



## [Drinking Water Quality Report for 2021](#)

Federal regulations require Lake Grove Water District to provide for our customers a yearly report of our drinking water quality. We're very pleased to provide you with this year's Annual Water Quality Report for data collected in 2021. We want to keep you informed about the excellent water we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source comes from the City of Portland, which primarily gets its water from the Bull Run Reservoir and City of Lake Oswego, which gets its water from the Clackamas River. The City of Lake Oswego's Water Quality Report and the City of Portland's Water Quality Report continue after Lake Grove Water District's report. We are pleased to report that our drinking water is safe and meets federal and state requirements.

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 the third Monday of every month at 6:00 PM at 15555 Bangy Rd, Lake Oswego, OR 97035. The District office is located at 4550 Kruse Way, Suite 360, Lake Oswego, OR 97035.

Lake Grove Water District routinely monitors for microbiological constituents in your drinking water and for disinfection by-products, according to federal and state laws. In 2017, we started monitoring for lead and copper apart from the City of Portland. All test results are within the allowable levels. Please review the reports from both the City of Lake Oswego and the City of Portland. The test results demonstrate the high quality of the water we purchase from each of those cities. All drinking water, including bottled 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. The residual of disinfection by-products was well below the Maximum Contaminate Level (MCL) of 80 parts per billion (ppb). On the basis of our own testing no contaminated was introduced into our distribution system.

Lake Grove Test Results for 2021

Variable	Amount Detected		MCL	MCLG	Possible Source of Contamination
	Minimum	Maximum			
Microbiological Contaminants					
Total Coliform Bacteria	N/D	N/D	0	0	Naturally present in the environment
Fecal Coliform and E.coli	N/D	N/D	0	0	Human and animal fecal waste

Contaminant	MCL	MCLG	Maximum Detected (Average)	Violation Yes/No	Source of Contamination
TTHM	80 ppb	0	37.6	No	By-product of drinking water chlorination
HAA5	60 ppb	0	25.8	No	By-product of drinking water chlorination

Contaminant	Action Level	Date Range	Number of Samples	90 <sup>th</sup> Percentile Level (mg/L)	Violation Yes/No	Possible Source of Contamination
Lead	0.015	Aug 2021	11	0.0100	No	Home plumbing
Copper	1.300	Aug 2021	11	0.1310	No	Home plumbing

Lake Grove Water District had no violations in 2019.

*Water Quality Reports from the City of Portland and the City of Lake Oswego are on the following pages.*





Drinking water sources **2**

PORTLAND WATER BUREAU

# 2022 Drinking Water Quality Report



Bull Run Filtration Project updates **11**



Test results **6**



Water quality FAQs **4**

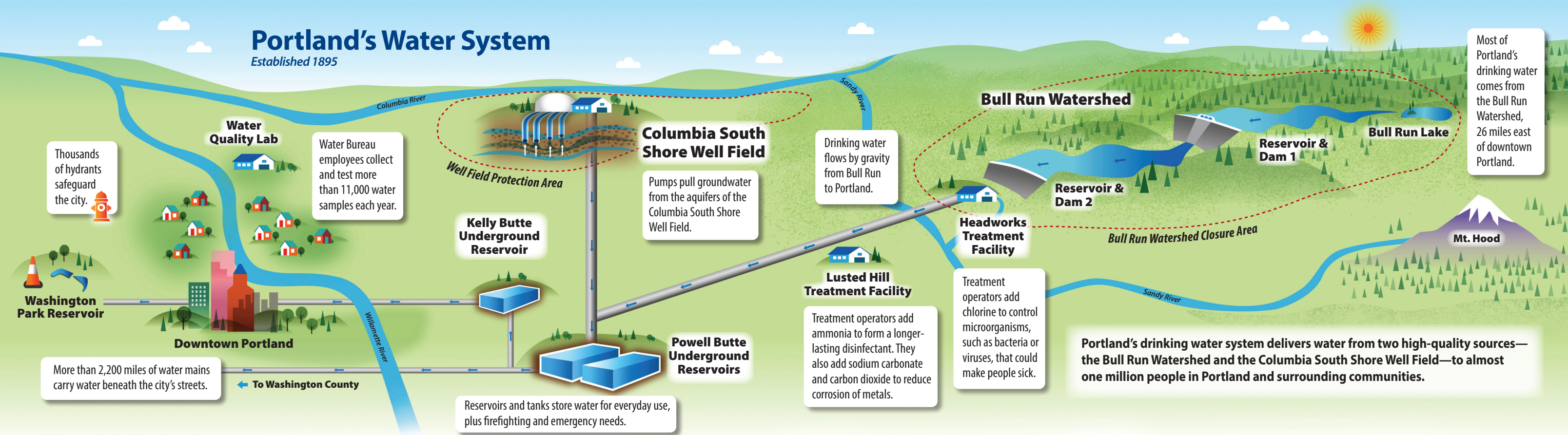


Lead and improved corrosion control treatment **8**



# Portland's Water System

Established 1895



## Portland's drinking water sources

**The Bull Run Watershed**, Portland's protected surface water supply, is in the Mount Hood National Forest, 26 miles from Portland. The Portland Water Bureau and the US 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 drinking water to control organisms that would make people sick but does not currently treat for *Cryptosporidium*. Portland is installing filtration to remove *Cryptosporidium* and other contaminants from drinking water by 2027. Learn more on pages 10 and 11.

Portland's source water assessment is available at [portland.gov/water/resources/source-water-assessment](http://portland.gov/water/resources/source-water-assessment) or by calling 503-823-7525.

**The Columbia South Shore Well Field**, Portland's protected groundwater supply, provides drinking water from 25 active wells located in three different aquifers. The well field is between 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 Programs work with residents and businesses in the well field to ensure that pollutants from this urban area do not impact the groundwater source.

More information about groundwater protection and groundwater education events: [portland.gov/water/groundwater](http://portland.gov/water/groundwater)

## Planning for a hotter climate

For over 100 years, Portland residents have enjoyed safe and abundant drinking water at their taps. The next 100 years will require us to adapt to a changing climate.

The real and present heat waves, wildfires, and droughts in our region have made it clear that our climate is heating up rapidly and we are experiencing the impacts here and now.

For over two decades, the Portland Water Bureau has been evaluating climate change impacts to Portland's water supplies. We are actively planning for a hotter climate that will make disruptions to the water system and extreme events more common.

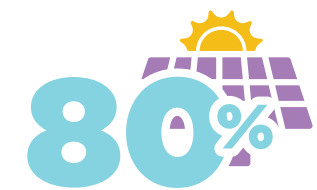
In 2021, Portland Water Bureau's director established three climate commitments to reduce the bureau's impact on climate change. We are also investing in our water system to be more resilient and reliable, taking steps to protect our outdoor workforce during extreme heat and wildfire smoke events, and reducing impacts on community members who are hit first and worst by climate change.

