

Annual Drinking Water Quality Report  
City of Creswell  
For year 2009

We are pleased to present to you this year's annual Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Prior to September 11, 2009, our community had three water sources, the coast fork of the Willamette River which was treated with the Trident water treatment system, and two well fields, Garden Lake Park and Emerald Valley which draw off of two aquifers and are at depths from 54' to 197'. Both of these aquifers, Willamette Alluvium and Fisher Formation are part of the Willamette basin water reserve. The water from the wells went straight into the water distribution system with only chlorine treatment.

On September 11, 2009, the new PALL membrane water plant was put online. The Garden Lake Wells now flow through the PALL water plant before entering the distribution system and the Emerald Valley Wells have been shut down and disconnected from our water distribution system, being placed in a reserve status.

We have a source water protection plan available at City Hall that provides more information such as potential sources of contaminants.

We are pleased to report that our drinking water is safe and exceeds federal and state requirements. This report shows our water quality from both the old system and the new PALL system, and what it means. If you have any questions about this report or concerning your water utility, please contact Mike Howard the Water Treatment Plant Operator at 541-895-4044.

The City of Creswell routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009 for contaminants. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

Be aware that MCL's are set at very stringent levels. To understand the possible Health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-Million chance of having the described health effect.

While your drinking water with the old system did contain low levels of arsenic, the water provided through the new PALL system does **not** contain any detectable levels of arsenic. The EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Key**

- AL**= Action Level
- MCL**=Maximum Contaminant Level
- MCLG**=Maximum Contaminant Level Goal
- ND**= Non-Detects
- NTU**= Nephelometric Turbidity Units
- Ppm**= parts per million, or milligrams per liter (mg/l)

**Water Sources**

- A**= Emerald Valley Wells
- B**= Garden Lake Wells
- C**= Willamette River (old water plant)
- D**= Willamette River + Garden Lake Wells (PALL water plant)

Contaminant (units)	MCLG	ANALYSIS	MCL	Major Sources in Drinking Water
<b>Microbiological Contaminants</b>				
<b>Non-Detectable</b>				
<b>Turbidity (NTU)</b>				
1. Source C	0.3	0.24	5.0	Soil runoff
2. Source D		0.04		
<b>Inorganic Contaminants</b>				
<b>Arsenic (mg/l)</b>				
1. Source A	0.005	0.026	0.010	Erosion of natural deposits
2. Source B		0.018		
3. Source D		ND		
<b>Disinfection By-Products (mg/l) Source A,B,C</b>				
1. Haloacetic Acids	0.0015	0.0208	0.060	Byproduct of drinking water chlorination.
2. Trihalomethanes	0.0005	0.0565	0.080	
<b>Lead (mg/l) Source A,B,C</b>	0.005	0.011	0.015	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Copper (mg/l) Source A,B,C</b>	0.010	0.410	1.3	Corrosion of household plumbing systems; Erosion of natural deposits

**Volatile Organic Contaminants: Non-Detectable**  
**Sources A,B,C,D**

**Note: sampled for another 157 contaminates in all water sources, analysis were all Non-Detectable.**  
**Sources A,B,C,D**

***Microbiological Contaminants:***

- (1) **Total Coliform.** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
- (2) **Turbidity.** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

***Inorganic Contaminants:***

- (1) **Disinfection By-Products.** Some people who drink water-containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- (2) **Lead.** Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
- (3) **Arsenic.** Some people who drink water-containing Arsenic over the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increase risk of getting cancer.
- (4) **Copper.** 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 could experience gastrointestinal distress. Some people who drink water 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.

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