

# Water Quality Report

We are pleased to present our annual Water Quality Report for 2010.

Drinking water regulations require us to produce and distribute this report every year. Most of the information in this report is also required—Congress and the Environmental Protection Agency want to be sure people know what is in their drinking water.

*The Cascade well system produces thousands of gallons of cost-efficient groundwater that we blend with water from Portland's Bull Run watershed. The system ensures that Gresham residents have plenty of water to meet daily demand if Bull Run were temporarily shut down.*



Construction of Gresham's Cascade Well #5

Our water supplies continue to meet all state and federal regulations.

## A year of opportunities

2010 was another big year for the City's Water Division.

We replaced 16,000 residential and all small commercial meters with "smart" automated meters. The City is moving toward a fully-automated meter system in order to eliminate manual meter reading, help us provide early leak detection and alerts to our customers, and provide our customers with better information and service about your water usage.

During 2010 we initiated development of a protection program for the Cascade well system. The system is jointly owned by the City and the Rockwood Water People's Utility District, and the overall purpose of the program is to work with our community to keep our drinking water safe and usable.

Last year we also launched two new pilot programs for residents. In the first, we partnered with the Energy Trust of Oregon to provide customers with free in-home water audits and home energy reviews. The second is a toilet rebate program for WaterSense certified toilets.

We take our work seriously, and want you to know that as we continue to flush, clean, test and improve the water system, it's all to help ensure the continued delivery of reliable, safe drinking water for you.

As in previous years the City met or exceeded 100% of water quality regulations set by the state and federal governments. This report contains our testing results and other information about our programs and services that we hope you will find useful.

If you have any questions, please don't hesitate to contact us.



Brian R. Stahl  
Water Division Manager



In 2010, Gresham installed a new residential "smart" water meter system with stimulus money from the American Recovery and Reinvestment Act and a low interest loan. Among multiple benefits, we are able to detect leaks more quickly and accurately.



Technicians installed residential "smart" water meters in 2010.

### Smart Water Meters: Automated Meter Infrastructure Project

- Latest in water meter reading technology
- Helps identify residential leaks
- Eliminates meter-reading and fuel costs, reduces pollution
- Smart water meters transmit water use data directly to the City
- Enhances customer service

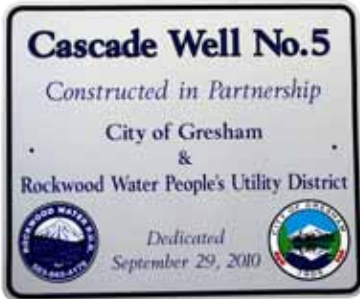
## Groundwater protection program in Gresham

Groundwater comes from aquifers deep in the ground. In order to protect this precious local resource, Gresham and the Rockwood Water PUD are developing the Cascade Well Field Protection Program to safeguard our joint groundwater supply system.

The new program will primarily work with businesses to safely manage, reduce, or find substitutions for the hazardous materials they use or store on site. In doing so, we can protect the groundwater supplies that our community depends on.

For the past eight years, Gresham has partnered with Portland and Fairview in the groundwater protection program for Portland's Columbia South Shore Well Field, from which we occasionally receive water. We will continue to do so.

For more information about the Gresham-Rockwood Cascade Well Field Protection Program, call the City at 503-618-2668.



Top: Pump station at Cascade Well #5.

Bottom: Mayor Shane T. Bemis at the Dedication Ceremony of Cascade Well #5.

