

# The Water You Drink



**You can have confidence in the quality of your drinking water. The City of Sherwood consistently delivers water that meets or surpasses all federal and state standards.**

Issued June 2011 based on water quality data for the year 2010. The U.S. Environmental Protection Agency (EPA) requires us to send this report to our customers by July 1, 2011.

## QUESTIONS?

*We have the answers!*

### Your Water Bill?

Utility Billing  
503-925-2315

### Water Quality?

Rich Sattler  
503-925-2319

### Water Conservation?

Kathy McWilliams  
503-925-2315

### Backflow Prevention?

Rich Sattler  
503-925-2319

### Water Emergencies?

Public Works  
503-625-5722

### After-hours

#### Water Emergencies?

Public Works  
503-625-5722

### General Inquiries?

Public Works  
503-625-5722



**Safe, reliable drinking water** is a basic life necessity. The City of Sherwood is proud to deliver water to more than 18,205 people every day. We think 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 safety. In accordance with federal guidelines, this report provides the information you need to know about the water you drink.



Contaminant levels in your drinking water are well below state and federal regulatory limits. The test results are shown on the following pages. Although the City's water supplies are tested for more than 200 regulated and unregulated contaminants, only those that have been detected in the water are included in this report.

Some people may be more vulnerable to contaminants in drinking water than the general populations. Immuno-compromised people, such as those with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC (centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline at 800-426-4791. Frequency of testing varies per federal and state requirements.

In 2005, the Oregon Department of Human Services and Oregon Department of Environmental Quality conducted a source water assessment on the City of Sherwood's groundwater wells. Results indicate that the water system would be sensitive to a contamination event inside the identified Drinking Water Protection Area. Potential sources include high density housing areas, sewer lines and transportation corridors. For more information please call Rich Sattler 503-925-2319 or email at [sattlerr@sherwoodoregon.gov](mailto:sattlerr@sherwoodoregon.gov).

If you have any questions about this report, contact Sherwood's Water Quality Division at 503-925-2319 or visit our website at [www.sherwoodoregon.gov](http://www.sherwoodoregon.gov)

## Where Does Your Water Come From?

Sherwood has two water sources. One source is groundwater from four production wells within the City. The other source is from the Portland Water Bureau, who primarily uses water from the Bull Run Watershed. Located about 30 miles east of Portland, it is one of the few water systems that remains unfiltered. The Portland Water Bureau also uses a groundwater well field to augment the Bull Run supply. For more information about Portland's water supply, visit [www.portlandonline.com/water](http://www.portlandonline.com/water).



## How Is Your Water Treated?

Sherwood's well water is treated with chlorine, with one well also treated to remove iron and manganese.

Water from Portland's Bull Run does not require filtering. Before delivery to the City, the water is disinfected with chloramines (a combination of ammonia and chlorine) and receives a pH to minimize corrosion.

## Cross Connection & Backflow Testing

We work very hard to ensure that the water delivered to our customers meets or exceeds State of Oregon and EPA's requirements. The customer's water use can compromise the water quality in the City's water system. To ensure that the customer's plumbing does not cause contamination to the public water system, the customers' backflow prevention assemblies are required to be tested annually by a State Certified Backflow Assembly Tester.

Beginning in April of every year residential properties will receive a notice from the City of their requirements to have their backflow assemblies tested prior to July 1<sup>st</sup> of that same year. As we get closer the July 1<sup>st</sup> due date follow up letters will be mailed to those customers who have not complied with the backflow testing requirements. Customers that fail to test their backflow assemblies could result in water service disconnection and service fees.

## Maintenance Programs

The Public Works department performs a number of maintenance programs:

**Valve Maintenance:** This past spring, you may have seen crew members in the intersections of streets turning one of our 1,600 valves. The purpose of this program is to ensure that staff can readily access and operate isolation valves for both scheduled and unscheduled maintenance, and in the case of an emergency, to limit the number of customers that may need to be out of service.

