

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020



Presented By
City of Washougal



Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges

of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Washington State Department of Health has a website (<https://goo.gl/fyO8XH>) that provides complete and current information on water issues in Washington, including valuable information about our watershed.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and the Washington Department of Health prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and Washington Department of Agriculture 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

QUESTIONS?

The City of Washougal is dedicated to providing our community and all its visitors with drinking water of the highest quality. For more information about this report, or for any questions relating to your drinking water, please contact Ryan Baker, Water/Wastewater Superintendent, at (360) 835-2662 or ryan.baker@cityofwashougal.us.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

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We remain vigilant in delivering the best-quality drinking water

Where Does My Water Come From?

The City of Washougal has two sources supplying our drinking water. Our main production facility is located on the west end of town at 411 Third Street.

Production at this site started in 1942 with Well SO5. Through the years, as demand increased, four additional wells were drilled: SO6 in 1947, SO7 in 1954, S11 in 1983, and S13 in 2007. Our second source is primarily used in the summer and is located in Upper Hathaway Park at 2801 I Street. Here, we have one active well, SO4, drilled in 1931. Combined, these two sources provided roughly 550 million gallons of clean drinking water last year.

What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, don't use any container with markings on the recycle symbol showing "7 PC" (that's code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can only survive 1 week without water.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of drinking water?

It could take up to 45 minutes to produce a single glass of drinking water.

How many community water systems are there in the U.S.?

About 53,000 public water systems across the United States process 34 billion gallons of water per day for home and commercial use. Eighty-five percent of the population is served by these systems.

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4–6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.



Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to the SWAP, our water system had a susceptibility rating of "medium." If you would like to review the SWAP, please feel free to contact our office during regular office hours.

Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



Water Treatment Process

Our treatment process consists of two steps. First, chlorine is added as a precaution against any bacteria that may enter the system through line breaks or low-pressure events. We carefully monitor the residual chlorine levels, adding the lowest quantity necessary to protect the safety of your water without compromising taste. Next, sodium hydroxide is added to adjust the pH in an effort to minimize the natural corrosion of pipes and plumbing fixtures. After treatment, the water is pumped to sanitized reservoirs and the distribution system and into your home or business.



Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates). The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water.

For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States. People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their website at <https://goo.gl/Jxb6xG>.

Community Participation

You are invited to participate in our public forum and voice concerns about your drinking water. City council, planning commission, and council workshop meetings are open to the public to voice questions or concerns regarding your water. Please visit our website at www.cityofwashougal.us for a schedule. Meetings are held at City Hall, 1701 C Street, Washougal.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.



The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2020	[4]	[4]	0.64	0.2–1.5	No	Water additive used to control microbes
Nitrate (ppm)	2020	10	10	1.8	0.5–1.8	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	3.1	2.0–3.1	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %ile)		Sites Above AL/Total Sites	Violation
Copper (ppm)	2020	1.3	1.3	0.39		0/30	No
Lead (ppb)	2020	15	0	3.2		0/30	No

SECONDARY SUBSTANCES							
Substance (Unit of Measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range Low-High	Violation	Typical Source
Chloride (ppm)	2014	250	NA	2.66	ND–2.66	No	Runoff/leaching from natural deposits
pH (units)	2020	6.5–8.5	NA	7.21	6.44–7.92	No	Naturally occurring
Sulfate (ppm)	2014	250	NA	3.91	ND–3.91	No	Runoff/leaching from natural deposits; Industrial wastes



UNREGULATED AND OTHER SUBSTANCES

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
Bromide (ppb)	2019	20	20–20	NA
Bromoacetic Acid (ppb)	2019	0.46	0.38–0.46	Disinfection by-product
Chlorodibromoacetic Acid (ppb)	2019	0.34	0.34–0.34	Disinfection by-product
Conductivity ($\mu\text{mho}/\text{cm}$)	2018	160	150–160	Naturally occurring
Dibromoacetic Acid (ppb)	2019	16	16–16	Disinfection by-product
Dichloroacetic Acid (ppb)	2019	0.75	0.36–0.75	Disinfection by-product
Hardness [Total, as CaCO_3] (ppm)	2018	45	38–45	Naturally occurring
Magnesium (ppm)	2018	3.3	NA	Naturally occurring
Manganese (ppb)	2019	0.48	ND–0.48	Naturally occurring
Sodium (ppm)	2018	15	13–15	Naturally occurring
Trichloroacetic Acid (ppb)	2018	0.79	ND–0.79	Disinfection by-product
Turbidity (NTU)	2018	0.18	ND–0.18	Naturally occurring

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): 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): 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): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

$\mu\text{mho}/\text{cm}$ (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.