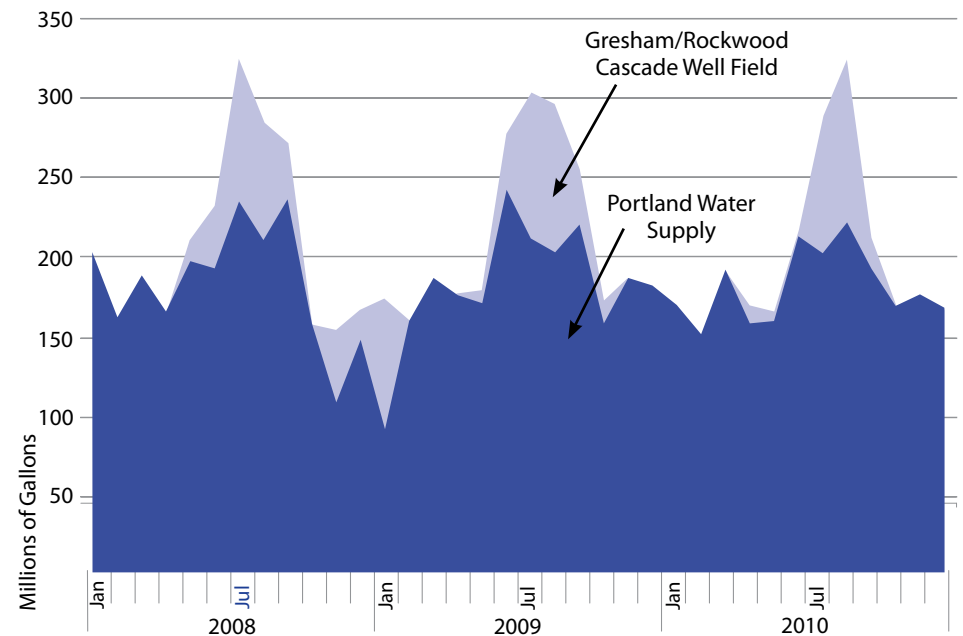
## Water sources at a glance

The City has access to three sources of water. Combined they provide Gresham a measure of cost control, resilience in emergencies, and the ability to ensure access to the highest quality water.

**Bull Run Watershed** – This is a protected and pristine section of the Mt. Hood National Forest. Gresham has been using this source for most of the last century. In 2010, Gresham received approximately 90% of its water from the Bull Run. This water comes primarily from rainfall and morning dew.

**Cascade Well Field** – Gresham and Rockwood Water PUD have coordinated our efforts to develop groundwater wells, treatment system and transmission lines. These wells tap aquifers located 500 to 700 feet below the surface. By developing these additional sources, Gresham is able to keep rates down and significantly improve the region's resilience in emergencies. In 2010, Gresham drew approximately 10% of its water from this source.

**Columbia South Shore Well Field** – Gresham occasionally receives groundwater from this source through the Portland Water Bureau (PWB). The PWB generally relies on this as a backup source, using it near the end of particularly dry summers or during turbidity events in the Bull Run. In 2010, Gresham received a nominal amount of water from this source.



## What the EPA says about drinking water contaminants

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

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### Contaminants in drinking water sources may include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from wildlife or septic systems
- **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 can also come from gas stations, urban stormwater runoff, and septic systems
- **Radioactive contaminants**, which can occur naturally

### Public water systems

To ensure that tap water is safe to drink, the EPA has regulations that limit the amount of certain contaminants in water provided by public water systems and require monitoring for these contaminants.

## Definitions

### Action Level

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

### Maximum Contaminant Level or MCL

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

### Maximum Contaminant Level Goal or MCLG

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

### Maximum Residual Disinfectant Level or MRDL

The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

### Maximum Residual Disinfectant Level Goal or MRDLG

The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

### Nephelometric Turbidity Unit or NTU

NTU is a measure of water clarity.

### Part 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.

### Part Per Billion

One part per billion corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years. One part per billion is equal to 1,000 parts per trillion.

### Part Per Trillion

One part per trillion corresponds to one penny in \$10,000,000,000 or approximately one second in 32,000 years.

### Picocuries Per Liter

Picocurie is a measurement of radioactivity. One picocurie is a trillion times smaller than one curie.

