

Water Quality Report for 2020



Deer Creek Water Association - P.O. Box 30230, Bellingham, WA 98228
www.deercreekwater.org

This report contains information about your drinking water. It is required by the Environmental Protection Agency and the Safe Water Drinking Act.

The bottom line:
Our water supply is safe to drink. Our water quality meets or exceeds state and federal standards.

Water Use Efficiency

Every year, Deer Creek provides the State Dept. of Health a report that reflects how efficiently we are using the water we produce. The

table below shows the gross volume of water we produced, the volume we know was used, the unaccounted-for water, and the percent of unaccounted-for water. Unaccounted-for water can be caused by leaks, theft, or most often, by under-reporting water meters. The industry-accepted volume of unaccounted-for water is 10%.

	2019	2018	2017	2016	2015	2014	2013	2012	2011
Water Produced	51,772,417	55,582,080	54,491,694	53,502,544	54,224,481	47,638,621	44,359,110	43,363,164	41,384,357
Water Consumed	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	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 for %	9.89%	12.31%	9.74%	12.78%	4.66%	8.99%	11.97%	1.22%	6.27%

To lower our unaccounted-for water, Deer Creek has replaced all of our water meters with radio read meters. This helps with the under-reporting issue and helps us read the meters much, much faster than we used to. In 2019, our consumption dropped to the levels of consumption from 2016! Great work members! Your efforts are appreciated. *Each water share is allocated 650 gallons of water per day.* If everybody stayed within their allocation - especially our large consumers - we would have many more water shares to sell, which means more customers. More customers helps to keep our expenses lower as we are able to spread out the expenses over a larger customer base. Thank you so much for your great results!

Your Drinking Water Source

Deer Creek Water Association operates two wells that pump groundwater from the Deer Creek aquifer. Our wells are located just east of

Guide Meridian along East Smith Road. Water from our wells is chlorinated, enters a manganese removal treatment plant and is then pumped into our distribution system. The treatment process removes 100% of the manganese present in the groundwater. Deer Creek has an emergency intertie with the City of Bellingham and we are currently working with neighboring water associations to develop interties.

Some Deer Creek residents receive water purchased from the City of Bellingham, whose water source is Lake Whatcom (**these residents receive Bellingham's Water Quality Report along with an attachment from Deer Creek**).



Officers and Directors

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Questions about this report or concerning Deer Creek can be made to the Business Manager.

Year 2019 Water Quality Data

The tables below show health-related drinking water contaminants we detected during 2019 and during previous years. The 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. A water treatment plant was installed in 2009 to reduce manganese in the water. Manganese sample results in 2019 were non-detectable.

Contaminants Regulated in the Distribution System

Detected Substance	Test Date	Highest Level Allowed (MCL)	DCWA Highest Detected Level	MCLG (EPA Goal)	Unit Measure	Violation?	Typical Sources of Contaminant
Arsenic	May 2019	0.010	0.0031	0.010	ppm	No	Erosion of natural deposits, orchards, glass & electronics production wastes.
Asbestos (fiber > 10 micrometers)	May 2010	7 million fibers/ liter	< 131 thousand fibers/ liter	7 million fibers/ liter	Million per liter	No	Decay of asbestos cement in water mains; erosion of natural deposits
Chlorine (2 samples monthly)	Monthly 2019	MRDL=4.0	0.35 (range 0.17 to .50)	MRDLG is 4.0	ppm	No	Disinfectant added to water. Used to control microbes.
Nitrate (as Nitrogen)	Sep 2019	10	Non-detectable	10	ppm	No	Runoff from fertilizer use
TTHM (see Terms below)	Sep 2019	80	Non-detectable and 9.5	none	ppm	No	By-product of drinking water chlorination
HAA5 (see Terms below)	Sep 2019	60	Non-detectable	none	ppm	No	By-product of drinking water chlorination

Note #1: Herbicides, Pesticides & Fumigants were all sampled in Nov. 2018. The results were non-detectable levels.

Contaminants Regulated at Customer Tap

Detected Substance	Test Date	Action Level *	DCWA Highest Detected Level	DCWA 90th Percentile	Unit Measure	Violation ?	Typical Source of Contaminant
Copper (See Note # 2)	07/18	1.3	0.629	0.542	ppm	No	Corrosion of plumbing
Lead (See Note # 2)	07/18	0.015	0.0121	0.0109	ppm	No	Corrosion of plumbing

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

Information about arsenic : Your drinking water currently meets EPA's revised drinking water standard for arsenic. However it does contain low levels of 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.

Information about Asbestos: 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.

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

Terms and Abbreviations

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

HAA5 - HaloAcetic Acids - 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. (2 samples taken in 2018).

MCL - Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

MCLG - Maximum Contaminant Level Goal - The level of 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.

ppb - parts per billion - corresponds to one minute in 2,000 years or a penny in \$10,000,000.

TTHM - Total Trihalomethanes - This is the sum of chloroform, bromodichloromethane, chlorodibromomethane and bromoform. Compliance is based upon the total. TTHMs are a by-product of chlorine reacting with organic and inorganic matter in drinking water (2 samples taken in 2018).

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 2012.