



Small Town. Real Life.

City of Duvall  
Public Works Dept.  
14525 Main Street NE  
PO Box 1300  
Duvall, WA 98019



Small Town. Real Life.

ANNUAL WATER  
QUALITY REPORT  
FOR 2013

PW ID WA207508

July 2014



**WHERE YOUR RATE DOLLAR GOES**

Your water rates pay for maintaining our water system, from protecting, storing, treating and delivering water, to customer service, security, tax and administration.

**INFORMATION FOR YOUR REVIEW**

The City has on file for customer review our March 2013 Water Comprehensive Plan, water quality test results, a Cross-Connection Control Plan, Development Design Standards, and the Water Shortage Response Plan.

**COMMUNITY PARTICIPATION**

You are invited to participate in our public City Council meetings and voice any concerns or suggestions you have about your drinking water. The City Council meets the 2<sup>nd</sup> and 4<sup>th</sup> Thursdays of each month at 7:00 p.m. in the meeting room at the Duvall Visitor Center, 15619 Main Street NE, Duvall.

**RATE ASSISTANCE PROGRAM**

For those of our customers who are struggling with financial hardship, we're committed to providing rate assistance. For more information about the program contact the Utility Billing Clerk.

**CITY OF DUVAL CONTACTS**

Utility Billing: 425.788.1185

Public Works: 425.788.3434

[www.duvallwa.gov](http://www.duvallwa.gov)

**MAKING SURE THIS REPORT REACHES OUR CUSTOMERS**

The Environmental Protection Agency (EPA) has informed water providers that having this report available on the Web meets delivery requirements as long as customers are notified of this option and those who would like a paper copy can request one. The City has decided to provide it in this way to conserve paper and save printing and mailing costs. If you would like to provide feedback about the delivery method, please send an email to [sara.ruhland@duvallwa.gov](mailto:sara.ruhland@duvallwa.gov) or call our Water Quality staff at 425.788.3434.

**AUTOMATIC PAYMENT OPTION**

The City of Duvall now has the capability of deducting your monthly utility bill from your checking or savings account.

For more information or to download the ACH Authorization form go to <http://www.duvallwa.gov/departments/finance/finance.html>. Fill out this form and turn the original in to City Hall.

**THE DETAILS ABOUT OUR WATER SOURCES AND THEIR POTENTIAL CONTAMINATIONS**

To ensure tap water is safe to drink, the Environmental Protection Agency and the Washington State Board of Health regulate the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Washington's Source Water Assessment Program is conducted by the Department of Health (DOH) Office of Drinking Water. According to DOH, all surface waters 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>.

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.

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 at **800.426.4791**.

In Duvall's drinking 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.

Maximum Contaminate Levels - or MCLs - are set at very stringent levels. To understand the risk level of possible health effects described for many regulated contaminants, consider that a person would have to drink two liters of water every day for a lifetime at the MCL level to have a one-in-a-million chance of having the described health effect.

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 healthcare 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 at **800.426.4791**.



**LEAD AND COPPER MONITORING**

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. Duvall is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components within your home. 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>.

**Most Recent Lead and copper monitoring results (Tolt WSA)**

Parameter and Units	MCLG	Action Level+	2011 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	6	0 of 53	Corrosion of household plumbing systems
Copper, ppm	1.3	1.3	0.16	0 of 53	

\* 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.

## WHERE DOES YOUR WATER COME FROM

When you turn on the tap, you may wonder where your water comes from. Duvall purchases all of its water from Seattle Public Utilities (SPU). SPU provides many cities and water districts with water to supply their customers.

## OUR HIDDEN WATER SYSTEM

Infrastructure. It may sound boring, but take a deeper look. You'll find the amazing role SPU's and Duvall's pipes, pumps and treatment plants play to bring some of the best water in the world to your tap.

