# 20 Drinking Water24 Quality Report

CITY OF GRESHAM, OREGON



# Our Water. Our Future.

Safe, clean water is vital to our community. The City of Gresham Water Division realizes that delivering healthy water to you, our customers, is our highest priority. We also know we must keep our water source resilient to threats from natural disasters, such as earthquakes. New water reservoirs and transmission pipes are being built using the highest earthquakeresistant standards. No matter what the city may face in the future, we aim to be ready to provide fresh, drinkable water to Gresham residents.

Our Mayor and City Councilors are keenly aware of how critical it is for Gresham to be able to provide water to our community at an affordable price. They have directed us to transition to our own independent source of groundwater, ensuring better future rate control and stability. Gresham has partnered with the Rockwood Water People's Utility District (RWPUD) to build state-of-the-art drinking water wells, treatment facilities, water reservoirs and transmission pipes. This partnership, titled the Cascade Groundwater Alliance, ensures that this system is built and operated in the safest and most efficient way possible.

As a crucial step and regulatory measure to ensure the groundwater supply continues to be safe and clean long into the future, we have expanded the city's Groundwater Protection Program. This program now covers the entire geographic area of Gresham. Under this program, City staff work with businesses that handle hazardous waste to ensure it is stored and managed properly and safely.

We are gifted with plentiful, healthy water stored safely deep below the surface. Along with RWPUD, we serve as joint caretakers and managers of this important community resource. As we move into the future, we are confident that we will be able to provide the highest quality water at the lowest possible cost to you.

For more information, visit

GreshamOregon.gov/

Cascade-Groundwater-Alliance

#### Mike Whiteley

Water Division Manager City of Gresham, 503-618-2525



# **Drinking Water Sources**

#### The Bull Run Watershed

is Gresham's primary source of drinking water, located in the Mount Hood National Forest, 26 miles from Portland. The Portland Water Bureau and the U.S. Forest Service carefully manage the watershed to sustain and supply clean drinking water. In a typical year, the watershed receives an astounding 135 inches of precipitation (rain and snow), which flows into the Bull Run River and then into two reservoirs that store nearly 10 billion gallons of drinking water.

Source water assessments are completed to identify contaminants of concern for drinking water. For the Bull Run, the only contaminants of concern are naturally-occurring microorganisms, such as Giardia, Cryptosporidium, fecal coliform bacteria, and total coliform bacteria. The Portland Water Bureau regularly tests Bull Run water for these microorganisms that live in virtually all freshwater ecosystems.

The Portland Water Bureau treats water to control organisms that could make people sick but does not currently treat for Cryptosporidium. Portland is installing filtration to remove Cryptosporidium from drinking water by 2027.

Portland's source water assessment is available at **portland.gov/water/SWA** or by calling **503-823-7525**.



# The Columbia South Shore Well Field

provides high-quality drinking water from 25 active wells located in three different aquifers. The well field is between the Portland International airport and Blue Lake Park. Portland uses the well field for two purposes: to supplement the Bull Run supply in the summer, and to temporarily replace the Bull Run supply during turbidity events, maintenance activities, and emergencies.

The Columbia South Shore Well Field is beneath homes and businesses with a variety of potential contaminant sources. The deep aquifers that are the primary sources of water supply have natural geologic protection from pollutants present at the land surface. Portland, Gresham, and Fairview work together to protect the well field. The cities' Groundwater Protection Program staff work with residents and businesses in the well field to ensure that pollutants from this urban area do not impact the groundwater source.

To learn more about groundwater protection and find upcoming groundwater education events, visit

portlandoregon.gov/water/groundwater.

#### The Cascade Well Field

is jointly owned and operated by Gresham and Rockwood Water People's Utility District. The wells are primarily used during the summer months to supplement our supply from Portland. This groundwater is from the Sand and Gravel Aguifer, located approximately 600 feet below the surface. Access to groundwater helps Gresham to manage both water expenses and water quality. The City works with Gresham and Fairview businesses to protect this important investment. For more information about the Cascade Well Field or our Groundwater Protection Program, visit Gresham Oregon.gov/ Well-Field-**Protection-Program** or contact the City at 503-618-2525.