**Flushing Maintenance:** This coming October, the primary water source for our City residents water will be the Willamette River Water Treatment Plant located in Wilsonville. The City will begin our Flushing Program to remove sediment in our water system, minimize the inter-mixing of water from Portland Water Bureau (chloramine disinfectant) and Willamette River Water Treatment Plant (free chlorine disinfectant), confirm proper operation of valves and hydrants, and verify hydrants are available for firefighting needs.

## Summer Demand:

During the "peak watering season" (July through September) water demand increases over 3.5 times of our daily winter time demand of 1.3 million gallons per day. To meet demand, the city uses ground water, water purchased from the City of Portland and finished storage reservoirs to meet the needs of our customers during the Summer. We encourage our customers to take advantage of a number of inside and outside conservation measures offered through the Utility Billing Department to help our customers minimize their water use.



# Reading Your Utility Bill



Sherwood Residents have asked for a Utility Bill that is easier to read and with more specific information. Here is the **NEW LOOK** and some tips on how to read your utility bill.

**OUR CONTACT INFORMATION**  
Call the Utility Billing Department at 503-925-2315 for customer assistance.

**MESSAGES**  
General messages for all customers can be read here and messages specific to your account will be found in Additional Information.

**MONTHLY CONSUMPTION**  
Chart your conservation efforts and water usage with a monthly bar graph starting with your April 2011 reading.

**LINE ITEM DETAIL**  
Your Water, Sewer, Storm Water Mgmt and Street charges are broken down.

**TOTAL AMOUNT DUE**  
Current Charges, Previous Balance, and recent payments are summed here.

**RETURN THIS PORTION**  
Include the stub with your check for quick processing. You can also pay online or pay by cash, check or debit/credit card in the Utility Billing Office.

**READ THE BACK**  
On the back side of the bill you can learn all about the Winter Average, EDU's and ESU's and how they affect your balance.



**UTILITY BILLING STATEMENT**

Utility Billing  
15527 SW Willamette St.  
Sherwood, OR 97140  
utilitybilling@sherwoodoregon.gov  
www.sherwoodoregon.gov

Billing Date:  
Billing Period:  
Due Date:  
Account Number:  
Service Address:

METER READING		SERVICE PERIOD			
PREVIOUS	CURRENT	CONSUMPTION	METER ID#	FROM	TO
		Cgals			
WINTER AVG:		AVG CONSUMPTION:		SEWER EDUs:	STORM ESUs:

**IMPORTANT MESSAGES TO CUSTOMERS**

**ADDITIONAL INFORMATION**

**WATER CHARGES**

WATER Base Charge \$16.76  
WATER Consumption Charge \$32.20  
**Total Water Charges \$48.96**

**SEWER & SURFACE WATER CHARGES**

STORM Water Charge – Clean Water Services \$1.06  
SEWER Base Charge – Clean Water Services \$17.80  
SEWER Consumption Charge – Clean Water Services \$8.94  
STORM Water Charge – City of Sherwood \$10.71  
SEWER Base Charge – City of Sherwood \$3.88  
SEWER Consumption Charge – City of Sherwood \$11.82  
**Total Sewer & Surface Water Charges \$44.21**

**STREET UTILITY FEES**

STREET Maintenance Fee \$2.00  
STREET Light Fee \$3.00  
SIDEWALK Repair Fee \$5.01  
SAFE Sidewalk Fee  
**Total Street Utility Fees \$5.00**

**OTHER CHARGES/ADJUSTMENTS**

**Total Other Charges/Adjustments \$0.00**

**Consumption in Cgals**  
Monthly Consumption

GRAPH

Current Utility Charges	\$
Previous Balance	\$
Payments	\$
Other Charges & Adj.	\$
<b>Total Amount Due</b>	<b>\$</b>

Any unpaid previous balance is due upon receipt. Due date applies to new charges only.

