)

UCMR 4 includes Assessment Monitoring for a total of 30 chemical contaminants including:

- Two metals
- Eight pesticides plus one pesticide manufacturing by product
- Three alcohols
- Three semivolatile organic chemicals (SVOCs).
- Three brominated haloacetic acid (HAA) disinfection byproducts groups and the indicators total organic carbon (TOC) and bromide.
- Nine cyanotoxins and one cyanotoxin group.

Monitoring under UCMR 4 will occur from 2021-2022.

For More Water Quality Information

In 2021 the Public Works Department collected a total of 233 water samples and tested for over 100 contaminants from throughout the water system. To obtain a copy of our Water Analysis Results, contact the Public Works Department at (509) 882-9211. You may also contact the following agencies should you have questions about drinking water quality:

- Environmental Protection Agency Safe Drinking Water (800) 426-4791.
- City of Grandview Public Works Department (509) 882-9211 or via fax (509) 882-9232.

Water Quality Monitoring Results

The U.S. Environmental Protection Agency (EPA) requires that water systems report annually on contaminants that have been detected in their water supplies.

In 2021 the Public Works Department collected a total of 233 water samples and monitored for over 100 contaminants. When contaminants are detected they are typically below the levels that EPA has established.

City of Grandview Water Plant Operators

Grandview's water meets or surpasses all state and federal drinking water standards

IMPORTANT DEFINITIONS

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 which is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

TREATMENT TECHNIQUE

A required process intended to reduce the level of a contaminant in drinking water.

ACTION LEVEL

The concentration of a contaminant which is exceeded, triggers treatment or other requirements which a water system must follow.

PART PER MILLION PART PER BILLION

These units describe the levels of detected contaminants.

One part per million is approximately half of a dissolved aspirin tablet (162.5 mg) in a full bathtub of water (about 50 gallons).

One part per billion is approximately one dissolved aspirin tablet (325 mg) in a typical 25-meter swimming pool (about 100,000 gallons).

Grandview's Water Quality Monitoring Results

Turbidity and Nephelometric Turbidity Units (NTUs)

Columbia River Basalt Group is an unfiltered water supply. Rules for public water systems have strict standards for unfiltered supplies.

Turbidity levels in unfiltered water must not exceed 5 NTU

The typical cause of turbidity is tiny particles of sediment in the water. Turbidity can interfere with disinfection and provide a medium for microbial growth.

Microbiological Testing

Microbiological testing of water helps protect the public from diseases such as cryptosporidiosis, giardiasis, polio, diphtheria, typhoid and cholera.

The Safe Drinking Water Act, Water Treatment Rule, requires unfiltered water systems to meet standards for total and fecal coliform bacteria.

This rule requires disinfection, a treatment technique, to destroy or inactivate a minimum level of Giardia cysts and viruses.

Testing before treatment helps confirm that the Columbia River Basalt Group is suitable for use as an unfiltered water supply.

Total Coliform Bacteria – Total coliform bacteria are naturally present in the environment.

Their presence is an indicator that other potentially harmful bacteria may be present.

The Public Works Department uses chlorine to disinfect and control these bacteria.

Ten total coliform samples are taken from the distribution system each month for a total of 120 samples per year. All samples taken in 2021 were negative, which is the preferred result.

Fecal Coliform Bacteria – The presence of fecal coliform bacteria indicates that water may be contaminated with human or animal wastes.

Disinfection Byproducts

During 2021, 2 total trihalomethanes (TTHM) and 2 halo-acetic acids (HAA5) samples were collected. The disinfection process is carefully controlled to remain effective, while keeping disinfection byproduct levels low.

New regulatory maximum contamination levels (MCL) for total trihalomethanes are 20 ug/L and 15 ug/L for HAA5s. All 4 samples were below the MCL.

Nutrients (Nitrates/Nitrites)

Nutrients can support microbial growth such as bacteria and algae. Nitrate and nitrite levels exceeding the standards can contribute to health problems. The levels in Grandview's water are below those that EPA considers of concern. 80 satisfactory samples were taken in 2021.

Metals (Antimony, Arsenic, Barium)

Metals are a group of similar elements that occur in the earth's crust. They can dissolve into water that is in contact with soil or in groundwater aquifers.

Other Minerals (Fluoride)

Fluoride is a naturally occurring trace element in groundwater. Grandview does not add fluoride to the water. At low levels, it helps prevent dental caries. The U.S. Public Health Service and the Centers for Disease Control (CDC) consider the fluoride levels in Grandview's water sources to be lower than optimal for helping to prevent dental caries. You may want to consult with your dentist about fluoride treatments to help prevent tooth decay, especially for young children.

