

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

BKS Water System **State ID #03581D**

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 BKS Water System prevent groundwater contamination for this and future generations.

Where does my water come from?

Your water comes from two sources and is considered groundwater. The water is pumped into the system from these two wells, which are 123 and 501 feet in depth. Chlorine is added at Well #2, located on Memory Lane, to oxidize and eliminate the naturally-occurring hydrogen sulfide odor (“rotten eggs”).

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 **NTU:** nephelometric turbidity unit

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	2008 & 2010	10	0	< 2 - 4	Y	Erosion of natural deposits (e.g., from volcanic rock); runoff from orchards; runoff from glass and electronic production
Nitrate	ppm	2010	10	10	< 0.2 - 0.8	Y	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfectant (an additive)							
Chlorine	ppm	2010	MRDL = 4	MRDLG = 4	0.02 ^c	Y	Water additive used to eliminate odors such as hydrogen sulfide (rotten eggs); also used to kill microbes

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 ^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	2008	1.3	5	0.13	0	Y	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2008	15	5	< 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? (Y/N)	Major Sources in Drinking Water
Iron	ppm	2008 & '10	0.30	< 0.1	Y	Leaching from natural deposits; industrial wastes
Manganese	ppm	2008 & '10	0.05	< 0.01 - 0.12	Y ^d	Leaching from natural deposits
Chloride	ppm	2008 & '10	250	2	Y	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	2008 & '10	N/A ^e	< 5 - 19	Y	Erosion of natural deposits; seawater influence
Hardness	ppm	2008 & '10	N/A	33 - 52 ^f	Y	Erosion of natural deposits
Turbidity	NTU	2008 & '10	N/A ^g	< 0.1 - 0.2	Y	Soil runoff

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

^b There are two wells on this system and each is tested but not necessarily in the same year. A range of concentrations is shown if their results differ.

^c This is the running annual average chlorine concentration measured/detected in the distribution mains during routine monthly bacteriological sampling. All monthly chlorine residuals in 2010 were 0.02 ppm. Just enough chlorine is added at the Sidney Heights well on Memory Lane to oxidize and eliminate the naturally-occurring hydrogen sulfide odor ("rotten eggs"). This very low dose of chlorine is unlikely to be noticed by customers.

^d Secondary maximum contaminant levels (SMCLs) are guidelines only, to control the staining, scale build-up and dirty, colored water that nuisance minerals like iron and manganese can cause. There are no known health effects associated with drinking water containing manganese at this level. System operations are managed so that taste, odor and appearance problems are kept to a minimum, as much as possible.

^e The EPA recommends 20 ppm sodium for consumers who must restrict their dietary intake. Your water is a blend of the two sources (< 20 ppm).

^f Equivalent to 1.9-3.0 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".

^g 1.0 NTU is the state's drinking water response level, meaning additional sampling or steps **may** be required, if exceeded.

Synthetic Organic Chemicals. Your drinking water sources were tested for 14 different herbicides and 30+ pesticides in 2006 (Well #1) and 2010 (Well #2). There were no detections of any of these contaminants in either source. No further monitoring is required until sometime during the new 2011-2019 compliance period.

Radioactive Contaminants. Your drinking water sources were tested for radium 228 and gross alpha in 2010 and there were no detections. These contaminants can be naturally occurring or the result of oil and gas production and mining activities.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791 or by visiting their web site below. Information about other contaminants found in water and their potential health effects can be obtained there, also.

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