Return this portion with your payment



15527 SW Willamette St  
Sherwood, OR 97140

ACCOUNT NUMBER	DUE DATE	TOTAL DUE

Amount Enclosed \$

RATES	LINE ITEM	JULY 1ST, 2011	JANUARY 1ST, 2012
WATER	WATER BASE	\$ 18.02	\$18.74
	WATER CONSUMPTION	\$ 0.49 / cgal for first 210 cgals \$ 0.76 / cgal over 210 cgals	\$ 0.51 / cgal for first 210 cgals \$ 0.79 / cgal over 210 cgals
SEWER	SEWER BASE—CWS	\$ 19.65 / EDU	
	SEWER BASE—COS	\$ 4.51 / EDU	
	SEWER CONSUMPTION—CWS	\$ 0.17½ / cgal	
	SEWER CONSUMPTION—COS	\$ 0.03 / cgal	
STORM WATER	STORM—CWS	\$ 1.31 / ESU	
	STORM—COS	\$ 11.46 / ESU	
STREETS	STREET MAINT.	\$ 2.00	
	STREET LIGHT	\$ 2.32	
	SIDEWALK REPAIR	\$ 0.52	
	SAFE SIDEWALK	\$ 0.69	

**Community Involvement:**  
The Sherwood City Council meets every first and third Tuesday at 7:00 p.m. at the Sherwood City Hall, 22560 SW Pine Street.

With the exception of any scheduled Executive Session, the meetings are open to the public and residents are encouraged to attend.

For more information visit our website at [www.sherwoodoregon.gov/city-council](http://www.sherwoodoregon.gov/city-council)

# Water Supply Improvement Project Transmission Pipeline



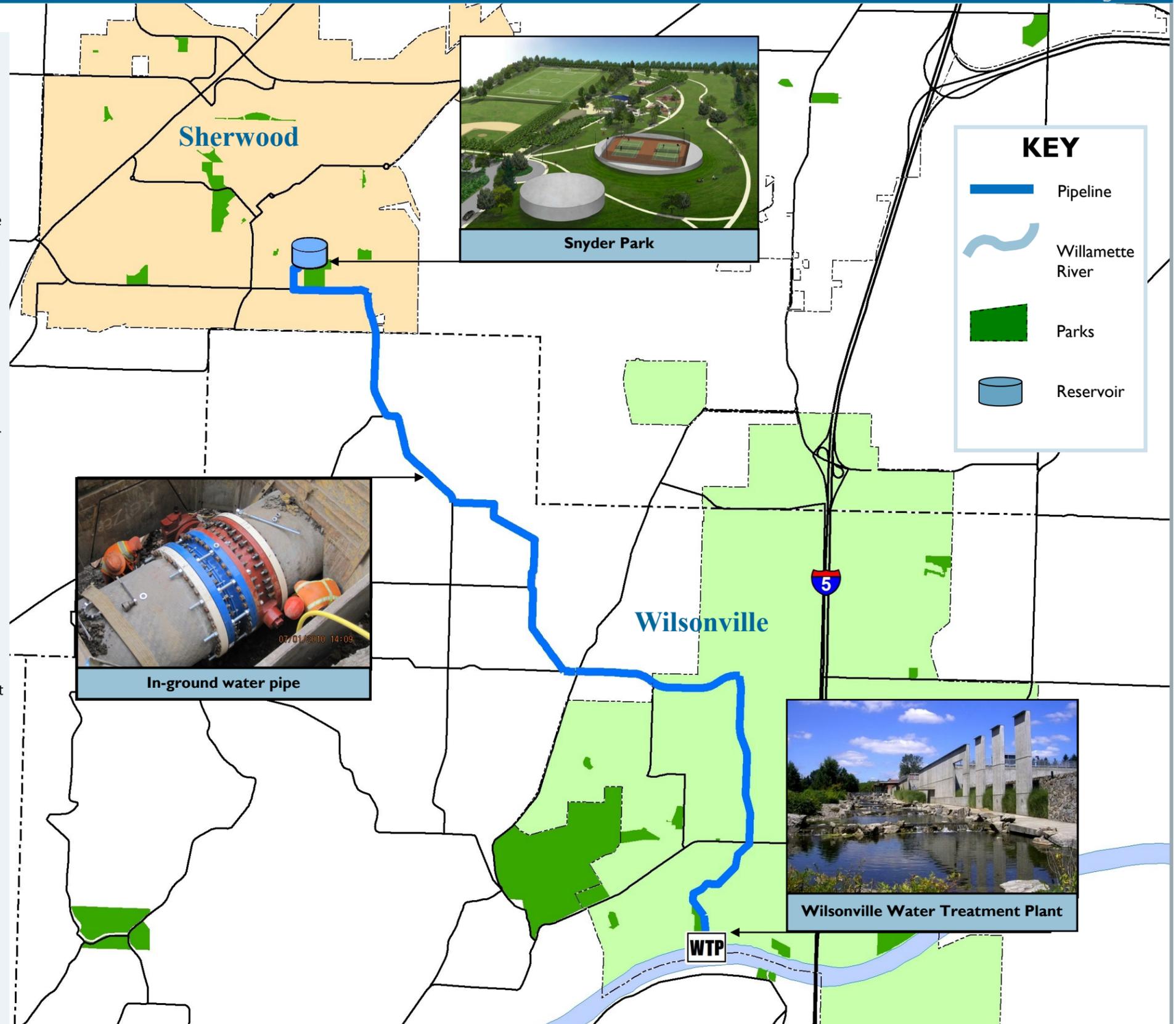
**We have accomplished a lot in the last three years!** We completed the reservoir and pump station at Snyder Park and the addition of the tennis courts is a great asset to the City. With the exception of one segment of 2,500 lineal feet of pipeline (in Wilsonville City limits), 3.2 miles of transmission pipeline to Wilsonville have been completed. We recently completed a temporary waterline for the interim and the construction of a meter vault will allow us to receive water from the Willamette River Water Treatment Plant by fall 2011. This pipeline is crucial to the City of Sherwood for our long term growth. Currently, without aid from the Cities of Portland, Tualatin and the Tualatin Valley Water District, Sherwood cannot meet our customer's water demands during peak summer months. Without aid, we have the capacity to provide 1.2 mg of water per day using our ground water wells. During the peak months, Sherwood uses up to 5.0 mg of water per day and we have an Intergovernmental Agreement (IGA) in place with the Portland Water Bureau the City of Tualatin and TVWD for interruptible water. Interruptible water is exactly what it sounds like: water that can be broken up and diverted from Sherwood if either Tualatin, Portland or TVWD has a higher demand and need the water for themselves.