More information: [portland.gov/water/climate](http://portland.gov/water/climate)

## Portland Water Bureau Climate Commitments



Reduce Portland Water Bureau carbon emissions 50 percent by 2030.



Purchase at least 80 percent direct renewable energy by 2030.



Integrate meaningful climate analysis into our project planning by the end of 2022.

The Clackamas River Water District, City of Gresham, City of Lake Oswego, City of Milwaukie, Rockwood Water People's Utility District, Sunrise Water Authority, and Tualatin Valley Water District provide drinking water to some Portland customers who live near service area boundaries. Customers who receive water from these providers will receive detailed water quality reports about these sources in addition to this report.



Get email updates when we make changes to our source water or treatment. Sign up at [portland.gov/water/notification](http://portland.gov/water/notification).



## Frequently asked questions about water quality

### What test results will I find in this report?

The Portland Water Bureau monitors drinking water for over 200 regulated and unregulated contaminants. This report lists all of the regulated contaminants the bureau detected in drinking water in 2021. **If a known health-related contaminant is not listed in this report, the Portland Water Bureau did not detect it in drinking water.**

### How is Portland's drinking water treated?

Currently, Portland's drinking water treatment is a three-step process: **1) Chlorine** disinfects against organisms, such as bacteria and viruses, that could otherwise make people sick. **2) Ammonia** stabilizes chlorine to form a longer-lasting disinfectant. **3) Sodium carbonate and carbon dioxide** replaced sodium hydroxide in 2022 to further reduce the corrosion of metals such as lead. Portland's treatment is changing more in the coming decade. Learn more starting on page 9.

### Is Portland's water safe from viruses such as the COVID-19 virus?

Yes, your water is safe from viruses and safe to drink. Portland controls microorganisms, including viruses, with chlorine.

### Is Portland's water filtered?

No. Neither of Portland's sources is filtered. In response to a series of low-level detections of *Cryptosporidium* in Bull Run water in 2017, Portland is installing a filtration plant to treat for *Cryptosporidium*. Bull Run water will be filtered by 2027. Learn more on pages 10 and 11.

### Does the Portland Water Bureau add fluoride to the water?

No. Fluoride naturally occurs in Portland's water at very low levels. You may want to ask your dentist or doctor about supplemental fluoride for preventing tooth decay. This is especially important for young children.

### Is Portland's water soft or hard?

Bull Run water—Portland's main water supply—is very soft. It typically has a total hardness of 3–8 parts per million (ppm), or ¼ to ½ a grain of hardness per gallon. Portland's groundwater supply is moderately hard: about 80 ppm, or about 5 grains per gallon.

### What is the pH of Portland's water?

The pH of Portland's drinking water typically ranges between 7.8 and 8.5.

### How can I get my water tested?

For free lead-in-water testing, contact the LeadLine at [leadline.org](http://leadline.org) or **503-988-4000**. For other testing, you can pay a private, accredited laboratory to test your tap water. For information about accredited labs, contact the Oregon Health Authority at [ORELAP.Info@state.or.us](mailto:ORELAP.Info@state.or.us) or **503-693-4100**.

### What causes temporarily discolored water?

Sediment and organic material from the Bull Run Watershed settle at the bottom of water mains. These can sometimes be stirred up during hydrant use or a main break. They can also be seen in the fall as a harmless tea-colored tint. Discolored water can also be caused by older pipes in buildings that add rust to the water. More information:

[portland.gov/water/DiscoloredWater](http://portland.gov/water/DiscoloredWater)

### How should property managers maintain water quality in large buildings?

Managers of large buildings should implement a water management program to protect their water quality and address the risk of *Legionella* growth. This is especially important during the pandemic and as buildings reopen. More information:

[portland.gov/water/WQBuilding](http://portland.gov/water/WQBuilding)

## Controlling for *Legionella* is a shared responsibility

*Legionella*, the bacteria that causes Legionnaires' disease, is found across the country in natural freshwater bodies and in building plumbing and cooling systems. The Portland Water Bureau treats drinking water to control *Legionella* and protect public health. However, if water quality in buildings is not maintained properly, *Legionella* bacteria can grow in buildings and make people sick.

The risk of getting sick from *Legionella* is low. Large buildings that have complex plumbing systems are at a greater risk to *Legionella* growth. Managers of large buildings should take steps to maintain water quality in their building. More information:

[portland.gov/water/WQBuilding](http://portland.gov/water/WQBuilding)

In 2021, the Portland Water Bureau began testing for *Legionella* throughout the city. In collaboration with our public health partners, we voluntarily began testing our drinking water for *Legionella*. *Legionella* has not been detected in this routine testing.

More information:

[portland.gov/water/legionella](http://portland.gov/water/legionella)

### Steps managers of large buildings should take to maintain water quality

- 1** Run water at least weekly. 
- 2** Maintain hot water at or above 140° F. 
- 3** Make sure your plumbing is working properly. 
- 4** Maintain building water treatment systems. 
- 5** Follow CDC Water Management Plan recommendations. 

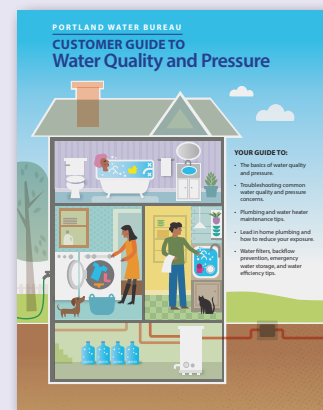
## What the EPA says can be found in drinking water

Across the United States, 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.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) has regulations that limit the amount of certain contaminants in water provided by public water systems and require 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.

Contaminants in drinking water sources may include **microbial contaminants**, such as viruses, bacteria, and protozoa from wildlife; **inorganic contaminants**, such as naturally occurring salts and metals; **pesticides and herbicides**, which may come from farming, urban stormwater runoff, or home and business use; **organic chemical contaminants**, such as byproducts from industrial processes or the result of chlorine combining with naturally occurring organic matter; and **radioactive contaminants**, such as naturally occurring radon.

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 EPA's Safe Drinking Water Hotline at **800-426-4791** or at [epa.gov/SafeWater](http://epa.gov/SafeWater).



