

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
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

Manzanita Beach Water System State ID #50994P

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 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 Manzanita Beach Water System prevent ground-water contamination for this and future generations.

Where does my water come from?

Your water comes from two wells and is considered groundwater. These two wells are 182 and 189 feet deep, both tapping the same aquifer. Currently, your water is not treated. A corrosion control treatment system is in the pilot study and design stages. Once the proposed treatment method is approved by the Dept of Health, construction of the facilities will begin. This new treatment system is expected to be in service by August 31, 2010.

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 \leq the AL or additional steps must be taken.

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

N/A: not applicable

Synthetic Organic Chemicals (herbicides, pesticides and insecticides). In 2009, the Dept of Health 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. Your drinking water source is scheduled to be tested for these chemicals in April 2010. Monitoring for insecticides is not required during this period.

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	2009	10	10	1.1	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

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	2004 ^a	1.3	5	1.38	1	N^b	Corrosion of household plumbing systems; erosion of natural deposits
Lead	ppb	2004 ^a	15	5	8	0	Y	Corrosion of household plumbing systems; erosion of natural deposits

TABLE 3: Secondary and Unregulated Contaminants Detected in Your Drinking Water

Secondary Contaminant	Units	Year Tested ^c	SMCL	YOUR WATER	Compliant? (Y/N)	Major Sources in Drinking Water
Iron	ppm	2007	0.30	< 0.1	Y	Leaching from natural deposits; industrial wastes
Manganese	ppm	2007	0.05	< 0.01	Y	Leaching from natural deposits
Chloride	ppm	2009	250	37	Y	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	2007	N/A ^d	20	Y	Erosion of natural deposits; seawater influence
Hardness	ppm	2007	N/A	101^e	Y	Erosion of natural deposits
Unregulated Contaminants						
Lead	ppb	2007	N/A ^f	< 2 - 34	Y	Corrosion of household plumbing systems; erosion of natural deposits

^a No lead and copper monitoring is required until after the corrosion control treatment system is in service (expected by Aug 31, 2010).

^b Lead and copper are regulated by a treatment technique that is required to control the corrosiveness of the water. If more than 10% of tap water samples exceed the “action level”, the water system must take additional steps. Please see paragraph at right for a Corrosion Control Treatment update.

Health Effects: Copper is an essential nutrient but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

^c Most recent testing done, in accordance with the regulations. These tests are required every three years.

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

^e Equivalent to 5.9 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”.

^f There is no MCL for lead (or copper) at the source. Lead and copper in drinking water most often come from water distribution lines or household plumbing rather than from the water source itself. Therefore, EPA has established distribution system-related levels (Action Levels), to control lead and copper (See Table 2). An anomalous result of 34 ppb lead was obtained during routine monitoring of the wellfield in August 2007. Each of the two wells were re-tested quarterly between August 2007 and April 2008 and all but one of the samples were < 2 ppb lead. The single detection was just 3 ppb lead (at Well #2, in August 2007).

Corrosion Control Treatment Update. Washington Water completed a Calcite media pilot study on this system in October 2006. Unfortunately, the results of the study were inconclusive. Currently, an EcoSmarte water treatment system is being pilot-tested which electrolytically adds a small amount of oxygen and copper to the water to reduce copper corrosion. Rather than changing the pH of the water as Calcite media does, this type of treatment works to create a protective film or passivating layer on the inside of the pipe that reduces the rate of copper corrosion. Because passivation treatment methods are typically slow to develop, the duration of the pilot testing of this method has been extended and flushing to increase water use to accelerate the formation of the protective coatings has been performed. Preliminary results from the flushing are promising but additional testing at lower flow rates is in progress. When approval for this method of treatment is obtained from the Dept of Health, construction of permanent, full-scale treatment facilities can begin. Corrosion control treatment for this water system is current scheduled to be on line by August 31, 2010.

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 listed below.

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