### Treatment Technique

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

## Regulated Contaminants: Detected in 2010

Regulated Contaminant	Minimum Detected	Maximum Detected	Maximum Contaminant Level or Maximum Residual Disinfectant Level (MRDL)	Maximum Contaminant Level Goal or Maximum Residual Disinfectant Level Goal (MRDLG)	Sources of Contaminant
<b>Source Water from Bull Run Watershed</b>					
<b>Turbidity</b>	0.23 nephelometric turbidity units	2.0 nephelometric turbidity units	Cannot exceed 5 nephelometric turbidity units more than two times in twelve months	Not applicable	Erosion of natural deposits
<b>Giardia</b>	Not detected	8 samples of 10 liters each had 1 <i>Giardia</i> cyst	Treatment technique required: Disinfection to inactivate 99.9% of cysts	Not applicable	Animal wastes
<b>Fecal Coliform Bacteria</b>	Not detected	3 samples had 4 bacterial colonies (100% of samples had 20 or fewer bacterial colonies per 100 milliliters of water)	At least 90% of samples measured during the previous six months must have 20 or fewer bacterial colonies per 100 milliliters of water	Not applicable	Animal wastes
<b>Entry Points to Distribution System—from Bull Run Watershed and Columbia South Shore Well Field</b>					
<b>Nutrients</b>					
<b>Nitrate Nitrogen</b>	0.01 parts per million	0.09 parts per million	10 parts per million	10 parts per million	Found in natural deposits; animal wastes
<b>Metals and Minerals</b>					
<b>Antimony</b>	<0.05 parts per billion	0.12 parts per billion	6 parts per billion	6 parts per billion	Found in natural deposits
<b>Arsenic</b>	< 0.5 parts per billion	1.4 parts per billion	10 parts per billion	0 parts per billion	Found in natural deposits
<b>Barium</b>	<0.00079 parts per million	0.00959 parts per million	2 parts per million	2 parts per million	Found in natural deposits
<b>Chromium (total)</b>	<0.2 parts per billion	0.3 parts per billion	100 parts per billion	100 parts per billion	Found in natural deposits
<b>Copper <sup>1</sup></b>	<0.03 parts per million	0.0036 parts per million	Not applicable	1.3 parts per million	Found in natural deposits
<b>Fluoride</b>	<0.05 parts per million	0.13 parts per million	4 parts per million	4 parts per million	Found in natural deposits
<b>Lead</b>	<0.02 parts per billion	0.15 parts per billion	Not applicable	0 parts per billion	Found in natural deposits
<b>Radionuclides</b>					
<b>Gross Beta <sup>2</sup></b>	3.4 picocuries per liter	3.4 picocuries per liter	50 picocuries per liter <sup>3</sup>	0 picocuries per liter	Man-made sources and natural deposits

<sup>1</sup> During the year, two different methods with different method reporting limits (MRLs) were used to analyze copper. The sample with results of <0.03 was analyzed by the method with the less sensitive MRL.

<sup>2</sup> These results are from 2009. The Oregon Department of Human Services - Drinking Water Program allows water utilities to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<sup>3</sup> The MCL for Gross beta is 4 mrem/yr. EPA considers 50 picocuries per liter to be the level of concern for Gross beta.

For historical test results, contact Water Quality at 503-618-2626.

Regulated Contaminant	Minimum Detected	Maximum Detected	Maximum Contaminant Level or Maximum Residual Disinfectant Level (MRDL)	Maximum Contaminant Level Goal or Maximum Residual Disinfectant Level Goal (MRDLG)	Sources of Contaminant
<b>Distribution System of Reservoirs, Tanks and Mains - Gresham</b>					
<b>Microbiological Contaminants</b>					
<i>E. coli</i> Bacteria	None detected	0 routine samples in 2010 had detectable <i>E. coli</i> bacteria	A routine sample and a repeat sample are total coliform positive, and one is also <i>E. coli</i> positive	0% of samples with detectable <i>E. coli</i> bacteria	Human and animal waste
Total Coliform Bacteria	None detected	2 samples out of 70 in September (2.8%) had detectable coliform bacteria	Must not detect coliform bacteria in more than 5.0% of samples in any month	0% of samples with detectable coliform bacteria	Found throughout the environment
<b>Disinfection Byproducts</b>					
<b>Haloacetic Acids</b>					
Running annual average of all sites	25 parts per billion	Not applicable	60 parts per billion	Not applicable	Byproduct of drinking water disinfection
Single result at any one site 2010	11 parts per billion	35 parts per billion	Not applicable	Not applicable	Not applicable
<b>Total Trihalomethanes</b>					
Running annual average of all sites	27 parts per billion	Not applicable	80 parts per billion	Not applicable	Byproduct of drinking water disinfection
Single result at any one site 2010	16 parts per billion	35 parts per billion	Not applicable	Not applicable	Not applicable
<b>Disinfectant Residual</b>					
Total Chlorine Residual	0.01 parts per million	2.04 parts per million	4 parts per million	4 parts per million	Chlorine and ammonia are used to disinfect water



*Water system flushing (left) and pipe maintenance (right) are just two of the ways we work daily to deliver reliable and safe drinking water.*



## Notes on regulated contaminants

### Turbidity

Bull Run is an unfiltered surface water supply. Rules for public water systems have strict standards for unfiltered surface water supplies. Turbidity levels in unfiltered water must not exceed 5 NTU (nephelometric turbidity units) more than two times in a twelve-month period. The typical cause of turbidity is sediment suspended in the water that can interfere with disinfection and provide a medium for microbial growth. Large storm events can result in increased turbidity, causing the Portland Water Bureau to shut down the Bull Run system and serve water from the Columbia South Shore Well Field.