## Discolored water? Low flow? Other water quality concerns?

Start here for troubleshooting tips:

[portland.gov/water/WQLine](http://portland.gov/water/WQLine)

Our Water Quality Line staff are also happy to assist you:

[WBWaterLine@PortlandOregon.gov](mailto:WBWaterLine@PortlandOregon.gov)

**503-823-7525**

# Contaminants detected in 2021

Regulated contaminant	Detected in Portland's water		EPA standard		Sources of contaminant	
	Minimum	Maximum	MCL or TT	MCLG		
<b>Untreated source water</b>						
Turbidity (NTU)	0.18	2.81	5	N/A	Erosion of natural deposits	
Fecal coliform bacteria (% >20 colonies/100 mL in 6 months)	Not detected	0%	10%	N/A	Animal wastes	
<i>Giardia</i> (#/L)	Not detected	0.08	TT	N/A	Animal wastes	
<b>Treated drinking water</b>						
<b>Metals and nutrients at the entry point</b>						
Arsenic (ppb)	<0.50	1.02	10	0	Found in natural deposits	
Barium (ppm)	0.00081	0.01030	2	2		
Cyanide (ppb)	<5	14	200	200	Naturally present in the environment	
Fluoride (ppm)	<0.025	0.160	4	4	Found in natural deposits	
Lead (ppb)	<0.05	0.15	15	0		
Nitrate (as nitrogen) (ppm)	0.012	0.30	10	10	Found in natural aquifer deposits, animal wastes	
<b>Microbial contaminants in the distribution system</b>						
Total coliform bacteria (% positive per month)	Not detected	0.4%	TT	N/A	Found throughout the environment	
<b>Disinfectant residual and byproducts in the distribution system</b>						
Total chlorine residual (ppm)	Running annual average	1.86	1.89	4 [MRDL]	4 [MRDLG]	Chlorine used to disinfect water
	Range of single results at all sites	0.34	2.66	N/A	N/A	
Haloacetic acids (ppb)	Running annual average at any one site	22.0	40.8	60	N/A	Byproduct of drinking water disinfection
	Range of single results at all sites	10.6	42.1	N/A	N/A	
Total trihalomethanes (ppb)	Running annual average at any one site	20.9	36.1	80	N/A	Byproduct of drinking water disinfection
	Range of single results at all sites	15.8	39.8	N/A	N/A	

Unregulated contaminant	Detected in Portland's water			Sources of contaminant
	Minimum	Average	Maximum	
<b>Treated drinking water</b>				
Radon (pCi/L)	<50	186	372	Found in natural deposits
Sodium (ppm)	3.0	6.5	15	
Manganese (ppm)	0.0019	0.0152	0.0319	

# Definitions

## MCL: maximum contaminant level

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.

## MCLG: maximum contaminant level goal

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.

## MRDL: maximum residual disinfectant level

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.

## MRDLG: maximum residual disinfectant level goal

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 contaminants.

## N/A: not applicable

Some contaminants do not have a health-based level or goal defined by the EPA, or the MCL or MCLG does not apply to that result.

## NTU: nephelometric turbidity unit

A unit for measuring the turbidity, or cloudiness, of a water sample.

## ppm: parts per million

Water providers use ppm to describe a small amount of a substance within the water. In terms of time, one part per million is about 32 seconds out of one year.

## ppb: parts per billion

Water providers use ppb to describe a very small amount of a substance within the water. In terms of time, one part per billion is about 3 seconds out of 100 years.

## pCi/L: picocuries per liter

Picocurie is a measurement of radioactivity.

## TT: treatment technique

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

# About these contaminants

## Arsenic, barium, fluoride, lead, 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 Portland's drinking water, these are unlikely to result in negative health effects. Find more information about lead on page 8.

## Cyanide

Cyanide is produced by certain bacteria, fungi, algae, and plants. It is rarely detected in Portland's water. At the levels found in Portland's drinking water, cyanide is unlikely to result in negative health effects.

## Fecal coliform bacteria

To comply with the filtration avoidance criteria of the Surface Water Treatment Rule, water is tested for fecal coliform bacteria before disinfectant is added. The presence of fecal coliform bacteria in source water indicates that water may be contaminated with animal wastes. This is reported in percent of samples with more than 20 colonies in 100 milliliters of water during any six-month period. The Portland Water Bureau uses chlorine to control these bacteria.

## *Giardia*

Wildlife in the watershed may be hosts to *Giardia*, a microorganism that can cause gastrointestinal illness. The treatment technique is to remove 99.9 percent of *Giardia* cysts. 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 (as nitrogen)

Nitrate, measured as nitrogen, can lead to bacterial and algal growth in the water. At levels that exceed the standard, nitrate can contribute to health problems. At the levels found in Portland'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. Based on the historical levels of radon in groundwater combined with the limited amount of groundwater used, people in Portland are unlikely to have negative health effects from radon in water. Find more information about radon from the EPA at [epa.gov/radon](https://www.epa.gov/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 the water distribution system. Chlorine residual is a low level of chlorine remaining in the water and is meant to maintain disinfection through the entire distribution system.

## Total coliform bacteria

Coliforms are bacteria that are naturally present in the environment. Coliform bacteria usually do not make people sick. They are used as an indicator that other potentially harmful bacteria may be present. If more than 5 percent of samples in a month are positive for total coliforms, an investigation must be conducted to identify and correct any possible causes. The Portland Water Bureau uses chlorine to control these bacteria.

## Turbidity

Turbidity is the cloudiness of a water sample. In Portland's system, increased turbidity usually comes from large storms, which suspend organic material in Bull Run water. Increased turbidity can interfere with disinfection and provide an environment for microorganisms to grow. Since the Portland Water Bureau does not yet filter Bull Run water, the treatment technique is that turbidity cannot exceed 5 NTU more than two times in twelve months. When turbidity rises in the Bull Run source, Portland switches to its Columbia South Shore Well Field source.





# Reducing exposure to lead

## What to know about lead

The Portland Water Bureau cares about the health of the families in our community and is committed to helping you reduce your exposure to lead. If present, lead at elevated levels can cause serious health problems, especially for pregnant people and young children. 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.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Portland Water Bureau is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components in homes or buildings. Lead is rarely found in Portland's source waters and there are no known lead service lines in the water system. In Portland, lead enters drinking water from the corrosion (wearing away) of household plumbing materials containing lead. These materials include lead-based solder used to join copper pipe—commonly used in homes built or plumbed between 1970 and 1985—and brass components and faucets installed before 2014.

In Portland, the most common sources of lead exposure are lead-based paint, household dust, soil, and plumbing materials. Lead is also found in other household objects such as toys, cosmetics, pottery, and antique furniture.

## What you can do

When your water has been sitting for several hours, such as overnight or while you are away at work or school, 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 drinking water, you can request a free lead-in-water test from the LeadLine ([leadline.org](http://leadline.org) or 503-988-4000). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from EPA's Safe Drinking Water Hotline: 800-426-4791 or [epa.gov/SafeWater/lead](http://epa.gov/SafeWater/lead).

