# City of Arkansas City 2019
# Consumer Confidence Report
Covering Year: 2018

The City of Arkansas City presents the 2019 Consumer Confidence Report. This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and State standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call Rod Philo at 620-441-4484. It is important that customers be aware of the continued efforts that are made to improve their water systems. During the 2018 calendar year, we had no violations of drinking water regulations.

To learn more about your drinking water, please attend any of the city commission meetings which are held on the first and third Tuesdays of each month at City Hall at 5:30pm.The public is welcome. Meeting agendas and relevant information are provided on local cable TV on channel 7. Other announcements can be found in the Arkansas City Traveler and heard over KSOK 1280 AM, 95.9 FM or KACY 102.5 FM radio. Further information is available on the City of Arkansas City's web site at: http://www.arkcity.org.

Your water is supplied by 10 ground water wells west of the Arkansas River. A surface water supply is also available from the Walnut River on the east side of town, but for the last several years only the water well source has been utilized.
The water treatment facility is permitted to soften and filter the source water at a rate up to 5.4 million gallons per day. The average water quantity delivered to customers in 2018 was 2.6 million gallons per day.

## Important Information from the EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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 (800-426-4791).

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants.

**Additional Information:** Our water system tested a minimum of 10 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliforms are bacteria that are naturally present in the environment and used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

**Terms & Abbreviations:**

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.
**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL is 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.
**Secondary Maximum Contaminant Level (SMCL):** recommended level for a contaminant that is not regulated and has no MCL.
**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
**Treatment Technique (TT):** a required process intended to reduce levels of a contaminant in drinking water.
**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.
**Non-Detects (ND):** lab analysis indicates that the contaminant is not present.
**Parts per Million (ppm)** or milligrams per liter (mg/l)
**Parts per Billion (ppb)** or micrograms per liter (µg/l)
**Picocuries per Liter (pCi/L):** a measure of the radioactivity in water.
**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.
**Monitoring Period Average (MPA):** an average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.
**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.
**Running Annual Average (RAA):** an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.
**Locational Running Annual Average (LRAA):** Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Contaminants that may be present in source water before we treat it include:**

***Microbial contaminants*,** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.
***Inorganic contaminants*,** such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water run-off, agriculture, and residential users.
***Radioactive contaminants*,** which can be naturally occurring or the result of mining activity.
***Organic contaminants*,** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

**Addition Information:** In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

*Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system. effects, and may lead to an increased risk of getting cancer.*

# Water Quality Data Table

**Please Note: Because of sampling schedules, results may be older than 1 year.**

| Microbiological | Results | MCL | MCLG | Typical source |
|---|---|---|---|---|
| **No Detected Results were Found in the Calendar Year of 2018** | | | | |

| Regulated Contaminants | Sample Date | Highest Value | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|---|---|---|---|---|---|---|---|
| **ARSENIC** | 6/5/2018 | 1.5 | 1.4-1.5 | ppb | 10 | 0 | Erosion of natural deposits |
| **BARIUM** | 6/5/2018 | 0.093 | 0.05-0.093 | ppm | 2 | 2 | Discharge from metal refineries |
| **CHROMIUM** | 6/5/2018 | 1.9 | 1.9 | ppb | 100 | 100 | Discharge from steel and pulp mills |
| **FLUORIDE** | 9/11/2018 | 0.63 | 0.22-0.63 | ppm | 4 | 4 | Natural deposits; Water additive which promotes strong teeth |
| **NITRATE** | 12/11/2018 | 0.77 | 0.33-0.77 | ppm | 10 | 10 | Runoff from fertilizer use |
| **SELENIUM** | 4/2/2018 | 2.2 | 1.5-2.2 | ppb | 50 | 50 | Erosion of natural deposits |

| Disinfection Byproducts | Monitoring Period | Your Highest RAA | Range (low/high) | Unit | MCL | MCLG | Typical Source |
|---|---|---|---|---|---|---|---|
| **TOTAL HALOACETIC ACIDS** | 2018 | 22 | 2.3-25 | ppb | 60 | 0 | By-product of drinking water disinfection |
| **TTHM** | 2018 | 58 | 18.6-60 | ppb | 80 | 0 | By-product of drinking water chlorination |

| Lead & Copper | Monitoring Period | 90th Percentile | Range (low/high) | Unit | AL | Sites Over AL | Typical Source |
|---|---|---|---|---|---|---|---|
| **COPPER, FREE** | 2016-2018 | 0.077 | 0.001-0.13 | ppm | 1.3 | 0 | Corrosion of household plumbing |

**Additional Information for Lead:** 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. Your water system 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**

| RADIOLOGICAL CONTAMINANTS | COLLECTION DATE | YOUR HIGHEST VALUE | RANGE (low/high) | UNIT | MCL | MCLG | TYPICAL SOURCE |
|---|---|---|---|---|---|---|---|
| COMBINED RADIUM (-226 & -228) | 1/06/2014 | 0.5 | 0.5 | PCI/L | 5 | 0 | Erosion of natural deposits |

| Secondary Contaminants | Sample Date | Our Highest Value | Range (low/high) | Unit | SMCL |
|---|---|---|---|---|---|
| **ALKALINITY, TOTAL** | 6/5/2018 | 120 | 53-120 | MG/L | 300 |
| **ALUMINUM** | 4/2/2018 | 0.052 | 0.052 | MG/L | 0.05 |
| **CALCIUM** | 6/5/2018 | 41 | 28-41 | MG/L | 200 |
| **CHLORIDE** | 4/2/2018 | 160 | 100-160 | MG/L | 250 |
| **CONDUCTIVITY @ 25 C UMHOS/CM** | 4/2/2018 | 870 | 710-870 | UMHO/CM | 1500 |
| **CORROSIVITY** | 4/2/2018 | 0.60 | 0.28-0.60 | LANG | 0 |
| **HARDNESS, TOTAL (AS CACO3)** | 6/5/2018 | 140 | 130-140 | MG/L | 400 |
| **MAGNESIUM** | 4/2/2018 | 15 | 9.2-15 | MG/L | 150 |
| **MANGANESE** | 4/2/2018 | 0.0048 | 0.001-0.0048 | MG/L | 0.05 |
| **PH** | 4/2/2018 | 9 | 8.2-9 | PH | 8.5 |
| **PHOSPHORUS, TOTAL** | 4/2/2018 | 0.42 | 0.21-0.42 | MG/L | 5 |
| **POTASSIUM** | 4/2/2018 | 5.8 | 3.1-5.8 | MG/L | 100 |
| **SILICA** | 4/2/2018 | 13 | 5.5-13 | MG/L | 50 |
| **SODIUM** | 4/2/2018 | 110 | 85-110 | MG/L | 100 |
| **SULFATE** | 4/2/2018 | 87 | 49-87 | MG/L | 250 |
| **TDS** | 4/2/2018 | 450 | 370-450 | MG/L | 500 |
| **ZINC** | 4/2/2018 | 0.11 | 0.07-0.11 | MG/L | 5 |