

City of Bellevue Water Quality Report 2021

Results from testing in 2020. This report contains important information about your drinking water.



PWS ID 05575B

WATER SOURCE

The clean and safe water you drink every day comes from the Cedar River and the south fork of the Tolt River. This water is obtained through Cascade Water Alliance (Cascade) which purchases its water from Seattle Public Utilities on behalf of its member utilities. Cascade also owns Lake Tapps, which can serve as a future source of municipal drinking water if needed.

Cascade is a municipal corporation formed in 1999 to provide a reliable source of water to municipalities in the region. It includes Bellevue, Issaquah, Kirkland, Redmond, Tukwila, Sammamish Plateau Water, and the Skyway Water and Sewer District. Each member has a voice in determining its community's future availability of clean, safe and reliable drinking water.

In addition, Cascade plans and implements programs, events, outreach and education to all of its partner agency residents, students, businesses and the community at large. These programs help demonstrate the best ways to use water wisely, including providing free conservation items and resources found at www.cascadewater.org.

Saving water today means delaying the need to develop additional water sources in the future. Bellevue Utilities and Cascade, in collaboration with other members and major regional water providers, are actively planning to meet current and future water supply needs. This will ensure that enough water will be available to serve growing populations and in case of natural or other emergencies.

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COVID-19 INFO

It has been over a year since the start of the pandemic. We hope you and your family are safe and healthy, and we want to assure you that Bellevue Utilities continues to deliver high quality and safe drinking water. During this challenging time, our staff have continued to perform essential work to support your services, such as operating the distribution system, conducting routine maintenance, performing emergency repairs, collecting water samples, and improving our water infrastructure.

For the most up-to-date information regarding COVID-19, please visit City of Bellevue's website at www.bellevuewa.gov/COVID-19 or the Washington State Department of Health website at www.doh.wa.gov/emergencies/COVID19.

If you have any questions or concerns about your drinking water, please contact us at Bellevue Utilities, 425-452-7840.



2020 was a challenging year. Whether working from home or out in the field conducting maintenance and repairs, our staff and frontline workers have worked tirelessly to provide high quality and safe drinking water to everyone in our community.

WATER TREATMENT

To protect your health and improve the water quality, our drinking water supply from the Tolt River and Cedar River is disinfected with ultraviolet light (UV) and ozone. Disinfection using ozone is very effective at destroying Cryptosporidium and other microbial organisms. Chlorine is added to your water to prevent diseases such as cholera, giardiasis, and salmonellosis and to act as a protective barrier from recontamination while water is in the distribution system. The average level of chlorine in your drinking water was 0.90 parts per million (ppm) in 2020. Fluoride is added by SPU during treatment to prevent tooth decay, in accordance with a Seattle public vote in 1968. The average fluoride level in your drinking water was 0.66 ppm in 2020. In addition, sodium hydroxide is added to the water supply to raise pH levels (a measurement of acidity) to a target of 8.2. These pH levels are adjusted to make the water less corrosive to plumbing and reduce the amount of lead and copper that can dissolve into drinking water. After treatment, your water contains very few contaminants, and those present are below the allowable limits.

Chlorine | Fluoride $\mathbf{\tilde{c}}$ parts per million





WATER QUALITY DATA

Your water is monitored and tested extensively throughout the year. After testing nearly 200 chemical compounds, only a few were detected (see table below). If you would like to see the

complete list of chemical compounds that were tested but not detected in 2020, please call Water Quality at 425-452-6192 or visit BellevueWA.gov/Water-Quality.

		EPA's Allowable Limits		Levels in Cedar Water		Levels in Tolt Water					
Detected Compounds	Units	MCLG	MCL	Average	Range	Average	Range	Typical Sources			
Raw Water											
Total Organic Carbon	ppm	NA	тт	0.7	0.3 to 1.1	1.15	1.0 to 1.3	Naturally present in the environment			
Finished Water											
Turbidity	NTU	NA	TT	0.3	0.15 to 3.1	0.04	0.02 to 0.18	Soil runoff			
Arsenic	ppb	0	10	0.4	0.4 to 0.5	0.4	0.3 to 0.5	Erosion of natural deposits			
Barium	ppb	2000	2000	1.5	1.4 to 1.7	1.2	1.1 to 1.3	Erosion of natural deposits			
Bromate	ppb	0	10	0.2	ND to 5	ND	ND	By-product of drinking water disinfection			
Fluoride	ppm	4	4	0.7	0.6 to 0.8	0.7	0 to 0.8	Water additive, which promotes strong teeth			
Total Trihalomethanes	ppb	NA	80	Average = 32 Range = 22.5 to 53.0				By-products of drinking water chlorination			
Haloacetic Acids (5)	ppb	NA	60	Average = 37 Range = 17.9 to 50.7							
Chlorine	ppm	MRDLG = 4	MRDL = 4	Average = 0.90 Range = 0.06 to 1.77				Water additive used to control microbes			

DEFINITIONS

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.

