

2020 Annual Drinking Water Quality Report



City of Bentonville Water Utilities Department

Water Utilities Manager

Preston Newbill

Monday through Friday

7:30 to 4:00

www.bentonvillear.com

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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 quality and protect our water resources.

Water Utilities Mission Statement

The mission of Bentonville's Water Utilities dedicated staff is to serve as water and wastewater professionals, providing consistent, reliable and sustainable services for the citizens of Bentonville, AR.

Vision Statement

Bentonville's water utility staff remains steadfast in assuring the citizens, businesses and guests we serve that quality plans are developed, proper water and wastewater infrastructure is installed and that the future of the water utilities has a solid foundation for generations to come. We are committed to hold true to a high standard of conduct from our team, which will be reflected in the operation and maintenance of Bentonville's water utilities systems. We will pursue avenues and set standards that will ensure Bentonville's water and wastewater systems will function properly and provide quality service for today's population and projected growth. Bentonville's water utilities team is ready to assist you today, tomorrow and into the future.



FROM THE MANAGER

Dear Customer,

I am pleased to share with you our annual water quality testing report. Each year, Bentonville Water Utilities takes hundreds of samples to ensure your water is safe and of the highest quality. In 2020, we again met every federal and state drinking water standard at a time when clean drinking water was more important than ever. I am happy to let you know that BWU did not have a single failed sample in the previous calendar year.

Your water system is well protected – from the treatment plant to the storage tanks – and water quality monitoring allows us to check the water every step of the way. BWU pulls samples throughout the system every month to ensure the water that comes from your tap is safe for drinking.

BWU delivered over 4 billion gallons of water to residents and businesses in 2020 and added 22,000 feet of water main with 689 additional water meters to the system.

We performed repairs on over 365 water leaks and made many other emergency repairs 24 hours a day and every

day of the week. BWU is determined to make our water system extremely reliable and safe.

I hope you will take a few moments to read through this important report and learn more about your water system. We have great confidence in the water we deliver to your home and we want you to share that confidence. Our dedicated local team of water quality experts is working in the community everyday ensuring that you, our customer, are our top priority and that we are providing the highest quality of service - now and in the years to come.

Please contact us if you have any questions about this report or any of BWU's components



Sincerely,

Preston Newbill

Bentonville Water Utilities Manager

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, the 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.

What measures are in place to ensure water is safe to drink: US EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. US FDA regulations establish limits for contaminants in bottle water that shall provide the same protection for public health.

Drinking water, including bottle water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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. BWU is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. If you have an older home with lead pipes and 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. Bentonville Water Utilities is required to collect 30 samples every 3 years. Please refer to Lead and Copper result table.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-

containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF website at www.nsf.org to learn more about lead-containing plumbing fixtures.

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 www.epa.gov/safewater/lead.



Tiger Tank

2 Million
Gallon
Capacity

Bentonville Water Utilities collected 843 water samples in 2020, this total includes the 50 regular monthly water samples that are spread throughout the water system. Please see test results below for water sample results.

TURBIDITY						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Turbidity (Beaver Water District)	N	Highest yearly sample result: 0.16	NTU	NA	Any measurement in excess of 1 NTU constitutes a violation	Soil runoff
		Lowest monthly % of samples meeting the turbidity limit: 100%			A value less than 95% of samples meeting the limit of 0.3 NTU, constitutes a violation	

Turbidity is a measurement of the cloudiness of water. Beaver Water District monitors it because it is a good indicator of the effectiveness of their filtration system.

RADIOACTIVE CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Tritium (Bentonville Water Utilities)	N	Average: 365.7 Range: 0 - 575.8	pCi/L	NA	NA	Decay of natural deposits

INORGANIC CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Fluoride (Beaver Water District)	N	Average: 0.73 Range: 0.66 - 0.84	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate [as Nitrogen] (Beaver Water District)	N	Average: 0.93 Range: 0.58 - 1.12	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

LEAD AND COPPER TAP MONITORING						
Contaminants	Number of Tap Samples	Number of Sites over Action Level	90 th Percentile Result	Unit	Action Levels	Major Sources in Drinking Water
Lead (Bentonville Water Utilities)	30	1	0.001	ppm	0.015	Corrosion from household plumbing systems; erosion of natural deposits
Copper (Bentonville Water Utilities)		0	0.035	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 2020. Our next required monitoring period is in 2023.

The Bentonville Water Utilities Department and Beaver Water District 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, 2020. 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.

Nephelometric Turbidity Unit (NTU) - a unit of measurement for the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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.

TOTAL ORGANIC CARBON						
The percentage of Total Organic Carbon (TOC) removal was routinely monitored in 2020 by Beaver Water District, and all TOC removal requirements set by USEPA were met. 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).						

