

CITY OF COLUMBIA CITY 2015 WATER QUALITY REPORT

In compliance with federal reporting requirements, Columbia City provides you with an annual report of the outcome of our many water quality tests. Our constant goal is to provide you with a safe and dependable supply of drinking water. The cities of St. Helens and Columbia City test water frequently, and we meet or exceed all quality standards required by federal and state requirements. We are required by the Oregon State Health Division to take 2 routine coliform bacteria water samples each month, along with other quarterly and yearly tests.

We continually upgrade our distribution and storage systems by replacing old water mains, repairing leaks, changing water

meters, cleaning our storage reservoirs and updating system maps. Columbia City's three water storage reservoirs provide us with a combined capacity of 1.4 million gallons, which meets our City's storage demands. Our cross-connection program is designed to help prevent any potentially contaminated water from re-entering the City water supply. Columbia City requires a backflow assembly where that potential exists in our system to ensure quality drinking water. This report presents water quality data and explains what it means.



WHERE DOES OUR WATER COME FROM?

Columbia City's water comes from two separate sources. The first source is supplied by two groundwater wells located in the Public Works Shop yard at 1755 Second Place, Columbia City. PW Well #2 is the City's main well, and PW Well #1 serves as a backup well.

The City also purchases water from the City of St. Helens. The City of St. Helens supplies water from a water treatment facility located in Columbia City and one ground well located near the Scappoose Bay Marina in St. Helens. The Scappoose Bay well only operates during emergencies. There are two Ranney Collector Wells in Columbia City that supply water to the treatment plant. The collector wells are located in Columbia City at "K" and First Streets and "E" Street and The Strand. The water treatment facility is a membrane filtration plant that works by running water through a series of synthetic filters that capture sediment, germs and organisms. These filter systems are fully computer-controlled for automatic backwashing and cleaning. There are no chemical additions, except for standard chlorine disinfection and acidity controls.



Columbia City is committed to continually upgrading and improving the quality of our water, our customer service, our water conservation efforts, and our water system. In recent years the City completed a City-wide Water Conservation Project involving the installation of smart meters, updated automated meter reading equipment; significant improvements to the system pressure zones, a system-wide leak detection survey, the abandonment of old redundant piping, and some new fire hydrants. Planned improvements to the upper-level storage reservoir include seismic upgrades, new telemetry, interior and exterior painting and repairs, and the construction of an overflow drain. The City also plans to replace some undersize water mains and add additional fire hydrants.

WATER SERVICE INFORMATION

In case of emergencies, our Public Works personnel are available 24 hours a day, 7 days a week by calling (503) 397-1521. Public Works personnel are certified by the Oregon State Health Department (OSHD) and are trained in all aspects of water distribution and cross-connection. They are required to complete continuing education classes in order to maintain their certification and to keep up-to-date on the latest information and technology in their field.

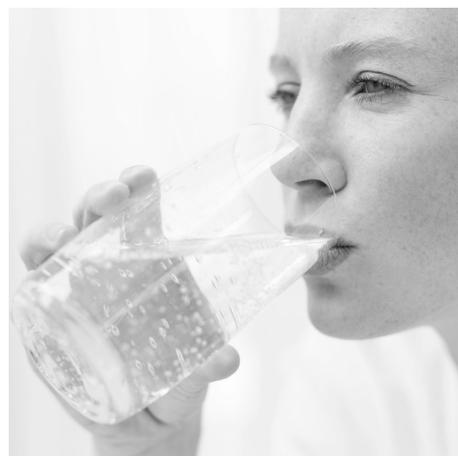
For information and/or participation in decisions about your drinking water, please contact Leahnette Rivers, City Administrator, by calling City Hall, (503) 397-4010. We want our valued customers to be informed about their water utility.

Our regularly scheduled City Council meetings are held on the first and third Thursdays of each month, at 6:00 p.m.

HOW TO READ THIS TABLE

This report is based upon the most recent tests conducted by the Columbia City and St. Helens Water Departments. The frequency of required testing depends on the nature of the test and ranges from daily test to ones conducted every 9yrs.

- **Maximum Contaminant Level (MCL)** – The "Maximum Allowed" (MCL) is 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 "Goal" (MCLG) is 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.
- **Treatment Technique or TT** – A required process intended to reduce the level of a contaminant in drinking water.



The data presented in this report is from the most recent testing done in accordance with regulations. Test results can also be viewed on the Oregon Health Division's website at <http://170.104.63.9/>. To view the test results on the website, enter PWS number 4100203 for Columbia City, and PWS number 4100724 for St. Helens.

Key to Table

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

TT = Treatment Technique

ppm = parts per million or milligrams per liter (mg/l)

ppb = parts per billion or micrograms per liter (mcg/l)

NTU = Nephelometric Turbidity Unit

ND = None Detected

Inorganic Contaminants – Columbia City Well Source

Contaminant	Date Tested	Violation	Range Min.-Max.	Detected Level	Unit	MCL	MCLG	Major Sources
Barium	8/14/13	No	n/a	0.014	ppm	2.0	n/a	Naturally occurring
Sodium	8/14/13	No	n/a	28.4	ppm	n/a	n/a	Naturally occurring
Nitrate	11/25/15	No	n/a	2.80	ppm	10.0	n/a	Naturally occurring
HAA5	Semi-Annually	No	ND-1.3	1.3	ppb	60.0	n/a	Disinfection byproduct
TTHMs	Semi-Annually	No	5.4-9.5	9.5	ppb	80.0	n/a	Disinfection byproduct

Inorganic Contaminants - City of St. Helens Source

Contaminant	Date Tested	Violation	Range Min.-Max.	Detected Level	Unit	MCL	MCLG	Major Sources
Barium	10/24/12	No	n/a	0.013	ppm	2.0	n/a	Naturally occurring
Sodium	10/24/12	No	n/a	14.8	ppm	n/a	n/a	Naturally occurring
Nitrate	9/9/15	No	n/a	1.73	ppm	10.0	n/a	Naturally occurring
TOC	Quarterly	No	1.19-1.56	1.56	ppb	n/a	n/a	Naturally occurring
HAA5	Quarterly	No	0-1.3	1.3	ppb	60.0	n/a	Disinfection byproduct
TTHMs	Quarterly	No	5.0-25.2	25.2	ppb	80.0	n/a	Disinfection byproduct
Turbidity	Daily	No	0.01-0.034	0.034	NTU	TT=0.3	n/a	Soil runoff, sediment

Water Quality Table Footnotes

All contaminants tested were below the Maximum Contaminant Level and none were in violation.

