

Water Quality Report for 2017

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

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%.

	2016	2015	2014	2013	2012	2011	2010
Water Produced	53,502,544	54,224,481	47,638,621	44,359,110	43,363,164	41,384,357	42,066,901
Water Consumed	46,667,140	51,698,125	43,357,566	39,051,195	42,836,232	38,788,815	39,566,823
Unaccounted For	6,835,404	2,526,356	4,281,055	5,307,915	526,932	2,595,542	2,500,078
Unaccounted %	12.8%	4.7%	9.0%	12.0%	1.2%	6.3%	5.9%

To lower our unaccounted for water, Deer Creek is replacing older infrastructure which includes our water meters. We have begun to install radio read meters throughout our system. This will help with the under-reporting issue and help us read the meters much, much faster than we do now. Also, our total water produced has been increasing for almost every year for the past seven years. We will also be looking at lowering this number as well in the coming months. You may receive a letter from us noting your excessive water consumption if it exceeds your daily allowance. Each member is allowed 650 gallons per day of water.

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

Vaughn Hagen	<i>President</i>
Dave Black	<i>Vice President</i>
Leroy Rohde	<i>Director</i>
Liz Hale	<i>Director</i>
Darla Norman	<i>Director</i>
Douglas Wittinger	<i>Secretary/ Treasurer</i>

Staff

<i>Business Manager</i>
Douglas Wittinger 360.820.4314 dcwa@deercreekwater.org
<i>Operations Manager</i>
Gene Kirner 360.966.2526 360.961.5512 (mobile)

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

Year 2016 Water Quality Data

Tables below show health related drinking water contaminants we detected *during 2016* 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 early 2009 to reduce manganese in the water (manganese was not detected in our water at the last sample in 2016).

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	Jun 2012	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 2016	MRDL=4.0	0.47 (Range 0.09 to .47)	MRDLG is 4.0	ppm	No	Disinfectant added to water. Used to control microbes.
Nitrate (as Nitrogen)	Aug 2016	10	0.9	10	ppm	No	Runoff from fertilizer use
TTHM (see Terms below)	Aug 2016	80	9.0 and 11.5	none	ppm	No	By-product of drinking water chlorination
HAA5 (see Terms below)	Aug 2016	60	1.2 and 1.4	none	ppm	No	By-product of drinking water chlorination

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 # 1)	07/15	1.3	1.4	0.47	ppm	No	Corrosion of plumbing
Lead (See Note # 1)	07/15	0.015	0.43	0.0048	ppm	No	Corrosion of plumbing

Note #1: Fourteen 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 2015).

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 2015).

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.