

# *Water District No. 49*

## **Annual Water Quality Report**      June 2018

### ***What Do You Know About Your Drinking Water?***

King County Water District No. 49 is pleased to provide you with this information about your drinking water. The purpose of this report is to inform our customers about the high quality of drinking water in Water District No. 49's water system. We would like you to know where your water comes from, what it contains and how it compares to stringent Federal water quality standards. This report summarizes the 2017 water quality testing results for your water.

The water you drink is supplied from the Cedar River Watershed. The Cedar River Watershed is located in a remote, uninhabited area of the Cascade Mountains and is managed by the City of Seattle. The city also maintains large transmission pipelines which convey the water from the watershed to our area. The District's distribution system is connected to these pipelines by four separate taps on large transmission mains.

The City of Seattle safeguards the quality of drinking water by enforcing an aggressive protection plan for the watershed. If you have any questions regarding this report, please call Ms. Holly Inkpen, Office Manager, at 206.242.8535.

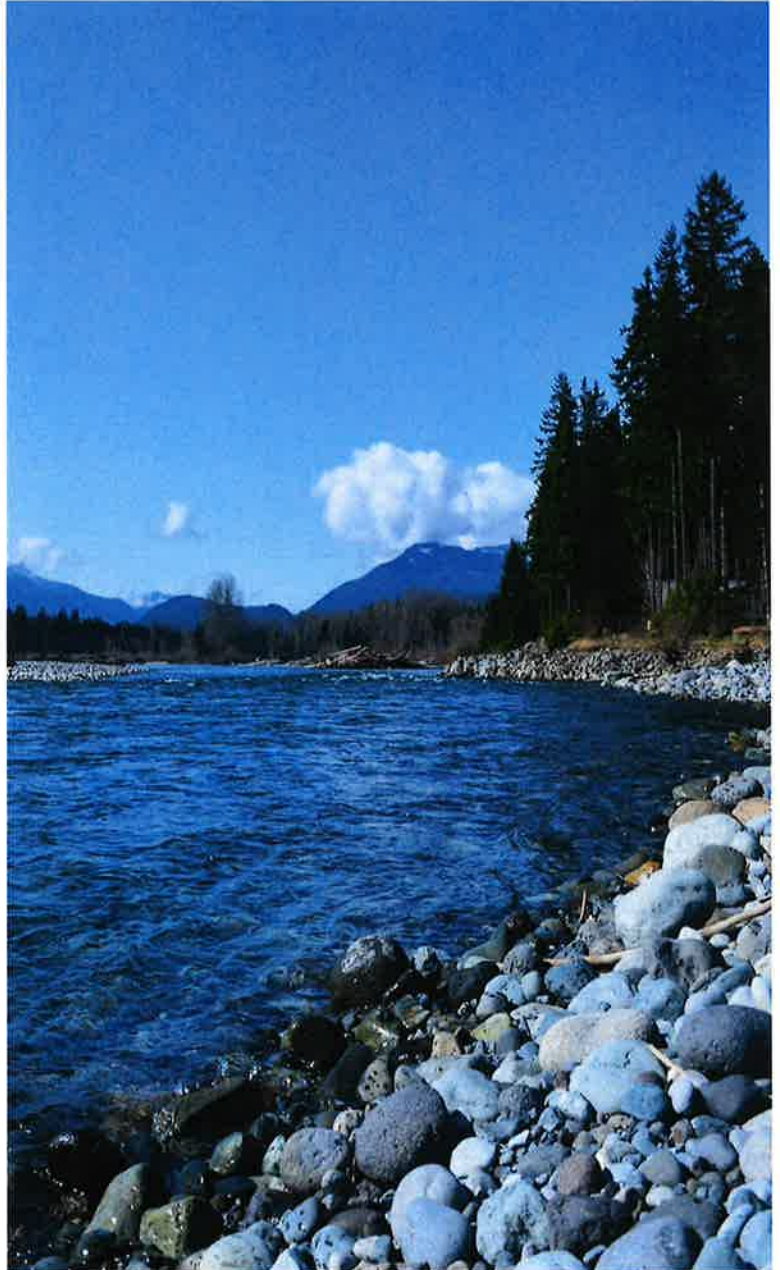


Photo by Bob Gulling

King County Water District No. 49 holds its Board meetings the second and fourth Wednesday of each month. Meetings are held at the District office located at 415 SW 153<sup>rd</sup> St, Burien, WA 98166-2214. You can contact the District at 206.242.8535 for more information.

## *Residential Tap Monitoring for Lead Copper*

Our source waters *do not contain lead or copper*. However, lead and copper can leach into residential water from building plumbing systems. Lead and copper monitoring is conducted at homes

categorized as high risk, most recently in 2015. Compliance is determined on a regional basis. As shown in the table below, our 90<sup>th</sup> percentile lead concentration is below the Action Level.

### Lead and Copper Monitoring Results (Cedar WSA)

Parameter and Units	MCLG	Action Level+	2015 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	4.0	0 of 50	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.161	0 of 50	

\* 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.

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. King County Water District No. 49 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 30 seconds to 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>

## *Information Provided by the U.S. EPA*

### Do I need to take special precautions?

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. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### Why are there contaminants in my drinking water?

