



2019 Water Quality Report

Water System ID: 4100149

Your Water is Safe to Drink

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. If you have any questions about this report or about your water utility, please contact us at (541) 469-1103.

Drinking Water Sources

Brookings City water comes from beneath the Chetco River through a well intake assembly located four miles from Brookings. The intake water from this facility is designated by the Oregon Health Authority (OHA) as a groundwater source and is pre-filtered naturally through many layers of sand before underground intake. Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century. Our water treatment plant also has capabilities for filtering and sedimentation if needed.

Water Quality Monitoring

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Water Quality Data

The table in this report, which can be found on the following page, lists all the drinking water contaminants we detected during the 2019 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table is from testing done January 1 through December 31, 2019. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Lead-Specific Information

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 Brookings 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 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 is available from the Safe Drinking Water Hotline at 800-426-4791 or at: <http://www.epa.gov/safewater/lead>.

Source Water Assessment

In May 2002 and October 2017, the Oregon Health Authority performed a Source Water Assessment on our system and results indicated that the water system would be moderately to highly susceptible if a contamination event occurred inside the identified Drinking Water Protection Area as well as within the North Fork watershed. The assessment results are available on the City of Brookings website at:

<https://www.brookings.or.us/ArchiveCenter/ViewFile/Item/576>

and

<https://www.brookings.or.us/ArchiveCenter/ViewFile/Item/575>.

Contaminants in Water

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 EPA's Safe Drinking Water Hotline 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 can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- *Pesticides & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff, and septic systems.

Public Participation Opportunities

The public is invited to attend City Council meetings the 2nd and 4th Mondays of the month at 7 pm at City Hall, 898 Elk Drive.



In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below:

AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

MCL - Maximum Contaminant Level, or 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.

MCLG - Maximum Contaminant Level Goal, or 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.

MRDL - Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

MRDLG - Maximum residual disinfectant level goal, or 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.

NA – Not applicable.

ND – Not detectable at testing limit.

Parts per billion (ppb) or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l) – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.

pCi/L - picocuries per liter (a measure of radioactivity).

RAA - Running Annual Average.

Table of Detected Contaminants

Substance	MCL [MRDL]	MCLG [MRDLG]	Our Water	Range of Detection	Sample Date	Violation	Typical Source of Contamination
Lead and Copper							
Copper (ppm) action level at consumer taps	1.3 (AL)	1.3	0.1	0 sites exceeded the AL	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb) action level at consumer taps	15 (AL)	0	1.3	0 sites exceeded the AL	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contaminants							
Barium (ppm)	2	2	0.03	NA	2016	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (optional) (ppm)	NA	NA	10.3	NA	2016	No	Erosion of natural deposits; Leaching
Radioactive Contaminants							
Alpha emitters (pCi/L)	0	15	1.2	NA	2016	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	0.15	NA	2016	No	Erosion of natural deposits
Disinfectants & Disinfection By-Products							
(There is convincing evidence that that addition of a disinfectant is necessary for control of microbial contaminants)							
Chlorine (as Cl ₂) (ppm)	4	4	0.7 (RAA)	0.18 – 1.21	2019	No	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	NA	80	31	NA	2019	No	By-product of drinking water disinfection

Violations:

- In February 2019, we failed to provide the State the 4-log Treatment report in a timely manner. Therefore; a treatment technique violation was given to the system. However; the State waived the public notice requirements given that the delayed data showed the public was not in risk. The system returned to compliance in June 2019.
- In April 2019, repairs were made to the City of Brookings water treatment system following a disinfection system equipment failure. The equipment failure resulted in a violation for failure to maintain 4-log treatment under the Groundwater Rule. The City of Brookings customers were notified of this issue in a Public Notice on April 17, 2019. The system returned to compliance in June 2019.

Special Population Advisory

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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/Center for Disease Control guidelines on how to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.