

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

Minterbrook Water System **State ID #54740B**

2010 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 **2010 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 Minterbrook Water System prevent groundwater contamination for this and future generations.

Where does my water come from?

In 2009, the water system was served by thirteen wells. This is considered groundwater. The water is pumped into the system from these wells, which range in depth from 140 to 326 feet. Chlorine is added at the Sehmel School and Wind N Tide wells only, for disinfection purposes and to eliminate naturally-occurring hydrogen sulfide odor (“rotten eggs”), respectively. There is no other treatment on the system.

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 ≤ the AL or additional steps must be taken.

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

Sodium. The EPA recommends 20 ppm sodium as a level of concern for those consumers who must restrict their dietary intake. The highest level of sodium in your drinking water was last measured in 2008 at Well #11, at **16 ppm**. The other 11 sources range from 5 - 10 ppm.

TABLE 1: Primary Contaminants Detected In Your Drinking Water

Primary Contaminant	Units	Year Tested ^a	MCL	MCLG	YOUR WATER ^b	Compliant? (Y/N)	Major Sources in Drinking Water
Arsenic	ppb	2007-2008	10	0	< 2 - 4	Y	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate	ppm	2009	10	10	< 0.2 - 4.6	Y	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectants and Disinfection Byproducts (in immediate vicinity of the chlorinated Sehmel School and Wind N Tide wells only)							
Chlorine	ppm	2009	MRDL = 4	MRDLG = 4	0.18 ^c	Y	Water additive used to kill microbes and to eliminate off-odors like hydrogen sulfide aroma ("rotten eggs")
Total Trihalomethanes (TTHM), ppb		2007	80	N/A	3.3 - 13.8	Y	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5), ppb		2007	60	N/A	< 0.05 - 3.0	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

Primary Contaminant	Units	Year Tested ^a	AL	No. of Homes Sampled	90th Percentile Value	No. of Homes Exceeding the AL	Compliant? (Y/N)	Major Sources in Drinking Water
Copper	ppm	2007	1.3	20	0.27	0	Y	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2007	15	20	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 ^a	SMCL	YOUR WATER ^b	Compliant?	Major Sources in Drinking Water
Iron	ppm	2007-'09	0.30	< 0.1 - 0.47	Y ^d	Leaching from natural deposits; industrial wastes
Manganese	ppm	2007-'09	0.05	< 0.01 - 0.11	Y ^d	Leaching from natural deposits

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

^b There are thirteen active wells on this system and each is tested. A range of concentrations is shown if their results differ.

^c This is running annual average chlorine concentration in the immediate vicinity of the Sehmel School well at 12400 113th Ave NW (range = 0.00 - 0.26 ppm chlorine). Running annual average in the immediate vicinity of the Wind N Tide well at 10300 128th St NW = 0.03 ppm (range = 0.00 - 0.06 ppm).

^d Secondary maximum contaminant levels (SMCLs) are guidelines only, to control the aesthetic effects caused by nuisance minerals like iron and manganese (dirty/colored water, staining, scale build-up on/in plumbing and fixtures). There are no known health effects associated with drinking water containing iron and manganese at these concentrations.

Iron: Eleven of the 13 wells have non-detectable iron concentrations (< 0.1 ppm). Well 3, at 0.47 ppm iron, supplied only 3.4% of the total water produced in 2009. Well 7, at 0.46 ppm iron, supplied only 1.4% of the water produced in 2009.

Manganese: Eight of the 13 wells have non-detectable manganese concentrations (< 0.01 ppm). Manganese in Well s 3, 11 and 17 ranges from 0.09 - 0.11 ppm.

Synthetic Organic Chemicals (SOCs, or herbicides, pesticides and insecticides). In 2009, the Dept of Health (DOH) notified systems that any source that had not collected a general pesticides sample since January 1, 1999, would be required to collect both a pesticides and an herbicides sample before December 31, 2010. Ten of the 13 wells were tested for herbicides and pesticides in 2009 or 2010. We are pleased to report that there were no detections, in any amount, of any of these contaminants! The remaining 3 wells are scheduled to be tested in 2010. DOH has waived any monitoring for insecticides through December 2010.

Water Hardness. Groundwater picks up minerals such as calcium and magnesium as it moves through soil and rock. Hardness is a measure of the calcium and magnesium present. As the hardness increases, soaps become difficult to "lather up". Soapy and scaly deposits may begin to form on plumbing fixtures, windows and dishes. Although a nuisance, hard water is safe for drinking, cooking, bathing and other household uses. The thirteen wells serving this system have a wide range of hardness, at **42 - 100 ppm, as CaCO₃**. This range is equivalent to 2.5 - 5.8 grains per gallon of hardness (another way to express it). 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".

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?>

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 by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791 or by visiting their web site shown below:

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