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

## *Cryptosporidium Parvum*

*Cryptosporidium Parvum* are microscopic organisms that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. These organisms are in all of Washington's rivers and

streams and are a product of animal activity in the watershed. The District regularly tests for *Cryptosporidium*.



Photo by Bob Gulling



## 2017 Water Quality Monitoring Results

In February of this year the results of the 2017 regional water quality testing were provided to the District by the Seattle Public Utilities Water Quality Laboratory. This testing information has been summarized in the table below.

The first column lists each compound tested and the units of measurement used for the test. The second column indicates the highest levels the U.S. EPA allows for each compound.

The third column illustrates the levels found in the Cedar River supply and if these levels meet compliance levels. The last column shows the typical source for the compounds.

All of the compounds found in the Cedar River supply were found to be at *lower levels* than the EPA allows. For more information about water quality testing you can contact the EPA at 800-426-4791.

Detected Compounds	Units	EPA's Allowable Limits		Levels in Cedar Water		Typical Sources
		MCLG	MCL	Average	Range	
<b>Raw Water</b>						
Total Organic Carbon	ppm	NA	TT	0.8	0.3 to 1.5	Naturally present in the environment
<b>Finished Water</b>						
Turbidity	NTU	NA	TT	0.3	0.2 to 2.5	Soil runoff
Arsenic	ppb	0	10	0.5	0.4 to 0.6	Erosion of natural deposits
Barium	ppb	2000	2000	1.7	1.4 to 1.9	Erosion of natural deposits
Bromate	ppb	0	10	0.04	ND -1	By-product of drinking water disinfection
Chromium	ppb	100	100	0.27	0.25 to 0.33	Erosion of natural deposits
Fluoride	ppm	4	4	0.7	0.3 to 0.9	Water additive, which promotes strong teeth
Coliform, Total	%	0	5%	ND	ND	Naturally present in the environment
Total Trihalomethanes	ppb	NA	80	35	20 to 46	By-products of drinking water chlorination
Haloacetic Acids (5)	ppb	NA	60	44	16 to 85	By-products of drinking water chlorination
Chlorine	ppm	MRDLG=4	MRDL=4			Water additive used to control microbes

\*\*Cryptosporidium was not detected in any samples from the Cedar supply.

## 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. MCLG's 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.

NA – Not Applicable

ND – Not Detected

**(NTU) Nephelometric Turbidity Unit** – Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2017 is 5 NTU.

**ppm** – 1 part per million = 1mg/L = 1 milligram per liter

**ppb** – 1 part per billion = 1ug/L = 1 microgram per liter

**(TT) Treatment Technique** – A required process intended to reduce the level of a contaminant in drinking water.

**1 ppm** – 1,000 ppb

## *Water Efficiency*

King County Water District No. 49's commitment to water conservation began in the early 1990's. Programs were designed to meet the Washington State Department of Health Conservation (DOH) Planning Guidelines and to slow the increase of average and peak seasonal water use demand. The DOH revised its requirements for water conservation planning as a result of the 2003 Municipal Water Law. As part of this law, the District adopted water use efficiency goals in a public process December 2007. The District, Seattle and 18 other water utilities formed the Saving Water Partnership (SWP). The SWP consist of the Wholesale Water Customers, excluding municipalities and special purpose districts that belong to Cascade Water Alliance.

The Saving Water Partnership (SWP) 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 2017 despite forecasted population growth. For 2017, the Saving Water Partnership met the goal, using 96.6 mgd.

Thank you for all you are doing to conserve water. It makes a difference! Conserving water year-round keeps your water bill as low as possible, and saves water for future generations and conservation is good for salmon too.

For 2017, King County Water District No. 49 purchased 4.50 million gallons of water and had a distribution system leakage rate of 3%. District customers used rebates and replaced 2 toilets in a single family dwelling and 63 toilets in a multi-family complex. The District replaced over 100 water meters and replaced 5 hydrants.

***King County Water District No. 49 will continue to have less than 10 percent annual water leakage for the entire system.***

The District has averaged less than 6% water leakage for the past 18 years. The District will continue to tighten the water system by completing more water main replacement projects in the future.

### **WAYS YOU CAN CONSERVE WATER**

- Fix leaky faucets right away.
- Check your toilet for leaks annually.
- Run your washer and dishwasher with full loads.
- Keep showers to a reasonable time.
- Use a broom to sweep outdoors instead of a hose.
- Mulch your garden beds to retain moisture longer.

### **LET US KNOW WHAT YOU THINK!**

Go to [www.savingwater.org](http://www.savingwater.org) and take our survey and enter to win a free home water and energy saving kit!

### **KEEPING YOUR WATER SAFE**

For additional information, the following resources are available for assistance:

**Washington State Department of Health**  
(360) 236-3100

**Washington State Department of Ecology**  
(425) 649-7000

**Washington State Office of Drinking Water**  
(253) 395-6750

**Environmental protection Agency (EPA)**  
(800) 426-4791

**Seattle Public Utilities—Customer Service**  
(206) 684-3000

**Seattle Public Utilities—Water Quality**  
(206) 615-0827