A young boy with brown hair, wearing blue and white plaid shorts, is playing in a water fountain. He is smiling and has his hands raised, splashing water. The background is a lush green field.

WOODINVILLE WATER DISTRICT

2017 Drinking Water Quality Annual Report

Published in June, 2018

Woodinville Water District takes pride in supplying you and your family with safe reliable drinking water. Our annual Water Quality Report provides information about water testing completed in 2017. It explains what is in our water and how the supply is protected and treated. Thank you for being our customer and for taking the time to learn about your drinking water.

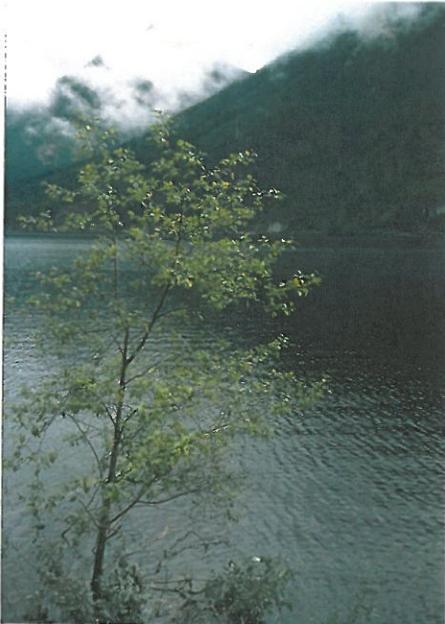


Where Does Our Water Come From?

The Cascade Mountains supply our drinking water. Two very large, protected watersheds, the Cedar River Watershed and the South Fork Tolt River Watershed, supply almost all of Seattle's metropolitan area with drinking water. We purchase all of our water from Seattle. Most of our water comes from the Tolt River Watershed, but occasionally we receive water from the Cedar River Watershed. In 2017, all of Woodinville's supply came from the Tolt.

Are Contaminants a Risk?

The 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.



Who Is Making Sure Our Water Is Safe To Drink?

In order to ensure that tap water is safe to drink, the Environmental Protection Agency and/or the Washington state board of health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and/or the Washington state department of agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

As part of this process, Washington's Source Water Assessment Program is conducted by the Department of Health (DOH) Office of Drinking Water. According to DOH, 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. Information on the source water assessments is available from the DOH website at <https://fortress.wa.gov/doh/eh/dw/swap/maps/>

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

In Seattle's surface water supplies, the potential sources of contamination include:

- » 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 the naturally occurring organic matter.



Lead And Copper And Your Drinking Water – Are You At Risk?

Although there is no detectable lead in our source water, some homes, especially those built before 1985, have some risk of lead contamination from water that sits in pipes longer than several hours. When your plumbing was installed and what type of plumbing you have all play a part in determining your potential exposure level. Seattle treats the water to minimize the tendency for lead to enter the water, and results show this has been very successful. 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. Woodinville Water District 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 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 <http://www.epa.gov/safewater/lead>.

LEAD AND COPPER MONITORING RESULTS (TOLT WSA)

Parameter and Units	MCLG	Action Level +	Combined Regional Monitoring		WWD's Customers	Source
			2017 Results*	# Homes Exceeding Action Level	# Homes Exceeding Action Level	
Lead, ppb	0	15.0	4.0	0 of 51	0 of 11	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.15	0 of 51	0 of 11	

* 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.

MCLG = Maximum Contaminant Level Goal; ppb = parts per billion; ppm = parts per million

Results from summer of 2017 sampling. Per requirements, the next round of sampling will be done in summer 2020 and those results will be reported in the Water Quality Report distributed in 2021.



