

# Water Quality Report

CITY OF TUALATIN

Based on Data from the 2022 calendar yea



**The City of Tualatin** delivers water to nearly 60,000 people (27,000+ residents and 30,000+ employees) who live, work, and play in Tualatin every day. We believe it is important for our customers to understand where their water comes from, how safe it is, and what actions we take to ensure its continuing high quality.

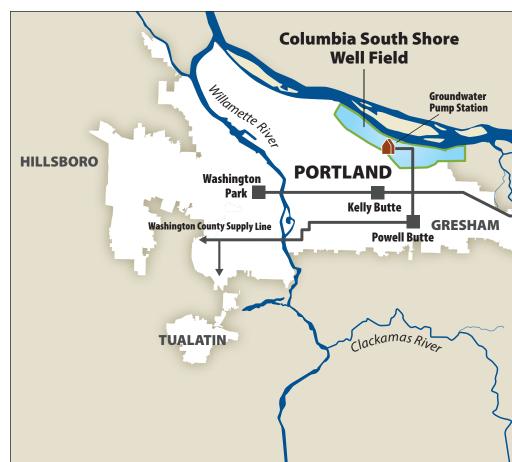
The City of Tualatin buys treated, ready to drink water from Portland. This means that our water travels to us through about 50 miles of pipe, all the way from the Bull Run Watershed near Mt. Hood (and occasionally the Columbia South Shore Well Fields). We do not source our water from any nearby rivers.

Every year the City of Tualatin publishes an Annual Water Quality Report. This report reviews both water quality and treatment for Tualatin's drinking water, which are based on results from yearly local tests run by the City and treatment and monitoring from the Portland Water Bureau (PWB) and the City of Portland.

For more information on the City of Portland's processes check out their Water Quality Report at **https://www.portlandoregon.gov/water/article/244813**.

#### **Tualatin's Water Source**

The City of Tualatin purchases water from the City of Portland.



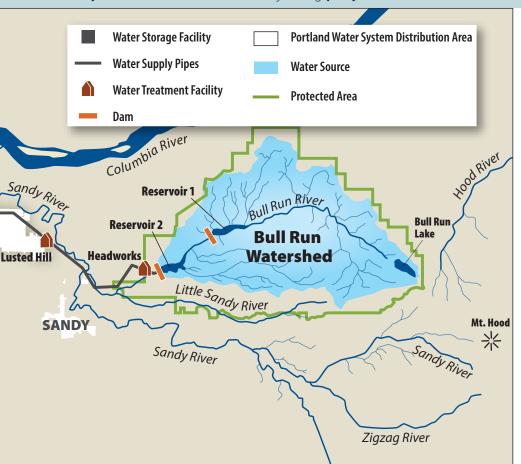
### **Portland's Water Sources**

**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 could 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.

Portland's source water assessment is available at **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** 





# **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**.

# 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 2022. 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 reduce the corrosion of metals such as lead. Portland's treatment will have additional improvements in the coming decade.

**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.

**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 8.0 and 9.0.

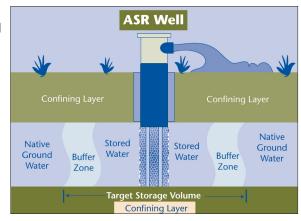
**How can I get my water tested?** For free lead-in-water testing, contact the LeadLine at *leadline.org* or *503-988-4000*. For other testing, you can pay a private, accredited laboratory to test your tap water. For information about accredited labs, contact the Oregon Health Authority at *ORELAP.Info@state.or.us* 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.

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 for healthcare facilities and residential buildings for people 65 or older. More information: **portland.gov/water/WQBuilding**.

# Tualatin's Aquifer Storage & Recovery (ASR) Well

Our Aquifer Storage and Recovery (ASR) Well is used to manage seasonal water demands. During the winter months when demands are lower, water is injected into an underground aquifer for storage. Then, when demand is higher (typically in the summer months), water is pumped back up into our distribution system. The City adds chlorine to the water during injection (when we put it into storage



under the ground) and adds chlorine and ammonia during recovery (when we bring it back up into our distribution system) to maintain or match the quality of the water we receive from Portland. This process is especially important since this water is being reintroduced back into the system after storage in the aquifer. Tualatin closely monitors water quality coming both in and out of the aquifer to ensure safe, high-quality water is injected and recovered, and to protect the long term health of the aquifer.

