

## Our Water Quality Commitment:

### You Can Count on Washington Water Employees to . . .

- ⇒ provide you with the highest quality water possible
- ⇒ sample, test and treat your water on a regular basis
- ⇒ work diligently to meet every water quality standard on every system, every day
- ⇒ maintain water distribution system reliability
- ⇒ provide you with the highest level of customer service possible

#### Important Phone Numbers:

**Washington Water Service Company**  
P.O. Box 336  
Gig Harbor, WA 98335-0336  
Office: (253) 851-4060  
Toll Free: (877) 408-4060  
<http://www.wawater.com>

**SW Regional Operations Mgr:**  
**Paul Robischon**

**Washington State Department of Health**  
Southwest Office of Drinking Water  
P.O. Box 47823  
Olympia, WA 98504-7823  
(360) 664-0768  
<http://www.doh.wa.gov/ehp/dw/>



WASHINGTON WATER  
SERVICE COMPANY

### **Alpine Hills Water System** **State ID #01826P**

## 2011 Drinking Water Report

Washington Water Service Company (WWSC) is committed to being a leader in providing communities and customers with traditional and innovative utility services. WWSC is proud of its service record and is staffed with courteous and knowledgeable water professionals who are dedicated to meeting your needs. While we are proud of our past record, we continually strive to improve upon the quality of services we provide to you, our valued customer.

This *2011 Drinking Water Report* is your annual update on the quality and safety of your drinking water. It includes the water quality monitoring results from the **most recent round** of testing done on your system, in accordance with state and federal regulations. This report also provides access through references and telephone numbers to source water assessments, health effects data and additional information about your water system. This allows you to make personal health-based decisions regarding your drinking water consumption and become more involved in decisions which may affect your health. We hope you find this information helpful!

**Washington Water Service Co.**  
Toll-free: (877) 408-4060

## Regarding “contaminants” in 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 the water poses a health risk. In order to ensure that tap water is safe to drink, the Washington State Department of Health and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Washington State Department of Agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Sources of drinking water:

Common sources of drinking water—both tap and bottled water—include rivers, lakes and streams (surface water) and wells and springs (groundwater). As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. The water can also pick up substances resulting from the presence of animals or from human activity.

### Where does my water come from?

Your water comes from two sources and is considered groundwater. One source is Well #2, which is 105 feet deep and located at Lot 25 in the plat of Alpine Hills. To remove elevated levels of naturally-occurring iron and manganese from this well water, chlorine is added to oxidize and precipitate out these minerals. The water is then filtered for clarity.

The second source of water is imported from the neighboring Camelot & Western Skies Water System. These two wells are 117 and 130 feet deep. This water is not treated (no chlorination, filtration, pH adjustment, etc).

## Contaminants that may be present in source water include:

- ◆ **Microbial contaminants**, such as viruses, parasites and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ◆ **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- ◆ **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- ◆ **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- ◆ **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.



# Water Quality Data

## How To Read The Tables:

Your water is tested for more than 100 contaminants for which state and federal standards have been set. **Tables 1 & 2** list all primary contaminants that were detected (in any amount) along with their respective Maximum Contaminant Levels (MCLs). Primary standards protect public health by limiting the levels of these contaminants in drinking water. **Table 3** shows the levels of secondary contaminants and common water properties of interest to many consumers. Secondary contaminants have no known health effects but can affect the aesthetic properties of water (taste, odor and appearance). Secondary Maximum Contaminant Levels (SMCLs) are guidelines only.

## Terms and Abbreviations used:

**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 Contaminant Level Goal (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 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 (e.g., chlorine, chloramines, chlorine dioxide).

**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.

**Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**Lead and Copper 90th Percentile Value:** Out of every 10 homes sampled, 9 were at or below this level. This must be  $\leq$  the AL or additional steps must be taken.

