

City of Bellevue
Drinking Water Quality 425-452-6192
Backflow Assembly Testing 425-452-5208
Utilities 24-hour Emergency Services
 water main breaks, lack of water 425-452-7840
Billing Issues 425-452-6973
 Discounts for low-income seniors and
 low-income citizens with disabilities 425-452-5285
Email: Utilities@bellevuewa.gov
Website: www.bellevuewa.gov/utilities.htm

The Environmental Services Commission advises Bellevue City Council on Utilities issues. To get involved in water topics, call Bellevue Utilities at 425-452-4497 for meeting dates and other information.

Safe Drinking Water Act Hotline
 Direct your drinking water questions to EPA's hotline: 1-800-426-4791.

This reports contains important information about your drinking water. To read it in other languages, visit www.bellevuewa.gov/water_quality.htm

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.bellevue.gov/water_quality.htm

Данный отчет содержит важную информацию о питании potable. Ha дрытых языках он доступен по адресу: www.bellevue.gov/water_quality.htm

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

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，請參閱網站 www.bellevue.gov/water_quality.htm

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

FSC LOGO Printed on 100 percent post-consumer recycled paper using soy-based inks.

City of Bellevue Drinking Water Quality Report

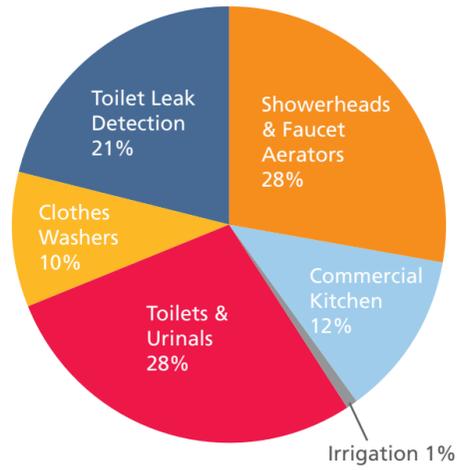
Results from testing in 2010

Your water is safe!

You'll be pleased to know that ongoing testing in 2010 showed that your drinking water met or exceeded all state and federal drinking water standards. In compliance with the federal Safe Drinking Water Act and WA State Department of Health requirements, we are sending this annual report, including testing results from 2010, to every water customer Bellevue serves. By inserting the report into *It's Your City*, we save on the cost of postage. If you have any questions about this report, please call Bellevue's Water Quality staff at 425-452-6192.

Water Savings

2008-2010



Water conservation update

Water conservation is important to provide a safe, reliable supply of water for our community's growing needs today and in the future. Bellevue's water conservation goal is to save 355,000 gallons per day (gpd) from 2008 - 2013—an average of 59,000 gpd of new savings each year.

In 2010, Bellevue supplied nearly 5.49 billion gallons of water to the community, serving a population of 135,100, with a daytime work force that increases the population to 205,000. Bellevue's water system is fully metered. The City does its part to conserve by minimizing water loss caused by leaks throughout its distribution system. Distribution system leakage or water loss was 5.4 percent of total consumption in 2010, well below the Washington State standard of 10 percent.

Bellevue offers water efficiency programs to encourage customers to conserve through the City's partnership with Cascade Water Alliance. Conservation programs seek to reduce indoor and outdoor water use by promoting high efficiency plumbing fixtures, appliances, and irrigation technologies, as well as leak detection and repair. Thanks to continuing community support and participation, these programs have been very successful. Since establishing the goal in 2008, Bellevue has saved 476,424 gpd. To see where program savings come from, check the chart on right. In 2010, residents, local businesses, property owners, and schools saved 127,261 gpd. Thank you for doing your part to conserve!

Bellevue's local water conservation programs complement regional efforts, focusing on educating youth, reducing residential peak season water use, and fostering participation in regional programs. The City works as a partner with the Bellevue School District in developing curriculum and providing technical assistance. As a result, youth education programs reached about 4,500 students. The Waterwise Garden at the Bellevue Botanical Garden educates the community about natural gardening practices that conserve water, reduce yard debris, and protect the quality of our lakes and streams. Seasonal yard care classes, displays, and how-to resources reach thousands of local residents and garden visitors each year. In 2010, volunteers donated about 750 hours, working in the garden while learning more about waterwise plants and practices. Water conservation news and tips are also featured in Bellevue's *It's Your City* newspaper, on the City's website, and on the City's BTV cable Channel 21.

Saving water is always a good thing to do. Water conservation can reduce water bills and lower wastewater and energy costs. To learn more about City conservation programs and what you can do to save water, visit Cascade Water Alliance at www.cascadewater.org or call Bellevue Utilities at 425-452-6932.

Keeping your water system in top shape

To improve Bellevue's water system, 9,100 linear feet of aging asbestos cement water main pipe was replaced with new ductile iron pipe in 2010.



