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# 2018 WATER QUALITY REPORT

Providing Exceptional Service from Forests to Faucets

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MAUMELLE

# 2018 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.

*Este documento contiene información importante acerca del agua potable que usted consume. Si no puede leer este informe, por favor pida a alguien que le ayude a entenderlo.*

## 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 11 wells that pump from the Alluvial (Quaternary System) Aquifer. We also purchased water from Central Arkansas Water (CAW), whose source of water is from two lakes: Lake Winona and Lake Maumelle.

## 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 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.
- **Unregulated contaminants** can include emerging pathogens of concern, such as *Enterococci*, *Pseudomonas*, and *Legionella*. CAW proactively monitors for these contaminants, and it is not uncommon to find occasional occurrences. Monitoring in 2018 indicated a limited presence of *Legionella* in an isolated portion of our system. Immediate action was taken to reduce or eliminate the occurrence, and those in the affected area were directly notified.

Additional testing was completed after the occurrence, and the results showed that the steps taken by CAW resolved the issue.

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.

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

The Arkansas Department of Health has completed a Source Water Vulnerability Assessment for Central Arkansas Water. The assessment summarizes the potential for contamination of our 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, our water sources have been determined to have a medium to high susceptibility to contamination. You may request a summary of the Source Water Vulnerability Assessment from our office.

## 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. Immunocompromised persons such as those with cancer who are undergoing chemotherapy, persons who have had organ transplants, people with HIV/AIDS or other immune system disorders and some elderly or 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 [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## QUALITY FACTS



We distribute over 60 million gallons of water each day that meet or exceed EPA safe drinking water standards.



We maintain 2,500 miles of water mains and respond to emergencies 24 hours a day, 7 days a week.



We deliver 5 gallons of our high-quality water to our customers for one penny.



## 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, Compliance Manager, 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 our regularly scheduled meetings. They are held on the second Thursday of each month at 2:00 PM in CAW's main office at 221 East Capitol Avenue in Little Rock.

## TEST RESULTS

ADH and CAW routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table, on the next page, shows the results of our monitoring for the period of January 1 to December 31, 2018. 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

### 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.

### WTP

Water Treatment Plant

| TURBIDITY          |                  |  |      |                              |  |                                    |
|--------------------|------------------|--|------|------------------------------|--|------------------------------------|
| CONTAMINANT        | VIOLATION<br>Y/N | LEVEL DETECTED   | UNIT | MCLG<br>(Public Health Goal) | MCL<br>(Allowable Level)   | MAJOR SOURCES<br>IN DRINKING WATER |
| Turbidity<br>(CAW) | N                | Highest yearly sample<br>result: 0.19                              | NTU  | NA                           | Any measurement<br>in excess of 1 NTU<br>constitutes a violation | Soil runoff                        |
|                    |                  | Lowest monthly % of<br>samples meeting the<br>turbidity limit: 100 |      |                              |  |                                    |

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     |                  |                                     |      |                              |                          |  |
|----------------------------|------------------|-------------------------------------|------|------------------------------|--------------------------|--|
| CONTAMINANTS               | VIOLATION<br>Y/N | LEVEL DETECTED                      | UNIT | MCLG<br>(Public Health Goal) | MCL<br>(Allowable Level) | MAJOR SOURCES<br>IN DRINKING WATER   |
| Fluoride<br>(CAW Maumelle) | N                | 0.68                                | ppm  | 4                            | 4                        | Erosion of natural<br>deposits; water additive<br>which promotes strong<br>teeth |
| Fluoride<br>(CAW)          | N                | Average: 0.77<br>Range: 0.64 - 0.95 |      |                              |                          |  |

| LEAD AND COPPER TAP MONITORING |                                      |                                       |      |              |   |  |
|--------------------------------|--------------------------------------|---------------------------------------|------|--------------|---|--|
| CONTAMINANTS                   | NUMBER OF SITES<br>OVER ACTION LEVEL | 90 <sup>TH</sup> PERCENTILE<br>RESULT | UNIT | ACTION LEVEL | MAJOR SOURCES<br>IN DRINKING WATER  |  |
| Lead<br>(CAW Maumelle)         | 0                                    | 0.003                                 | ppm  | 0.015        | Corrosion from household plumbing<br>systems; erosion of natural deposits |  |
| Copper (CAW<br>Maumelle)       | 0                                    | 0.13                                  | 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 2016. Our next required monitoring period is in 2019.

| REGULATED DISINFECTANTS |                  |                                     |      |                               |                           |  |
|-------------------------|------------------|-------------------------------------|------|-------------------------------|---------------------------|--|
| DISINFECTANT            | VIOLATION<br>Y/N | LEVEL DETECTED                      | UNIT | MRDLG<br>(Public Health Goal) | MRDL<br>(Allowable Level) | MAJOR SOURCES<br>IN DRINKING WATER         |
| Chlorine                | N                | Average: 0.52<br>Range: 0.45 - 0.59 | ppm  | 4                             | 4                         | Water additive used to<br>control microbes |

| BY-PRODUCTS OF DRINKING WATER DISINFECTION        |                  |  |      |                              |                          |  |
|---|------------------|--|------|------------------------------|--------------------------|--|
| CONTAMINANTS                                      | VIOLATION<br>Y/N | LEVEL DETECTED   | UNIT | MCLG<br>(Public Health Goal) | MCL<br>(Allowable Level) |  |
| HAA5<br>[Haloacetic Acids]<br>(CAW Maumelle)      | N                | Highest Running 12 Month Average: 21<br>Range: 10.2 - 25.4   | ppb  | 0                            | 60                       |  |
| TTHM<br>[Total Trihalomethanes]<br>(CAW Maumelle) | N                | Highest Running 12 Month Average: 68<br>Range: 38 - 79.5     | ppb  | NA                           | 80                       |  |
| Chlorite<br>(CAW Maumelle)                        | N                | Highest Annual Quarterly Average: 69.8<br>Range: 51.4 - 88.1 | ppb  | 800                          | 1000                     |  |
| Chlorite<br>(CAW)                                 | N                | Highest Annual Quarterly Average: 328<br>Range: 266 - 438    |      |                              |                          |  |

| UNREGULATED CONTAMINANTS   |                |      |                              |   |  |  |
|----------------------------|----------------|------|------------------------------|---|--|--|
| CONTAMINANTS               | LEVEL DETECTED | UNIT | MCLG<br>(Public Health Goal) | MAJOR SOURCES<br>IN DRINKING WATER            |  |  |
| Chloroform (CAW)           | 33.8           | ppb  | 70                           | By-products of drinking water<br>disinfection |  |  |
| Bromodichloromethane (CAW) | 5.70           | ppb  | 0                            |   |  |  |
| Dibromochloromethane (CAW) | 0.83           | ppb  | 60                           |   |  |  |

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.