**How We Got Where We Are.** The City adopted a Water Master Plan which details long term water needs for the City of Sherwood in 2005. After Council reviewed the options, they directed staff to present a ballot to the voters to consider the Willamette River as a source for the City. This ballot was approved by the voters in November 2005. In early 2006 the City began working on a feasibility study for a pipeline route. The study indicated that the most cost-effective option was to partner with the City of Wilsonville on four Segments of pipeline to reduce costs to our citizens since these segments had already been constructed or were in the process of being constructed. After the feasibility study was completed the City purchased an undivided interest in the Water Treatment Plant (WTP) facilities in Wilsonville.

**Understanding the Treatment Plant.** During the 1990's pilot tests were conducted in Wilsonville using conventional treatment methods. These tests confirmed that under "worst case" conditions, treated water from the Willamette could consistently meet drinking water standards. As a further margin of safety, enhanced methods of treatment were tested and incorporated into the design of the multi-barrier system used at Wilsonville's water treatment plant. The resulting water supplied from this facility is even purer than required by current drinking water standards (as well as proposed future drinking water standards). The treatment facility is "over-designed" in the sense that drinking water standards can be met without such extensive treatment. Nonetheless, the plant is operated using all steps at all times -- whether or not they are all needed to meet drinking water standards. In addition, the treatment plant has redundant (i.e., back-up) systems for all these processes.

We encourage you to visit the plant and learn about your water source. Tours of the Willamette River Water Treatment Plant are given by appointment only. If you are interested in scheduling a tour contact Veolia Water at 503-582-9655.

The forward thinking of City Council and the voters who approved moving in this direction allowed City staff to take advantage of the bidding climate and the economy, and Sherwood was able to save money and guarantee our long term water needs – needs that will be met through 2030 and beyond.



