2003 Annual Drinking Water Quality Report
City of Fayetteville Water Department

We are pleased to present to you this year's **Annual Drinking Water Quality Report**. This report is designed to inform you about the high quality water and services 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. The sources of drinking water (both tap water 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, can pick up substances resulting from the presence of animals or from human activity. Our water source is the Beaver Water District, which treats surface water from Beaver Lake**.** Contaminants that may be present in source water include: Microbial contaminants such as 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; 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; and Radioactive contaminants which can be naturally- occurring or be the result of oil and gas production and mining activities.

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** or online at **http://epa.gov/safewater**. **Further information regarding source water and watershed protection can be obtained from the USEPA web site at http://www.epa.gov\surf and the Arkansas Department of Health web site at http://www.healthyarkansas.com/eng**. City of Fayetteville information is available at **http://accessfayetteville.org/utilities_and_cable_access/utility_applications_and_documents.html.** The Arkansas Department of Health (ADH) completed a Source Vulnerability Assessment for Beaver Water District in June 2000. This assessment summarizes the potential for contamination of our source of drinking water and can be used as a basis for developing a source water protection plan. A report explaining the assessment process and results can be obtained from the Beaver Water District office, or accessed through the Source Water Assessment Program (SWAP) website at **http://www.healthyarkansas.com/eng/swp/swp.htm.**

We are pleased to report that our drinking water meets or exceeds all federal and state requirements with respect to water quality.

We want you, our valued customers, to be informed about your water utility. If you have any questions about this report, please contact Alan Fortenberry, Engineer with the Beaver Water District, at 756-3651 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday. For questions pertaining to the City of Fayetteville Water & Sewer Department, please contact David Jurgens, Water & Sewer Superintendent, at 575-8386, between the hours of 7:30 a.m. and 4:30 p.m. If you want to learn more, please attend any of our city council meetings. Water and sewer topics are not always on the agenda for each of these meetings. Therefore, please contact the City Clerk at 575-8323 for meeting agendas, time, date and location. They are normally held at 6:00 p.m. on first and third Tuesday of each month.

The City of Fayetteville Water & Sewer Department and the Beaver Water District routinely monitor for constituents in your drinking water in accordance with Federal and State laws. The table on page two shows the results of our monitoring for the period of **January 1st to December 31st, 2003**. In this 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:

Non-Detects (**ND**) - Laboratory analysis indicates that the constituent is not present.
Parts per million (**ppm**) *or Milligrams per liter (mg/l)* - One part per million corresponds to one minute in two years or one penny in $10,000.
Parts per billion (**ppb**) *or Micrograms per liter* - One part per billion corresponds to one minute in 2,000 years, or one penny in $10,000,000.
Millirems per year (**mrem/yr**) - Measure of radiation absorbed by the body.
Nephelometric Turbidity Unit (**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.
Picocuries per liter (**pCi/l**) - Picocuries per liter is a measure of the radioactivity in water.
Action Level (**AL**) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.
Treatment Technique (**TT***)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
Maximum Contaminant Level - The "Maximum Allowed" (**MCL**) is 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 - The "Goal"(**MCLG**) is 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.

We constantly monitor the water supply for various constituents. We have not detected the presence of cryptosporidium in the finished water or source water on any of the occasions that we have tested in 2003. We believe it is important for you to know that cryptosporidum may cause serious illness in immuno-compromised persons.

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** at **1-800-426-4791**.

2003 Annual Drinking Water Quality Report
City of Fayetteville Water Department

TEST RESULTS (Where Sampled)

Contaminant	Violation Y/N	Level Detected	Unit Of Measurement	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (City of Fayetteville)	N	**0**	Present	0	Presence of coliform bacteria in 5% of monthly samples	*Naturally present in the environment*
Fecal coliform and *Escherichia coli* (City of Fayetteville)	N	**0**	Present	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*
Turbidity (Beaver Water)) Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system	N	**0.15** (Highest yearly sample result) **0.08 (avg.)** Lowest monthly % of samples meeting turbidity limit: **100%**	NTU	n/a	> .5NTU in > 5% of samples or any 1 sample > 5 NTU	*Soil runoff*
Radionuclides Herbicides (Beaver) (None Detected)						
Inorganic Contaminants (Beaver)						
Barium	N	**0.0261**	ppm	2	2	*Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits*
Fluoride	N	**0.83 – 1.03** **0.94 (avg.)**	ppm	4	4	*Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories*
Nitrate (as Nitrogen)	N	**0.31**	ppm	10	10	*Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits*
Synthetic Organic Contaminants including Pesticides and Herbicides (Beaver Water District) (None Detected)						
Volatile Organic Contaminants (Beaver Water District)						
Contaminant	**Violation Y/N**	**Level Detected**	**Unit of Measurement**	**MCLG**	**MCL**	**Major Sources in Drinking Water**
TTHM [Total trihalomethanes]	N	Highest running annual avg: 54.4 Range: 12.1 **– 67.4**	ppb	NA	80	*By-products of drinking water disinfection*
HAA5 [Haloacetic Acids]	N	Annual avg: **43.5** Range: 25.7 **– 67.0**	ppb	0	60	

♦ On January 1st, 2002 monitoring for Haloacetic Acids (HAA5) changed from investigative status to compliance status. The average stated above reflects monitoring results from quarterly HAA5 sampling in 2002 only, and is not a running annual average. Next year our water quality report will indicate a running annual average for HAA5.

Lead And Copper Tap Monitoring (City of Fayetteville)

Contaminant	Number of sites over AL	90% percentile result	95% percentile result	Unit of measurement	Action Level (AL)	Major Sources in Drinking Water
Lead	**0**	**0.002**	**0.004**	ppm	0.015	*Leaching from household plumbing systems; erosion of natural deposits.*
Copper	**0**	**0.05**	**0.05**	ppm	1.3	*Leaching from household plumbing systems; erosion of natural deposits.*

The Fayetteville water system is on a reduced monitoring schedule and required to sample once every 3 years for lead and copper at the customer's tap. Our last monitoring period was in 2002. Our next required monitoring period is in 2005.

Unregulated Constituents (Beaver Water District)

Contaminant	Not Regulated	Level of Detect	Unit of measurement	Not Regulated	Major Sources in Drinking Water
Dibromochloromethane	" "	**1.24**	ppb	" "	*Components of Total Trihalomethanes*
Bromoform	" "	**1.93**	ppb	" "	
Bromodichloromethane	" "	**7.21**	ppb	" "	
Chloroform	" "	**19.5**	ppb	" "	

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Compliance Monitoring (Beaver Water District)

Disinfection By-Product Precursors (Beaver Water District)

Contaminant	Violation Y/N	Lowest Percentage of TOC Removal	Required Percentage of TOC Removal	Major Sources in Drinking Water
Total Organic Carbons (TOC)	N	**26%**	**N/A**	*Naturally occurring*

♦ The Total Organic Carbon (TOC) was measured quarterly. Because the source water TOC level was low, there is no requirement for TOC removal.

As you can see by the table, our system had no 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.

<u>The EPA has determined that your water IS SAFE at these levels.</u>