### Giardia

Wildlife in the Bull Run watershed may be hosts to *Giardia lamblia*, the organism that causes giardiasis. Chlorine is effective in inactivating *Giardia*.



### Fecal coliform bacteria

The presence of fecal coliform bacteria in source water indicates that water may be contaminated with animal wastes. Chlorine is used to control these bacteria.

### E. coli bacteria

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches or other symptoms. They may pose a special health risk for infants, young children, some of the elderly and people with severely compromised immune systems.

### Total coliform bacteria

Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present.

### Nitrate - nitrogen

Nitrate, measured as nitrogen, can support microbial growth (bacteria and algae). Nitrate levels exceeding the standards can contribute to health problems.

### Antimony, arsenic, barium, chromium (total), copper, fluoride, lead

Metals and minerals are elements found in the earth's crust; they can dissolve into water that is in contact with soil or in groundwater aquifers. At the levels found in our drinking water, they are unlikely to contribute to adverse health effects. There is no MCL for lead at the entry point to the distribution system. Lead is regulated at customers' taps. See the section on lead in drinking water for more information.

### Gross Beta

Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Gross Beta was detected in the combined Bull Run and Columbia South Shore water sources. The screening level for Gross Beta is not a health-based level but is a level at which additional and increased monitoring would be necessary.

### Disinfection byproducts

During disinfection, certain byproducts form as a result of chemical reactions between chlorine and naturally occurring organic matter in the water. These byproducts can have negative health effects. Trihalomethanes and haloacetic acids, regulated disinfection byproducts, were detected in our water. The disinfection process is carefully controlled to remain effective, while keeping byproduct levels low.

### Total chlorine residual

Total chlorine residual is a measure of free chlorine and combined chlorine and ammonia in our distribution system. Chlorine residual is necessary to maintain disinfection throughout the distribution system. Adding ammonia to chlorine results in a more stable disinfectant and helps to minimize the formation of disinfection byproducts.

## Special notice for immunocompromised people

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA and Centers for Disease Control and Prevention 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.



Infants are among those who can be particularly at risk from infections.

## Notes on unregulated contaminants

Unregulated contaminant monitoring helps the EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants in the future.

### Nickel

Nickel is a metal found in the earth's crust; it can dissolve into water that is in contact with natural deposits. There is currently no maximum contaminant level for nickel. At the levels found in Gresham's drinking water, it is unlikely to contribute to adverse health effects.

### Radon

Radon is a naturally occurring radioactive gas that cannot be seen, tasted, or smelled. Radon has not been detected in the Bull Run supply. It has been detected at varying levels in Portland's groundwater wells. For information about radon, call the EPA's Radon Hotline (800-SOS-RADON) or [www.epa.gov/radon/rnwater.html](http://www.epa.gov/radon/rnwater.html).

### Sodium

Sodium is a metal found in the Earth's crust; it can dissolve into water that is in contact with natural deposits or added to water during treatment. There is currently no drinking water standard for sodium. Sodium is an essential nutrient. At the levels found in drinking water, it is unlikely to contribute to adverse health effects.

### Vanadium

Vanadium is a metal found in the earth's crust, which can dissolve into water that is in contact with natural deposits. Based on concerns regarding vanadium as a potential emerging contaminant, the Portland Water Bureau tested water from the Columbia South Shore Well Field for vanadium in 2010. All of the results for vanadium were below the 50 parts per billion notification level set by the State of California. At these levels it is unlikely to contribute to adverse health effects.

*To ensure high quality drinking water, the City of Gresham tested over 900 water samples in 2010.*



Unregulated Contaminants Detected in 2010				
Contaminant	Minimum Detected	Average Detected	Maximum Amount Detected	Source of Contaminant
<b>Entry Points to Distribution System – From Bull Run and the Columbia South Shore Well Field</b>				
Nickel	< 0.2 parts per billion	< 0.2 parts per billion	0.7 parts per billion	Found in natural deposits
Radon	310 picocuries per liter	310 picocuries per liter	310 picocuries per liter	Found in natural deposits
Sodium	2.5 parts per million	8.5 parts per million	24.4 parts per million	Added to water during treatment; found in natural deposits
Vanadium	4.9 parts per billion	4.9 parts per billion	4.9 parts per billion	Found in natural deposits

# What you should know about lead in drinking water

## Lead in household plumbing

Lead was not detected in your water sources. The City of Gresham has removed all known lead service connections from its distribution system.

