

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
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

Parkview Terrace Water System State ID #66215N

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.

Reminder:

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

Where does my water come from?

In 2010, your water came from three sources. This is considered groundwater. The water is pumped into the system from three wells, which range in depth from 156 to 192 feet. Water entering the Parkview Terrace storage tank (located on Lakeway Blvd) is aerated to drive off dissolved carbon dioxide that is naturally-occurring in the groundwater from Wells #1 and #2. Aeration increases the pH of the water, thereby reducing the water’s corrosivity toward household copper plumbing and fixtures

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.

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

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 at:

EPA's Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/ogwdw

TABLE 1: Primary Contaminants Detected In Your Drinking Water

Primary Contaminant	Units	Year Tested	MCL	MCLG	YOUR WATER ^a	Compliant? (Y/N)	Major Sources in Drinking Water
Nitrate	ppm	2010	10	10	1.2 - 2.2	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	AL	No. of Homes Sampled	90th Percentile Value	No. of Homes Exceeding the AL	Compliant? (Y/N)	Major Sources in Drinking Water
Copper	ppm	2011 ^b	1.3	22	1.0	0	Y	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2011 ^b	15	22	3	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 ^a	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	Y	Leaching from natural deposits
Chloride	ppm	2008	250	3 - 4	Y	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	2008	N/A ^d	< 5	Y	Erosion of natural deposits; seawater influence
Hardness	ppm	2008	N/A	52 - 64 ^e	Y	Erosion of natural deposits

^a There are three active wells serving the system and each is tested. A range of concentrations is shown if their results differ.

^b This January 2011 sample set was the first of two rounds of samples required in two consecutive six month periods to demonstrate the effectiveness of aggressive aeration of the source water at the Parkview Terrace well site (located on Lakeway Blvd) at reducing corrosivity of the water. The second round of sampling will be completed in July 2011. See "Corrosion Control Treatment Update" at right for details.

^c Most recent testing done, in accordance with the regulations (required every 3 years)

^d The EPA recommends 20 ppm sodium as a level of concern for consumers who must restrict their dietary intake.

^e Equivalent to 3.0 - 3.7 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" water.

Health Effects of Copper in Drinking Water: 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 could 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.

Tips for Reducing Your Exposure to Copper: Because copper may dissolve into the water when it sits unused in the pipes for long periods of time (like overnight or while away at work during the day), simply running the COLD water for 30-45 seconds prior to using the water for drinking or cooking will significantly reduce your exposure to copper. Avoid using hot water from the tap for drinking or cooking (use cold water and then heat it on the stove or in the microwave). Heat tends to speed up the dissolution of copper into water.

Corrosion Control Treatment Update (see Table 2).

All public water systems are required to monitor the levels of lead and copper at customer taps every 3 years in order to ensure that they stay below safe levels, called Action Levels (AL). Due to more than 10% of customer samples exceeding the copper AL of 1.3 mg/l during routine monitoring in 2007 (lead has never exceeded its AL of 15 ppb), the water system was required to take additional steps. These steps included a broadened sampling of homes and the testing of the well water itself for corrosive properties. The results of these additional tests confirmed that the water was indeed corrosive to household plumbing. In 2008, the system entered into the "corrosion control process". This involves the design, piloting and construction of a professionally-engineered and Dept of Health-approved treatment system which reduces the corrosivity of the water. In late 2009, aeration equipment was installed at the Parkview Terrace box reservoir to pilot study the effectiveness of aggressive aeration of the source water (as it enters the storage tank) at reducing its corrosivity. Aeration drives off the naturally-occurring dissolved carbon dioxide in the groundwater, which raises the pH of the water, thereby reducing its corrosivity toward household copper plumbing. In June 2010, ten homes served by the box reservoir, and which had elevated copper in their tap water, collected first-draw kitchen tap samples. All ten samples were below the copper AL of 1.3 mg/l (range = 0.12 - 0.98 mg/l). In January 2011, sampling was broadened to 22 homes representing the entire Parkview Terrace water system, including homes served by Well #4 (Burley Terrace well) to determine whether corrosion control work is still needed elsewhere in the system, also. All 22 of these samples were also below the copper AL (range = < 0.02 - 1.2 mg/l). Ninety percent of the homes tested must be at or below the AL for the system to be considered "optimized for corrosion control". This is called the "90th percentile value", which was 1.0 mg/l copper for the Jan 2011 sample set (see Table 2 at left). Another round of system-wide samples is scheduled to be collected in July 2011. If the 90th percentile value is at or below the AL for this set, the system will be confirmed optimized for corrosion control.

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.