Fast Facts

Residential Population Served:

135,100

Bellevue's water is soft:

1.56 grains per gallon

Bellevue's water system contains:

27 water reservoirs

22 pump stations

620 miles of water main pipe

40,810 water meters

5,812 fire hydrants

Bellevue's Water Quality Team at work

To optimize the freshness and safety of your water, we:

- Monitor drinking water throughout the system regularly and perform state-regulated water quality sampling.
- Respond to customer questions about topics such as water quality and backflow assembly testing.
- Inspect water storage tanks for sanitary conditions and operation.
- Oversee the Water Main Flushing Program, which keeps water fresh.
- Manage the Cross Connection Control Program, which helps protect the City's water supply from hazardous connections.
- Maintain the City's emergency water supply and emergency water distribution equipment.

Preventing backflow contamination

If you have a water connection to an irrigation system, fire sprinkler system, boiler, pool/spa, water feature, or photo development equipment, state law requires that you install a backflow prevention assembly and have it tested annually. A backflow prevention assembly will prevent contaminated water from flowing back into your drinking water or into the City's water system—a serious health hazard. Most Bellevue residents and businesses with backflow assemblies that require testing (over 10,000) are registered with Bellevue, and we thank you for your cooperation. If you haven't been testing your assembly, please contact Water Quality so we can help you find a tester. The cost, about \$50 per year, goes a long way in preventing dangerous backflows.

Bellevue's Water Quality employees maintain a database of known assemblies and work to identify existing connections that are not properly protected, as well as potentially hazardous connections. If you know of a potential cross connection, or have questions about backflow or any other water quality Issue, please contact Water Quality at 425-452-6192. Your efforts to help identify and protect Bellevue's drinking water from hazardous connections are greatly appreciated.

Fire Hydrants

Using water from Bellevue's fire hydrants requires a permit. Trucks and other vehicles with a permit are allowed to connect to hydrants painted blue, which are located in non-residential areas. If you see vehicles other than City vehicles connecting to fire hydrants in your neighborhood, please call Utilities at 425-452-7840. Improper use of fire hydrants can lead to a hazardous cross connection to the water system and/or impact fire-fighting abilities.

High quality drinking water

The City of Bellevue takes pride in delivering great tasting water that is safe and dependable. Your drinking water comes from the Cedar River and Tolt River watersheds in the Cascade Mountains and is purchased from Cascade Water Alliance, an organization that provides water to Bellevue and seven other cities and water districts in the Puget Sound region. Cascade, whose mission is to provide safe, reliable water to you today and tomorrow, completed its purchase of Lake Tapps in Pierce County and was granted water rights by the state in 2010. This important step will ensure the future development of the region's first new drinking water supply in decades. The purchase and approval to use Lake Tapps for a municipal water supply means future generations will be guaranteed drinking water. In the meantime, Cascade will manage Lake Tapps for recreation and enhance fish habitat in the White River.

From the Environmental Protection Agency (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. 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 1-800-426-4791.

Earth's water is always in movement and is always changing states, from liquid to vapor to ice and back again. The water cycle, also called the hydrologic cycle, has been working for billions of years and all life on Earth depends on it.



Ensuring your water is safe

Water from the Tolt and Cedar River watersheds may include the following contaminants: microbial contaminants, such as viruses, bacteria, and protozoa from wildlife; inorganic contaminants, such as salts and metals, which are naturally occurring; and organic contaminants, which result from chlorine combining with naturally occurring organic matter.

To make sure your tap water is safe to drink, the Environmental Protection Agency and the Washington State Dept. of Health (WSDOH) prescribe regulations that limit the amount of contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

As part of this process, the state evaluates the safety of water supplies by assessing sources of contamination prior to treatment. All surface waters in Washington are given a susceptibility rating of high, regardless of whether contaminants have been detected or whether there are any sources of contaminants in the watershed. For more information on Source Water Assessments, visit WSDOH's website at www.doh.wa.gov/ehp/dw/default.htm.

