

### The Facts on Contaminants

The sources of drinking water (both tap and bottled water) include streams, rivers, lakes, ponds, reservoirs, springs, and wells. Drinking water, including bottled water may reasonably be expected to contain at least small amounts of some contaminants. A contaminant is defined as any substance in water including minerals. The presence of contaminants does not necessarily indicate that water poses a health risk.

As water travels over the surface of the land or through the ground, naturally-occurring minerals, and in some cases radioactive material, dissolve in the water. Water can also pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water are microbes, pesticides, herbicides, organic or inorganic chemicals, and radioactive minerals. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



此报告包含有关您的饮用水的重要信息。请人帮您翻译出来, 或请看懂此报告的人将内容说给您听。

В этом сообщении содержится важная информация о воде, которую вы пьёте. Попросите кого-нибудь перевести для вас это сообщение или поговорите с человеком, который понимает его содержание.

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.



FINANCIAL ACCOUNTING MANAGER:  
Robert B. Wagner

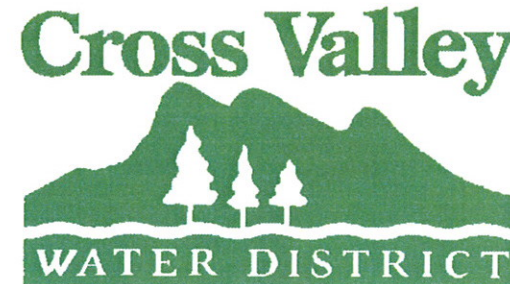
GENERAL MANAGER:  
Gary Hajek

Mark Cassell  
Chris Kuehn  
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BOARD OF COMMISSIONERS:

8802—180th St. SE  
Snohomish, WA 98296-4804  
360-668-6766 or 425-485-8461

# 2012 Water Quality Report



## For More Information on Water Quality Issues:

To receive more information on water quality, you may contact:

Cross Valley Water District  
8802 180th St. SE  
Snohomish, WA  
98296-4804  
(360) 668-6766  
(425) 485-8461  
cvwd@crossvalleywater.net

EPA Safe Drinking Water  
Hotline (800) 426-4791  
[www.epa.gov/safewater](http://www.epa.gov/safewater)  
Email questions to:  
[hotline-sdwa@epamail.epa.gov](mailto:hotline-sdwa@epamail.epa.gov)

Washington State  
Department of Health  
Division of Drinking Water  
1-800-521-0323  
[www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)

Cross Valley Water District is pleased to provide you with our 2012 Water Quality Report. In this report we will provide you with information about your water source and the results of our water quality testing in 2012.

Public interest and participation is encouraged in our community's decisions regarding drinking water. Regular meetings of the Board of Commissioners occur on the first and third Tuesday of each month. Meetings are held at the District Office at 2:30 p.m. You are welcome to attend and discuss your concerns. Please call the General Manager, Gary Hajek at (360) 668-6766 or (425) 485-8461 ext. 102 to reserve your spot on the agenda if you wish to address the Board.

### What you will find in this report:

- ⇒ Water Source – Where your water comes from
- ⇒ Source and types of contaminants
- ⇒ Test results for the water tested in your area
- ⇒ Explanation of the results
- ⇒ Regulated and Unregulated Contaminants

### WHY ARE WE SENDING THIS REPORT?

The Safe Drinking Water Act (SDWA) requires community water systems to provide customers with annual reports on the quality of their drinking water. This information is to raise consumer awareness of where their water comes from and to help them understand the process by which safe drinking water is delivered to their homes. All people are exposed to sources of disease and illness every day in many different ways. Typically, healthy people have normal immune systems that can help prevent diseases from many sources. 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791). The information in this report has been collected and reported in accordance with the water quality standards established by the EPA and DOH. Cross Valley is dedicated to providing you with the safest and most reliable water supply.

### Conservation Kits


A limited number of indoor and outdoor conservation kits are available in our office. Please call us at 360-668-6766 or 425-485-8461 or drop us an email at [cvwd@crossvalleywater.net](mailto:cvwd@crossvalleywater.net). We can reserve your kits for pickup, or have them delivered. Just let us know and we will be happy to process your request.

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Turbidity, Nitrate, Total Coliform Bacteria, Fluoride, Bromodichloroacetic Acid, Chloroform, Lead, Copper .....

What do all these terms mean?



DO I RECEIVE GROUND WATER OR SURFACE WATER TO MY HOME

Cross Valley Water District has several sources from which we draw water. One source is from our own wells listed below. Some of our customers also receive water that we purchase from the City of Everett. This water is surface water that comes from Spada Reservoir, located approximately 30 miles east of Everett. This water is treated at the Lake Chaplin Treatment plant where Chlorine & Fluoride is added.

