

WATER QUALITY REPORT 2011 Reporting Year

A Message to Our Customers

The City of Carlton is pleased to provide this year's Annual Water Quality Report. This report is designed to inform you about the quality of water we deliver to you every day. Our ongoing goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts made to continually improve and to protect our water resources. The City of Carlton won an award from the American Water Works Association for best tasting water for the Northwest Oregon Region 2011.

Water System Information

If you have any questions about this report, or your water utility, please contact the City of Carlton at 191 E. Main Street, Carlton, OR 97111 or call (503) 852-7575. For additional information on the quality of water delivered by the City of Carlton, please contact Bryan Burnham, Public Works Superintendent, at (503) 852-6040. Our customers are welcome to attend city council meetings which are held on the second Monday of each month at 7pm at City Hall.

Special Water Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons 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. U.S. Environmental Protection Agency (USEPA)/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Our Water Source

The City of Carlton's drinking water supply is conveyed from Panther Creek Reservoir which is approximately 7 miles west of town off of Panther Creek Road. The sources of supply are considered to be most vulnerable to landslides, logging, and the source drying up. Carlton's water supply is filtered and disinfected at the water treatment plant. The treatment plant is a direct pressure filtration plant that was installed in 1985. The filters were rebuilt in 1996. In 2001, the City upgraded its treatment capacity to 1.4 million gallons a day. The treatment plant design should be able to accommodate the City's current residents and projected growth through a population of 9,800. The treatment plant includes a 300,000 gallon clear well, which serves as a chlorine contact chamber. The city has two additional above ground reservoirs one which is 378,000 gallons and another is 1 million. Following treatment, water is conveyed by pipeline down Panther Creek and Meadowlake Road to Carlton.

The quality of Carlton drinking water met all Federal and State requirements for safe drinking water in 2011



Educational Information

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. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800-426-4791) or find it on the EPA's website – www.epa.gov/safewater/hfacts.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, USEPA and the Oregon Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Oregon notification levels are available on the DHS website - at (www.oregon.gov/DHS/ph/dwp).

As supply and treated waters are also analyzed by the City of Carlton in 2011, the City of Carlton compiled 35 test results from reservoirs and distribution sample sites to verify the safety of the delivered water.

The scope of monitoring contaminants that may be present in water include:

- ◆ **Microbial contaminants**, such as viruses and bacteria that come from wildlife.
- ◆ **Organic chemical contaminants**, would include agriculture (pesticides/herbicides) sources, synthetic and volatile organic chemicals that are by-products of industrial processes.
- ◆ **Radioactive contaminants** which can be naturally occurring or a result of oil and gas production and mining activities.



Our Mission

The City of Carlton distributes 10.5 million gallons of water each month to an estimated population of 2,035.

Our mission is to provide high quality water that meets or exceeds the stringent water quality standards established by the U.S. Environmental Protection Agency (EPA) and the State of Oregon Department of Health Services (DHS). The City of Carlton is dedicated to providing you a dependable supply of high quality water.

Water Quality Data

The City of Carlton routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2011 along with the broader monitoring program performed by the City of Carlton. All drinking water, including bottled drinking water, may be reasonably expected to contain small amounts of some contaminants.

As you can see from the results, the quality of our water consistently meets all State standards, which are equal to or more stringent than federal EPA water quality standards. Therefore, federal MCLs are not listed. If you have any questions please contact Bryan Burnham, Public Works Superintendant, at (503) 852-6040.

Primary Drinking Water Standards — Mandatory Health-Related Standards

Parameter	Units	MCL [MCLG]	MCL	Highest Level Detected	Overall Results	Major Sources in Drinking Water
CLARITY						
Combined Filter Effluent Turbidity	NTU	0 - .3	.3	1.0	95% met limits	Soil runoff
MICROBIOLOGICAL						
Total Coliform Bacteria	[b]	0	0	0	0	Naturally present in the environment
Fecal Coliform and E. coli	[b]	0	0	0	0	Human and animal waste
DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS						
Chlorine	ppm			2.4	1.3	Water additive used to control microbes
Haloacetic Acids (HAA5)[c]	ppm	0 - .06	.06	.018	.018	By-product of drinking water disinfection
Total Trihalomethanes [c]	ppm	0 - .08	.08	.018	.018	Byproduct of drinking water chlorination
Nitrate (as Nitrate)	ppm	0 – 10	10	ND	ND	Runoff and leaching from fertilizer use; erosion of natural deposit
VOLATILE ORGANIC CHEMICALS - Non Regulated						
Bromodichloromethane	ppm			.0065		
Chloroform	ppm	.0005		.0198		

Abbreviations and Definitions

n/a: Not Applicable

ND: Not Detected

NL: Notification Level

NS: No Standard

ppm: parts per million or milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

ppb: parts per billion or micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

NTU: Nephelometric Turbidity Unit - is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standard (PDWS) - MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.