

Annual Water Quality Report

April 2013

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 2012 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 Mr. Michael L. Harris, General Manager, at 206.242.8535.

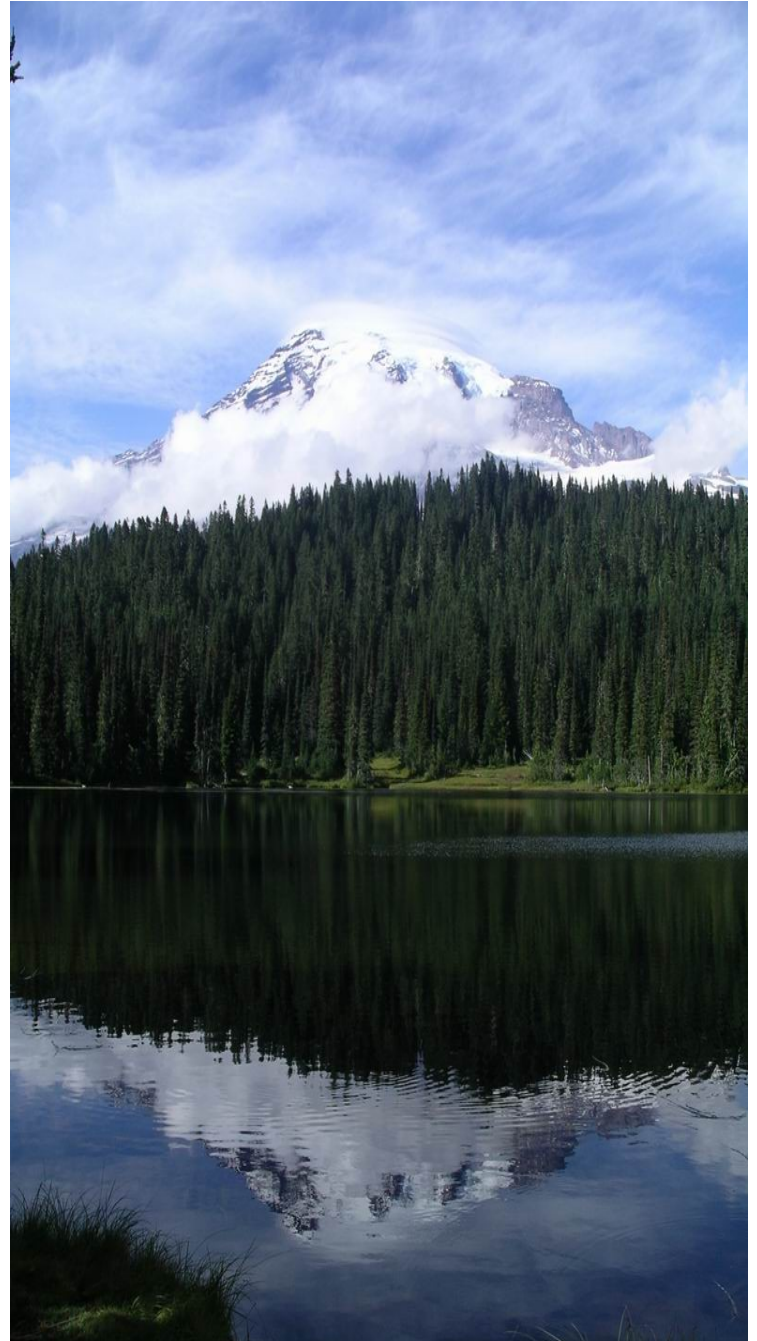


Photo by Sumit Gulwani

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 2012. Compliance is determined on a regional basis. As shown in the table below, our 90th percentile lead concentration is below the Action Level.

Lead and Copper Monitoring Results (Cedar WSA)

Parameter and Units	MCLG	Action Level+	2012 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	3.6	0 of 52	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.096	0 of 52	

* 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. Source water monitoring in 2012 detected *Cryptosporidium* in 0 of 3 samples collected from the Cedar supply.



Photo by Chris Pederick

2012 Water Quality Monitoring Results

In February of this year the results of the 2012 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	MCL	
Raw Water						
Total Organic Carbon	ppm	NA	TT	0.7	0.4 to 1.1	Naturally present in the environment
Cryptosporidium	#/100L	NA	NA	ND	ND	Naturally present in the environment
Finished Water						
Turbidity	NTU	NA	TT	0.3	0.2 to 2.3	Soil Runoff
Fluoride	ppm	4	4	0.8	0.7 to 0.9	Water Additive, which promotes strong teeth
Barium	ppb	2000	2000	1.8	(one sample)	Erosion of natural deposits
Nitrate	ppm	10	10	0.02	(one sample)	Erosion of natural deposits
Total Trihalomethanes	ppb	NA	80	W.D. 49 Monitoring Site*		By-Products of drinking water chlorination
				44	21-55	
Haloacetic Acids (5)	ppb	NA	60	W.D. 49 Monitoring Site*		By-Products of drinking water chlorination
				32	15-50	
Chlorine	ppm	MRDLG=4	MRDL=4	W.D. 49 Monitoring Site*		Water additive used to control microbes
				Average= .01-1.4 Range= 1.1		
Cadmium	ppb	5	5	ND	(one sample)	Erosion of natural deposits

*Tested in 2012

Definitions

Maximum Contaminant Level Goal (MCLG) – 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.

Maximum Contaminant Level (MCL) – 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.

Maximum Residual Disinfectant Level (MRDL) – 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.

Maximum Residual Disinfectant Level Goal (MRDLG) – 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

Nephelometric Turbidity Unit (NTU) – Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2012 is 5 NTU.

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

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

Treatment Technique (TT) – 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 16 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.

For 2012, King County Water District No. 49 purchased 4.56 million gallons of water and had a distribution system leakage rate of 1.5%. District customers used 7 washer rebates and replaced 1 toilet for multifamily dwellings and 4 single family dwellings. District customers used 2 of the Water Efficient Irrigation incentives. The District replaced over 350 water meters and replaced 4 hydrants.

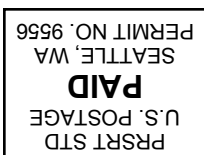
The District's Water Use Efficiency goals are shown below in the italics and the progress towards meeting those goals will be reported annually.

In 2012, the regional 1% program, with our participation, achieved an estimated 0.78 mgd of annual average savings toward the 6-year cumulative total of 5.98 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.

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 with high water losses of 13.3 percent in 1996. The leakage rate for 2012 was 1.5%. The District will continue to tighten the water system by completing more water main replacement projects in the future.



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