- It starts with the watersheds - over 100,000 protected acres - that provide some of the cleanest water. We're the envy of the nation, with such a safe and reliable source of mountain water. These watersheds also provide habitat for our salmon and other animals and plants.
- Two surface water sources provide the majority of water for SPU's system; the Cedar River and the South Fork Tolt River in the Cascade Mountains. Duvall's high-quality water comes from the **Tolt Water Supply**.
- Water travels to two plants that treat and test the water to ensure it is safe. Because of the purity of the source water, we do much less treatment than other cities.
- South Fork Tolt water is ozonated, filtered, and disinfected with chlorine. Then our water is ready to drink.
- It travels through 39 miles of city-owned water mains. We schedule regular preventative maintenance to prevent leaks and breaks.
- It is monitored 24 hours a day, seven days a week, by people responding to breaks, power outages, pumping station issues and coordinating with street and electricity construction projects.
- It is stored in two covered reservoirs in the city, protected from contamination.
- It's there - tasty, clean and safe when you turn on the tap.
- It takes many people and lots of equipment, to bring you what you have come

to expect: the best water in the nation, for less than a penny a gallon.

*More than 100,000  
acres of protected  
watershed*

## PREVENTING WATER WASTE

Duvall purchased 176,159,984 gallons of treated drinking water from SPU in 2013. Of this amount, 12,513,292 gallons were lost to leakage; representing a leakage rate of 7.1 percent, which is considered relatively low.

Preventing leaks is one way water is conserved; your efforts are another. Why is conservation so important in our region? It gives customers ways to lower their utility bills. It helps make the water system more reliable by reducing waste and leaving water available for when it's needed most. And, conserving water means that we'll have enough water for ourselves, wildlife, and future generations.

The Saving Water Partnership (SWP) – which is made up of Duvall and its 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. In order to meet the goal, the amount of water used per person will need to decrease to offset growth. For 2013, the Saving Water Partnership met the goal, using 93.1 mgd.

Visit [www.savingwater.org](http://www.savingwater.org) for information on rebates, conservation tips, videos on fixing leaks and efficient landscaping practices, and more.

*Your water is some of  
the highest quality in  
the country and a  
bargain at less than a  
penny a gallon.*



## Our Results

The results of monitoring in 2013 are shown in the table below. These results are for parameters regulated by the federal and state agencies. For other water quality information please contact the Public Works Department. We can also send you a list of the more than 200 compounds for which we tested but did not find in our drinking water supplies.

Water quality monitoring data can be difficult to interpret. To make all the information fit in one table, we used many acronyms that are defined below the table.



SPU 2013 Water Quality Monitoring Results Cedar and Tolt Water Quality Data									
		EPA's Allowable Limits		Levels in Cedar Water		Levels in Tolt Water			
Detected Compounds	Units	MCLG	MCL	Average	Range	Average	Range	Typical Sources	In Compliance
<b>Raw Water Before Treatment</b>									
Total Organic Carbon	ppm	NA	TT	0.8	0.4 to 1.4	1.3	1.2 to 1.4	Naturally present in the environment	Y
Cryptosporidium*	#/100L	NA	NA	ND	ND	<1	ND - 2	Naturally present in the environment	Y
<b>Finished Water</b>									
Turbidity	NTU	NA	TT	0.4	0.2 to 2.7	0.06	0.04 to 0.14	Soil runoff	Y
Barium	ppb	2000	2000	1.8	(one sample)	1.9	(one sample)	Erosion of natural deposits	Y
Bromate	ppb	0	10	0.08	ND - 2	ND	ND	By-product of drinking water disinfection	Y
Fluoride	ppm	4	4	0.8	0.7 to 0.8	0.8	0.7 to 0.9	Water additive, which promotes strong teeth	Y
Coliform, Total	%	0	5%				ND	Naturally present in the environment	Y
Total Trihalomethanes	ppb	NA	80			27	17.5 - 37.5	By-products of drinking water chlorination	Y
Haloacetic Acids(5)	ppb	NA	60			26	14.8 - 30.4		
Chlorine	ppm	MRDLG = 4	MRDL = 4				Average = 0.98 Range = 0.9—1.07	Water additive used to control microbes	Y

\*Cryptosporidium was not detected in any samples from 3 samples from the Cedar and in 1 sample from the 4 samples on the Tolt.

## Definitions

**NTU:** *Nephelometric Turbidity Unit* - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2013 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 100% of the samples from the Tolt in 2013 were below 0.3 NTU.

**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.

**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.

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

**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**

