

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

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Gig Harbor, WA 98335-0336
Office: (253) 851-4060
Toll Free: (877) 408-4060
<http://www.wawater.com>

Local Manager: Roy Stanton

Washington State Department of Health

Northwest Office of Drinking Water
20435- 72nd Avenue South Suite 200, K17-12
Kent WA 98032-2358
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<http://www.doh.wa.gov/ehp/dw/>



WASHINGTON WATER
SERVICE COMPANY

Rosario Water System State ID #74270J

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.

Where does my water come from?

Your water comes from Cascade Lake in Moran State Park and is considered surface water. The water is pumped from the lake to a treatment plant where a series of chemical and physical processes remove contaminants from the water and clarify it. Ozone is added as a primary disinfectant, killing microorganisms that may be present. Residual ozone is then removed by using ultraviolet light. Chlorine is added in order to maintain a disinfectant residual in the distribution mains. This treated water is pumped to a number of storage tanks from which it is then redistributed, by gravity, to the homes and businesses 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.

Treatment Technique (TT): a required process intended to reduce the level of a contaminant in drinking water

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

Sodium in your drinking water was last measured in 2008 at **8 ppm**. There is no federal or state maximum for sodium in drinking water but the EPA recommends 20 ppm as a level of concern for those consumers who must restrict their intake.

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
Disinfectant							
Chlorine	ppm	2010	MRDL= 4	MRDLG= 4	0.33^a	Y	Water additive used to kill microbes
Disinfection Byproducts (DBPs)							
Haloacetic Acids (HAA5), ppb		2010	60	N/A	9.3	Y	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM), ppb		2010	80	N/A	21.3	Y	Byproduct of drinking water disinfection
Microbiological^b					Highest Single Measurement ^c	Lowest Monthly Percentage of Samples Meeting Turbidity Std of ≤ 0.30 NTU ^d	
Turbidity	NTU	2010	TT	N/A	1.053	98.5%	N^c Soil runoff

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 ^e	Action Level	No. of Homes Sampled	90th Percentile Value	No. of Homes Exceeding the A.L.	Compliant? (Y/N)	Major Sources in Drinking Water
Copper	ppm	2009	1.3	10	0.85	0	Y	Corrosion of household plumbing systems; Erosion
Lead	ppb	2009	15	10	5	0	Y	Corrosion of household plumbing systems; Erosion of natural deposits

TABLE 3: Secondary Contaminants (Inorganic Chemical and Physical)

Secondary Contaminant	Units	Year Tested ^e	SMCL	YOUR WATER	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	12	Y	Runoff/leaching from natural deposits; seawater influence
Hardness	ppm	2008	N/A	87^f	Y	Erosion of natural deposits

^a Running annual average concentration in the distribution system. The range was 0.05 - 0.88 ppm chlorine.

^b All routine monthly bacteriological samples collected in the distribution system were absent of any coliform bacteria in 2010. Turbidity is a measure of the cloudiness of the water. We continuously monitor it because it is a good indicator of the effectiveness of our filtration system. Elevated turbidity may indicate the presence of disease-causing organisms (bacteria, viruses and parasites). Turbidity can also interfere with disinfection and provide a medium for microbial growth.

^c The turbidity maximum for any single sample is 1.0 NTU. See additional details on this June 2010 Treatment Technique Violation, at right.

^d Filtered water turbidity must be ≤ 0.30 NTU in at least 95% of the measurements made each month. The lowest monthly percentage of samples meeting the ≤ 0.30 NTU turbidity standard was 98.5% in June. 100% of samples met the standard in all other months in 2010.

^e Most recent testing done, in accordance with the regulations. The Dept of Health reduced the monitoring frequency for Inorganic Chemicals and Volatile Organic Chemicals during the 2008-2010 monitoring period from annually to triannually. This was based on water quality history and susceptibility to contamination (e.g., industrial and agricultural). Testing was completed in 2008. There were no detections of any primary contaminants.

^f Equivalent to 5.1 grains per gallon of hardness. 0 - 75 mg/l hardness is generally considered “soft” water, 75 - 150 ppm is “moderately hard”, 150 - 300 is “hard”, and > 300 mg/l is “very hard”.

July 2010 Monitoring Violation. As the owner and operator of a water system with a filtered surface water source, we are required to monitor your drinking water for specific parameters on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. One of these is daily monitoring of the residual disinfectant (chlorine) concentration entering the distribution mains serving the homes on the system. The number of samples per day is based on the average daily population served by the water system in that month. Due to an average daily population increase to greater than 1,000 in the months of July and August, we are required to monitor the chlorine residual three times per day as opposed to the usual two times per day. Our operator was not aware of this requirement, so this was not done during the month of July. Therefore, we cannot be sure of the quality of your drinking water during this time. Proper disinfection treatment with ozone and chlorine did take place during this time. Although this was not an emergency, and there was nothing you needed (or need) to do, as our customers, you have a right to know what happened and what we did to correct the situation. The Dept of Health brought the oversight to our attention in early August upon review of our monthly report submittal for July. The daily checks were increased to three per day immediately and continuous chlorine residual monitoring equipment has since been installed and put into service to prevent this from happening again. We sincerely apologize for this oversight.

June 2010 Treatment Technique Violation. Complete details of this water quality violation were provided in a notice distributed to all water system customers on July 9, 2010. During the evening of Saturday, June 26, 2010, from 7:25 - 7:35 pm, the Rosario Water Treatment Plant (WTP) produced water with elevated turbidity. Turbidity is a measure of the cloudiness of the water. We continuously monitor it because it is a good indicator of the effectiveness of our filtration system. Normal turbidity levels at our plant average 0.05 turbidity units. A water sample taken at 7:25 pm by the continuous monitoring instrument showed a level of 1.053 units. This exceeded the maximum allowable 1.0 unit drinking water standard. Turbidity has no health effects. However, it can interfere with disinfection and provide a medium for microbial growth. It may indicate the presence of disease-causing organisms. These organisms may include bacteria, viruses and parasites that cause symptoms such as nausea, cramps, diarrhea and associated headaches. Proper disinfection treatment with ozone and chlorine did take place during this time. A high voltage event caused by a ground fault of the primary commercial power supply to the WTP damaged electrical circuits including those that control the automatic operation of the WTP, as well as alarms and automatic shutdown that would normally take place before turbidity reaches the maximum of 1.0 unit. To prevent this from happening again, surge protectors were installed and a complete switch over to a new automated controls program was installed.

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