THE Sherwood WATER QUALITY REPORT

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

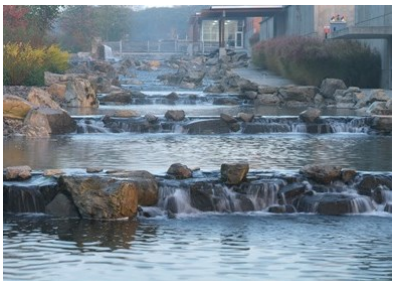
Safe, reliable drinking water is a basic life necessity. The City of Sherwood is proud to deliver water to more than 18,955 people every day. We think it is important for our customers to understand where their water comes from, how safe it is, and what actions we take to ensure its continuing safety. 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 2014 are included in this report.

If you have any questions about the contents of this report, or about something not included in this report, please contact the Public Works Utility Manager, Richard Sattler, at 503 925-2319 or sattlerr@sherwoodoregon.gov.

WATER SOURCES

Sherwood draws water from three water sources

1. The Willamette River Water Treatment Plant (WRWTP)
2. The Bull Run Watershed
3. Local ground water wells



The city relies on the Willamette River Water Treatment Plant for a majority of its supply. The plant utilizes a multi-barrier system, meaning that they treat the water extensively in many different ways, in order to produce water that exceeds the current and future drinking water standards. You can learn more about the 5-step treatment process at the city's website *sherwoodoregon.gov*.

Beginning in June of 2015 the Portland Bull Run source will be isolated, becoming an available "emergency source" as are our ground water wells. The WRWTP provides the City with an availability of 5 million gallons per day.

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. This source assessment is available for review.

EPA ON WATER QUALITY

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 federal Environmental Protection Agency (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.

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 (Center 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 1 800-426-4791.

WATER QUALITY CONTAMINATES

Supply Key: **WRWTP** = Surface Water from the Willamette River
PDX = Portland's Bull Run Watershed/Well field
SS = Sherwood Specific from local sample testing

To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. **Your water is tested for approximately 200 contaminates.** These include all contaminates regulated by the EPA, plus a number of unregulated contaminates. 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.

"Contaminate" 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.

REGULATED CONTAMINATES

Supply	Contaminate	Unit of Measure	Amt. Detected low—high	MCL	MCLG	Source
PDX	Arsenic	ppb	<0.50—1.46	10	0	Erosion of natural deposits in groundwater aquifers
WRWTP PDX	Barium	ppm	0.0035—0.0055 0.00072—0.0107	2	2	Erosion of natural deposits in groundwater aquifers
PDX	Chromium	ppb	<0.20—0.50	100	100	Found in natural deposits
WRWTP PDX	Copper	ppm	ND—0.0015 <0.0005—0.00202	AL=1.3	AL=1.3	Found in natural deposits; household plumbing
PDX	Fluoride	ppm	<0.025—0.15	4	4	Found in natural deposits
PDX	Nitrate-Nitrogen	ppm	<0.01—0.024	10	10	Runoff from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
WRWTP PDX	Turbidity ◊	NTU	0.03—0.08 0.19—4.04	0.3	N/A	Soil runoff; erosion of natural deposits

◊ 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 more than two times in a twelve-month period.

UNREGULATED CONTAMINATES

Supply	Contaminate	Unit of Measure	Amt. Detected low—high	MCL	MCLG	Source
WRWTP	Bromodichloro-methane	ppm	0.0005—0.0027	N/A	N/A	Byproduct of water disinfection
WRWTP	Chloroform	ppm	0.0005—0.0094	N/A	N/A	Byproduct of water disinfection
WRWTP	Manganese	ppm	ND—0.0037	N/A	N/A	Erosion of natural deposits
WRWTP PDX	Sodium ◊	ppm	7.60—10 2.93—21.6	N/A	N/A	Erosion of natural deposits; added to water during treatment
WRWTP	Sulfate	ppm	7.4—10	N/A	N/A	Erosion of natural deposits

◊ 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.

TOTAL COLIFORM

Supply	Contaminate	Unit of Measure	Amt. Detected low—high	MCL	MCLG	Source
SS	Total Coliforms & E. Coli ◊	% in monthly samples	1 sample out of 240 had bacteria detected ‡	1 positive sample per month	0	Naturally present in the environment

◊ Total coliform bacteria are used as indicators of microbial contamination of drinking water. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

‡ In August 2014 Sherwood collected 1 positive sample for coliform. Follow-up samples were collected with results being negative.

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DISINFECTION BYPRODUCTS

Supply	Contaminate	Unit of Measure	Amt. Detected low—high	MRDL	MRDLG	Source
WRWTP	Bromate	ppm	0.0016—0.0036	10	0	Byproduct of water disinfection
SS	Chlorine at any 1 site	ppm	<0.1—1.7	N/A	N/A	Water additive to control microbes
SS	Chlorine running annual average	ppm	0.44—0.94	4	4	Water additive to control microbes
SS	Haloacetic Acids	ppm	0.0194—0.0387 Avg.—0.0226	60	N/A	Byproduct of water disinfection
SS	Total Trihalomethanes	ppm	0.0116—0.309 Avg.—0.0225	80	N/A	Byproduct of water disinfection

Violation Note: Sherwood received a violation for late reporting of disinfectant monitoring in December 2014. Samples were collected in January 2015. Sherwood returned to compliance on January 21st, 2015. Contract laboratory failed to collect the necessary samples.