### Additional steps to reduce exposure to lead from plumbing

- Run your water to flush the lead out
- Use cold, fresh water for cooking, drinking, and preparing baby formula
- Do not boil water to remove lead
- Test your child's blood for lead
- Test your water for lead
- Consider using a filter certified to remove lead
- Clean your faucet aerators every few months
- Consider replacing pre-2014 faucets or fixtures

## Lead and copper testing results from homes with higher risk of lead in water

The Portland Water Bureau offers free lead-in-water tests to anyone in the service area. Twice each year, the Portland Water Bureau also collects water samples from a group of over 100 homes that have lead solder and are more likely to have higher levels of lead in water. Testing results from fall 2021 showed that more than 10 percent of these homes had elevated levels of lead. Because these results exceeded the action level for lead, the Portland Water Bureau informed customers about the lead results. We also completed construction and brought improved corrosion treatment online to reduce lead levels at the tap. See page 9 for more information.

Regulated contaminant	Detected in residential water taps		EPA standard		Sources of contaminants
	Fall 2021 results <sup>1</sup>	Homes exceeding action level <sup>2</sup>	Action level <sup>2</sup>	MCLG <sup>3</sup>	
Lead (ppb) <sup>3</sup>	21.0	14 out of 104 (13.5%)	15	0	Corrosion of household and commercial building plumbing systems
Copper (ppm) <sup>3</sup>	0.238	0 out of 104 (0%)	1.3	1.3	

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

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

<sup>3</sup> See page 7 for definitions.

# Bull Run TREATMENT PROJECTS

## Improved corrosion control treatment

### Improved treatment started this spring

In April 2022, Portland began implementing our improved corrosion control treatment to reduce the levels of lead in drinking water for everyone. The new treatment system, built at our existing Lusted Hill treatment facility, adds two naturally occurring substances, sodium carbonate (soda ash) and carbon dioxide, to our drinking water. These adjust the alkalinity to about 25 mg/L and increase the pH to at least 8.5. We are proud to bring this improved treatment online and better support the health of our community.

### How we got here

After detecting elevated levels of lead in higher risk homes in 2013, we looked for additional ways to reduce lead that can enter the water from home or building plumbing. We determined that improving our drinking water treatment is the most effective way to reduce lead levels. In 2016, we agreed with the Oregon Health Authority to install improved treatment and began construction in 2020. We found elevated levels of lead in these higher risk homes again in fall 2021, highlighting the need for improved treatment to protect public health. The improved corrosion control treatment facility began treating our drinking water in April 2022.

### Progress in reducing lead levels at the tap

Our team has been working to ramp up improved treatment to full operation. We are making treatment changes in steps to allow our drinking water system to adjust to the changes in water chemistry. Throughout these changes, the treatment team is collecting water samples from around the city to track how the improved treatment is affecting lead levels. These results are helping us monitor the changes to the system and determine the correct treatment to reduce lead levels as much as possible.



Two naturally occurring substances, sodium carbonate (soda ash) and carbon dioxide, are added to water in our upgraded treatment system.



More information: [portland.gov/BullRunProjects](http://portland.gov/BullRunProjects)



## Monitoring for *Cryptosporidium*

*Cryptosporidium* is a potentially disease-causing microorganism that lives in virtually all freshwater ecosystems. Drinking water treatment for *Cryptosporidium* is required by state and federal regulations. For five years, the Oregon Health Authority (OHA) did not require the Portland Water Bureau to treat for *Cryptosporidium* based on data showing that *Cryptosporidium* was rarely found in the Bull Run Watershed. Since 2017, test results have shown low-level detections of *Cryptosporidium* primarily during the rainy season. As a result, OHA determined that treatment is now necessary. The Portland Water Bureau does not currently treat for *Cryptosporidium*, but is required to do so under drinking water regulations. Portland is working to install filtration by 2027 under a compliance schedule with OHA. In the meantime, the Portland Water Bureau 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 has estimated that a small percentage of the population could experience gastrointestinal illness from *Cryptosporidium* and 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.

### 2021 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
200	33	Not detected	0.12

More information: [portland.gov/water/crypto](https://portland.gov/water/crypto)

## Special notice for immunocompromised persons

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

Immunocompromised 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 people, 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 (EPA)/Centers for Disease Control and Prevention (CDC) 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**.



## Bull Run TREATMENT PROJECTS

## Filtration treatment by 2027

### Project team hits important halfway milestone

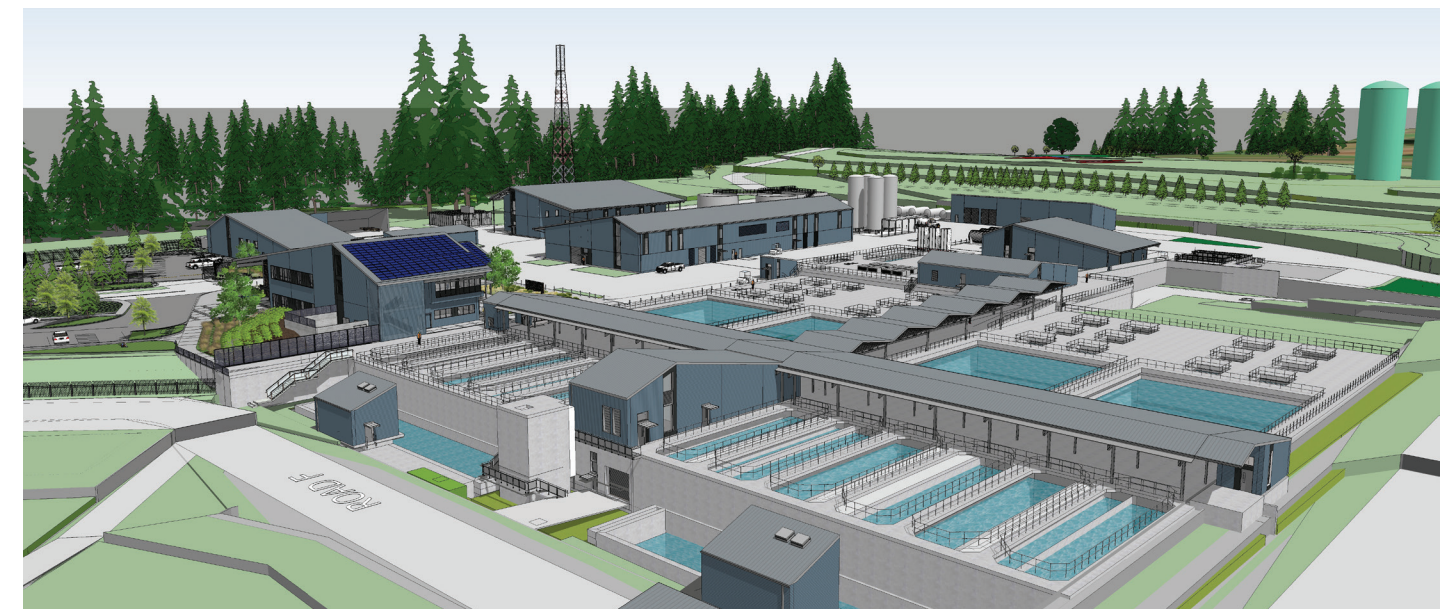
Since 2017, a team of Portland Water Bureau and consultant engineers have been working to plan for and design the new water filtration facility. In 2020, the project team submitted two years of testing data confirming the best way to filter our water. They achieved a significant milestone this past year when they received OHA's approval to design the filtration facility using the preferred treatment approach.