MANDATORY TESTING

The contaminants we monitor are listed below. Only the ones listed in the previous table had detectable levels.

<u>Microbiological Contaminants</u>	Uranium	Pentachlorophenol
Total Coliform Bacteria	<u>Synthetic Organic Contaminants</u>	Picloram
Fecal Coliform	2,4D	Simazene
Turbidity	2,4,5-TP (Silvex)	Toxaphene
<u>Radioactive Contaminants</u>	Alachlor	<u>Volatile Organic Contaminants</u>
Beta/photon emitters	Atrazine	Benzene
Alpha emitters	Benzo(a)pyrene(PAH)	Carbon Tetrachloride
Combined Radium	Carbofuran	Chlorobenzene
<u>Inorganic Contaminants</u>	Chlordane	o-Dichlorobenzene
Antimony	Dalapon	p-Dichlorobenzene
Arsenic	Di(2-ethylhexyl)adipate	1,2-Dichloroethane
Barium	Di(2-ethylhexyl)phthate	1,1-Dichloroethylene
Beryllium	Dibromochloropropane	cis-1,2-Dichloroethylene
Cadmium	Dinoseb	trans-1,2-Dichloroethylene
Chromium	Diquat	Dichloromethane
Copper	Endothall	1,2-Dichloropropane
Cyanide	Endrin	Ethylbenzene
Fluoride	Ethylene dibromide	Stryrene
Lead	Glyphosate	Tetrachloroethylene
Mercury (inorganic)	Heptachlor	1,2,4-Trichlorobenzene
Nickel	Heptachlor epoxide	1,1,1-Trichloroethane
Nitrate (as Nitrogen)	Hexachlorobenzene	1,1,2-Trichloroethane
Nitrite (as Nitrogen)	Hexchlorocyclopentadiene	Trichloroethylene
Selenium	Lindane	THHMs
Sodium	Methoxychlor	Toluene
Sulfate	Oxamyl (Vydate)	Vinyl Chloride
Thallium	PCBs (Polychlorinated)	Xylenes

Lead and Copper Testing

Substance	Units	Goal	Action Level (AL)	90 th Percentile	Homes Exceeding Action Level	Complies?	Source of Contaminate
Copper	ppm	1.3	1.3	0.185	0	Yes	Corrosion of household plumbing
Lead	ppm	0	0.015	0.003	0	Yes	Corrosion of household plumbing

The 90th percentile is the highest result found in 90% of the samples when they are listed in order from the lowest to the highest results. EPA requires testing for lead and copper at customers' taps most likely to contain these substances based on when the house was built. The EPA determined that the sample results did not exceed the Action Level (AL). The above results are from lead and copper samples taken in 2015. Lead and Copper samples will be taken again in 2018.

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 Columbia City 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 water for 30 seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your 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 Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

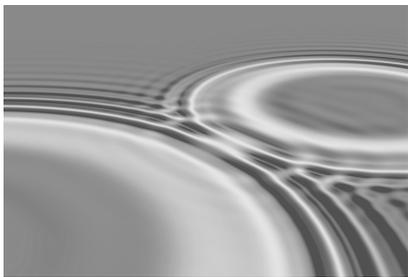
WATER CONSERVATION TIPS

- Install low flow shower heads and aerators on the faucets.
- Upgrade appliances and toilet fixtures as needed with water saving models.
- When washing dishes by hand, don't let the water run. Fill one basin with wash water and the other with rinse water.
- Use the garbage disposal sparingly. Instead, compost vegetable food waste.
- Wash fruits and vegetables in a pan of water instead of running water from the tap.
- Don't let the water run while brushing your teeth.
- Time your shower to keep it under five minutes.
- Toilet leaks can be silent - be sure to test your toilet for leaks at least once a year.
- Plant in the spring and fall, when the watering requirements are lower.
- If the soil is moist, don't water. Allow your lawn and plants to dry out before watering to promote deeper root growth.
- Water deeply, but infrequently, and only water when necessary.
- Use a hose nozzle when watering or washing your car.
- Monitor your water usage to help detect leaks, and promptly fix leaking plumbing and faucets.

ADDITIONAL HEALTH INFORMATION

To ensure that tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Safe Drinking Water Hotline at (800) 426-4791.



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 radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Organic chemical contaminants**, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, stormwater runoff and residential uses.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.

THANK YOU! The City of Columbia City works around the clock to provide top quality water to every tap. Should you experience any problems with your water or, just want to ask a question, please contact us. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

CITY HALL:

Hours: 8 a.m. – 12 p.m. and 1 p.m. – 5 p.m., Monday–Friday
Phone (503) 397-4010 Fax (503) 366-2870

CITY SHOP:

Hours 8 a.m. – 5 p.m., Monday–Friday Phone (503) 366-0454

AFTER HOURS EMERGENCY PHONE: (503) 397-1521

VISIT OUR WEB SITE: www.columbia-city.org

E-MAIL US AT: colcity@columbia-city.org