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.

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.

TT: Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

NTU: Nephelometric Turbidity Unit - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2019 is 5 NTU, and for the Tolt supply it was 0.3 NTU for at least 95% of the samples in a month. 100% of Tolt samples in 2019 were below 0.3 NTU.

NA: Not Applicable

ND: Not Detected

ppm: 1 part per million = 1 mg/L = 1 milligram per liter

ppb: 1 part per billion = 1 ug/L = 1 microgram per liter

1 ppm =1000 ppb



LEAD AND COPPER

REDUCING LEAD FROM PLUMBING **FIXTURES**

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. Bellevue Utilities 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 at 1-800-426-4791 or at www.epa.gov/safewater/lead.

In 2020, tap water samples were collected and analyzed for lead and copper from 62 homes throughout the Bellevue Utilities service area. These samples are collected every three years as required by the Washington State Department of Health. Our next round of sampling will be in August 2023. Below are the 2020 sample results.

Lead and Copper Monitoring Results										
Parameter and Units	MCLG	Action Level*	2020 Results**	Homes Exceeding Action Level	Source					
Lead, ppb	0	15	5.1	0 of 62	Corrosion of household					
Copper, ppm 1.3		1.3	0.16	0 of 62	plumbing systems					

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile: i.e. 90 percent of the samples were less than the values shown.



PREVENTING LEGIONELLA GUIDANCE TO REOPENING BUSINESSES

Legionella are pathogenic bacteria that can cause serious lung infection.

Many buildings are closed to the public or have limited access in order to help slow the spread of COVID-19. The resulting drop in building water use increases the risk of the formation of biofilm which supports Legionella growth in building plumbing and associated equipment like cooling towers, pools, decorative fountains, hot tubs and other equipment. To prevent Legionella growth, these systems must be actively managed and maintained. If Legionella grows during lowuse periods, building users have a higher risk of contracting Legionnaires' disease and Pontiac Fever during the shutdown and when full use resumes. While Legionella is a primary risk, other opportunistic pathogens and metal corrosion concerns are increased by closure or reduced use situations.

Building closures and reduced occupancy affect all environmental systems operating inside buildings including 1) potable and non-potable water systems, 2) cooling towers, and 3) heating, ventilation and air conditioning (HVAC) that regulate interior relative humidity and control mold. These systems must be actively managed and maintained to protect the health of building users. In addition to managing systems during shutdown periods, building owners and operators need to implement thoughtful start up protocols to ensure the protection of staff and the public. (Source: WA Dept. of Health)

For more information on Legionella and guidance on safe reopening procedures, please visit Washington Department of Health's website at www.doh.wa.gov/ CommunityandEnvironment/ DrinkingWater under Building Plumbing System Guidance, or the Centers for Disease Control and Prevention website at www.cdc.gov/legionella/index.html.



PREVENTING BACKFLOW TO KEEP OUR Reverse flow can be DRINKING created by a change in water WATER pressure. **CLEAN** AND SAFE

Water pressure may be reduced because of a break in the water main.

Without a backflow prevention assembly, dangerous contaminants can be drawn into the drinking water supply.

Locate or install a backflow assembly device.

If you have an underground irrigation system, check to see if you have a backflow assembly. The backflow assembly is a brass valve usually found between your water meter and the point where your water service line enters your home, usually in a small green box similar to a meter box. If your irrigation system does not include a backflow assembly or if you are installing a new underground irrigation system, City of Bellevue plumbing code requires you to install a Double Check Valve Assembly (DCVA) at a minimum.

Test your backflow assembly device annually.

Backflow assembly device

Once installed or located, you must have it tested annually by a state-certified backflow assembly tester. This ensures that the assembly is functioning properly to protect the public drinking water. For a list of state-certified testers or any questions on backflow assembly testing, please contact City of **Bellevue Backflow Prevention** at 425-452-4201 or visit BellevueWA.gov/backflow.