2017 WATER QUALITY MONITORING RESULTS

Detected Compounds	Units	EPA's Allowable Limits		Levels in Tolt Water		Levels in Cedar Water		Meet USEPA Standards?	Typical Sources
		MCLG	MCL	Average	Range	Average	Range	Compliance	
RAW WATER									
Total Organic Carbon	ppm	NA	TT	1.2	1.1 to 1.3	0.8	0.3 – 1.5	✓ YES	Naturally present in environment
FINISHED WATER									
Turbidity	NTU	NA	TT	0.04	0.01 – 0.2	0.3	0.2 – 2.5	✓ YES	Soil runoff
Arsenic	ppb	0	10	0.4	0.3 – 0.5	0.5	0.4 – 0.6	✓ YES	Erosion of natural deposits
Barium	ppb	2000	2000	1.4	1.1 – 1.7	1.7	1.4 – 1.9	✓ YES	Erosion of natural deposits
Bromate	ppb	0	10	0.25	ND – 2	0.04	ND – 1.0	✓ YES	By-product of drinking water disinfection
Chromium	ppb	100	100	0.2	ND – 0.24	0.27	0.25 – 0.33	✓ YES	Erosion of natural deposits
Fluoride	ppm	4	4	0.7	0.6 – 0.8	0.7	0.3 – 0.9	✓ YES	Water additive which promotes strong teeth
DISINFECTION BY-PRODUCTS (Measured in the Woodinville Water District Distribution Area)									
Total Trihalomethanes	ppb	NA	80	38	20 – 46	NA	NA	✓ YES	By-product of drinking water chlorination
Haloacetic Acids (5) (HAA5)	ppb	NA	60	34	17 – 46	NA	NA	✓ YES	By-product of drinking water chlorination
CL2 RESIDUAL (Measured in the Woodinville Water Distribution Area)									
Chlorine	ppm	MRDLG = 4.0	MRDL = 4.0	Average = 1.02 mg/L Range = 22 – 1.65 mg/L				✓ YES	Water additive used to control microbes

NOTES TO TABLE: *Cryptosporidium was not detected in any samples from the Cedar or Tolt supplies (3 samples each)

DEFINITIONS:

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 2016 is 5 NTU, and for the Tolt supply it was 0.3 NTU for at least 95% of the samples in a month. 100% of the samples from the Tolt in 2016 were below 0.3 NTU.

NA: *Not Applicable; ND: Not Detected*

ppm: 1 part per million = 1 mg/L = 1 milligram per liter

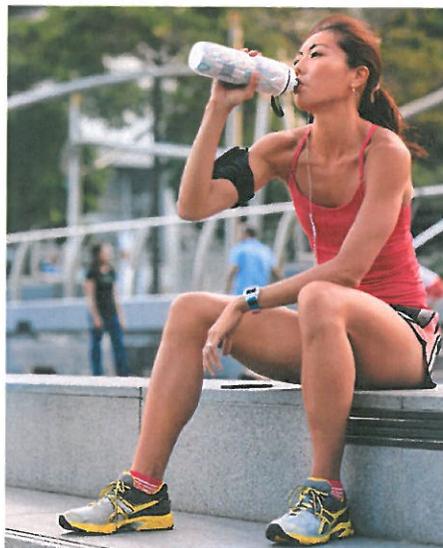
ppb: 1 part per billion = 1 ug/L = 1 microgram per liter

1 ppm = 1000 ppb

#/100L = number of organisms per 100 liters

Conservation Program Goals and Results

The Saving Water Partnership (SWP) – which is made up of Woodinville Water District and 18 water utility partners – has set a six-year conservation goal: reduce per capita use from current levels so that the SWP's total average annual retail water use is less than 105 mgd from 2013 through 2018 despite forecasted population growth. For 2017, the Saving Water Partnership met the goal, using 96.6 mgd.



Do You Have Health Concerns?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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 health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

How Can I Get More Info?

WWD Water Quality Office
425-487-4125
waterquality@woodinvillewater.com
www.woodinvillewater.com
(Click on the Water Quality Tab in the Quick Links Menu)

Seattle Public Utilities, Water Quality Lab
206-684-7834
drinkingwater.quality@seattle.gov
www.seattle.gov

Washington State Department of Health
www.doh.wa.gov/ehb/dw

Environmental Protection Agency (EPA)
www.epa.gov/safewater

EPA Safe Drinking Water Hotline
1-800-426-4791