

TASTE
VALUE
QUALITY

DEER CREEK WATER ASSOCIATION

WATER QUALITY REPORT - Guide South 2022

Water is a life-essential resource—yet, at less than a penny a gallon, it costs very little compared to its value. Your water rates pay for everything it takes to operate our water system, from storage and treatment, to delivering the water to your tap. Your water rates also help pay for system improvements that ensure we will provide high-quality drinking water for generations to come. This year's Drinking Water Quality Report illustrates the exceptional value for the clean, safe, great tasting drinking water you receive.

Deer Creek Water Association

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An Overview of Your Water

Your water falls safely within state guidelines and significantly below the federal EPA's levels.

Where Is Your Water From?

Deer Creek Water Association purchases water from the City of Bellingham for our members who live in a service area known as DCWA/Guide South (System ID# AB912-G). This service area includes members who live on Kline Road, Larson Road, King Mountain Road, and along Guide Meridian, south of Smith Road. Water is sourced from the City of Bellingham via the Lake Whatcom Reservoir, which is supplied by rainwater in the Lake Whatcom watershed, and the Deming Glacier on Mt. Baker.

Who Oversees Your Water Quality?

Your drinking water is regulated by the Environmental Protection Agency (EPA), who sets drinking water quality standards, establishes testing methods and monitoring requirements for water utilities, sets maximum levels for water contaminants, and requires utilities to give public notice whenever a violation occurs.

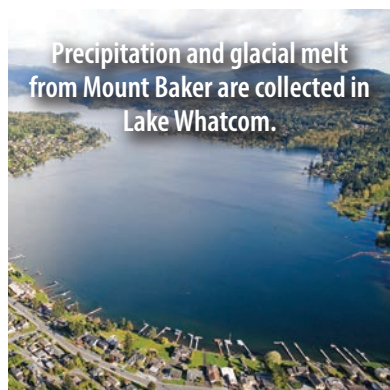
Who Tests Your Water?

Testing is done by the City of Bellingham's testing laboratory, which is accredited by the Washington Department of Ecology to perform analyses under

the regulations administered by the state of Washington and the federal EPA. Water is tested seven days a week by laboratory staff who are experienced in a wide range of sampling and testing methods. Each laboratory analyst has at minimum a four-year degree in the sciences, and all staff members have years of experience with laboratory and field testing in government and private sector laboratories. Learn more at <https://cob.org/services/environment/lake-whatcom/water-quality-monitoring>

How is Your Water Tested?

Over 200 compounds are tested and not detected; most of this monitoring occurs once every several years. The Tables on the following page list all contaminants detected in the most recent required water testing along with the limits and goals set by the EPA and the State of Washington Department of Health (DOH) to ensure your tap water is safe. Not shown are more than 200 additional contaminants that were tested for, but not detected, in your drinking water. If you have questions about your water quality, feel free to contact Deer Creek Water Association at (360) 820-4314.



Precipitation and glacial melt from Mount Baker are collected in Lake Whatcom.



Lake water travels to the City's water treatment plant at Whatcom Falls Park.



The City of Bellingham treats the water using coagulation, flocculation, filtration, and disinfection.



Water transmission lines carry drinking water to Deer Creek Water Association.



Treated water is delivered to over 100 connections in the Guide South service area.

Your Drinking Water Facts and Figures The following statements are required by the US Environmental Protection Agency

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Bellingham's source water is Lake Whatcom on the eastern edge of town. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and 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 can also come from gas stations, urban stormwater runoff, and septic systems.

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

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 \(1-800-426-4791\)](https://www.epa.gov/safewater).

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, can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the [Safe Drinking Water Hotline \(1-800-426-4791\)](https://www.epa.gov/safewater).

In order to ensure that tap water is safe to drink, the DOH and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Elevated levels of lead in drinking water can cause serious health problems, especially for pregnant women and young children. In Bellingham, fortunately, lead is not found in the treated water, but lead in drinking water can come from pipes and faucets in our customers' homes. The City of Bellingham is responsible for providing high quality drinking water, but cannot control the variety of materials used in customers' plumbing. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for at least 30 seconds before using the water for drinking or cooking. You can capture this water to use on plants. If you are concerned about lead in your water, you may opt to have your water analyzed by a local laboratory. To learn more about lead in water, go to: <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