The City of Sherwood and the City of Portland test your water supply for approximately 200 contaminants. These include all contaminants regulated by the EPA, plus a number of unregulated contaminants. Sampling is conducted at various locations in the water supply and distribution system. Test results are submitted to the Oregon Health Authority, Drinking Water Program, the local agency responsible for enforcing EPA’s Safe Drinking Water Act. **If a health related contaminant is not listed in this report, it was not detected.**

## Definitions

**Action Level:** The concentration of a contaminant that, if exceeded, triggers a treatment or other requirements that 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 treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of 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 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 contaminants.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**ND (Non-detection):** No presence of a contaminant was detected.

**NTU:** Nephelometric turbidity units, a measure of turbidity.

**pCi/L:** Picrouries per liter, a measure of radioactivity.

**ppb:** Parts per billion. 1 ppb means that one part of a particular contaminant is present for every 1 billion (1,000,000,000) parts of water. 1 ppb is equivalent to 1 inch in 16,000 miles, 1 second in 32 years and 1 cent in \$10 million dollars.

**ppm:** Parts per million. 1 ppm means that one part of a particular contaminant is present for every 1 million (1,000,000) parts of water. 1 ppm is equivalent to 1 inch in 16 miles, 1 minute in 2 years and 1 cent in \$10,000 dollars.

**RAA:** Running Annual Average. The average result from quarterly samples taken within the distribution system. This average is used to determine compliance with MCLs.

**TT:** Treatment technique; a required process intended to reduce the level of a contaminant in drinking water.

**Turbidity:** Bull Run is an unfiltered surface water supply. The 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.

## LEAD AND COPPER

While there is not MCL for lead or copper, the federal government identifies “action levels” that trigger certain actions by the water provider. The action level is based on the 90<sup>th</sup> percentile. This means that 90 percent of the samples must meet or be under the defined action level. The action level for copper is 1.3 ppm and the action level for lead is 15 ppb.

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. Sherwood 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 running 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 want to request a free lead-in-water test from The Lead Line. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Lead Line 503-988-4000 or [www.leadline.org](http://www.leadline.org), or the Safe Drinking Water Hotline at 800-426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

Contaminant	Samples Taken (Regional)	AL	MCLG	90 <sup>th</sup> Percentile	Action Level Exceedences
Lead	115	12 ppb	0 ppb	0 ppb	10 (8.9%)
Copper	115	1.3 ppm	1.3 ppm	0.34 ppm	0

In compliance with federal requirements, the District, along with our water source providers, has taken actions to reduce our customers’ exposure to lead and copper in drinking water. These include corrosion control, source water treatment, and public education. Other ways to reduce lead include:

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. Test your water for lead. Call the LeadLine at (503) 988-4000 to find out how to get a FREE lead in water test.

Consider buying low-lead fixtures. New brass faucets, fittings, and valves, may contribute to lead in your drinking water. Federal law currently allows end-use 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.