#### **Unregulated Contaminants at our ASR Well**

Our water system samples for a series of unregulated contaminants at our ASR. Unregulated contaminants are those that do not yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a health standard.

Radon is a naturally occurring radioactive gas that cannot be seen, tasted, or smelled. Tualatin tests for radon at **our ASR well (results above).** Radon has also been detected at very low levels in the Bull Run water supply and at varying levels in Portland's groundwater supply. For information about radon, call the EPA's Radon Hotline (**800-SOS-RADON**) or **www.epa.gov/radon** Sodium is an essential nutrient. At the levels found in drinking water, it is unlikely to contribute to adverse health effects.

Additionally, samples were taken at the ASR to test for the presence of radon and sodium.

O and a min a matilianit	Detecte	ed in ASR Wel	Torrigal Course	
Contaminant/Unit	Minimum	Average	Maximum	Typical Source
Radon @ ASR	611 pCi/L	611 pCi/L	611 pCi/L	Naturally occurring
Sodium @ ASR	6.9 mg/l	10.96 mg/l	13.4 mg/l	Naturally occurring

#### Significance of these results

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*.

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

# 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) prescribes 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.
- 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 1-800-426-4791 or at epa.gov/safewater.



### **Definitions**

**Action Level** \* The concentration of a contaminant which, if exceeded, triggers treatment and other requirements that a water system must follow.

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.

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

**ppm: Parts Per Million** \* 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.

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

**piC/L: Picocuries Per Liter** \* A picocurie is a measurement of radioactivity. One picocurie is one trillion times smaller than one curie.

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

### **Water Quality Data**

#### **Monitoring for Unregulated Substances**

Every five years, the EPA requires the City of Tualatin and other water utilities across the country to test their water for contaminants that do not have a federal standard or limit, called unregulated contaminants. After testing rounds are complete, the EPA evaluates the test results and the potential health risks of the contaminants to determine if a standard is needed to protect public health.

Manganese is a metal found in the earth's crust. It can dissolve into water that is in contact with natural deposits. Low levels of manganese in water can cause discolored water or staining. High levels of manganese can lead to negative health effects. At the levels in Tualatin's water, it is unlikely to lead to negative health effects.

Disinfection byproducts form when precursors, which are naturally present in the environment, combine with chlorine, which is added to water as disinfection. High levels of disinfection byproducts could cause health problems in people. At the levels in Tualatin's water, these are unlikely to lead to negative health effects.

Results from Tualatin and Portland's Unregulated Contaminant Monitoring are including in the following Tables.





The Portland Water Bureau is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During July 2022, the Portland Water Bureau did not complete all monitoring or testing for coliform bacteria, and therefore cannot be sure of the quality of your drinking water during that time. In July 2022, the Portland Water Bureau tested 238 water samples for coliform bacteria, not meeting the requirement of testing at least 240 samples per month. The Portland Water Bureau returned to compliance the following month. The Portland Water Bureau takes this very seriously and updated our coliform testing plans to ensure that they are consistently meeting testing requirements.

# **Portland's Water Quality Data**

REGULATED	Detected in Portland's Water		EPA Standard		SOURCES OF				
CONTAMINANTS	Minimum	Maximum	MCL or TT	MCLG	CONTAMINANT				
UNTREATED SOURCE V	UNTREATED SOURCE WATER								
Turbidity (NTU)	0.25	4.74	5	N/A	Erosion of natural deposits				
Fecal Coliform Bacteria (% >20 colonies/100 mL in 6 months)	Not Detected	0.6%	10%	N/A	Animal wastes				
Giardia (#/L)	Not Detected	0.04	Τ	N/A	Animal wastes				
TREATED DRINKING WA	TER								
Metals and nutrients at the	e entry points								
Arsenic (ppb)	<0.50	1.05	10	e0	Found in natural deposits				
Barium (ppm)	0.00074	0.0107	2	2	Found in natural deposits				
Copper (ppm)	<0.00050	0.00065	1.3	1.3	Found in natural deposits				
Nitrate (as nitrogen) (ppm)	<0.010	0.14	10	10	Found in natural aquifre deposits, animal wastes				
Nitrite (as nitrogen) (ppm)	<0.005	0.007	1	1	Found in natural aquifre deposits, animal wastes				
Total Nitrate + Nitrite (as nitrogen) (ppm)	<0.010	0.15	10	10	Found in natural aquifre deposits, animal wastes				
UNREGULATED Detected in Portland's Water					SOURCES OF				
CONTAMINANTS	Minimum	Average	Maximum		CONTAMINANT				
TREATED DRINKING WATER									
Radon (pCi/L)	<12	167	33		Found in natural deposits				
Sodium (ppm)	3.4	10.6	15						
Manganese (ppm)	0.0012	0.0193	0.0318						

