

City of Bono

2022 Annual Drinking Water Quality Report

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 goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand, and be involved in, the efforts we make to continually improve the water treatment process and protect our water resources.

Where Does Our Drinking Water Come From?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our sources of water are two wells that pump from the Quaternary System Aquifer. We also purchase treated water from Jonesboro City Water & Light (CW&L) whose sources are 35 wells that pump from the Alluvial and Memphis aquifers. All customers receive water treated at the City of Bono Water Treatment Plant with the exception of the following: At the north side of Bono, one half mile of city limits, starting at CR380 East to CR384, then north to CR381 and CR382, there are 36 meters on the Jonesboro CW&L system. At the southeast corner of the Bono city limits, on Elizabeth, Crystal, Kaylee, and Hayden streets, there are 40 meters on the Jonesboro CW&L system.

How Safe Is The Source Of Our Drinking Water?

The Arkansas Department of Health has completed Source Water Vulnerability Assessments for the City of Bono and Jonesboro City Water & Light. 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 medium susceptibility to contamination. You may request summaries of the Source Water Vulnerability Assessments from our office.

What Contaminants Can Be In Our Drinking Water?

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. 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.

In order to assure tap water is safe to drink, EPA has 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.

Am I at Risk?

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. However, 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 small amounts of contamination. These people should seek advice about drinking water from their health care providers. 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 addition, EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbiological contaminants are also available from the Safe Drinking Water Hotline.

Lead and Drinking Water

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. We are 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>.

How Can I Learn More About Our Drinking Water?

If you have any questions about this report or concerning your water utility, please contact Adam Rufkahr, Public Works Director, at 870-243-1906. 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 third Tuesday of each month at 6:00 PM at Bono City Hall.

TEST RESULTS

We and Jonesboro City Water & Light (JWL) 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, 2022. 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.

JWL – Jonesboro City Water & Light

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.

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.

INORGANIC CONTAMINANTS

Contaminant	Violation Y/N	Levels Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Fluoride Sample site F001 (Jonesboro)	N	Average: 0.75 Range: 0.68 – 0.80	ppm	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth
Fluoride Sample site F003 (Jonesboro)		Average: 0.73 Range: 0.63 – 0.86				
Fluoride Sample site F004 (Jonesboro)		Average: 0.75 Range: 0.66 – 0.83				
Fluoride Sample site F029 (Jonesboro)		Average: 0.75 Range: 0.67 – 0.81				
Nitrate [as Nitrogen] (Bono)	N	Average: 0.67 Range: 0.57 – 0.76	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate [as Nitrogen] Sample site E001 (Jonesboro)		Average: 0.64 Range: 0 – 1.28				
Nitrate [as Nitrogen] Sample site E003 (Jonesboro)		0.13				
Nitrate [as Nitrogen] Sample site E004 (Jonesboro)		Average: 0.43 Range: 0.39 – 0.47				
Nitrate [as Nitrogen] Sample site E019 (Jonesboro)		Average: 1.275 Range: 1.27 – 1.28				
Nitrate [as Nitrogen] Sample site E020 (Jonesboro)		Average: 0.64 Range: 0.62 – 0.66				
Nitrate [as Nitrogen] Sample site E021 (Jonesboro)		0.22				
Nitrate [as Nitrogen] Sample site E022 (Jonesboro)		0.16				
Nitrate [as Nitrogen] Sample site E023 (Jonesboro)		Average: 136 Range: 114 - 176				
Nitrate [as Nitrogen] Sample site E029 (Jonesboro)		Average: 0.75 Range: 0.68 – 0.80				
Nitrate [as Nitrogen] (Bono)		Average: 0.46 Range: 0.35 – 0.56				
Copper Sample site E022 (Jonesboro)	N	Average: 0.73 Range: 0.63 – 0.86	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Selenium (Bono)	N	Average: 2.33 Range: 0 – 6.1	ppb	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

VOLATILE ORGANIC CONTAMINANTS

Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Ethylbenzene (Jonesboro)	N	Average: 1.65 Range: 0 - 6.6	ppb	700	700	Discharge from petroleum refineries
Xylenes (Jonesboro)	N	Average: 0.01085 Range: 0 – 0.0434	ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

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 (Bono)	0 of 10	<0.001	ppm	0.015	Corrosion from household plumbing systems; erosion of natural deposits
Copper (Bono)	0 of 10	0.542	ppm	1.3	

♦ We are currently on a reduced monitoring schedule and required to sample once every three years for lead and copper at the customers’ taps. The results above are from our last monitoring period in 2021. Our next required monitoring period is in 2024.

REGULATED DISINFECTANTS

Disinfectant	Violation Y/N	Level Detected	Unit	MRDLG (Public Health Goal)	MRDL (Allowable Level)	Major Sources in Drinking Water
Chlorine (Bono)	N	Average: 1.01 Range: 0.34 – 1.39	ppm	4.0	4.0	Water additive used to control microbes

BY-PRODUCTS OF DRINKING WATER DISINFECTION

Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)
HAA5 [Haloacetic Acids] (Bono)	N	0	ppb	0	60
TTHM [Total Trihalomethanes] (Bono)	N	0	ppb	NA	80