### Testing drinking water treatment options

The project team relied on science to help make sure the filtration process at the full-scale facility is designed for our unique Bull Run water. To do this, they used a mini-filtration facility to test how different treatment options work through seasonal changes to our water. The testing ensures that treatment at the future water filtration facility will meet our public health goals, including removing *Cryptosporidium* from our drinking water.

### What's next

The project is now at its halfway point and on track to begin delivering filtered Bull Run water in 2027. The final design of the filtration facility will be complete by the end of 2022 and construction is anticipated to begin in 2023.



More information: [portland.gov/BullRunProjects](https://portland.gov/BullRunProjects)





1120 SW Fifth Avenue • Suite 405  
Portland, Oregon 97204

Mingus Mapps, Commissioner-in-Charge  
Gabriel Solmer, Director

## Questions? We're here to help.

### Central information

For general information about projects, programs, and public meetings.  
**503-823-7404**

### Water quality and pressure

For questions regarding water quality or water pressure.  
**503-823-7525**  
**WBWaterLine@PortlandOregon.gov**

### Billing and financial assistance

For questions or information about your account or to apply for financial assistance.  
**503-823-7770**  
**PWBCustomerService@PortlandOregon.gov**

### Water system emergencies

For reporting street leaks and water service problems.  
**503-823-4874**  
**24 hours a day, 7 days a week**



### Additional drinking water information

Oregon Health Authority  
Drinking Water Services: **971-673-0405**  
**public.health.oregon.gov/**  
**HealthyEnvironments/DrinkingWater**

Portland Water Bureau's Water System ID: 4100657

### Regional Water Providers Consortium

The Portland Water Bureau is a member of the Regional Water Providers Consortium. This year, the Consortium and its members are celebrating 25 years of service. Find out more about the Consortium and its work in water conservation, emergency preparedness, and regional coordination at **regionalh2o.org**.



**This report and past reports are available at the website below.**

**Please contact us for translation, interpretation, or accommodations for people with disabilities.**

Para obtener una copia del informe de calidad del agua potable en español, o para alguna adaptación para personas con discapacidades, comuníquese con:

Здесь можно получить копию отчёта о качестве воды на русском языке или в услугах для людей с ограниченными возможностями:

Để có bản sao báo cáo chất lượng nước uống này bằng tiếng Việt, hoặc nhận hỗ trợ cho người tàn tật, vui lòng liên lạc:

欲索取此饮用水报告的中文版本，或残疾人士所需的便利设施，请联系：

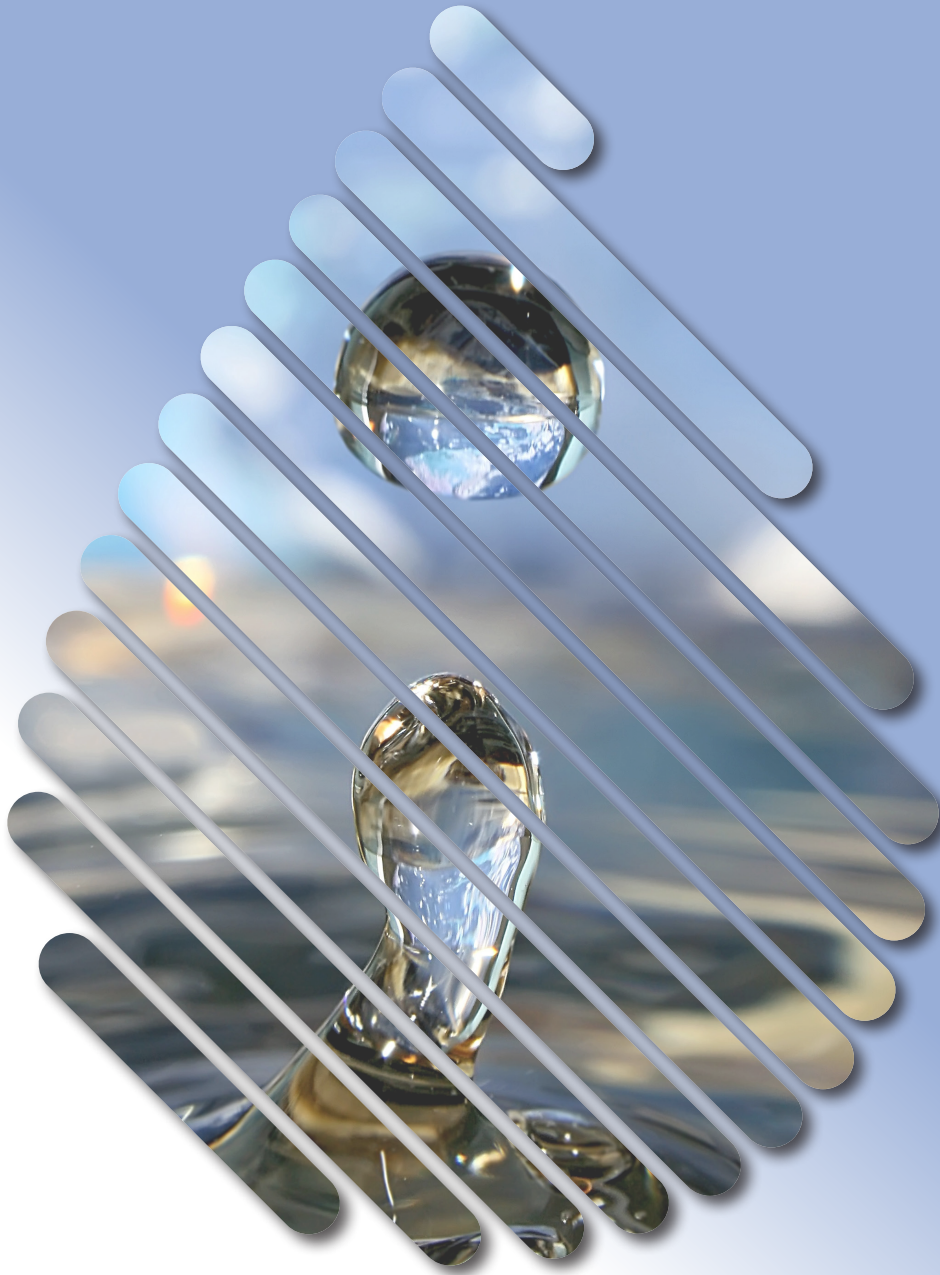
Traducción e Interpretación | Biên Dịch và Thông Dịch | 口笔译服务 | अनुवादन तथा व्याख्या | Устный и письменный перевод  
Turjumaad iyo Fasiraad | Письмовий і усний переклад | Traducere și interpretariat | Chiaku me Awewen Kapas  
Translation and Interpretation:

**portland.gov/WaterQualityReport** • **503-823-7525** (Relay Service: 711)

Printed on recycled paper  
06/2022



2022



# KNOW YOUR H<sub>2</sub>O:

**It's Clean and Safe**

City of Lake Oswego Water Quality Report  
Drinking water quality data from 2021

 LOOREGON  @CITYOFLAKEOSWEGO  @LAKEOSWEGOINFO



# KNOW YOUR H2O: IT'S CLEAN AND SAFE

The 2022 Water Quality Report is based on data collected during the 2021 calendar year. The City prepares this report in accordance with Federal and State regulations to bring our customers the best available information about the water they drink.

Clean drinking water is an essential resource that we rely on every day. It is easy to take for granted when we turn on our taps and always get clean, fresh water. Knowing where your water comes from, how it is treated, what it is tested for, and how it reaches your tap is important to understand.

## KNOW YOUR H2O:

YOUR WATER SOURCE AND TREATMENT PROCESS	PAGE 2
BEHIND THE SCENES WITH YOUR WATER SUPERHEROES!	PAGE 3
YOUR 2021 WATER QUALITY TEST RESULTS	PAGE 4-5
GLOSSARY OF TERMS	PAGE 5
LEAD SAFETY	PAGE 6
CYANOTOXIN RESULTS & Q+A	PAGE 7



## Where does Lake Oswego's water come from?

### Source Information

Your drinking water originates in the Clackamas River watershed, which is one of the highest quality water sources in the state. This watershed encompasses 940 square miles and begins in the Mount Hood National Forest. Water is withdrawn from the Clackamas River, then pumped through a pipeline buried beneath the Willamette River to the Lake Oswego Tigard Water Treatment Plant located in West Linn.

A Clackamas River Watershed Source Water Assessment was completed in 2019. The report is available at [deq.state.or.us/wq/dwp/docs/uswareports/USWA\\_00457LakeOswego.pdf](https://deq.state.or.us/wq/dwp/docs/uswareports/USWA_00457LakeOswego.pdf)

## How is your drinking water treated?

The Lake Oswego Tigard water treatment process is a multi-step process using ballasted flocculation, intermediate ozone, biological filtration, and disinfection / pH adjustment:

- **Ballasted Flocculation** uses micro-sand and a coagulant to settle dirt, sediment and contaminants out of the water.
- **Ozone** is then added to remove unpleasant taste and odor compounds and to provide advanced treatment.
- **Biological Filtration** through a deep bed of granular activated carbon and silica sand removes any remaining tiny microbes and contaminants, such as cryptosporidium. Beneficial biological activity removes organic molecules that can produce disinfection byproducts.
- Once filtered, the water is **disinfected** using a small amount of chlorine and the **pH is adjusted** to prevent **corrosion** of household plumbing.

## Behind-the-Scenes with Your Water Superheroes!

No matter the weather or the emergency, there are hardworking water professionals braving the elements to maintain all the infrastructure needed to ensure high-quality drinking water is there when you need it! Meet some of our dedicated water professionals, who work behind-the-scenes around the clock, to ensure the Lake Oswego community enjoys nature's most precious resource.

### Chris Warren – Instrument Technician

1. **What is your favorite or least favorite part of your job?** My favorite part of the job is troubleshooting electrical controls, new equipment install projects or writing/changing PLC programming code. My least favorite part of the job is pressure washing inside filters.
2. **Why are you passionate about working in the water industry?** Being able to work on large industrial pumps and controls that provide clean drinking water to 100,000 people is a cool feeling. Everyday there are new challenges and always a new problem to solve. I also enjoy being part of the collaboration and knowledge sharing that goes on between operators and industry experts. There's a general feeling in this industry that everyone wants to help each other succeed which is very unique in an industrial process.
3. **What does H2O/drinking water mean to you?** It means working with people that are passionate about water treatment and sustainability of this precious resource to deliver clean and safe drinking water.
4. **What is one thing you would like more customers know about their drinking water?** You have a state-of-the-art water treatment facility and dedicated operators cleaning your drinking water to the highest industry standards.



### Craig Smith – Senior Utility Worker/Cross Connection Specialist

1. **What is your favorite or least favorite part of your job?** Emergencies
2. **Why are you passionate about working in the water industry?** It is necessary for sustaining everyday life.
3. **What does H2O/drinking water mean to you?** Without water there would be no Beer!!
4. **What is one thing you would like more customers know about their drinking water?** There is a lot of work done behind the scenes to bring safe drinking water to the tap.

### Kyle Bateman – Utility Worker

1. **What is your favorite or least favorite part of your job?** Favorite part of my job is being on a crew that can tackle any job or emergency efficiently and effectively.
2. **Why are you passionate about working in the water industry?** Every human in the world requires clean water to drink and use, and I get to be a part of the team that gets it to your faucet.
3. **What does H2O/drinking water mean to you?** Drinking water to me is taken for granted and we have great water that is clean and dependable.
4. **What is one thing you would like more customers know about their drinking water?** I think more customers should know that there is a lot that goes on behind the scenes to ensure we can dependably deliver clean water to you.



### Jason Hoye – Water Treatment Plant Operator

1. **What is your favorite or least favorite part of your job?** My favorite part of the job is walking the plant grounds and inspecting our processes and equipment.
2. **Why are you passionate about working in the water industry?** I enjoy being involved in providing this resource to the community. Being that the water industry is critical to public health and well-being, we see technology advances and opportunity for growth to produce the best product. It is exciting to grow to meet the needs of the industry.
3. **What does H2O/drinking water mean to you?** Having clean and safe drinking water is a right for all people and nobody should have to worry about the quality or availability of water. Knowing the process from source through treatment and distribution allows me to understand what it takes to have water from the tap at home.
4. **What is one thing you would like more customers know about their drinking water?** Ditch the single use plastic water bottles and opt for a reusable container. We produce safe water to access from your tap at home, so there is no need to add the extra waste of consumed plastic material.





# YOUR LO WATER BY THE NUMBERS

## Your Drinking Water Meets or Exceeds Every State and Federal Standard

Your drinking water is tested every day. More than 90 contaminants are regularly sampled, both before and after the water is treated, to ensure it meets the more than 120 water quality standards for drinking water set by the Environmental Protection Agency (EPA) and the State of Oregon.