LEAD AND COPPER

Contaminate	# of Samples	AL	MCLG	90th Percentile	Sites Above AL
Lead	0 of 60	15 ppb	0 ppb	0	0
Copper	0 of 60	1.3 ppm	1.3 ppm	0	0

While there is no MCL for lead or copper, the federal government identifies an "action level" (AL) that triggers certain actions by the water provider. The action level is based on the 90th percentile. This means that 90 percent of the samples must be at or below 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. Contact the Safe Drinking Water Hotline at 1 800-426-4791 or *http://water.epa.gov/drink/info/lead/index.cfm* to learn more.

If a health related contaminate is not listed in this report, it was not detected.

DEFINITIONS

Action Level (AL): 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 (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.

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.

Nephelometric Turbidity Units (NTU): a measure of turbidity.

No Detection (ND): In all of the tested samples there was no contaminate detected.

Parts per billion (ppb): 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.

Parts per million (ppm): 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.

WORKING TOGETHER

PARTICIPATE IN THE DISCUSSION

You are invited to join in on the conversation. 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.

WATER QUALITY ACTIVITIES

The City's Public Works and Utility Billing Departments are dedicated to daily activities to bring high quality water to every home. Listed below are several programs that, with the help of our residents and businesses, maintain the integrity and resilience of our entire water system. Read more about each at *sherwoodoregon.gov*.

- Advanced Metering Infrastructure
- Cross-Connection / Backflow Program
- Uni-Directional Hydrant Flushing
- Emergency Preparedness

WATER MASTER PLAN UPDATE

In May of 2015 the City of Sherwood City Council adopted the Water Master Plan Update. The purpose of the revision from the 2005 plan is to perform an analysis of the city's water system, document the system upgrades and estimate future water requirements. Looking out past the next 30 years the plan details many projects that address the growth anticipated for Sherwood. Also included are updates to the city's capital improvement plan and evaluations of rates and charges.

The Water System Master Plan is available for your review on the city's website. Please visit *sherwoodoregon.gov/publicworks* for a copy.

WATER CONSERVATION AT HOME

Indoor conservation begins in the Utility Billing Department with a full array of FREE conservation items. Faucet aerators and low-flow shower heads can replace your current hardware and reduce the amount of water used for each cleaning without losing pressure. Using the toilet dye tablets makes checking for leaks in the toilet a cinch. Plus, the 4-minute shower timer will assist with water-wise habits.

Water use outdoors goes up substantially (2 to 3 times the normal usage) in the hot summer months. There are many ways to reduce your outdoor water usage with a few smart tips. The Regional Water Providers Consortium provides a Watering Number tool that will give customers the perfect amount of water in inches to hydrate your lawns and gardens based upon your zip code, forecasts and historical rainfall data.

These tips and many, many more are available for you to explore at *sherwoodoregon.gov/utilitybilling* and *www.conserveh2o.org*

EMERGENCY PREPAREDNESS

Police, fire and rescue may not always be able to reach you quickly in an emergency or disaster. The most important step you can take in helping your local responders is being able to take care of yourself and those in your care; the more people who are prepared, the quicker the community will recover. Now is a perfect time to prepare and plan in the event you must go for three days without electricity, water service, access to a supermarket, or local services.

Build a Kit: Keep enough emergency supplies - water, nonperishable food, first aid, prescriptions, flashlight, and battery-powered radio on hand - for you and those in your care.

Make a Plan: Discuss, agree on, and document an emergency plan with those in your care. For sample plans, see *Ready.gov*. Work together with neighbors, colleagues, and others to build community resilience.

Get Involved: There are many ways to get involved especially before a disaster occurs. The whole community can participate in programs and activities to make their families, homes safer from risks and threats. Community leaders agree that the formula for ensuring a safer homeland consists of volunteers, a trained and informed public, and increased support of emergency response agencies during disasters.

Stay Informed: Information is available from federal, state, county and city resources. Access *Ready.gov* to learn what to do before, during, and after an emergency.

Timely information could be your key to safety. Sign up today with the City of Sherwood's **Emergency Notification System**, the city's latest tool for providing residents with immediate warnings on water contamination, extreme weather warnings, unexpected road closures and more. Go online at *sherwoodoregon.gov/publicworks* to create your account. Like us on Facebook – City of Sherwood, Oregon Government - and follow us on Twitter - @SherwoodPW - to get up-to-date notices and information.

ADVANCED METERING INFRASTRUCTURE

Our crews have been visiting neighborhoods and installing new hardware and new water meters to expand the city's Advanced Metering Infrastructure, or AMI. This system will allow the Utility Billing Department's customer service representatives to better assist the customers by enabling them to view detailed, time-based information about your home's water consumption.

The benefits of the system are many and include more consistent and accurate readings, 24-hour leak detection and real-time monitoring to reflect usage and conservation efforts.

Want to see if we have switched out your home's water meter with the new smart meter? Learn more about AMI and review our progress throughout Sherwood with our interactive map and watch for signs like the one above in your neighborhood. Visit *sherwoodoregon.gov/AMI* and see when we will be in your area.