

# *Annual Drinking Water Quality Report*

## *For the City of Lafayette, Oregon*

### **For Calendar Year 2010**

The City of Lafayette is pleased to provide you with this year's Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide to you a safe and dependable supply of drinking water. Our active water sources (groundwater) are as follows:

1. Four wells and three springs in the Henry Creek Watershed situated Northeast of the city (the "**Lafayette Combined Watershed Sources**");
2. A well in Perkins Park in the city ("**City Park Well**").
3. Five wells shared with the City of Dayton located south of Dayton ("**Dayton/Lafayette Well Field**").
4. A well located on Hwy 18, 2 miles southeast of the city ("**Well #7**") – Currently Inactive.

The 1996 Amendments to the Safe Drinking Water Act require that all states conduct Source Water Assessments for public water systems within their boundaries. The assessments consist of (1) identification of the Drinking Water Protection Area, i.e., the area at the surface that is directly above that part of the aquifer that supplies groundwater to our wells, (2) identification of potential sources of contamination, and (3) determining the susceptibility or relative risk to the well water from those sources. Based on the assessment results, which indicate that the aquifer is highly sensitive in the immediate vicinities of the springs and wells 1 and 2, the drinking water source is considered to be susceptible to viral contamination because viral contaminant sources (surface water) have been identified within the 2-year Time-of-Travel of the wells. A copy of the Source Water Assessment is available for review at City Hall.

The City of Lafayette received one reporting violation during 2010, and we are currently in compliance with reporting requirements. If you have any questions about this report or concerning your water utility, please contact the City Administrator at 503-864-2451 or the Public Works Foreman, Jim Anderson at 503-864-3119.

In this report and the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Detected* - laboratory analysis indicates that the constituent is present.

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Maximum Contaminant Level (MCL)* - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal (MCLG)* - (mandatory language) The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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

*Parts per billion (ppb) or Micrograms per liter (µg/L)* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* – picocuries per liter is a measure of the radioactivity in water.

*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.

*Maximum Residual Disinfectant Level Goal (MRDLG)*- The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contamination.

Although we routinely monitor our water for more than 100 constituents, the table below will only show the results of our tests for *coliform* and *ecoli* bacteria and for those constituents for which a "detect" was found. Bear in mind that just because a contaminant was detected does not mean that the level found exceeds the maximum contaminant level ("MCL") allowed by the Safe Drinking Water Act. A constituent can be detected in trace amounts and the water is still safe to drink.

This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2010 and also includes test results from the most recent testing done in accordance with the regulations for items not required to be tested annually. As you can see by the table, our system had no contaminant violations. We’re proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected, however, the EPA has determined that your water IS SAFE at these levels.

Contaminant	Violation Y/N	Level Detected	Unit	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
1. Total Coliform Bacteria	N	ND		0	Presence of coliform bacteria in 1 monthly sample	Naturally present in the environment.
2. Fecal coliform and <i>E.coli</i>	N	ND		0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste
<b>Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals</b>						
THMs	N	8 / 104.8 Range 09/15/2010	ppb	N/A	80 ppb	Byproduct of drinking water disinfection
Haloacetic Acids	N	3.8 / 43.5 Range 09/15/2010	ppb	0	60 ppb	Byproduct of drinking water disinfection

<b>Inorganic Contaminants (IOC)</b> <i>3 Year Testing Cycle</i>						
Lead	N	<b>0.021</b> 09/20/2010 & 09/29/2010	ppm	0	AL=.0155 mg/L	Corrosion of household plumbing systems, erosion of natural deposits
Copper	N	<b>0.210</b> 09/20/2010 & 09/29/2010	ppm	1.3	AL=1.35 mg/L	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen) Watershed	N	<b>2.5</b> 2010	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
City Park Well		<b>ND</b> 2010				
Arsenic Watershed	N	<b>ND</b> 8/24/09	ppb	N/A	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
City Park Well		<b>ND</b> 8/24/09				
<b>Radioactive Contaminants</b> <i>9 Year Testing Cycle</i>						
Combined radium Watershed	N	<b>1.452</b> 12/4/03	pCi/l	0	5	Erosion of natural deposits
Combined radium City Park Well	N	<b>1.068</b> 12/4/03	pCi/l	0	5	Erosion of natural deposits
Uranium Watershed City Park Well	N	<b>0.011</b> <b>0.051</b> 12/4/03	µg/L	0	30	Erosion of natural deposits
<b>Volatile Organic Contaminants</b> <i>3 Year Testing Cycle</i>						
Di(2-ethylhexyl) Phthalate	N	<b>2</b> 3/12/08		6	6	Discharge from rubber and chemical factories
Xylene	N	<b>ND</b> 5/21/08	ppm	10	10	Discharge from petroleum/chemical factories
<b>Other</b>						
Sodium Watershed	N	<b>18.2**</b> 8/24/09	ppm	N/A	N/A	Naturally occurring
City Park Well		<b>18.7**</b> 8/24/09				

*\* Arsenic: Some people who drink water containing arsenic in excess of the MCL (10) over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer.*

*\*\* Sodium: is unregulated, but people on low salt diets prefer less than 20 ppm.*

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Although the city routinely monitors for lead and copper in the water, and has been in compliance since the upgrades to our system were completed in 2003 to address this issue, all water providers are required to include the following language in this report:

*Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The City of Lafayette is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).*

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 2 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.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. EPA/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).

Proposed improvements to our water system projected for the coming year include telemetry improvements in the city's watershed and an Aquifer Storage and Recovery (ASR) project will be completed within the coming month. Rehabilitation of Lafayette Spring has also been completed.

The City of Lafayette also receives water from the Dayton/Lafayette Wellfield, and test results from those sources are obtained and on file with the City of Dayton.

**Si Ingles no es su lenguaje, favor de leer lo siguiente:** Este reporte es para informales a todo nuestro clientes sobre la cualidad de la agua de la ciudad de Lafayette. Varios de nuestros clientes son hispanos y queremos que todos reciban y entiendan este reporte. Si usted tiene dificultad en entender este reporte y desea que se le traduzca en español o si tiene alguna pregunta que desea que se le conteste en español, favor de llamar al city hall al (503) 864-2451.