

Grand Prairie Bayou Two P.F.B.
2009 Annual Drinking Water Quality Report
Bayou Two Water System, Grand Prairie Water System and Combined Systems

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the 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.

In 2007 Bayou Two legally merged with Grand Prairie Water, but until June 2009 the two systems remained separate. In June 2009, the two systems were physically interconnected and now have one distribution system and share the treatment and storage facilities of Grand Prairie Water. Until the physical merger in June, Bayou Two purchased treated water from Jacksonville Water Works whose sources are twelve wells that pump from the Quaternary System Aquifer. Jacksonville Water Works also purchases water from Central Arkansas Water, which receives its supply from two surface water sources: Lake Winona and Lake Maumelle. Both lakes can supply Jackson Reservoir, a regulating reservoir located in Little Rock. Water is delivered by pipeline to the Jack H. Wilson and Ozark Point water treatment plants. Prior to June 2009, Grand Prairie Water's water came from four wells that pumped from the Sparta Sand (Wells # 1 and 2) and Alluvial (Wells # 3 and 4) aquifers to one of two treatment plants.

Since the June physical merger, four new Alluvial Aquifer wells, drilled in 2008, were activated and now serve the combined system. Water is still purchased from Jacksonville, but only in minimal sufficient amounts to clear the lines of the combined distribution system as needed and as an emergency backup. The Drinking Water Quality Report that follows, reports both the systems as separate from January 1, 2009 until June 2009 and as combined from June 2009 to December 31, 2009.

Contaminants that may be present in source water include: Microbial contaminants such as viruses and 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; Radioactive contaminants which can be naturally occurring or be the result of oil and gas production and mining activities.

The Arkansas Department of Health has completed Source Water Vulnerability Assessments for Jacksonville Water Works and Central Arkansas Water. The assessments summarize the potential for contamination of our sources of drinking water and can be used as a basis for developing source water protection plans. Based on the various criteria of the assessments, our water sources have been determined to have a low to high susceptibility to contamination. You may request summaries of the assessments from our office.

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.

In order to assure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Grand Prairie Bayou Two P.F.B. 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 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 or at <http://www.epa.gov/safewater/lead>.

If you have any questions about this report or concerning your water utility, please contact Terry W. House, Manager, at 501-676-2887. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Thursday of each month at 7:00 PM at Grand Prairie Bayou Two P.F.B. Office, 11177 Arkansas Highway 31 North.

Grand Prairie Bayou Two P.F.B., Jacksonville Water Works, and Central Arkansas Water routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st. In the table you might find terms and abbreviations you are not 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.

Maximum Contaminant Level (MCL) - 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 (MCLG) - unenforceable public health goal; 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.

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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA - Not applicable

Parts per billion (ppb) - a unit of measurement for detected levels of contaminants in drinking water. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) - a unit of measurement for detected levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

TEST RESULTS						
MICROBIOLOGICAL CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Total Coliform Bacteria (Grand Prairie Water)	N	1 Positive sample in May	Present	0	1 positive sample per month	Naturally present in the environment
Total Coliform Bacteria (Bayou Two)	N	None	Present	0		
TURBIDITY						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Turbidity (Central Arkansas Water)	N	Highest yearly sample result: 0.35	NTU	NA	Any measurement in excess of 1 NTU constitutes a violation	Soil runoff
		Lowest monthly % of samples meeting the turbidity limit: 98.3%				
♦ Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.						

INORGANIC CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Fluoride (Jacksonville Water Works)	N	Average: 0.88 Range: 0.69 - 1.03	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Fluoride (Central Arkansas Water)	N	Average: 0.79 Range: 0.63 - 1.04				
Nitrate [as Nitrogen] (Jacksonville Water Works)	N	Average: 0.82 Range: 0.79 - 0.85	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate [as Nitrogen] (Grand Prairie Water)	N	Average: 0.78 Range: 0.0 - 1.53				
LEAD AND COPPER TAP MONITORING						
Contaminant	Number of Sites over Action Level	90 th Percentile Result	Unit	Action Level	Major Sources in Drinking Water	
Lead (Grand Prairie Water)	0	<0.003	ppm	0.015	Corrosion from household plumbing systems; erosion of natural deposits	
Copper (Grand Prairie Water)	0	0.58	ppm	1.3		
♦ Grand Prairie Bayou Two P.F.B. is now on a reduced monitoring schedule and required to sample once every three years for lead and copper at the customers' taps. The data above is from our last monitoring period in the Grand Prairie Water System in 2007. Our next required monitoring period is the year 2010.						
REGULATED DISINFECTANTS						
Disinfectant	Violation Y/N	Level Detected	Unit	MRDLG (Public Health Goal)	MRDL (Allowable Level)	Major Sources in Drinking Water
Chlorine (Grand Prairie & Bayou Two)	N	Average: 0.54 Range: 0.2 - 1.2	ppm	4	4	Water additive used to control microbes
DISINFECTION BY-PRODUCT PRECURSORS						
♦ The percentage of Total Organic Carbon (TOC) removal was routinely monitored in 2009 by Central Arkansas Water, and all TOC removal requirements set by USEPA were met. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs).						
BY-PRODUCTS OF DRINKING WATER DISINFECTION						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	
HAA5 [Haloacetic Acids] (Grand Prairie Water)	N	5.4	ppb	0	60	
THM [Total Trihalomethanes] (Grand Prairie Water)	N	2.8	ppb	NA	80	
♦ Grand Prairie Bayou Two is on a reduced monitoring schedule and required to sample once every three years for Total Trihalomethanes and Haloacetic Acids in the distribution system. The data above is from our last compliance monitoring period in Bayou Two in 2008. Our next compliance monitoring period is in 2011.						
UNREGULATED CONTAMINANTS						
Contaminant	Level Detected	Unit	MCLG (Public Health Goal)	Major Sources in Drinking Water		
Chloroform (Central Arkansas Water)	Average: 26.6 Range: 21.7 - 31.4	ppb	70	By-products of drinking water disinfection		
Chloroform (Jacksonville Water Works)	0.76					
Chloroform (Grand Prairie Bayou Two)	Average: 0.77 Range: 0.0 - 3.86					
Bromodichloromethane (Central Arkansas Water)	Average: 4.11 Range: 2.69 - 5.53	ppb	0			
Bromodichloromethane (Jacksonville Water Works)	1.11					
Bromodichloromethane (Grand Prairie Bayou Two)	Average: 1.67 Range: 0.0 - 7.49					
Dibromochloromethane (Central Arkansas Water)	Average: 0.28 Range: 0.0 - 0.57	ppb	60			
Dibromochloromethane (Jacksonville Water Works)	1.54					
Dibromochloromethane (Grand Prairie Bayou Two)	Average: 1.54 Range: 0.0 - 6.46					
Bromoform (Jacksonville Water Works)	0.96	ppb	0			
Bromoform (Grand Prairie Bayou Two)	Average: 0.54 Range: 0.0 - 1.70					
♦ 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. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.						

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