The accompanying table shows the results of water quality testing for 2021. Every regulated substance detected in Lake Oswego's drinking water is listed. All of the substances were either not detected or were detected at levels well below limits set by the EPA and State of Oregon for safe drinking water.

For a complete listing of all test results, go to the Oregon Drinking Water Service website: <https://yourwater.oregon.gov/inventory.php?pwsno=00457>.

Contaminants (Units)	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfection By-Products</b>								
Chlorine (CL <sup>2</sup> ) (ppm)	4	4	0.87 (average)	0.17	1.38	2021	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	8.4 (highest quarterly average)	0	18.4	2021	No	By-product of drinking water chlorination
Total Trihalomethanes/ (TTHMs) (ppb)	NA	80	11.1 (highest quarterly average)	2.3	15.9	2021	No	By-product of drinking water disinfection
Bromate (ppb)	0	10	0.32	ND	1.4	2021	No	By-product of drinking water treatment with Ozone
<b>Microbiological</b>								
Fecal Coliform/E. Coli (positive samples)	0	0	0	Not Detected		2021	No	Human and animal waste
Total Coliform (% positive samples/month)	0	5	0	Not Detected		2021	No	Naturally present in the environment
Turbidity (NTU)	NA	TT 0.3 in 95% of samples	100% of samples meet turbidity standards	Highest single measurement: 0.085		2021	No	Soil runoff
<b>Inorganic</b>								
Copper - action level at consumer taps (ppm)	1.3	AL=1.3	90 <sup>th</sup> percentile: .042 Homes exceeding AL: 0		2020	No	Corrosion of household plumbing systems; erosion of natural deposits	
Lead - action level at consumer taps (ppb)	0	AL=15	90 <sup>th</sup> percentile: 1.8 Homes exceeding AL: 0		2020	No	Corrosion of household plumbing systems; erosion of natural deposits	

### Unregulated Contaminant Monitoring Rule 2019 Results

The Lake Oswego Tigard Water Partnership has complied with the fourth round of the EPA's Unregulated Contaminant Monitoring Rule (UCMR 4). A full list of contaminants tested and their results are available upon request. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The unregulated contaminants that were detected in Lake Oswego sampling are listed above, along with their level of detection. For more information, call 503-635-0394 or email [watertest@lakeoswego.city](mailto:watertest@lakeoswego.city).

For a complete listing of all test results, go to the Oregon Drinking Water Service website: <https://yourwater.oregon.gov/inventory.php?pwsno=00457>

## What Else Do We Look For In Our Water?

The following list of chemicals and compounds are what we test for on a regular basis. Most chemicals are measured in parts per billion (ppb) or parts per million (ppm).

- **Volatile Organic Compound:** (21 compounds) manmade chemical compounds such as cleaning fluids, degreasers and plastics.
- **Synthetic Organic Compounds:** (30 compounds) manmade chemicals, including insecticides and herbicides.
- **Inorganic Compounds:** (16 compounds) naturally occurring minerals and chemicals that are released into water through erosion and leaching of mineral deposits.

## Cryptosporidium

*Cryptosporidium* is a microorganism (protozoan) naturally present in surface water supplies throughout the world. Surface water supplies are particularly vulnerable if they receive runoff or pollution from human or animal wastes. Since wildlife inhabit the Clackamas River Watersheds, managing agencies regularly monitor for *Cryptosporidium*. Occasionally, this monitoring detects low levels of *Cryptosporidium*.

New national standards further reduce the risks of illness from *Cryptosporidium*. Symptoms of infection include nausea, abdominal cramps and diarrhea. Most healthy individuals are able to overcome the disease within a few weeks. However, immunocompromised people have more difficulty and are at greater risk of developing severe, life threatening illnesses. Immunocompromised individuals are encouraged to consult their doctor regarding appropriate precautions to avoid infection. *Cryptosporidium* must be ingested for it to cause disease and may be spread through means other than drinking water."

## Sources of Contaminants

In order to ensure that tap water is safe to drink, the EPA sets regulatory limits on the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration sets limits for contaminants in bottled water which must provide the same protection for public health.

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 earth's surface or through the ground it dissolves naturally occurring minerals and, in some cases, radioactive material. Drinking water can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water throughout the United States include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from wildlife or septic systems e.g. coliform and Giardia.
- **Inorganic contaminants**, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges or farming.
- **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**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and may come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can occur naturally, e.g. radon.

## Glossary: EPA Water Quality Definitions

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

**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 technology.

**Maximum Contaminant Level Goal (MCLG):** the level of a contaminant in drinking water below which there is no known risk to health. MCLGs allow for a 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.

**Nephelometric Turbidity Units (NTU):** the standard unit of measurement used in water analysis to measure turbidity in a water sample. Turbidity is a measure of how clear the water looks.

**Parts per Million (ppm):** one part per million is equivalent to half of an aspirin tablet dissolved in a full bathtub of water (approximately 50 gallons).

**Parts per Billion (ppb):** one part per billion is equivalent to half of an aspirin tablet dissolved in 1,000 bathtubs of water (approximately 50,000 gallons).

**pH:** a scale that measures how acidic or basic drinking water (or another substance) is.

**Treatment Technique (TT):** a required process intended to reduce the level of a contaminant in drinking water.



## Drinking and Bottled Water Notice

Drinking water, including bottled water, may be reasonably expected to contain small amounts of some contaminants. However, the presence of contaminants does not necessarily indicate that the 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** at 1-800-426-4791.



### A Penny Per Gallon

You pay less than a penny per gallon of high-quality tap water, delivered to your home. By comparison, a 16-ounce container of bottled water costs approximately \$1.00.

## Special Notice for Immuno-Compromised Persons

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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the **Safe Drinking Water Hotline** 1- 800-426-4791 or visiting [epa.gov/safewater](http://epa.gov/safewater).

## Lead Safety

Lake Oswego water system meets State and Federal requirements for lead. Results from customer sampling demonstrate that the system is optimized to prevent lead from getting into the water.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead is rarely found above detectable levels in the City of Lake Oswego's source water, the Clackamas River.

The main source of lead in drinking water is typically from household plumbing or components associated with water service lines. The City of Lake Oswego is responsible for providing high-quality drinking water, but cannot control the variety of materials used in private 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 two minutes before using water for drinking or cooking.

## Free Lead Testing

If you are concerned about lead in your water, you may wish to have your water tested. The City offers FREE lead testing to its water customers— you can pick up a test kit and instructions at the 2nd floor reception desk at City Hall.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the **Safe Drinking Water Hotline** or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).