Properly maintain vour irrigation system.

When winterizing your irrigation system, make sure the compressed air is connected to a properly installed blowout connection to avoid inadvertently introducing air into our water distribution system.





MESSAGE FROM THE US EPA

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. 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. 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.

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. Environmental Protection Agency/ Centers for Disease Control 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 1-800-426-4791.

WATER USE EFFICIENCY

Using water efficiently is important to provide a safe, reliable supply of water for our community's needs today and in the future. On behalf of Bellevue and other members, Cascade will dedicate resources to achieve a cumulative, annual drinking water savings of 0.4 million gallons per day by December 31, 2022.

In 2020, Bellevue Utilities supplied 5.56 billion gallons of water to its customers. Bellevue's water system is fully metered. The city does its part to encourage the efficient use of water by minimizing water loss caused by leaks throughout its distributions system. Distribution system leakage or water loss was 4.0 percent of total consumption in 2020, below the Washington State standard of 10 percent.

Cascade Water Alliance (Cascade) provides water efficiency programs and services on behalf of its members, which are Bellevue, Issaquah, Kirkland, Redmond, Tukwila, Sammamish Plateau Water District, and Skyway Water and Sewer District. In 2020 Cascade responded to the pandemic by adopting conservation program measures for remote delivery options and continuing to offer some programs unchanged.

Highlights of the 2020 water efficiency program include:

- Classroom presentations for water education
- · Remote learning materials developed for students to continue their studies of water at home
- Online learning packets accessed 8,205 times
- 295 classroom presentations delivered with 7,053 student impacts
- Supporting videos developed for learning materials
- Live remote classes offered
- Support of teachers and students who want more in-depth learning about water systems and water issues through the Problem-Based Learning for Water Systems program
- Launch of the "We Need Water" campaign showcasing Cascade's programs and water issues
- 3,214 rebates for EnergyStar and WaterSense showerheads and clothes washers

- 3,392 free shower timers, rain gauges, toilet leak detection dye, and other conservation items provided through Cascade's website
- Free conservation items delivered upon request to multifamily properties and Cascade members for distribution to customers
- Participation in the Northwest Flower and Garden Show
- · Live remote gardening classes
- Promotion of the US EPA's annual Fix A Leak Week
- Irrigation system assessments for high-use customers such as school districts, parks departments, and homeowner associations
- Partnership with Tilth Alliance to deliver the Soil and Water Stewardship program, which trains residents on sustainable landscaping, rainwater harvesting, drip irrigation, and other water-related topics

- Partnership with the Lake Washington Institute of Technology to offer the Sustainable Landscape Technologies accredited program to train students and industry professionals on the fundamentals of efficient irrigation system management and sustainable landscaping
- Partnership with the Sno-King Watershed Council to train residents as stream monitors

These programs and services promoted water efficiency and stewardship of our water resources, resulting in thousands of customer interactions representing all Cascade members, and achieved an estimated savings of 48,316 gallons of water per day in 2020. Along with 2019 savings, this represents 47.7% of Cascade's 2019 – 22 Water Use Efficiency Goal.

To learn more about water efficiency programs and what you can do to save water, visit Cascade Water Alliance at www.cascadewater.org/ conservation.php.



THE VALUE OF WATER

MORNINGS WOULDN'T BE THE SAME WITHOUT WATER

You may not think about how water gets to you or where it goes when it swirls down the drain. You don't have to, because we do. We run the treatment plants, pumps and pipes that deliver clean water and safely carry away and clean wastewater. But those systems are aging. Many parts need to be fixed, upgraded or replaced to continue to provide life's most essential resource. Waiting until they break down is not an option.

Your water and wastewater bills pay for investments that guarantee clean, safe water is available from the moment you wake up. And all day, every day.

Essential. Reliable. Invaluable.

Learn how water works for you. Visit TheValueofWater.org

Learn more about how Bellevue is investing in your water system at BellevueWA.gov/Utilities-Capital-Projects



DOH.wa.gov/drinkingwater



thevalueofwater.org

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WATER FAQ

Is Bellevue's drinking water hard or soft?

Bellevue's drinking water is very soft. It is not necessary to use special water softeners for your clothes or dishwashing machines. Water's "hardness" and "softness" is due to its concentration of minerals, such as calcium and magnesium. Water is considered "softer" when it contains a lower mineral content. Bellevue's drinking water has a hardness of approximately 1.42 grains per gallon or 24.3 mg/L.