### **The City of Gresham**

is a member of the Regional Water Providers Consortium.
The Consortium provides leadership in the planning, management, stewardship, and resiliency of drinking water in the greater Portland, OR metropolitan region. Learn more at regionalH2O.org.





Check out our how-to videos and other resources that show how to store, access, and treat drinking water in an emergency at **regionalH2O.org**/

emergency-preparedness.

Resources are available in: English, Arabic, Chinese, Farsi, Hindi, Japanese, Karen, Khmer, Korean, Lao, Nepali, Somali, Spanish, Romanian, Russian, Thai, Ukrainian, and Vietnamese.

### CITY OF GRESHAM

1333 NW Eastman Parkway Gresham, OR 97030 503-618-2525

Gresham Oregon.gov/Water-Resources Gresham Public Water System #4100357



### **Learn More**

You'll find information about these topics and more at <u>GreshamOregon.gov</u>/

GreshamOregon.gov/
Water-Resources-Division

- Emergency resilience
- FREE testing for lead
- Groundwater protection
- Toilet rebates
- Utility billing and rates
- Water conservation
- Water quality

Oregon Health Authority Drinking Water Program 971-673-0405 oregon.gov/oha/ph/ healthyenvironments/drinkingwater

# **Special Notice to Immuno-Compromised People**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people such as those with cancer undergoing chemotherapy, people 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 Agency, Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **Safe Drinking Water Hotline at 800-426-4791. See page 9 for more information on** *Cryptosporidium***.** 



# **Translation**

Do you need this document translated into another language? Please call **503-618-2525**.

Por información en Español, llame al **503-618-2525**.

Для получения копии этого отчета на русском языкепозвоните по указанному ниже номеру **503-618-2525**.

# **Public Participation**

Interested in opportunties for public participation?

Please visit **GreshamOregon.gov/ Council-Meetings** 

GreshamOregon.gov/
Council-Citizen-Advisory-Committees

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Regulated Contaminant	Minimum Detected	Maximum Detected	Maximum Contaminant Level (MCL), Treatment Technique (TT) or Maximum Residual Disinfectant Level (MRDL)	Maximum Contaminant Level Goal (MCLG) or Maximum Residual Disinfectant Level Goal (MRDLG)	Sources of Contaminant
Turbidity (NTU)	0.23	3.69	5	N/A	Erosion of natural deposits
Total Coliform Bacteria (% samples more than 100 MPN/100 ml in 6 months)	0%	0.5%	No more than 10% of samples in 6 months can have more than 20 CFU/100 ml of water.	N/A	Found throughout the environment
Giardia (#/L)	0%	0.08	π	N/A	Animal wastes

### Treated Drinking Water from Bull Run Watershed, Columbia South Shore Well Field, & Cascade Well Field to Distribution System

Regulated Contaminant	Minimum Detected	Maximum Detected	Maximum Level (MCL)(MRDL)	Maximum Level (MCLG)(MRDLG)	Sources of Contaminant
Arsenic (ppb)	<0.50	0.9	10	0	
Barium (ppm)	0.00082	0.0188	2	2	Found in natural deposits
Fluoride (ppm)	<0.025	0.13	4	4	
Nitrate (ppm)	0.01	0.11	10	10	Natural aquifer deposits; Animal wastes
Unregulated Contaminant	Minimum Detected	Average Detected	Maximum Detected		
Radon (pCi/L)	<12	167	333		Found in natural deposits
Sodium (ppm)	11	13.65	16.3		
Manganese (ppm)	25	15.8	33.7		

#### Treated Drinking Water from Points Throughout the Distribution System of Reservoirs, Tanks and Main

Treated Drinking	Water from Poin	its Throughout the L	distribution System of Reservoirs, Tanks an	d Mains	
Haloacetic Acids Range of single results at all sites (ppb) Locational Running Annual Average (ppb)	14.8	52.2 32.8	N/A 60	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes Range of single results at all sites (ppb) Locational Running Annual Average (ppb)	18.1	54.6 33.1	N/A 80	N/A	Byproduct of drinking water disinfection
Total Chlorine Residual Range of single results at all sites (ppm) Locational Running Annual Average (ppm)	0.04	2.2 1.67	N/A 4	N/A 4	Chlorine/ammonia disinfection

# **Definitions**

#### **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.

#### Maximum Residual Disinfectant Level or

**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 or 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.

**Nephelometric Turbidity Units or NTU** - The unit of measurement of turbidity or cloudiness in water as measured by the amount of light passing through a sample.

