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 WYE MOUNTAIN WATER ASSOCIATION

WATER QUALITY REPORT | 2014

WE TREAT WATER BETTER.

# 2014 Water Quality Report



Central Arkansas Water (CAW) is pleased to present to you this year's Annual Drinking Water Quality Report on behalf of the Wye Mountain Water Association (WMWA). This report is designed to inform you about the quality water and services CAW delivers 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. WMWA purchases treated water from CAW. CAW's source of water is from two lakes, [Lake Winona](#) and [Lake Maumelle](#).

## **HOW SAFE IS THE SOURCE OF OUR DRINKING WATER?**

The Arkansas Department of Health has completed a Source Water Vulnerability Assessment for CAW. The assessment summarizes the potential for contamination of CAW's sources of drinking water and can be used as a basis for developing a source water protection plan. Based on the various criteria of the assessment, CAW water sources have been determined to have a medium to high susceptibility to contamination. CAW actively works to reduce or eliminate sources of contaminants to our water supplies. You may request a



View video clips of our recent distribution and treatment improvements and our many watershed management activities at: [carkw.com/annual-report](http://carkw.com/annual-report).

summary of the Source Water Vulnerability Assessment from CAW's office.

### WHAT IS CRYPTOSPORIDIUM?

*Cryptosporidium* is a microbial pathogen found in surface water throughout the U.S. It lives and reproduces only with the host. In the environment, *Cryptosporidium* exists as a thick walled oocyst, containing four organisms. Monitoring by CAW in 2014 indicated no presence of these organisms in their Lake Maumelle, Lake Winona, or Jackson Reservoir water sources. It is important to know that although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

### 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. CAW 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](http://www.epa.gov/safewater/lead) 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 [Sharon Sweeney](#), Water Quality Specialist with CAW, at 501-210-4914. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of CAW's regularly scheduled board meetings on the second Thursday of each month at 2 pm at the James T. Harvey Administration Building at 221 East Capitol Avenue in Little Rock. You may also attend the annual public board meeting of the WMWA, normally conducted in March or April of each year; contact CAW for time and date information regarding the next WMWA board meeting.

### TEST RESULTS

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table in this report shows the results of our monitoring for the period of January 1st to December 31st, 2014. In the table in this report 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)** - an 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.

AT CENTRAL ARKANSAS WATER, WE'RE DEDICATED TO DOING ALL WE CAN TO PROVIDE EXCEPTIONAL WATER QUALITY. FOR US, TREATING WATER BETTER MEANS CONSISTENTLY PUTTING IN THE EFFORT AND EXPERTISE TO BETTER PROTECT IT, TO BETTER TREAT IT, AND TO DEVELOP BETTER WAYS TO DISTRIBUTE IT TO OUR 400,000 CUSTOMERS. WE UNDERSTAND HOW IMPORTANT WATER IS TO THE PEOPLE THAT WE SERVE; THAT'S WHY ITS QUALITY IS SO IMPORTANT TO US. 🧑🏻‍🔬

## 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](https://www.epa.gov/safewater/hotline). 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.

**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

**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.

## Wye Mountain Water Association 2014 CCR Data Table

MICROBIOLOGICAL CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Total Coliform Bacteria (Wye Mountain Water)	N	None	Present	0	1 positive sample per month	Naturally present in the environment
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: 0.21 Lowest monthly % of samples meeting the turbidity limit: 100%	NTU	NA	At no time can turbidity go higher than 1 NTU, and samples for turbidity must be ≤ 0.3 NTU in at least 95 % of the samples in any month	Soil runoff
◆ Turbidity is a measurement of the cloudiness of water. CAW monitors it because it is a good indicator of the effectiveness of their filtration system.						
INORGANIC CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Fluoride (Central Arkansas Water)	N	Annual Average: 0.66 Range: 0.54 – 0.87	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
LEAD AND COPPER TAP MONITORING						
Contaminant	Number of Sites over Action Level	90 <sup>th</sup> Percentile Result	Unit	Action Level	Major Sources in Drinking Water	
Lead (Wye Mountain Water)	0	0.003	ppm	0.015	Corrosion from household plumbing systems; erosion of natural deposits	
Copper (Wye Mountain Water)	0	<0.20	ppm	1.3		
◆ We are currently on a reduced monitoring schedule and required to sample once every three years for lead and copper at our customers' taps. The results above are from our last monitoring period in 2013. Our next required monitoring period is in 2016.						
TOTAL ORGANIC CARBON						
◆ The percentage of Total Organic Carbon (TOC) removal was routinely monitored in 2014, 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).						
REGULATED DISINFECTANTS						
Disinfectant	Violation Y/N	Level Detected	Unit	MRDLG (Public Health Goal)	MRDL (Allowable Level)	Major Sources in Drinking Water
Chlorine (Wye Mountain Water)	N	Average: 0.65 Range: 0.21 – 1.33	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)	
HAA5 [Haloacetic Acids] (Wye Mountain Water)	N	Highest Running 12 Month Average: 12 Range: 8.8 – 13.5	ppb	0	60	
TTHM [Total Trihalomethanes] (Wye Mountain Water)	N	Highest Running 12 Month Average: 65 Range: 46 – 96.8	ppb	NA	80	
Chlorite (Central Arkansas Water)	N	12 Month Average: 200 Range: 20 - 605	ppb	800	1000	
◆ While only the upper end of the TTHM range exceeded the MCL, it should be noted that some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.						
UNREGULATED CONTAMINANTS						
Contaminant	Level Detected	Unit	MCLG (Public Health Goal)	Major Sources in Drinking Water		
Chloroform (Central Arkansas Water)	29.4	ppb	70	By-products of drinking water disinfection		
Bromodichloromethane (Central Arkansas Water)	7.22	ppb	60			
Dibromochloromethane (Central Arkansas Water)	1.96	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.						



221 East Capitol Avenue  
P.O. Box 1789  
Little Rock, AR 72203

Wye Mountain Water Association **WATER QUALITY REPORT 2014**  
COMPLIANCE PERIOD *January 1, 2014 through December 31, 2014*



On behalf of Wye Mountain Water Association, Central Arkansas Water is pleased to provide our 2014 Water Quality Report. We continue to strive to bring you high-quality water that meets or exceeds federal and state regulations for drinking water quality. This 2014 Water Quality Report contains

information about the quality and sources of your water as well as the results of the 115,000 water quality tests that we perform each year. We hope you will take a few minutes to review the report and learn more about the water you drink.

**Graham W. Rich, P.E., BCEE**  
Chief Executive Officer

**Board of Commissioners**

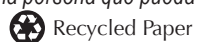
- Eddie Powell, Chair
- Roby Robertson, PhD, Vice Chair
- Anthony Kendall, Secretary
- Jay Hartman, Member
- Carmen Smith, Member
- Marie-Bernarde Miller, Member
- John Braune, Member

**For additional information about this report, please write or call :**

Central Arkansas Water	U.S. Environmental Protection Agency
221 East Capitol Avenue	Safe Drinking Water Hotline
P.O. Box 1789	1.800.426.4791
Little Rock, AR 72203	

**Sharon Sweeney**, Water Quality Specialist  
501.210.4914  
**Jane Hurley**, Assistant Director of Water Quality  
501.223.1577

**IMPORTANTE:** *Este informe contiene información importante acerca de la agua que consume, las fuentes de su agua potable y el monitoreo, reporting y requisitos de calidad de la Ley Federal de agua potable segura y el estado de Arkansas. Si usted no habla a Inglés, por favor póngase en contacto con una persona que pueda traducir esta información para usted.*



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