The Portland Water Bureau posts additional results at:

# **Tualatin's Water Quality Data**

REGULATED CONTAMINANTS		Detected in Tualatin's Water		EPA Standard		SOURCES OF	
		Minimum	Maximum	MCL or TT	MCLG	CONTAMINANT	
MICROBIAL CONTAMINANTS IN THE DISTRIBUTION SYSTEM							
Total Coliform Bacteria (% positive per month)		0 samples detected positive	0 %	N/A	N/A	Found throughout the environment	
DISINFECTION RE	SIDUAL AND E	SYPRODUCT	S IN THE DIS	TRIBUTIO	N SYSTEM		
Total Chlorine Residual (ppm)	Running annual average	0.84 ppm	2.06 ppm	4 [MRDL]	4 [MRDLG]	Chlorine used to disinfect water	
	Range of single results at all sites	0.18 ppm	2.30 ppm	N/A	N/A		
Haloacetic Acids (ppb)	Running annual average at any one site	24.2 ppb	25.5 ppb	60	N/A	Byproduct of drinking water disinfection	
	Range of single results at all sites	7.7 ppb	33.8 ppb	N/A	N/A		
Total Trihalomethanes (ppb)	Running annual average at any one site	25.7 ppb	27.7 ppb	80	N/A	Byproduct of drinking water disinfection	
	Range of single results at all sites	10.8 ppb	40.3 ppb	N/A	N/A		

#### **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 lead to 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 (HAAs) and Total Trihalomethanes (THMs) - 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 and nitrite (as Nitrogen) Nitrate and nitrite, measured as nitrogen, can lead to bacterial and algal growth in the water. At levels that exceed the standard, nitrate and nitrite can contribute to health problems. At the levels found in Portland's drinking water, nitrate and nitrite are 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.

**Sodium** - There is currently no drinking water standard for sodium. At the levels found in drinking water, it is unlikely to lead to 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.

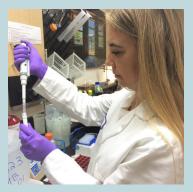
**Total coliform bacteria** - Coliforms are bacteria that are naturally present in the environment. Coliform bacteria usually do not make people sick. They are used as an indicator that other potentially harmful bacteria may be present. If more than 5 percent of samples in a month are positive for total 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 12 months. When turbidity rises in the Bull Run source, Portland switches to its Columbia South Shore Well Field source

# **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.

#### 2022 Results of Cryptosporidium Monitoring at the Raw Water Intake

Number of Samples		Concentration Detected (oocysts/L)		
Total Tested	Positive for Cryptosporidium	Minimum	Maximum	
179	46	Not Detected	0.08	

More information: portlandoregon.gov/water/crypto

### Bull Run Treatment Projects: Filtration treatment by 2027

#### Project achieves 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 and they achieved a significant milestone this past year when they received OHA's approval to design the filtration plant using that filtration method.

#### **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 heath 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 this year.

Our new water filtration treatment process:

- The Bull Run Watershed will remain highly protected.
- Filtration will remove Cryptosporidium and other potential contaminants.
- Disinfection will control microorganisms.
- Corrosion control treatment will continue to lower lead levels at the tap.



