

# City of Troutdale 2016 Water Quality Report

## Water Quality Information

In 2016, the City of Troutdale's water system is considered an "Outstanding Performer" under the criteria set by the Oregon Health Authority. Our water quality was found to exceed all mandated Federal and State standards. We had no violations and are not operating under any variance or exemption. This report summarizes the quality of water provided to our customers last year, along with additional information that you may find helpful, such as where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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 the 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. The City welcomes your questions and comments about this report and other matters concerning your water. Contact David Schaffer at (503) 674-3305.

## Where Does Your Water Come From?

Your water comes from seven City-owned-and-operated groundwater wells within the City that are drilled to various depths ranging between 485 and 697 feet. The water is provided from two aquifers, known hydrologically as the Sand & Gravel Aquifer and the Troutdale Sandstone Aquifer.

## How Do Contaminants Get Into Water Supplies?

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.

## Source Water Assessment

The 1996 Amendments to the Safe Drinking Water Act require that all states conduct Source Water Assessments for public water systems within their boundaries. The assessments consist of (1) identification of the Drinking Water Protection Area, i.e., the area at the surface that is directly above that part of the aquifer that supplies groundwater to our wells, (2) identification of potential sources of pollution within the Drinking Water Protection Area, and (3) determining the susceptibility or relative risk to the well water from those sources. The purpose of the assessment is to provide water systems with the information they need to develop a strategy to protect their drinking water resource if they choose. *The Department of Human Service's Drinking Water Program has completed the identification of the Drinking Water Protection Area for our system. A map showing this area is on file at our office.*

## Want Additional Information?

### Special Information Available

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 from 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 and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Non-Health Related Water Issues

To have your questions answered on issues such as water pressure, water leaks, staining, taste, odor or appearance, call the Public Works Department at (503) 674-3300. Public participation with regard to the City's water system is welcomed. For information regarding City Council meetings, please contact Sarah Skroch, City Recorder, at (503) 674-7258.



Provided by: City of Troutdale,  
Water Division  
342 SW 4th Street, Troutdale,  
OR 97060

## Information The EPA wants you to know

- In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.
- While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.
- During disinfection, certain byproducts, which can have negative health effects, form as a result of chemical reactions between chlorine and naturally occurring organic matter in the water. The disinfection process is carefully controlled to remain effective, while keeping byproduct levels low. HAA5's and Trihalomethanes are the regulated disinfection byproducts found in Troutdale's system.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, 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, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 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 lead service lines and home plumbing. The City of Troutdale does not have lead service lines, and 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 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 <http://www.epa.gov/safewater/lead>.

# What's In Your Water

Most of the many substances we are required to monitor are not represented in our water system. Here is a table with information on those substances which have been detected. This is the most recent monitoring done in compliance with regulations. All water sources are analyzed for Inorganic Contaminants (minerals and metals) every nine years.

## RESULTS OF MONITORING FOR REGULATED CONTAMINANTS

Substance	Unit of Measurement	Ideal Goals (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Level Detected in Troutdale's Water				Sources of Contaminant
				Low	High	Average	Violation	
Nitrate	ppm	10 ppm	10 ppm	0	2.19	.3807	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Cyanide	ppb	200 ppb	200 ppb	0	22	3.1	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories.
Barium	ppm	2 ppm	2 ppm	.00149	.0471	.0212	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Fluoride	ppm	4 ppm	4 ppm	0	.311	.0919	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Arsenic	ppb	N/A	10 ppb	0	3.36	.5925	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Total Trihalomethane	ppb	N/A	80 ppb	0	0	0	No	Byproduct of water treatment process.
HAA5's	ppb	N/A	60 ppb	0	.5	.25	No	Byproduct of water treatment process.
Combined Radium 226/228	Pci/L	N/A	5pci/L	0	1.39	.199	No	Radioactive contaminants can be naturally occurring or can be the result of oil and gas production and mining activities.

## RESULTS OF MONITORING FOR LEAD & COPPER \*

Substance	Unit of Measurement	Ideal Goals (EPA's MCLG)	EPAs Action Level (AL)	90th Percentile	Exceeding AL	Violation	Sources of Contaminant
Lead	ppb	0 ppb	AL = 15 ppb	2.6 ppb	0	No	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	ppm	1.3 ppm	AL = 1.3 ppm	.0292ppm	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

\* Samples were collected in 2014 in accordance with regulations.

## RESULTS OF MONITORING FOR MICROBIOLOGICAL CONTAMINANTS

Substance	Unit of Measurement	Ideal Goals (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Positive Sample #	Total Samples Collected	Violation	Sources of Contaminant
Total Coliform Bacteria	Positive or Negative	0 Positive	Presence of coliform bacteria in 5% of monthly samples	0	180	No	Naturally present in the environment. Indicates that other potentially harmful organisms may be present.

## RESULTS OF MONITORING FOR UNREGULATED CONTAMINANTS

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help the EPA decide whether the contaminants should have a standard.

Unregulated Contaminant	Low	Average	High	Sources of Contaminant	Information
Sodium	16.7 ppm	27.842 ppm	50.3 ppm	Added to water during treatment; erosion of natural deposits.	Sodium is not currently regulated and thus has no drinking water standard. Persons following a sodium reduced diet should consult a physician regarding levels of naturally occurring sodium in the City's water.
Molybdenum	0	1.45625 ppb	2.7 ppb	Erosion of natural deposits.	Molybdenum is a naturally-occurring metal that can be found in small amounts in rocks and soil. It is also present in plants, animals and bacteria. Molybdenum is most commonly used in the production of structural steel, stainless steel, cast iron and other alloys. It is also used in the manufacture of a number of electronic components, pigments, and other specialty applications, and it can be used in metal finishing processes as a replacement for hexavalent chromium.
Strontium	51 ppb	72.875 ppb	120 ppb	Erosion of natural deposits, air contamination, milling processes, coal burning or phosphate fertilizers.	Strontium is an alkaline earth metal that is found naturally in the minerals Celestine and strontianite. Strontium shares many physical and chemical properties with calcium and barium, and is highly susceptible to chemical changes.
Vanadium	0	.31875 ppb	.65 ppb	Erosion of natural deposits.	Vanadium is a metal that naturally occurs in many different minerals and in fossil fuel deposits. The primary industrial use of vanadium is in the strengthening of steel.
Chlorate	0	60.5625 ppb	130 ppb	Added to water during treatment.	The term "chlorate" most commonly refers only to chlorine in the +5 oxidation state, or chlorate ion. Chlorate ion is a known byproduct of the drinking water disinfection process, forming when sodium hypochlorite or chlorine dioxide are used in the disinfection process.
Hexavalent Chromium	0	.00225 ppb	.036 ppb	Erosion of natural deposits, or as a result of industrial activities.	Hexavalent chromium is one of the chemical forms of chromium, which can be present in different forms in the environment, changing from one form to another in water and soil. Hexavalent chromium is also commonly called chromium 6, chromium VI, chrome 6, Cr(VI), Cr+6 or hex chrome.

## DEFINITIONS

Maximum Contaminant Level Goal (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.	Action Level: Concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.	Pci/L = Picocuries per Liter
Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.	Maximum Residual Disinfectant Level (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.	
Parts Per Billion (ppb): One part per billion is comparable to one penny in \$10,000,000. Parts Per Million (ppm): One part per million is comparable to one penny in \$10,000.	Maximum Residual Disinfectant Level goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDL's do not reflect the benefits of the use of disinfectants to control microbial contamination.	