**Part per Million (ppm)** - One part per million corresponds to one penny in \$10,000 or approximately one minute in two years. One part per million is equal to 1,000 parts per billion.

**Part Per Billion (ppb)** - One part per billion corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years.

**Picocuries Per Liter (pCi/L)** - Measurement of radioactivity. One picocurie is one trillion times smaller than one curie.

**Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to help EPA determine their occurrence in drinking water and potential need for future regulation.

# Notes On Contaminants

Arsenic, Barium, Fluoride, and Manganese – These metals are elements found in the earth's crust. They can dissolve into water that is in contact with natural deposits. At the levels found in Gresham's drinking water, they are unlikely to result in negative health effects.

**Giardia** – Wildlife in the watershed may be hosts to Giardia, the organism that causes giardiasis. The Portland Water Bureau uses chlorine to control Giardia.

#### Haloacetic acids and total

**Trihalomethanes -** Disinfection byproducts form when chlorine interacts with naturally-occurring organic material in the water. High levels of disinfection byproducts can cause health problems in people. Portland adds ammonia to form a more stable disinfectant, which helps minimize disinfection byproducts.

Nitrate / Nitrogen – Nitrate, measured as nitrogen, can support microbial growth (bacteria and algae). Nitrate levels exceeding the standards can contribute to health problems. At the levels found in Gresham's drinking water, nitrate is unlikely to result in negative health effects.

Radon – Radon is a naturally-occurring radioactive gas that cannot be seen, tasted or smelled. Radon can be detected at very low levels in the Bull Run water supply, and at varying levels in Portland's groundwater supply. At the levels found in Gresham's drinking water, radon in water is unlikely to result in negative health effects. For information about radon, visit www.epa. gov/radon or call the EPA's Radon Hotline at 800-SOS-RADON.

**Sodium** – There is currently no drinking water standard for sodium. At the levels found in drinking water, it is unlikely to result in negative health effects.

**Total Chlorine Residual** – Total chlorine residual is a measure of free chlorine and combined chlorine and ammonia



in our distribution system.
Chlorine residual is a low level of chlorine remaining in water and is designed to maintain disinfection through the entire distribution system. At the levels found in Gresham's drinking water, chlorine is unlikely to result in negative health efects.

#### Total Coliform Bacteria -

Coliforms are bacteria that are naturally present in the environment. They are used as an indicator that other potentially-harmful bacteria may be present. The Portland Water Bureau uses chlorine to control these bacteria.

**Turbidity** – Turbidity is a measure of the water's clarity. Increased turbidity is typically caused by large storms that suspend organic material in our source water. This can interfere with disinfection and provide an environment for microbial growth. When turbidity rises, Gresham has two groundwater supply options: Columbia South Shore and Cascade Well Field sources.

# What the EPA Says About 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 (EPA) Safe Drinking Water Hotline at 800-426-4791 or at www.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 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 in drinking water sources may include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from wildlife.
- **Inorganic contaminants**, such as naturally-occurring salts and metals.
- Pesticides and herbicides, which may come from a variety of sources, such as farming, urban stormwater runoff, and home or business use.
- Organic chemical contaminants, such as byproducts of industrial processes, or the result of chlorine combining with naturally-occurring radon.
- Radioactive contaminants, which can occur naturally.

In order to ensure that tap water is safe to drink, the EPA has regulations that limit the amount of certain contaminants in water provided by public water systems and requires monitoring for these contaminants. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



# Monitoring for Cryptosporidium

The PWB does not currently treat for Cryptosporidium, but is required to do so under drinking water regulations. Portland is working to install filtration by September 30, 2027 under a compliance schedule with OHA. In the meantime, the PWB is implementing interim measures such as watershed protection and additional monitoring to protect public health. Consultation with public health officials continues to conclude that the general public does not need to take any additional precautions.