## Backflow Testing

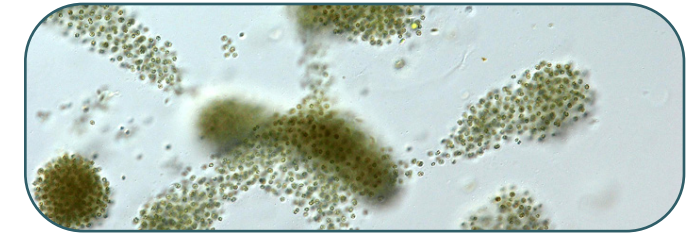
Backflow assemblies separate potable drinking water from non-potable water sources such as irrigation systems, medical equipment, and private pump systems. These devices help protect the public water system from possible contamination. Backflow devices are required by the City of Lake Oswego and the State of Oregon.

All backflows must be tested no later than July 15th of each calendar year. For more information and a complete list of certified backflow testers, please visit [lakeoswego.city/backflow](http://lakeoswego.city/backflow) or call 503-534-5674.



## Cyanotoxin Monitoring Rule

In 2018, the Oregon Health Authority (OHA) developed a new drinking water rule that requires many drinking water systems in the state to test for cyanotoxins, and notify the public about the test results.



### What are cyanotoxins?

Cyanobacteria, naturally occur in lakes and streams. Under certain conditions, such as in warm water containing an abundance of nutrients, they can rapidly form harmful algal blooms (HABs). These blooms are capable of producing toxins known as cyanotoxins. Cyanotoxins are compounds that are capable of harming humans. The OHA has issued safe drinking water limits for the cyanotoxins microcystins and cylindrospermopsin, listed below.

Algal Toxin	Health Advisory (Vulnerable Population)	Health Advisory (All Population)	Health Advisory (Recreational Advisory)	Sample Date	Your Water
Total Microcystins	0.3 µg/L	1.6 µg/L	4 µg/L	2021	Not Detected
Cylindrospermopsin	0.7 µg/L	3 µg/L	8 µg/L	2021	Not Detected

Cyanotoxins were tested in 2018 under the EPA's unregulated contaminant monitoring rule. Finished water samples were collected and analyzed for microcystin, cylindrospermopsin and anatoxin-A from May - September 2018. No toxins were detected in any of the samples collected.

## Q&A about H2O

### Are there cyanotoxins in my drinking water?

No, there has never been any toxin detected in the Lake Oswego drinking water. The Lake Oswego Tigard Water Partnership, along with the Clackamas River Water Providers have monitored the Clackamas Watershed for many years for cyanotoxins. Although we have detected low levels of these compounds in the North Fork Reservoir and on the Clackamas, no toxin has been detected in the finished drinking water.

### Can the water treatment plant remove cyanotoxins?

Yes! Your water treatment plant was designed with Ballasted Flocculation, Ozone treatment, Biological Filtration, and final disinfection with chlorine to effectively treat these compounds.

### Why does my water have a chlorine taste and odor?

Public water systems are required by state and federal safe drinking water laws to maintain a residual chlorine level in the water to keep it safe from microbial contamination. Low levels of chlorine, below 4 ppm, are considered safe for drinking water by the EPA. If you do not like the taste of chlorine in the water you can remove it by placing an open pitcher of water in the refrigerator to let the chlorine dissipate or run the water through an activated carbon filter that is rated to remove chlorine.

### Is my water hard or soft?

The water from the Clackamas River is considered soft. It is around 25 ppm or 1.5 grains per gallon of hardness.

### Is fluoride added to our drinking water?

No. The Lake Oswego Tigard Water Treatment Plant does not add fluoride to the water and there is no detectable natural fluoride in the Clackamas River source. Fluoride is a naturally occurring trace element in surface and groundwater. You may want to consult with your dentist about fluoride treatment to help prevent tooth decay, especially for young children.

### My water is brownish in color, what should I do?

Sediment often settles in our water pipes and from time to time that may be disturbed which can color the water coming out of our taps. We recommend running your shower or tubs at full speed at the same time for about ten minutes to flush the water in your lines.



# THANK YOU FOR TAKING THE TIME TO KNOW YOUR WATER!

[LAKEOSWEGO.CITY/2021-WATER-REPORT](http://LAKEOSWEGO.CITY/2021-WATER-REPORT)



## WIN \$100 TOWARDS YOUR NEXT UTILITY BILL

To enter to win, visit <https://bit.ly/3EWsxQ4> then complete and submit the form by June 30, 2022

### Contest Rules:

- Entrants must be a Lake Oswego water customer to win.
- Only one entry is allowed per customer.
- Entrants must complete and submit all the required information on the online form by June 30, 2022.
- One winner will be randomly selected and announced in July 2022.

## MORE INFORMATION?

We are here for you!

[lakeoswego.city/publicworks](http://lakeoswego.city/publicworks)

**Water Quality and Treatment:** 503-635-0394

or [watertest@lakeoswego.city](mailto:watertest@lakeoswego.city)

**Utility Billing:** 503-635-0265

**Water Operations:** 503-635-0280

**Water Conservation:** 503-675-3747

or [kmccaleb@lakeoswego.city](mailto:kmccaleb@lakeoswego.city)

**Lake Oswego Tigard Water Partnership**

[lotigardwater.org](http://lotigardwater.org)

**United States Environmental Protection Agency**

**Safe Drinking Water Hotline**

1-800-426-4791

[epa.gov](http://epa.gov)

**Oregon Health Authority**

**Drinking Water Services**

1-503-731-4010

[public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx](http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/Pages/index.aspx)

**HealthyEnvironments/**

**DrinkingWater/Pages/index.aspx**

**Regional Water Providers Consortium**

**consortium**

[regionalh2o.org](http://regionalh2o.org)

**Clackamas River Water Providers**

[clackamasproviders.org](http://clackamasproviders.org)

**Clackamas River Basin Council**

[clackamasriver.org](http://clackamasriver.org)

### Get Involved

You are invited to attend Lake Oswego City Council meetings and Lake Oswego Tigard Water Partnership Oversight Committee meetings. Visit [lakeoswego.city/citycouncil](http://lakeoswego.city/citycouncil) or [lotigardwater.org](http://lotigardwater.org) for meeting details.

If you are interested in a tour of our water treatment plant, call 503-635-0394.

## Looking to save money on your water bill?

From your kitchen to your garden, there are little things you can do to make a big difference on your bill. Get all the tips at: [lakeoswego.city/publicworks/water](http://lakeoswego.city/publicworks/water)

To schedule a **FREE** water audit of your irrigation system, call 503-675-3747.

### Sign Up for the Public Alerts Emergency Notification System!

The City uses the ClackCo Public Alerts emergency notification software system to distribute emergency messages via phone, text or email to registered participants. Important messages like a shelter-in-place, water contamination, boil water notices, gas leaks or wildfires can be relayed using this system. All water customers who are served by the City will be covered by ClackCo Public Alerts and are urged to sign up! Enroll at [clackamas.us/publicalerts](http://clackamas.us/publicalerts)