Exposure to lead through drinking water is possible if materials in a building's plumbing contain lead. The level of lead in water can increase when water stands in contact with lead-based solder and brass faucets containing lead.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Gresham is responsible for providing high quality drinking water, but cannot control the variety of materials used in 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 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the LeadLine, 503-988-4000, [www.leadline.org](http://www.leadline.org) or the Safe Drinking Water Hotline 800-426-4791, [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

People are exposed to lead in many other ways. In our community, dust from paint in homes built before 1978 is the most common source of exposure to lead. Other sources include soil, pottery,

traditional folk medicines or cosmetics, some sports equipment such as fishing weights and ammunition, and some occupations and hobbies.

## Corrosion treatment

Regional approach to corrosion control treatment reduces corrosion in plumbing by increasing the pH of the water. Comparison of monitoring results with and without pH adjustment shows over 50 percent reduction in lead at the tap with pH adjustment.

If you are concerned that your home tap water may have lead, call the LeadLine for a free lead-in-water test kit and to learn ways to reduce your exposure to all sources of lead. This program targets testing the water in households most at risk from lead in water. These are homes built between 1970 and 1985, where pregnant women or children age six or younger reside.



## LeadLine 503-988-4000

Call the LeadLine or visit [www.leadline.org](http://www.leadline.org) for information about lead hazards, free lead in water testing, free childhood blood lead testing and referrals to other lead reduction services.

## Easy steps to avoid possible exposure to lead from plumbing

- If the water has not been used for several hours, run each tap for 30 seconds to 2 minutes or until it becomes colder before drinking or cooking. This flushes water which may contain lead from the pipes.
- Use cold, fresh water for cooking and preparing baby formula. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water. Do not use water from the hot water tap to make baby formula.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Consider using a filter. Check whether it reduces lead – not all filters do. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality. Contact National Sanitation Foundation International at 800-NSF-8010 or [www.nsf.org](http://www.nsf.org) for information on performance standards for water filters.
- Test your water for lead. Call the LeadLine at 503-988-4000 to find out how to get a FREE lead-in-water test kit.
- Test your child for lead. Ask your physician or call the LeadLine to find out how to have your child tested for lead. A blood lead level test is the only way to know if your child is being exposed to lead.
- Regularly clean your faucet aerator. Particles containing lead from solder or household plumbing can become trapped in your faucet aerator. Regularly cleaning every few months will remove these particles and reduce your exposure to lead.
- Consider buying low-lead fixtures. New brass faucets, fittings, and valves, may contribute to lead in your drinking water. Federal law currently allows brass fixtures, such as faucets, to contain up to 8% lead. These fixtures are labeled as "lead free." When buying new fixtures, consumers should seek out those with the lowest lead content. Visit [www.nsf.org](http://www.nsf.org) to learn more about lead content in plumbing fixtures.

## Free water audit and home energy assessments

The City and Energy Trust of Oregon are collaborating to offer free home water and energy assessments to Gresham water customers. The two hour in-home assessment, completed by a professional advisor, demonstrates ways residents can reduce water and energy use, improve the comfort and performance of their home, and save money.

During the assessment, an advisor reviews the home from top to bottom seeking out areas of water and energy waste. The customer receives helpful tips and information, and even some free products that can help with savings right away, such as compact fluorescent light bulbs. The advisor measures the flow rate of all faucets and showerheads, and if necessary, will install high-performance showerheads and faucet aerators. Toilets

are checked for leaks and the flapper valve will be replaced if needed. Customers are also shown how to read and understand their water meters.

At the end of the assessment, the customer receives a list of prioritized recommendations, and information on cash incentives, tax credits and local rebates available for making improvements.

The free home assessment is available to Gresham residents who live in a single-family residential home, have a City of Gresham residential water account and heat their homes using Portland General Electric, Pacific Power, NW Natural.

*To schedule a Water Audit and Home Energy Review, call Energy Trust at 1-866-368-7878. For more information, visit [GreshamOregon.gov/water](http://GreshamOregon.gov/water)*

## EPA WaterSense Program

The WaterSense label makes it easy for consumers to recognize products and programs that save water without sacrificing performance or quality. Independent, third-party licensed certifying bodies certify that products meet Environmental Protection Agency criteria for water efficiency and performance by following testing and certification protocols specific to each product category. Products that are certified to meet EPA specifications are allowed to bear the WaterSense label. A number of common fixtures are labeled by the WaterSense Program, including toilets, showerheads and more.