**REGULATED CONTAMINANTS (TESTED IN 2010 UNLESS OTHERWISE NOTED)**

	<b>Contaminant</b>	<b>Unit of Measurement</b>	<b>Amount Detected Min – Max</b>	<b>MCL Max. Contaminant Level</b>	<b>MCLG Max. Contaminant Level Goal</b>	<b>Major Sources</b>
<b>MICRO-BIOLOGICAL</b>	Total Coliform	Percentage of monthly samples	ND	Must not detect coliform bacteria in more than 5% of samples in any month	0% of samples with detectable coliform bacteria	Naturally present in the environment
	Turbidity (Measured in Bull Run water only)	NTU	0.23 – 2.0	Cannot exceed 5.0 NTU more than 2 times in 12 months.	N/A	Soil runoff; erosion of natural deposits
<b>INORGANICS</b>	Nitrate	ppm	.7 – 1.3	10	10	Runoff from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
	Arsenic	ppb	.5 – 1.4	10	0	Erosion of natural deposits in groundwater aquifers
	Barium	ppm	.00079 - .00959	2	2	Erosion of natural deposits in groundwater aquifers
	Antimony	ppb	.05 - .12	6	6	Found in natural deposits
	Chromium	ppb	.2 - .3	100	100	Found in natural deposits
	Fluoride	ppm	<0.05-.13	4	4	Found in natural aquifer deposits
	DIQUAT	ppb	ND	20	20	Runoff from herbicide use
	BENZO(A)PYRENE	ppt	ND	200	0	Leaching from linings of water storage tanks and distribution lines
<b>DISINFECTION BYPRODUCTS</b>	TTHMs (Total Trihalomethanes)	ppb	20.25 RAA (21 – 30)	80	N/A	Byproduct of drinking water chlorination
	Total Haloacetic Acids (five)	ppb	19.23 RAA (5.65-25.7)	60 standard	N/A	Byproduct of drinking water chlorination
	Disinfectant Residual	ppm	.59 AVG (.03-1.77)	4.0 (MRDL)	4.0 (MRDLG)	Water additive to control microbes
<b>RADIONUCLIDES</b>	Gross Alpha	pCi/L	1.2	15	0	Erosion of natural deposits in groundwater aquifers
	Gross Beta (2009)	pCi/L	3.4	NA. Screening at 50 pCi/L	0	

**UNREGULATED CONTAMINANTS (TESTED IN 2010)**

<b>Contaminant</b>	<b>Unit of Measurement</b>	<b>Amount Detected Min – Max</b>	<b>Major Sources</b>
Sodium	ppm	2.5 – 8.5	Added to water during treatment and erosion of natural deposits. At the levels found in drinking water Sodium is unlikely to significantly contribute to adverse health effects.
Hardness (CaCO <sub>3</sub> ) Calcium Carbonate	ppm gpg (grains per gallon)	4 – 112 0.2 – 6.5	Erosion of natural deposits in groundwater aquifers.
Varadium	ppb	4.9	Found in natural deposits.
Nickel	ppb	0.2	Found in natural deposits.

**RADON (UNREGULATED)**

Radon is a radioactive gas that occurs naturally in groundwater and is released from water into the air during household use. At high exposure levels, it can cause lung cancer. In 2010, testing of Portland groundwater showed a level of 310 pCi/L. For more information about Radon, visit [www.epa.gov/radon](http://www.epa.gov/radon) or call the EPA's Hotline at 800-SOSRADON (800-767-7236).

## How Do Contaminants Get Into Your Water?

“Contaminant” refers to any substance that may be found in water. As water travels over the surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or human activities. Contaminants that may be present in source water (water that hasn’t been treated) include biological contaminants, such as viruses and bacteria; inorganic contaminants, such as salts and metals; pesticides and herbicides; organic chemicals from industrial or petroleum use; and radioactive materials.

Drinking water and 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. To ensure that tap water is safe, the EPA sets regulations that limit the amount of certain contaminants in water provided by public systems. The Food and Drug Administration (FDA) establishes similar limits for bottled water. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at 800-426-4791.



**City of Sherwood**  
15527 SW Willamette Street  
Sherwood, OR 97140

Postal Customer

Prsrt Std  
ECRWSS  
US Postage  
PAID  
Bend, OR  
Permit No. 473

### Emergency & Disaster Preparedness

Do you know what to do in the event of an emergency or disaster? These sources can help:

- ◇ [redcross.org](http://redcross.org) (American Red Cross)
- ◇ [ready.gov](http://ready.gov) (Prepare. Plan. Stay Informed.)
- ◇ [tvfr.com](http://tvfr.com) (Tualatin Valley Fire and Rescue)
- ◇ [ocem.org](http://ocem.org) (Washington County Office of Consolidated Emergency Management)

### Emergency Water Sources

During time of emergency, water service, like any utility may be unavailable. The City of Sherwood’s primary focus will be the restoration of the system, and the return of service. You may need to get by for several days on your own, until help arrives, or the system is restored. A person can survive a couple of weeks without food, but only three days without water. If you keep commercially bottled water as an emergency supply, be aware of the expiration date and rate accordingly. If you choose to bottle your own, we recommend that you use a food grade container designed for water storage, and change the water every six months.