Should I get my water tested?

Bellevue's drinking water has been tested and monitored extensively to ensure its safety and quality. In addition to 16 online analyzers that monitor the water quality 24/7, 150 bacteriological samples are collected every month. Moreover, extensive chemical analyses are done every quarter. If you would like to proceed with self-conducted testing, we recommend using a state-certified drinking water laboratory and avoiding any home test kits or online vendors that are not certified by the state. To find a certified laboratory, please visit ecology.wa.gov/Regulations-Permits/ Permits-certifications/Laboratory-Accreditation. For sampling results or questions on testing, please contact Water Quality at 425-452-6192.

Why are there pink or black stains in sinks and around drains?

Those pink or black stains are a mixed culture of airborne yeast, mold, and/or bacteria which grow well in moist conditions. They are not from your drinking water. These occurrences can increase especially in the summer when humidity and warmer temperatures increase microbial growth rates. Frequent cleaning can remove these.

Who should I contact if my water has an unusual smell, taste, or appearance?

A change in your water's smell, taste, or color is not necessarily a health concern. However, sometimes changes can be a sign of problems. If you notice a change in your water, please call Bellevue Utilities at 425-452-7840.





City of Bellevue Utilities PO Box 90012 Bellevue, WA 98009-9012

ECRWSS POSTAL CUSTOMER

Important Contact Information

City of Bellevue Utilities Operation and Maintenance

2901 115th Ave NE, Bellevue, WA 98004 Monday thru Friday: 7:00 am - 3:30 pm Email: OMSupport@bellevuewa.gov Website: www.bellevuewa.gov/utilities

Utilities employees are on-call to respond to emergencies 24 hours a day. For questions or help with drinking water quality, cross connections and backflow assembly testing, water main breaks, flooding, sewer overflows, or pollutant spills, please call 425-452-7840.

During non-working hours, emergency calls are answered by staff who will contact the appropriate stand-by personnel.

Get involved! The Environmental Services Commission is a citizen group that advises The Bellevue City Council on Utilities issues. Email ESC@bellevuewa.gov or visit **BellevueWA.gov/ESC** for meeting dates and other information.

Citv Hall

450 110th Ave NE, Bellevue, WA 98009-9012 Service First (general information) 425-452-6800 www.bellevuewa.gov

Utility Billing 425-452-6973 To pay your utility bill online, please visit www.myutilitybill.bellevuewa.gov

Permit Processing 425-452-4898 www.mybuildingpermit.com

EPA Hotlines Safe Drinking Water 1-800-426-4791 water.epa.gov

Washington State Department of Health Office of Drinking Water 253-395-6750 www.doh.wa.gov/CommunityandEnvironment/ **DrinkingWater**

This report contains important information about your drinking water. To read it in other languages, visit **www.bellevuewa.gov/drinkingwaterquality**

Các báo cáo này chứa các thông tin quan trọng về nước uống của quý vị. Để đọc bằng các thứ tiếng khác, truy cập www.bellevuewa.gov/drinkingwaterquality



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Este informe contiene información importante acerca del agua potable. Para leerla en otros idiomas, visite www.bellevuewa.gov/drinkingwaterquality

本報告內含關於您飲用水的重要資訊。若需要使用其他語言閱讀此資訊,請參觀網站 www.bellevuewa.gov/drinkingwaterquality

이 보고서에는 식수에 관한 중요한 정보가 들어 있습니다. 다른 언어로 읽으시려면, 다음 웹페이지를 방문하십시오: www.bellevuewa.gov/drinkingwaterquality

本報告書にはあなたの飲料水に関する重要な情報が記載されています。 英語以外の言語でお 読みになる場合、www.bellevuewa.gov/drinkingwaterqualityをご覧ください。

इस रिपोर्ट में आपके पीने के पानी के बारे में महत्वपूर्ण जानकारी है। इसे अन्य भाषाओं में पढ़ने के लिए www.bellevuewa.gov/drinkingwaterquality पर जाएं



For alternate formats, interpreters, or reasonable accommodation requests please phone at least 48 hours in advance 425-452-5215 (voice) or email jguthrie@bellevuewa.gov. For complaints regarding accommodations, contact City of Bellevue ADA/Title VI Administrator at 425-452-6168 (voice) or email ADATitleVI@bellevuewa.gov. If you are deaf or hard of hearing dial 711. All meetings are wheelchair accessible.