Learn more about WaterSense: [epa.gov/watersense](http://epa.gov/watersense)



Lead and Copper Sampling at High-Risk Residential Water Taps					
Regulated Contaminant	90th Percentile Values	Number of Sites Exceeding the Action Level*	Lead and Copper Rule Exceedance	Maximum Contaminant Level Goal (MCLG)	Source of Contaminant
Copper	0.34 parts per million	0 samples exceeded the copper action level of 1.3 parts per million	More than 10% of the homes tested have copper levels greater than 1.3 parts per million	1.3 parts per million	Corrosion of household and commercial building plumbing systems
Lead	12 parts per billion	10 of 112 samples (8.9%) exceeded the lead action level of 15 parts per billion	More than 10% of the homes tested have lead levels greater than 15 parts per billion	0 parts per billion	Corrosion of household and commercial building plumbing systems

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

## Gresham toilet rebate program

After a Water Audit and Home Energy Review, a homeowner can apply for up to two \$50 cash rebates for installing WaterSense certified high efficiency toilets if the customer has inefficient toilets (greater than 1.6 gallons per flush).

### Toilet Rebate Requirements

- Resident has received a Water Audit and Home Energy Review – or provides verification of the other requirements listed below.
- Owner has replaced one or two high flow (more than 1.6 gallons per flush) toilets with an EPA WaterSense labeled toilet.
- Owner has recycled the old toilet and provided documentation.

*For information about program rules and requirements, or how to recycle your toilet, contact us at 503-618-2656 or [Jesse.Engum@GreshamOregon.gov](mailto:Jesse.Engum@GreshamOregon.gov).*

## Frequently ask questions about water

### Do we add fluoride to drinking water?

Fluoride is not added to our drinking water. Naturally occurring fluoride is only minutely detected in our supplies. The U.S. Public Health Service and the Centers for Disease Control and Prevention consider the fluoride levels in our water sources to be lower than optimal for the prevention of tooth decay. You may want to consult with your dentist about fluoride treatment to help prevent tooth decay, especially for young children.

### Why is my water discolored at times?

This is typical for water from the Bull Run system, especially in the fall. Natural organic material from vegetation washes from the forest floor and stream channels into the reservoirs. While the color may influence the appearance of the water and possibly the taste, the water is still safe to drink. The change in color may also have to do with our seasonal water system flushing program.

### How is my water treated?

Our water does not require filtration. Our water sources need only chlorine, ammonia, and corrosion treatment for the purposes of maintaining quality through the distribution system to your faucet.

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

Gresham's water is very soft. The hardness of Bull Run water is typically 4-13 parts per million (ppm), or approximately ½ a grain of hardness per gallon. Gresham's groundwater hardness is approximately 86 ppm (about 5 grains per gallon), which is considered moderately hard.

### Who can I call about water quality or pressure concerns?

The City can answer your questions and concerns about water quality or pressure, 503-618-2626. We are available Monday through Friday from 8 a.m. to 5 p.m.

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

The pH of Gresham's drinking water typically ranges from 6.9 to 8.7.

### Do I need a water filter?

Because we take steps to provide water that meets all state and federal rules, additional filtration is not required. If you decide to purchase a filter, check to make sure the device you consider is designed to meet your goals. NSF International is a non-profit, non-government agency that provides assistance in selecting water treatment devices. You can contact the NSF at [www.nsf.org](http://www.nsf.org) or toll free at 877-867-3435.



## Contact Us

We try to answer common questions and provide useful information on our website at [GreshamOregon.gov](http://GreshamOregon.gov). Now you can even pay your bills online. Even so, you're always welcome to give us a call.

Utility Billing	503-618-2373
Water Conservation	503-618-2656
Groundwater Protection	503-618-2668
Smart Water Meters	503-618-2633
Water Quality	503-618-2626
Backflow Assembly Testing	503-618-2626
Lead Testing	503-988-4000
Gresham City Council	503-618-2871
General City Information	503-618-3000

### City of Gresham Water Division

1333 N.W. Eastman Parkway  
Gresham, Oregon 97030  
503-618-2668  
[GreshamOregon.gov/water](http://GreshamOregon.gov/water)

### For Additional Information

Oregon Health Authority  
Drinking Water Program  
971-673-0405  
[www.oregon.gov/DHS/ph/dwp/](http://www.oregon.gov/DHS/ph/dwp/)

Gresham Public Water System #4100357



June 2011

We have taken the effort to make this complex information readable, informative, and to produce it at a reasonable cost. For information about this report, please contact us at 503-618-2668.