Customers in the Fobes Hill, Swans Trail, Seattle Hill, Lowell Larimer Road and the general Clearview area receive purchased City of Everett Water. The balance of our customers receive well water from our well supply.

If you do not know from which water source your water is drawn, please call our office and we will be able to tell you if your home received well or surface water.

WELL NAME	FLOW RATE (In gpm)	WELL SCREEN DEPTH-FT.	PRES-SURE ZONE	TREATMENT
1	130	171-191	640	None
3	350	208-238	640	None
5	450	217-244	756	Filtration & Chlorination
6	400	235-255	575	Filtration & Chlorination
7	350	171-191	640	None
7A	150	204-214	640	None
8	350	174-244	640	None
9	980	262-300	640	None
10	700	220-271	575	Filtration & Chlorination
Wood lane	40	156-168	640	None

**Maximum Contaminant Level (MCLG)** - 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.

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

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

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment of other requirements that a water system must follow.

**Parts per Million (ppm)/Parts per Billion (ppb)** - A part per million means that one part of a particular contaminant is present for every million parts of water. Similarly, parts per billion indicate the amount of contaminant per billion parts of water.

**Total Coliform Bacteria** – Testing is used to monitor microbial quality in the water distribution system.

**Fluoride** – Is added to the water (Everett Water Supply Only) in carefully controlled levels for dental health. The Fluoride in well water come from natural sources.

**Nitrate** – The small amount of nitrate comes from natural sources in the water shed.

**Turbidity** – Is a measure of the amount of particulates in water measured in Nephelometric Turbidity Units (NTU). Particulates in water can include bacteria, viruses and protozoans that can cause disease. Turbidity measurements are used to determine the effectiveness of the treatment process in removing these particulates. 95% of all combined filter effluent samples, must be less than, or equal to 0.3 NTU and no single turbidity sample can be greater than 1.0 NTU.

**<sup>1</sup>Bromodichloroacetic Acid, Chloral Hydrate, Dichloroacetone, 1,1 Dichloropropanone, 1,1,1 Trichloropropanone, Total Organic Halides** – These substances are by-products of the chlorine disinfection process and were monitored quarterly as part of the Information Collection Rule (ICR) requirements.

**<sup>2</sup>Bromodichloromethane, Chloroform, Dichloroacetic Acid, Trichloroacetic Acid** – These substances are disinfection by-products which must be monitored quarterly every year to determine compliance with the Disinfectants/Disinfection By-products Rule regulations.

**<sup>3</sup>Not Applicable (N/A)** - Means that EPA has not established MCLGs for these substances.

**Microbial, Turbidity and Inorganics** – All parameters are below EPA standards.

**Lead & Copper** – EPA requires monitoring for the presence of lead and copper. The 90% level is the highest result obtained in 90% of the samples when ranked from lowest to highest findings. This indicates there is virtually no lead or copper in the water you are provided, but your household plumbing may contribute to the presence of lead and copper at your tap.

**ND & NR** – “ND” means not detected. “NR” means the contaminant was not regulated by EPA.

**Arsenic** – In January 2001, considerable media attention was given to the Bush administration’s decision to review the new arsenic standard for drinking water approved by President Clinton. After extensive review of all available health effects data, the USEPA and President Bush reinstated the new maximum contaminant level (MCL) for arsenic in drinking water of ten parts per billion (10 ppb). Over the past year, Everett and Cross Valley have routinely monitored the treated drinking water for arsenic. None near the MCL was detected in any of the samples collected.

**Treatment Polymers** – During water treatment, polymer coagulants are added to improve coagulation and filtration that remove particulates from water. The particulates that are removed can include viruses, bacteria and other disease causing organisms. The USEPA sets limits on the type and amount of polymer that a water system can add to the water. In addition the EPA limits, the State of Washington also requires that all polymers used be certified safe for potable water use by an independent testing organization (NSF International). During treatment, Everett adds only NSF approved polymers and the levels used are far below the safe limits set by USEPA.

**Disinfection By-Products and Risks to Pregnancy** – Some recent health effects studies have suggested that high levels of trihalomethanes (THMs) in drinking water may be linked to increased risks for birth defects or miscarriage in pregnant women. THMs are one of the by-products that form when drinking water is chlorinated to kill disease-causing organisms. The studies suggest that levels of THMs above the new EPA safety standard of 80 parts per billion (ppb) may be of concern for pregnant women. In January 2002, the Environmental Working Group and the US Public Interest Research Group released a joint independent report listing all US water systems since 1995 that have or are currently providing water exceeding the new 80 ppb standard. The Everett water system is not on that list. Since required monitoring began nearly fifteen years ago, the THM content of Everett’s water has been significantly below the new maximum allowable safe level of 80 ppm and currently contains less than half of the amount.