2022 Water Quality for Deer Creek Water Association - Guide South

Detected Regulated Contaminants			EPA Regulations		City of Bellingham Water Results + Deer Creek on 3 substances*		
			Ideal Goal (MCLG)	Max. Allowed (MCL)	Range or Reported Value	Average Value	Comply?
Detected Substance	Major Source	Units					
Total Coliform Bacteria	Naturally present in the environment	% Positive	0	5% Positive per Month	2% positive in July. 1% positive in August. 0% positive all other months. No E. coli bacteria were detected.	2% positive in July.	Yes
Bellingham collects over 100 samples a month at locations throughout their water distribution system, and analyzes them for coliform bacteria to ensure water purity. No more than 5% of these samples can be positive for total coliform bacteria, and none can be positive for <i>Escherichia coli</i> . No <i>Escherichia coli</i> was detected in 2022.							
Free Residual Chlorine Levels	Added as a disinfectant to drinking water	ppm	Detectable in 95% of samples	4.0 MRDL	City of Bellingham (COB) Range < 0.02 to 0.93 ppm *Deer Creek (DCWA) Range: 0.23 to 0.53	COB Average 0.50 ppm *DCWA: 0.36	Yes Yes
Bellingham monitors chlorine levels continuously at the water filtration plant. Over 100 distribution system samples are also analyzed each month to ensure a disinfectant residual remains in treated water on its way to customers' homes. They must be able to detect free chlorine in 95% of the samples they analyze in the distribution system.							
Haloacetic Acids (5) (HAA-5)	By-product of drinking water chlorination	ppb	0	60	City of Bellingham (COB) Range 7.0 to 18.0 ppb *Deer Creek (DCWA) Range: 1.7	COB Highest site average 14.0 *DCWA: 1.7	Yes Yes
Total Trihalomethanes (TTHM)	By-product of drinking water chlorination	ppb	0	80	City of Bellingham (COB) Range 16.0 to 50.0 ppb *Deer Creek (DCWA) Range: 8.4	COB Highest site average 39.0 *DCWA: 3.9	Yes Yes
Haloacetic acids and trihalomethanes form as by-products of the drinking water chlorination process. The HAA-5 and TTHM results are from 8 representative locations in Bellingham's treated water distribution system. Compliance is based on a site-specific running average. The highest site average from 2022 is shown above.							
Turbidity	Soil erosion	NTU	<0.3	TT	Range: 0.02 to 0.07 NTU At or below 0.3 NTU 100% of the time.	Highest value 0.07 NTU	Yes
The turbidity limit is 0.3 NTU. In 2022, no filtered water turbidity result exceeded 0.3 NTU so Bellingham met the Department of Health's limit 100% of the time.							
Lead (2020 sampling)	Plumbing; erosion of natural deposits	ppb	0	15*	6 ppb as the 90th percentile	< 1 to 12 ppb	Yes
Copper (2020 sampling)	Plumbing; erosion of natural deposits	ppb	1300	1300*	65 ppb as the 90th percentile	2 to 118 ppb	Yes
Lead and copper are monitored every 3 years in our customers' homes to assess the amount of corrosion occurring in home plumbing. The water sampled is the first draft of stagnant water in homes identified as having lead solder and copper pipe. There are no lead service lines in the City of Bellingham. Sampling will next be conducted in 2023. *The 90th percentile value of all samples collected.							
Barium	Soil erosion	ppm	N.A.	2	0.0069	0.0069	Yes
Nitrate (also nitrate + nitrite)	Run-off from fertilizers and agriculture	ppm	N.A.	10	0.10	0.10	Yes
Inorganics detected that do not have a Maximum Contaminant Level (MCL)							
Hardness	Soil erosion	ppm	N.A.	N.A.	20.3	20.3	Yes
Manganese	Soil erosion	ppb	N.A.	N.A.	3.0	3.0	Yes
Sodium	Soil erosion	ppm	N.A.	N.A.	9.3	9.3	Yes
Inorganics with detections above state detection reporting levels					Bellingham Level 2022	SMCL Limit Allowed	
Chloride	Soil erosion	ppm	N.A.	N.A.	5.6	250	Yes
Sulfate	Industrial discharge	ppm	N.A.	N.A.	8.2	250	Yes

Table Definitions

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

HAA-5: HaloAcetic Acids: These are a group of chemicals that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. (1 sample taken by Deer Creek Water Association in 2022).

MCL: Maximum Contaminant Level: The highest level of a contaminant 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.

MFL: Million Fibers per Liter: The level of asbestos fibers in drinking water.

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: The EPA has not established MCLGs for these substances.

ppm: Parts per Million / ppb: Parts per Billion: A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of a contaminant per billion parts of water.

SMCL: Secondary Maximum Contaminant Levels: limits that are not based on health concerns, but instead based on the aesthetic properties of water such as taste, color, and odor.

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

Turbidity: A measure of the number of particulates suspended in water expressed in nephelometric turbidity units (NTU) that is an important test in determining drinking water quality. Particulates in water can include bacteria, viruses and protozoans that can cause disease.