Exposure to Cryptosporidium can cause cryptosporidiosis, a serious illness. Symptoms can include diarrhea, vomiting, fever, and stomach pain. People with healthy immune systems recover without medical treatment. According to the Centers for Disease Control and Prevention (CDC), people with severely

weakened immune systems are at risk for more serious disease.

Symptoms may be more severe and could lead to serious life-threatening illness. Examples of people with weakened immune systems include those with AIDS, those with inherited diseases that affect the immune system, and cancer and transplant patients who are taking certain immunosuppressive drugs.

The Environmental Protection Agency advises that customers who are immunocompromised and receive their drinking water from the Bull Run Watershed consult with their health care professional about the safety of drinking the tap water.

For more information, visit portlandoregon.gov/water/crypto

# 2023 Results of *Cryptosporidium*Monitoring at the Raw Water Intake

	Number of Samples	Concentration Detected (oocysts/L)		
Total Tested Positive for <i>Cryptosporidium</i>		Minimum	Maximum	
217	59	Not Detected	0.2	

# **Reducing Exposure to Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant people and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. These materials include lead-based solder used to join copper pipe—commonly used in homes built or plumbed between 1970 and 1985—brass components, and faucets.

The City of Gresham is responsible for providing high quality drinking water to more than 70,000 people, but cannot control the variety of materials used in plumbing components. The City removed all known lead service connections from the water distribution system and has never used lead service lines.

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 two minutes before using water for drinking or cooking.

If you are concerned about lead in your water, the City encourages you to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from

- Leadline, 503-988-4000, www.leadline.org
- Safe Drinking Water Hotline, 1-800-426-4791, www.epa.gov/ safewater/lead

FREE LEAD TEST KITS FREE LEAD TEST KITS and steps you can take to minimize exposure are available from Leadline, 503-988-4000, www. leadline.org

### Routine testing at homes with higher risk of lead in water

The City of Gresham offers free lead-in-water tests to anyone in the service area. Twice each year, the City of Gresham also collects water samples from a group of over 60 homes that have lead solder and are more likely to have higher levels of lead in water.

Testing results exceed the federal action level for lead when more than 10 percent of results from these homes are above 15 parts per billion. In our most recent round of testing, zero homes exceeded the lead action level.

### **Lead and Copper Sampling at High-Risk Residential Taps**

Regulated Contaminant	Detected in Resi	dential Water Taps	EPA's Limits			
	Fall 2023 Results	Homes Exceeding Action Level	Action Level	MCLG	Sources of Contaminants	
Lead (ppb)	5	0 out of 63	15	0	Corrision of household and commercial	
Copper (ppm)	0.185	0 out of 63	1.3	1.3	building plumbing systems	

<sup>&</sup>lt;sup>1</sup> 90th Percentile: 90 percent of the sample results were less than the values shown.

<sup>&</sup>lt;sup>2</sup> Action Level definition: The concentration of a contaminant which, if exceeded, triggers treatment or requirements of which a water system must follow.

# Sign Up For PublicAlerts

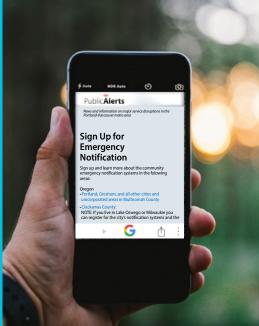
Extreme heat, ice storms, wildfires, and other emergencies happen. The good news is there's a lot you can do to prepare for and stay informed about events like these.

Start by signing up to get #PublicAlerts where you live, love, work, go to school, worship, and play. Then you'll know when there's an emergency in your area and what to do to stay safe.

Messages from Public Alerts will only come to you if you sign up. It only takes a couple of minutes to sign up or to update your contact info.

If you are in more than one county daily be sure to sign up for alerts in each county.

You can choose to get alerts by text, email, or phone. Sign up or update your info today at **PublicAlerts.org/signup**.



# Here are some examples of emergencies that may activate a Public Alerts message:

- Water main breaks or other service outages
- Major landslide
- Flooding
- Large fire

- Public health emergency
- Boil water notice
- Severe weather event
- Hazardous material spill
- Police activity



# INCLUDE WATER IN YOUR EMERGENCY KIT

1 gallon per person per day (minimum).