

ANNUAL WATER QUALITY REPORT

Reporting Year 2021

Presented By



We've Come a Long Way

Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Fixtures With Green Stains

A green or blue-green stain on kitchen or bathroom fixtures is caused by tiny amounts of copper that dissolve in your home's copper plumbing system when the water sits unused overnight. Copper staining may be the result of a leaky faucet or a faulty toilet flush valve, so be sure your plumbing is in good working order.

Copper stains may also be caused by overly hot tap water. Generally speaking, you should maintain your water temperature at a maximum of 120 degrees Fahrenheit. You should consult the owner's manual for your heater or check with your plumber to determine your current heat setting. Lowering your water temperature will reduce the staining problem and save you money on your energy bill.

Also keep in mind that a tap that is used often throughout the day usually will not produce copper stains, so if you flush the tap for a minute or so before using the water for cooking or drinking, copper levels will be reduced.

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 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

Community Participation

You are invited to participate in our public forum and voice concerns about your drinking water. City Council meetings, Planning Commission meetings, and Council Workshop meetings are open to the public so you can ask questions or raise concerns about your drinking water. Please visit our website at www.cityofwashougal.us for a schedule. Meetings are held at City Hall, 1701 C Street, Washougal, WA.

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <https://www.atsdr.cdc.gov/pfas/index.html>.

QUESTIONS?

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

Where Does My Water Come From?

The City of Washougal has two sources supplying our drinking water. Our main production facility is located in 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 600 million gallons of clean drinking water last year.

BY THE NUMBERS



The number of Americans who receive water from a public water system.

300
MILLION

1
MILLION

The number of miles of drinking water distribution mains in the U.S.

34
BILLION

The number of gallons of water produced daily by public water systems in the U.S.

135
BILLION

The amount of money spent annually on maintaining the public water infrastructure in the U.S.

151
THOUSAND

The number of active public water systems in the U.S.

199
THOUSAND

The number of highly trained and licensed water professionals serving in the U.S.

2
BILLION

The age in years of the world's oldest water, found in a mine at a depth of nearly two miles.

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

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>.



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, the distribution system, and into your home or business.

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.

REGULATED SUBSTANCES

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2021	[4]	[4]	0.65	0.3–1.0	No	Water additive used to control microbes
Nitrate (ppm)	2021	10	10	2.0	0.58–2.0	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2021	80	NA	3.7	0.78–3.7	No	By-product of drinking water disinfection
Gross Alpha (pCi/L)	2021	15	0	2.97	2.82–2.97	No	Naturally occurring radioactive elements emit alpha particles as they decay
Radium 228 (pCi/L)	2021	5	0	0.829	0.716–0.829	No	In the natural environment, radium occurs at trace levels in virtually all rock, soil, water, plants and animals

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	Typical Source
Copper (ppm)	2020	1.3	1.3	0.39	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	3.2	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

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
Copper (ppm)	2021	1.0	NA	0.070	0.022–0.070	No	Erosion of natural deposits
pH (Units)	2021	6.5–8.5	NA	7.15	6.83–7.62	No	Naturally occurring
Sulfate (ppm)	2014	250	NA	3.91	ND–3.91	No	Runoff/leaching from natural deposits; Industrial wastes

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.

pCi/L (picocuries per liter): A measure of radioactivity.

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.

µmho/cm (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.

UNREGULATED SUBSTANCES

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
Bromodichloromethane (ppb)	2021	1.1	ND–1.1	Disinfection by-product
Chloroform (ppb)	2021	1.9	0.78–1.9	Disinfection by-product
Dibromochloromethane (ppb)	2021	0.66	ND–0.66	Disinfection by-product

OTHER SUBSTANCES

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
Calcium (ppm)	2021	9.9	6.2–9.9	Naturally occurring
Conductivity (µmho/cm)	2021	140	98–140	Naturally occurring
Dichloroacetic Acid (ppb)	2021	1.0	ND–1.0	Disinfection by-product
Hardness (ppm)	2021	36	24–36	Naturally occurring
Magnesium (ppm)	2021	2.8	2.0–2.8	Naturally occurring
Sodium (ppm)	2021	11	9.2–11	Naturally occurring
Turbidity (NTU)	2021	0.31	0–0.31	Naturally occurring

Substances That Could Be in Water

In order to ensure that tap water is safe to drink, the U.S. EPA and the Department of Health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and the 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.