Annual Drinking Water Quality Report
For the City of Lafayette, Oregon
For Calendar Year 2005

The City of Lafayette is pleased to present to you this year's Annual Water Quality Report, as required by the Safe Drinking Water Act. This report is designed to inform you about the quality of water we deliver to you every day. 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. We are committed to ensuring the quality of your water. This report shows our water quality and what it means. 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. Three 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 pollution within the Drinking Water Protection Area, and (3) determining the susceptibility or relative risk to the well water from those sources.

The purpose of the assessment is to provide water systems with the information they need to develop a strategy to protect their drinking water resource if they choose. The respective Drinking Water Programs of the Departments of Human Services and Environmental Quality have completed the assessment for our system.

An inventory of potential contamination sources was performed within our Drinking Water Protection Area. The primary intent of this inventory was to identify and locate significant potential sources of contaminants of concern. The inventory was conducted by reviewing applicable state and federal regulatory databases and land use maps, interviewing persons knowledgeable of the area, and conducting a windshield survey by driving through the drinking water protection area to field locate and verify as many of the potential contaminant source activities as possible. It is important to remember the sites and areas identified are only potential sources of contamination to the drinking water. Environmental contamination is not likely to occur when contaminants are used and managed properly.

A copy of the Source Water Assessment is on file at City Hall.

What contaminants might be in my water? The City of Lafayette routinely monitors for constituents in your drinking water according to Federal and State laws. 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. It's important to remember that 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.

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.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. 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.

Are some people more sensitive to contaminants than others? 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).

Recent improvements to water system. In 2003, our new treatment building in the Watershed was put online to allow for the addition of soda ash to adjust the pH of our water. Adjusting the pH of the water helps prevent the leaching of the lead in the plumbing of your home. By making these improvements to our water system, we successfully completed two rounds of lead sampling during 2004, reducing our sampling requirement to once every three years.

What if I have questions about my water or this report? 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**.** We want city residents to be informed about their water utility. If you want to learn more, please attend any of the regularly scheduled meetings of the City Council. They are held on the second Thursday of each month at 6:30 p.m. at City Hall (486 3rd Street).

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 dificultidad 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.

We work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future.

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.

Are there contaminants in the City of Lafayette water? 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.

The only exceedance of an MCL in 2005 was for trihalomethanes (TTHMs), a byproduct of drinking water disinfection. Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer. Routine flushing of the area of exceedance has been established to avoid further violations.

We also received a violation during 2005 for two positive coliform results in July of 2005. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria such as fecal coliform or E. coli, are present. We did not find any of these bacteria in our subsequent testing, and further testing shows that this problem has been resolved. Public notification was made as required.

This table shows the results of our monitoring for the period of January 1st to December 31st, 2005 and also includes test results from the most recent testing done in accordance with the regulations for items not required to be tested annually.

Contaminant	Violation Y/N	Level Detected	Unit	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
1. Total Coliform Bacteria	Y	Present		0	Presence of coliform bacteria in 1 monthly sample	Naturally present in the environment.
2. Fecal coliform and *E.coli*	N	ND		0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	Human and animal fecal waste
Disinfection Byproducts, Byproduct Precursors, and Disinfectant Residuals						
THMs	Y	**84.05 Average 12.1-156 Range** 08/31/05	ppb	N/A	80 ppb	Byproduct of drinking water disinfection
Haloacetic Acids	N	**31.15 Average 5.6-56.7 Range** 08/31/05	ppb	0	60 ppb	Byproduct of drinking water disinfection
Inorganic Contaminants (IOC)						
Lead	N	**0.010** 1/29/04 **0.004** 8/10/04	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Copper	N	**0.48** 1/29/04 **0.27** 8/10/04	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen) Watershed	N	**1.50** 3/09/05	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nitrate (as Nitrogen) Dayton	N	**2.10** 3/09/05	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Arsenic Dayton	N	**6.0** 3/10/05	ppb	N/A	50	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium Well #7	N	**0.1** 10/18/00	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium Well #7	N	**12** 10/18/00	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Radioactive Contaminants						
Combined radium Watershed	N	1.452 12/4/03	pCi/1	0	5	Erosion of natural deposits
Combined radium Well #7	N	1.068 12/4/03	pCi/1	0	5	Erosion of natural deposits
Uranium Well #7	N	0.011 12/4/03	µg/L	0	30	Erosion of natural deposits