**EPA Lead Statement:**  
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. Cross Valley 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 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>.

2012 WATER QUALITY ANALYSIS RESULTS FROM EVERETT AND THE WELLS OF CROSS VALLEY

MICROBIAL - TURBIDITY - INORGANIC									
Parameter	Units	CVWD WELLS				EVERETT SUPPLY		Complies	Major Source Listed by EPA
		Ideal Goal (MCLG)	Max Level (MCL)	Range or Other	Average Value	Range or Other	Average Value		
Turbidity	NTU	.10	1.0	ND – .92	.24	100%	0.11	YES	*Soil Erosion (See last page of this report)
Fluoride	ppm	2	4	ND – .18	0.05	0.0 – 1.0	0.7	YES	CVWD –naturally occurring, erosion of natural deposits EVERETT-Fluoride is added to your water in carefully
Nitrate (NO3)	ppm	10	10	0 – 3.51	1.43	0.042– 0.175	0.096	YES	Erosion of natural deposits and animal wastes
Arsenic	ppm	ND	0.05	0-.005	.003	ND	ND	YES	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production waste
Total Coliform	% Pos	0	5% Per/mo	None	0%	None	0.0%	YES	Everett collects 120-125 samples per month. CVWD collects 20.
*CITY OF EVERETT: Total coliform bacteria monitoring is used to track microbial quality in the water distribution system. Not more than 5% of the monthly total can be positive for total coliforms. No total coliform were detected in 2012.									

DISINFECTION BY-PRODUCTS									
Parameter	Units	CVWD				EVERETT SUPPLY		Complies	Major Source Listed by EPA
		Ideal Goal (MCLG)	Max Level (MCL)	Range Detected	Average Value	Range Detected	Average Value		
Chloroform	ppb	0	NR	2.93 – 48.2	27.7	24.6 – 52.0	37.1	YES	By-product of drinking water chlorination
Bromodichloromethane <sup>2</sup>	ppb	0	NR	1.0 – 4.7	2.25	1.6 – 2.4	1.9	YES	By-product of drinking water chlorination
Chlorodibromomethane	ppb	0	NR	ND – 3.1	.81	NA	NA	YES	By-product of drinking water chlorination
Total Trihalomethanes	ppb	0	80	7.6 – 52.8	30.7	26.3 – 54.1	49.1	YES	By-product of drinking water chlorination
Dichloroacetic Acid <sup>2</sup>	ppb	0	NR	1.7 – 12.0	5.34	4.8 – 18.4	12.9	YES	By-product of drinking water chlorination
Trichloroacetic Acid <sup>2</sup>	ppb	0	NR	1.3 – 27.1	13.3	16.5 – 23.4	19.9	YES	By-product of drinking water chlorination
Monochloroacetic Acid	ppb	0	NR	ND–1.72	.13	2.0 – 2.8	2.3	YES	By-product of drinking water chlorination
HAA(5)	ppb	0	60	3.0 – 45.0	22.3	22.6 - 42.5	36.9	YES	By-product of drinking water chlorination

LEAD AND COPPER SAMPLING													
Parameter	Units	CROSS VALLEY WELLS				EPA		EVERETT WATER SUPPLY				Complies	Major Source Listed by EPA
		Ideal Goal	Action Level	90% Level	Homes Exceeding The Action Level	Ideal Goal	Action Level	90% Level	Homes Exceeding The Action Level				
Lead	ppb	0	15	.002	NONE	0	15	2	NONE	YES	Corrosion of household plumbing		
Copper	ppm	0	1.3	.408	NONE	1.3	1.3	0.109	NONE	YES	Corrosion of household plumbing		

MICROBIAL - TURBIDITY - INORGANIC						
	Well 3	Wells 5, 6 & 10	Wells 7	Well 8	Well 9	Woodlane
Turbidity	ND	.13	.92	.25	ND	.16
Fluoride	ND	.18	ND	ND	.12	ND
Nitrate	1.07	ND	.80	2.65	.55	3.51
Arsenic	.003	.004	ND	.003	.005	.001
Lead	ND	ND	ND	ND	ND	ND

ADDITIONAL EVERETT RESULTS			
Parameter	Units	Range Detected	Average Value
Alkalinity	ppm	12.7 – 23.4	16.0
Aluminum	ppm	.001-0.19	0.02
Arsenic	ppb	ND	ND
Calcium Hardness	ppm	7.5 –13.2	9.6
Free Chlorine	ppm	0.2 – 1.5	0.6
PH	s.u.	7.6 – 8.9	7.9
Sodium	ppm	5.5 – 6.5	6.0
Total Hardness	ppm	10.1 – 15.0	12.4