

## 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>

NW Regional Operations Mgr:  
Dan Brown

Washington State Department of Health  
Northwest Office of Drinking Water  
20435- 72nd Avenue South Suite 200, K17-12  
Kent WA 98032-2358  
(253) 395-6750  
<http://www.doh.wa.gov/ehp/dw/>



WASHINGTON WATER  
SERVICE COMPANY

### Orting 15 Water System State ID #047783

## 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 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.

#### Reminder:

Any hazardous material that you put onto the ground or in your septic tank could potentially pollute the groundwater. Please help the Orting 15 Water System prevent ground-water contamination for this and future generations.

### Where does my water come from?

Your water comes from one well and is considered groundwater. The water is pumped into the system from a depth of 150 feet. Currently, your water is not treated. However, results of routine lead and copper monitoring at customer faucets in 2002 & 2003 showed that the source water is corrosive to household plumbing and fixtures and that corrosion control treatment is required. Details on this treatment project are provided inside this brochure.

### 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.



**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.

**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 ≤ the AL or additional steps must be taken.

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

**N/A:** not applicable    **NTU:** nephelometric turbidity unit

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.

# Water Quality Data

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

Primary Contaminant	Units	Year Tested	MCL	MCLG	YOUR WATER	Compliant? (Y/N)	Major Sources in Drinking Water
Nitrate	ppm	2010	10	10	1.5	Y	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

**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 <sup>a</sup>	AL	No. of Homes Sampled	90th Percentile Value	No. of Homes Exceeding the AL	Compliant? (Y/N)	Major Sources in Drinking Water
Copper	ppm	2009	1.3	12	2.00	8	N <sup>b</sup>	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2009	15	12	< 2	0	Y	Corrosion of household plumbing systems; erosion of natural deposits

**TABLE 3: Secondary Contaminants (Inorganic Chemical and Physical)**

Secondary Contaminant	Units	Year Tested	SMCL	YOUR WATER	Compliant? (Y/N)	Major Sources in Drinking Water
Iron	ppm	2010	0.30	< 0.1	Y	Leaching from natural deposits; industrial wastes
Manganese	ppm	2010	0.05	< 0.01	Y	Leaching from natural deposits
Chloride	ppm	2010	250	8	Y	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	2010	N/A <sup>c</sup>	6	Y	Erosion of natural deposits; seawater influence
Hardness	ppm	2010	N/A	56 <sup>d</sup>	Y	Erosion of natural deposits
Conductivity	umhos/cm	2010	700	116	Y	Substances that form natural deposits; seawater influence
Turbidity	NTU	2010	N/A <sup>e</sup>	< 0.1	Y	Soil runoff
Color	color units	2010	15	< 5	Y	Naturally occurring organic materials

<sup>a</sup> Most recent testing done, in accordance with the regulations. These tests are required every three years.  
<sup>b</sup> See **Lead and Copper** section at top right for additional details. **Health Effects:** Copper is an essential nutrient but some people who drink water containing copper in excess of the AL over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the AL over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.  
<sup>c</sup> The EPA recommends 20 ppm as a level of concern for those consumers who must restrict their dietary intake.  
<sup>d</sup> Equivalent to 3.3 grains per gallon of hardness. 0-75 ppm hardness is generally considered "soft" water, 75-150 ppm is "moderately hard", 150-300 ppm is "hard" and > 300 ppm is "very hard".  
<sup>e</sup> 1.0 NTU is the state's drinking water response level, meaning additional sampling or steps **may** be required, if exceeded.

**Lead and Copper** are regulated by a treatment technique that is required to control the corrosiveness of the water. If more than 10% of customer tap water samples exceed the lead and/or copper Action Level (AL), additional steps must be taken. As reported in last year's drinking water report, a simplified nozzle aeration study was conducted in 2009 and showed that this type of aeration was not aggressive enough to remove naturally-occurring carbon dioxide (CO<sub>2</sub>) from the Orting 15 source water. The dissolved CO<sub>2</sub> causes a lower pH (acidic) water, thereby making it corrosive toward household copper plumbing. Eight of the 12 homes sampled still exceeded the copper AL (See TABLE 2 at left).

In 2010, Washington Water Service Co. (WWSC) received permission from the Dept of Health (DOH) to pilot a more aggressive and commercially available aeration unit to strip the carbon dioxide from the source water. That pilot unit was purchased, configured and set up by WWSC at the well site for a two-week study in Sept 2010. The results showed that this method of aeration can significantly reduce the corrosive characteristics of the Orting 15 source water. A summary of the pilot process and test results was written by WWSC's Engineering Dept and submitted to DOH in Dec 2010. DOH granted approval of this corrosion control treatment alternative method in Jan 2011. Orting 15 must now confirm their treatment process selection and retain an engineer for full scale design. That design must be submitted to DOH by Apr 15, 2011.

**Synthetic Organic Chemicals.** Your drinking water source was tested for 14 different herbicides and 30 pesticides in 2010. There were no detections of any of these chemicals. The Dept of Health waived any monitoring for insecticides in the 2008-2010 compliance period.

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 EPA's Safe Drinking Water Hotline:

**Safe Drinking Water Hotline**  
**1-800-426-4791**  
[www.epa.gov/ogwdw](http://www.epa.gov/ogwdw)