# **Reducing Exposure to Lead**

#### What to know about lead

The City of Tualatin and the Portland Water Bureau care about the health of the families in our community and is committed to helping you reduce your 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. The Portland Water Bureau and the City of Tualatin are 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 and Tualatin, 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 and Tualatin, 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 painted antique furniture, barro pottery, cultural cosmetics (sindoor, kumkum, tikka, roli, and kohl) and turmeric purchased overseas.

#### What You Can Do

When your water has been sitting for several hours, such as overnight or after returning from 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* 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*.

#### ADDITIONAL STEPS TO REDUCE POSSIBLE EXPOSURE TO LEAD FROM HOUSEHOLD 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.

More information to keep your family safe from lead:

leadline.org or 503-988-4000.

#### **Lead and Copper Testing in Tualatin**

Beginning in the fall of 2017, Tualatin successfully implemented its Lead and Copper Monitoring Program.

To monitor for lead within Tualatin's distribution area, samples are taken at residential sample sites. These are homes in our service area where the plumbing is known to contain lead solder, which is more likely to contribute to elevated lead levels. Samples are collected after the water has been standing in the household plumbing for more than six hours. These houses represent a worst-case scenario for lead in water.



# Portland's New Improved Corrosion Control Treatment Plant

The Portland Water Bureau has improved water treatment to help protect the health of nearly a million people who drink Bull Run water. In April 2022, the Water Bureau brought Improved Corrosion Control Treatment online at Portland's Lusted Hill Facility to further reduce potential levels of lead at customers' taps.

With improved corrosion control, water from Bull Run is treated using two naturally occurring substances—sodium carbonate (also known as soda ash) and carbon dioxide. These proven treatment methods are commonly used in food and beverage production and help to increase the pH (to make the water less corrosive) and alkalinity (or hardness) of the water.

Once Portland's treatment process stabilized, wholesaler purchasers of Portland water (including Tualatin) were required to take additional demonstration samples to measure the levels of lead and copper in the water. Staff from Tualatin's Water Division collected samples during two consecutive six-month periods (Fall 2022 and Spring 2023) from the existing sixty Tier One home sample sites.

Results from the Fall 2022 sampling showed the lowest lead results since Tualatin began its own Lead Copper testing program in the Fall of 2017. Only 3 of the 64 homes (or 4.7%) tested above the EPA's action level and overall, the 90th percentile results was 9.6 ppb (parts per billion).

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

REGULATED	DETECTED IN RESIDENTIAL WATER TAPS		EPA LIMITS		SOURCES OF	
CONTAMINANT	2022 Results <sup>1</sup>	Homes Exceeding Action Level <sup>2</sup>	Action Level <sup>2</sup>	MCLG <sup>3</sup>	CONTAMINANT	
Lead (ppb)	9.6 ppb	3 out of 64 (4.7%)	>15.0 ppb	0	Corrosion of household and	
Copper (ppm)	0.1204	0 out of 64 (0%)	1.3 ppm	1.3	commercial building plumbing systems	

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

# REDUCE YOUR EXPOSURE TO ALL SOURCES OF LEAD

Contact the LeadLine: **www.leadline.org** or **503-988-4000**.

- Free lead-in-water testing
- · Free childhood blood lead testing
- Free lead reduction services

<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.

<sup>&</sup>lt;sup>3</sup> 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.

# **Regional Collaboration**

Along with 24 other local water providers, the City of Tualatin is a proud member of the Regional Water Providers Consortium. The Consortium provides leadership in the planning, management, stewardship, and resiliency of drinking water in the Portland metro region. Learn more at **regionalh2o.org**.



#### **Questions?**

If you have questions about this report, please contact Terrance Leahy, Water Manager at **503.691.3095**.

You may also wish to visit the City's website at **tualatinoregon.gov/ publicworks/water-quality** or contact the Oregon Health Authority/
Drinking Water Program at **971.673.0405** or visit their website at **public.health.oregon.gov/healthyenvironments/drinkingwater/pages/ index.aspx** 



# Want to get involved?

City Council meetings occur the first and third Mondays of the month (aside from holidays).

For more information visit www.tualatinoregon.gov/citycouncil.



City of Tualatin

10699 SW Herman Road Tualatin, OR 97062

www.tualatinoregon.gov/publicworks/water-quality

Printed on 100% recycled paper