



DEER CREEK WATER ASSOCIATION

WATER QUALITY REPORT - Main System 2021

TASTE
VALUE
QUALITY

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

PO Box 30230
Bellingham, WA 98228

www.deercreekwater.org
dcwa@deercreekwater.org

360.820.4314

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 (DCWA) operates two wells that pump groundwater from the Deer Creek aquifer. These wells are located just east of Guide Meridian, along East Smith Road. Water from our wells is chlorinated, enters a manganese removal treatment plant, which removes 100% of the manganese present in the groundwater, after which it is then pumped into our distribution system. For resiliency and back-up purposes, DCWA has an emergency intertie with the City of Bellingham, and we are currently working with neighboring water associations to develop additional interties.

Some Deer Creek residents receive water purchased from the City of Bellingham, with water sourced from Lake Whatcom. These residents receive a Drinking Water Quality Report from the City of Bellingham, along with a separate supplement from DCWA.

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

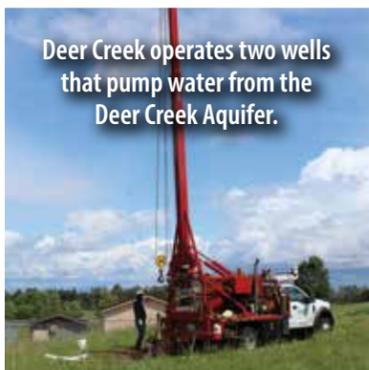
contaminants, and requires utilities to give public notice whenever a violation occurs.

Who Tests Your Water?

Drinking water sourced from our Main System is tested periodically, using a wide range of sampling and testing methods, by a third party laboratory that is accredited by the Washington Department of Ecology to perform analyses under the regulations administered by both the state of Washington, and the federal Environmental Protection Agency.

How is Your Water Tested?

The Tables on the following page show health-related drinking water contaminants we detected during 2021, as well as during previous years. Washington State Department of Health (DOH) requires monitoring for certain contaminants less than yearly because concentrations of these contaminants are not expected to vary significantly from year to year. We are not required to list potential contaminants for which there were no detections. If you have questions about your water quality, feel free to contact Deer Creek Water Association at (360) 820-4314.



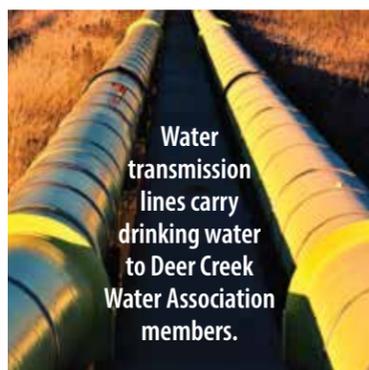
Deer Creek operates two wells that pump water from the Deer Creek Aquifer.



Well water is chlorinated as soon as it is pumped out of the ground.



Water travels to our manganese removal treatment plant which removes 100% of the manganese.



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



Deer Creek's Main System currently serves over 650 members.

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 Department of Health 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>

2021 Water Use Efficiency for Deer Creek Water Association

Each year, Deer Creek Water Association provides the Washington State Department of Health with a report that indicates how efficiently we are using the water we produce. The table below shows the gross volume of water produced, the volume we know was used, and the unaccounted-for water by gallons and by percent. The industry-accepted volume of unaccounted-for water is 10%.

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Water Produced	56,505,813	50,997,092	51,772,417	55,582,080	54,491,694	53,502,544	54,244,481	47,638,621	44,359,110	43,363,164	41,364,357
Water Consumed	49,216,316	49,545,831	46,654,595	48,737,171	49,185,631	46,667,140	51,698,125	43,357,566	39,051,195	42,836,232	38,788,815
Unaccounted For	7,289,497	1,451,261	5,117,822	6,844,909	5,306,063	6,835,404	2,526,356	4,281,055	5,307,915	526,932	2,595,542
Unaccounted %	12.90%	2.85%	9.89%	12.31%	9.74%	12.78%	4.66%	8.99%	11.97%	1.22%	6.27%

2021 Water Quality for Deer Creek Water Association's Main System

Contaminants Regulated in the Distribution System			EPA Regulations			Deer Creek Water Association Testing Results	
Detected Substance	Test Date	Typical Source of Contaminant	Units	EPA Goal (MCLG)	Max. Allowed (MCL)	Deer Creek Highest Detected Level	Comply?
Arsenic	May 2019	Erosion of natural deposits, orchards, glass and electronics production wastes.	ppm	0.010	0.010	0.0041	Yes

Although your drinking water does contain low levels of arsenic, it currently meets EPA's revised drinking water standard for arsenic. There is a small chance that some people who drink water containing low levels of arsenic for many years could develop circulatory disease, cancer, or other health problems. Most types of cancer and circulatory diseases are due to factors other than exposure to arsenic. EPA's standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water.

Asbestos (fiber <10 micrometers)	June 2020	Decay of asbestos cement in water mains; erosion of natural deposits.	MFL	7 MFL	7 MFL	< 0.116 thousand fibers per liter	Yes
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The potential health effect from long-term exposure above the MCL of 7 million fibers per liter is increased risk of developing benign intestinal polyps.

Chlorine (2 samples monthly)	Monthly 2021	Disinfectant added to water. Used to control microbes.	ppm	4.0 MRDLG	4.0 MRDLG	Average: 0.31 Range: 0.05 to 0.56	Yes
Nitrate (as Nitrogen)	Sept. 2021	Run-off from fertilizers and agriculture.	ppm	10	10	Non-detectable	Yes
TTHM (see Definitions below)	Aug. 2021	By-product of drinking water chlorination.	ppm	None	80	8.5 (one sample)	Yes
HAA-5 (see Definitions below)	Aug. 2021	By-product of drinking water chlorination.	ppm	None	60	Non-detectable (one sample)	Yes

NOTE 1: Herbicides, pesticides, and fumigants were all sampled in November 2018. The results were non-detectable levels.

Contaminants Regulated at Customer Tap			Units	Action Level*	Deer Creek 90th Percentile	Deer Creek Highest Detected Level	Comply?
Detected Substance	Test Date	Typical Source of Contaminant					
Lead (see Note 2)	July 2021	Plumbing; erosion of natural deposits.	ppm	0.015	0.00426	0.0085	Yes
Copper (See Note 2)	July 2021	Plumbing; erosion of natural deposits.	ppm	1.3	0.3404	0.360	Yes

NOTE 2: Eleven sites were sampled. *Action Level: 90% of samples must be below this level.

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 in 2021).

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.

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.

Secondary Standards

National Secondary Drinking Water Regulations (NSDWRs) are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards but does not require systems to comply. Examples of these include Iron, Manganese, Silver, Chloride, Sulfate, and Zinc. None of these contaminants were detected in our water at the last sampling in 2021.

The word "contaminant" as used in this report does not necessarily mean that the substance is harmful to your health in the quantities detected.