**ppb:** parts per billion    **ppm:** parts per million

**N/A:** not applicable

**TABLE 1: Primary Contaminants Detected In Your Drinking Water**

Primary Contaminant	Units	Year Tested	MCL	MCLG	YOUR WATER <sup>a</sup>	Compliant? (Y/N)	Major Sources in Drinking Water
Nitrate	ppm	2010	10	10	< 0.2 - 1.6	Y	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Disinfectant</b> (an additive)							
Chlorine	ppm	2010	MRDL = 4	MRDLG = 4	0.06 <sup>b</sup>	Y	Water additive used to kill microbes, and to optimize iron and manganese removal treatment
<b>Disinfection Byproducts (DBPs)</b>							
Total Trihalomethanes (TTHM), ppb		2010	80	N/A	1.3	Y	Byproduct of drinking water disinfection

**TABLE 2: Lead and Copper Monitoring - Samples are collected at customer faucets. The number of homes sampled is based on population served by the system. Specific EPA-mandated criteria are used to select the homes:**

Primary Contaminant	Units	Year Tested	AL	No. of Homes Sampled	90th Percentile Value	No. of Homes Exceeding the AL	Compliant? (Y/N)	Major Sources in Drinking Water
Copper	ppm	2008	1.3	5	0.30	0	Y	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2008	15	5	5	0	Y	Corrosion of household plumbing systems; erosion of natural deposits

**TABLE 3: Secondary Contaminants and Unregulated Contaminants**

Secondary Contaminant	Units	Year Tested	SMCL	YOUR WATER <sup>a</sup>	Compliant? (Y/N)	Major Sources in Drinking Water
Iron	ppm	2008	0.30	< 0.1	Y	Leaching from natural deposits; industrial wastes
Manganese	ppm	2008	0.05	< 0.01 - 0.01	Y	Leaching from natural deposits
Sodium	ppm	2008	N/A <sup>d</sup>	< 5 - 7	Y	Erosion of natural deposits; Seawater influence
Hardness	ppm	2008	N/A	72 - 78 <sup>e</sup>	Y	Erosion of natural deposits
<b>Unregulated Contaminants<sup>f</sup></b>						
Total Trihalomethanes (TTHM), ppb		2008	N/A	1.0	Y	Byproduct of drinking water disinfection

<sup>a</sup> There are two sources supplying this system, the Alpine Hills well and water imported from the neighboring Camelot & Western Skies wellfield, via an intertie. Both sources are sampled and tested. A range of results is shown if their results differ.

<sup>b</sup> This is the running annual average. Range = 0.00 - 0.18 ppm chlorine.

<sup>c</sup> Most recent testing done, in accordance with the regulations (required every 3 years)

<sup>d</sup> The EPA recommends 20 ppm sodium as a level of concern for those consumers who must restrict their dietary intake.

<sup>e</sup> Equivalent to 4.2 - 4.6 grains per gallon of hardness. 0-75 ppm hardness is considered "soft" water, 75-150 ppm is "moderately hard", 150-300 ppm is "hard" and > 300 ppm is "very hard".

<sup>f</sup> Unregulated contaminants are those for which EPA has not established drinking water standards (note there is no MCL). The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted. This result represents a sample collected just after the Alpine Hills treatment facility but prior to entry to the distribution system. TTHMs are regulated in the distribution system where they are known to form over time. See Table 1 for those levels and their MCLs.

**Synthetic Organic Chemicals (SOCs).** The Alpine Hills source was tested for 63 different pesticides in 2006. We are pleased to report that there were no detections of any of these contaminants. The Camelot & Western Skies wellfield was tested for 14 different herbicides and 31 pesticides in 2010. Again, there were no detections of any of these contaminants. The Dept of Health waived all monitoring for insecticides during the 2008-2010 period. No further monitoring for SOC's is required until sometime during the new 2011-2019 compliance period.

### Reminder:

Any hazardous material that you put onto the ground or in your septic tank could potentially pollute the groundwater. Please help the Alpine Hills Water System prevent groundwater contamination for this and future generations.

The Office of Drinking Water has compiled source water assessment program (SWAP) data for all community water systems in Washington. SWAP data for your system is available by accessing DOH's web site at:

<http://www4.doh.wa.gov/dw/swap/app/login.cfm?app=maps>

If you do not have access to the web, we encourage you to use the internet service available through the public library system.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, those 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 at (800) 426-4791.

More information about contaminants found in water and their potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline or by visiting their web site shown below.

**Safe Drinking Water Hotline**  
**1-800-426-4791**  
**www.epa.gov/ogwdw**