GRANDVIEW'S RESULTS OF MONITORING FOR REGULATED CONTAMINANTS

The 2021 Season Test Results meet or surpass state and federal drinking water standards.

Variable	Amount Minimum Detected	Detected Maximum	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Possible Source Of Contaminant
Total Coliform Bacteria	Not Detected	100% of our samples had fewer than 100 Bacterial colonies per 100 milliliters of water. 120 samples were taken in 2021.	At least 90% of samples must have fewer than 20 bacterial colonies per 100 milliliters of water.	Zero bacterial colonies detected	Found throughout the environment
Fecal Coliform Bacteria	Not Detected	100% of our samples had fewer than 20 Bacterial colonies per 100 milliliters of water. 120 samples were taken in 2021.	At least 90% of samples must have fewer than 20 bacterial colonies per 100 milliliters of water	Zero bacterial colonies `detected	Animal waste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Grandview's Results of Lead and Copper

As directed by the Department of Health, the Public Works Department monitors tap water from a select group of homes.

These are older homes in our service area where the plumbing may potentially contribute to elevated lead or copper levels.

Samples are collected after the water has stood motionless in the home for approximately 6 – 18 hours.

Lead has not been detected in Grandview's water system; however, our water is naturally corrosive and may leach metals when water has stood motionless in the home's plumbing system.

During September 2021, we sampled for lead and copper levels and none exceeded the Action Level of 15 parts per billion set by drinking water regulations.

2021 LEAD AND COPPER MONITORING RESULTS		
ANALYTE	**COPPER (Cu)**	**LEAD (Pb)**
STATE REPORTING LEVEL (SRL)	**.02 mg/l**	**0.001 mg/l**
REGULATORY ACTION LEVEL	**1.3 mg/l**	**0.015 mg/l**
GRANDVIEW'S AVERAGE	**0.036376 mg/l**	**<0.0006 mg/l**

Water Testing

The Public Works Department will be testing for lead and copper in our drinking water in 2023.

What you should know about lead in your tap water

Infants and young children are typically more vulnerable to lead in drinking water than adults.

Lead levels at your tap could be higher than at other homes because of the plumbing fixtures and materials.

If you are concerned about lead levels in your water, you may wish to have your water tested. (Certified laboratory phone numbers are listed under "Frequently Asked Questions.")

You can reduce your lead exposure by:

- Flushing your home's plumbing if water has stood motionless in the pipes for more than 6 hours. Run the water until it is cold (about 30-60 seconds).
- Using only cold water for cooking, drinking, and making baby formula.
- Using only "lead-free" solder when making plumbing repairs.
- If you replace plumbing, use only "lead-free" faucets and plumbing components.

The U.S. Safe Drinking Water Act requires faucets and plumbing components sold after August 6, 1998 to be "lead-free".

For more information about faucets call the National Sanitation Foundation (NSF) International telephone number 800-NSF-MARK, or via the internet at http://www.nsf.org

Grandview's Water Quality Monitoring Results

Total Chlorine Residual

Chlorine residual is necessary. Total chlorine residual is a measure of free-chlorine entering our distribution system. A new standard, finalized in 1998, sets the maximum contaminant level for this type of disinfection residual at 4 parts per million.

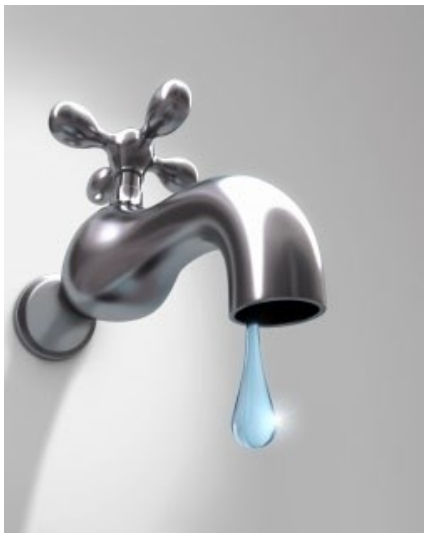
GRANDVIEW'S RESULTS OF MONITORING FOR UNREGULATED CONTAMINANTS

Drinking water rules require the water works department to monitor for certain Unregulated contaminants. Testing detected these unregulated contaminants.