2010 water quality monitoring results

Detected Compounds and Units	EPA's allowable limits		Levels in Cedar River		Levels in Tolt River		Typical Sources	In Compliance
	MCLG	MCL	Average	Range	Average	Range		
Raw Water (before treatment)								
Total Organic Carbon ppm	NA	TT	0.9	0.4 - 1.8	1.3	1.2 to 1.4	Naturally present in the environment	Yes
Cryptosporidium* #100L	NA	NA	ND	ND	ND	ND	Naturally present in the environment	Yes
Finished Water (After treatment)								
Turbidity NTU	NA	TT	0.4	0.2 to 4.5	0.07	0.04 to 0.11	Soil runoff	Yes
Fluoride ppm	4	4	0.95	.07 to 1.1	1.0	0.9 to 1.2	Water additive, which promotes strong teeth	Yes
Barium ppb	2000	2000	1.8	(one sample)	1.3	(one sample)	Erosion of natural deposits	Yes
Nitrate ppm	10	10	0.02	(one sample)	0.13	(one sample)	Erosion of natural deposits	Yes
Arsenic** ppb	0	10	0.5	(one sample)	ND	(one sample)	Erosion of natural deposits	Yes
Chromium** ppb	100	100	0.8	(one sample)	0.6	(one sample)	Erosion of natural deposits	Yes
Total Trihalomethanes ppb	NA	80	Average = 33.5 Range = 21.8 - 49.6			By-products of drinking water chlorination		Yes
Haloacetic Acids (5) ppb	NA	60	Average = 27.1 Range = 14.5 - 33.9			By-products of drinking water chlorination		Yes
Total Coliform % positive samples	0	5%	Highest Month = August Annual Average = 0.1%			Naturally present in the environment		Yes
Chlorine ppm	MRDLG = 4	MRDL = 4	Average = 0.91 mg/L Range = U - 1.86 mg/L			Water additive used to control microbes		Yes

*During 2010, 3 samples were collected at both the Cedar and Tolt rivers, with no Cryptosporidium detected in any of the samples.

**Arsenic and Chromium are now being reported. (The reported Chromium result is for Total Chromium.) Arsenic and Chromium have almost always been detected, but were below the state reporting limit. Because the state is lowering their reporting limits, these low levels are now included in this report.

Key to abbreviations in chart

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 2010 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 100% of the samples from the Tolt in 2010 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**

Why drinking water is treated

Chlorine is added to your water to prevent diseases such as cholera, giardiasis, and salmonellosis. Treatment also destroys Cryptosporidium parvum, a disease-causing organism found in the natural environment. (In 2010, no Cryptosporidium was found during testing.) In accordance with a Seattle public vote in 1968, fluoride is added to prevent tooth decay. The concentration of fluoride was reduced in January, 2011 from 1 part per million to 0.8 part per million, the lowest concentration in the acceptable range defined by the WA State Department of Health. After treatment, your water is safe to drink. It contains very few contaminants, and those present are below the allowable limits (see chart on left).

Lead and copper monitoring results in Bellevue

Parameter and Units	MCLG	Action Level+	2008 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	14	5 of 52	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.17	0 of 52	

* 90th Percentile: i.e. 90 percent of the samples were less than the values shown.
+ The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Because of good test results in recent years, Bellevue was not required by the State Department of Health to perform lead and copper sampling in 2009 or 2010. If you have concerns about lead in your water, please call Water Quality at 425-452-6192.

Testing results in 2010 show your water is safe

To ensure safety, your water is monitored and tested every day.

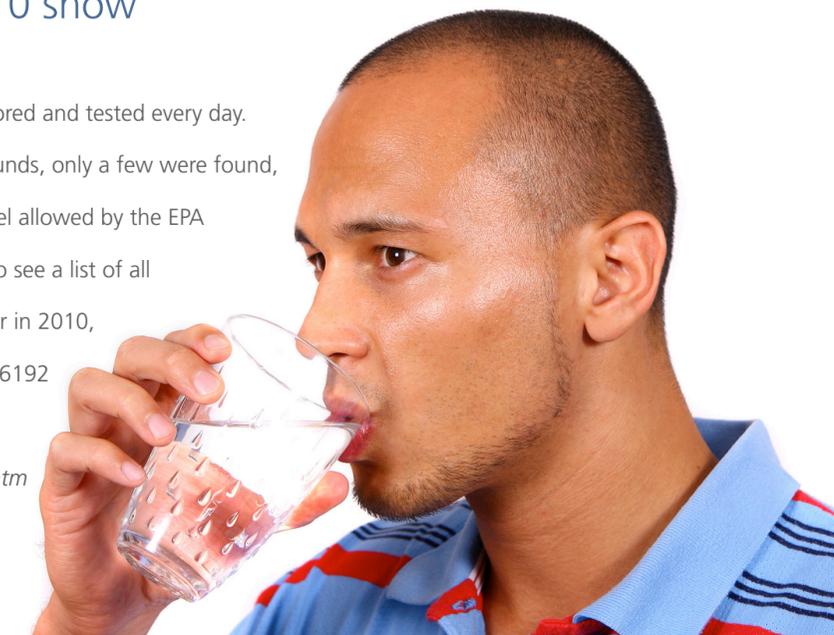
After testing for close to 200 compounds, only a few were found, and all were below the maximum level allowed by the EPA

(see chart on left). If you would like to see a list of all compounds your water was tested for in 2010,

please call Water Quality at 425-452-6192

or visit the City's website at

www.bellevuewa.gov/water_quality.htm



Lead and drinking water

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 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 www.epa.gov/safewater/lead