REGULATED DISINFECTANTS						
Disinfectant	Violation Y/N	Level Detected	Unit	MRDLG (Public Health Goal)	MRDL (Allowable Level)	Major Sources in Drinking Water
Chlorine (Bentonville Water Utilities)	N	Average: 1.09 Range: 0.43 - 1.54	ppm	4	4	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)	Major Sources in Drinking Water
HAA5 [Haloacetic Acids] (Bentonville Water Utilities)	N	Highest Locational Average: 32 Range: 24.3 - 38.3	ppb	0	60	By-products of drinking water disinfection
TTHM [Total Trihalomethanes] (Bentonville Water Utilities)	N	Highest Locational Average: 49 Range: 35.5 - 59.7	ppb	NA	80	
Chlorite (Beaver Water District)	N	Highest Annual Quarterly Average: 291.6 Range: 130 - 411	ppb	800	1000	

UNREGULATED CONTAMINANTS						
Contaminant	Level Detected	Unit	MCLG (Public Health Goal)	Major Sources in Drinking Water		
Chloroform (Beaver Water District)	11.0	ppb	70	By-products of drinking water disinfection		
Bromodichloromethane (Beaver Water District)	2.23	ppb	0			

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.

Where Does Our Drinking Water Come From?



More than 70 years ago, visionary community leaders got together to discuss the need for a long-term supply of clean, safe water for Northwest Arkansas. With an eye to the future and knowledge that a large lake was the best source of water, these citizens worked to establish Beaver Lake Reservoir. The dam that created Beaver Reservoir and the first water treatment plant (constructed by the City of Springdale) were completed in the mid-1960s. Since that time, Beaver Water District (BWD) has expanded facilities and improved to keep up with increased water demand and stricter drinking water standards. BWD is a Regional Water Distribution District enabled

by Arkansas Act 114 of 1957. BWD's mission is to sustainably provide our customers with safe, economical drinking water. BWD supplies clean, safe drinking water, sourced from Beaver Lake to four customers -- Fayetteville, Springdale, Rogers, and Bentonville. These cities in Northwest Arkansas then pump, store, distribute and resell the water to more than 350,000 people and industries in their cities and surrounding areas.

How safe is our Drinking Water?

Beaver Water District must meet national, health-based standards for drinking water in order to fulfill its primary mission, which is to produce safe, potable water. That means the District must comply with the Safe Drinking Water Act (SDWA), passed by Congress in 1974 and amended in 1986 and 1996. The SDWA's purpose is to protect public health by regulating

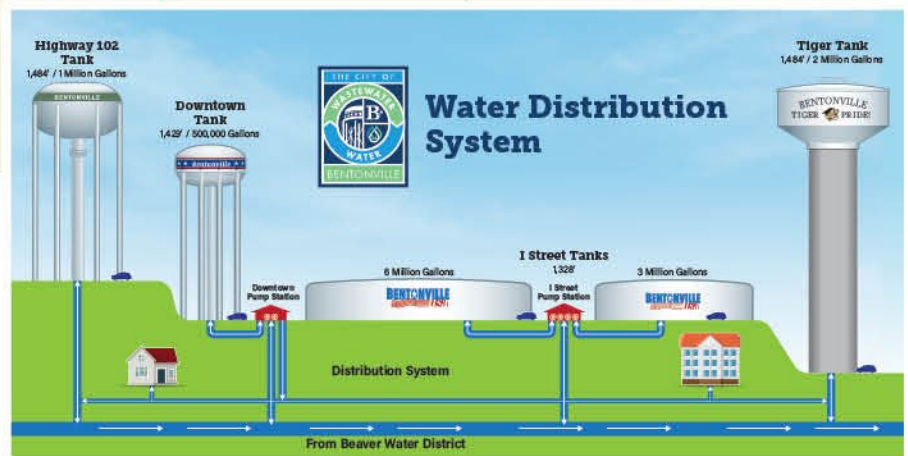
the nation's public drinking water supply. The SDWA authorizes the U.S. Environmental Protection Agency (USEPA) to set standards for drinking water in order to protect against naturally occurring and man-made contaminants. The standards set enforceable maximum contaminant levels and provide the framework for accepted methods to treat water to remove contaminants. In Arkansas, USEPA's requirements for the SDWA are managed and enforced by the Arkansas Department of Health. To comply with these standards, the District frequently tests water at various phases of the treatment process and monitors water before it leaves the facility on its way to customers. At every step, safeguards ensure that all standards are met and that the District is in compliance with the SDWA. Beaver Water District prepares an annual report each year.



Beaver Water District treats all BWU drinking water. It is then distributed from their facility near Beaver Lake to four major customers including the City of Bentonville.

Bentonville Water Utilities Maintains:

17M Gallons Highest Day of Distribution	23,367 Water Services	348 Miles Waterlines
308 Miles Sewerline	6,587 Manholes	3,315 Hydrants



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