Variable	Amount Minimum	Detected Average	Maximum Contaminant	Possible source of Contamination
Total Chlorine Residual	0.11 Parts Per million	1.2 Parts per million	4.0 Parts per million	Chlorine used to disinfect water

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less water whenever you can. Here are a few tips to conserve water:



- Turn off the water while shaving or brushing teeth. You waste up to 4 gallons a minute, or up to 200 gallons a week for a family of four!
- Wash only full loads of dishes and select the appropriate water level or load size option on the dishwasher.
- You can significantly reduce water use by simply repairing leaks in fixtures (faucets and showerheads), pipes and toilets. A slow leaking faucet can waste 15 to 20 gallons a day. A leaky toilet can waste up to 100 gallons a day.
- For those with automatic timed sprinkler systems, adjust your watering times based on rainfall, type of grass or plants, sunny or shady locations. If your yard looks healthy, try reducing the watering time by two minutes per zone.

How Do We Protect Water Quality?

The Public Works Department uses a multiple barrier approach to protect and maintain the high quality of our water.

Protecting groundwater – Preventing pollution is the first priority in protecting our groundwater. The City of Grandview has in place a wellhead protection plan for all of our well sources and regulates activities that might pollute our source wells.

Monitoring and reporting meet regulations – The Public Works Department monitors drinking water as required by State and Federal regulations. We report our results to the State of Washington, Department of Health Division, in Spokane, Washington, (509) 329-2100. This agency oversees all drinking water systems in Eastern Washington.

Disinfecting and treating water – We use chlorine to disinfect our water and aeration to minimize or reduce odors in our water system.

Managing the distribution system – This activity includes monitoring water quality and quantities in tanks and water mains. It is important that the water that reaches our customers' taps has adequate chlorine disinfectant residual as recommended by the Department of Health.

OUR WATER MEETS OR SURPASSES ALL DRINKING WATER REGULATIONS.

Frequently Asked Questions

What is the pH of Grandview's water?

The average pH of water in Grandview's distribution system is 7.9 .

Is Grandview's water soft or hard?

Grandview's water is hard. It ranges from 9.9 to 18.0 grains of hardness per gallon.

Why does the taste and odor of my water sometimes differ?

Water naturally varies in taste and odor at different times of the year. Taste and odor problems can come from new or old pipelines, plumbing fixtures, or changes in water quality.

What causes discolored water?

Is rusty or discolored water typical at your tap? Rusting galvanized pipe in home plumbing systems is the usual cause of discolored water. If this is the case, the water clears after running a bit. Iron causes the discoloration but it is not a health risk.

Is your hot water rusty?

If so, the water heater may need flushing. If you flush your water heater, follow the manufacturer's guidelines.

Discolored water rarely causes health problems. Drinking water regulations provide guidelines covering taste, and odor or color of drinking water.

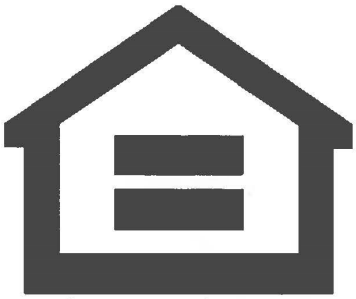
Our water meets or surpasses those standards.

State –Certified Laboratories Test Water

If you are concerned about the quality of water in your home, you may want to have your water tested; private laboratories will test your tap water, but there is a fee. The State of Washington has certified the following metropolitan-area laboratory to conduct water quality analysis. Not all labs are certified to test for all contaminants; be sure to ask what types of testing the lab is certified to perform.

Eurofins Cascade Analytical, Yakima WA 800-545-4206 (Toll Free)

U. S. Department of Housing and Urban Development



EQUAL HOUSING OPPORTUNITY

We Do Business in Accordance With the Federal Fair Housing Law

(The Fair Housing Amendments Act of 1988)

It is Illegal to Discriminate Against Any Person Because of Race, Color, Religion, Sex, Handicap, Familial Status, or National Origin

In the sale or rental of housing or residential lots

In advertising the sale or rental of housing

In the financing of housing

In the provision of real estate brokerage services

In the appraisal of housing

Blockbusting is also illegal

Anyone who feels he or she has been discriminated against may file a complaint of housing discrimination:

1-800-669-9777 (Toll Free)
1-800-927-9275 (TTY)
www.hud.gov/fairhousing

U.S. Department of Housing and Urban Development
Assistant Secretary for Fair Housing and Equal Opportunity
Washington, D.C. 20410

Previous editions are obsolete

form HUD-928.1 (8/2011)

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