We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to providing you with information because informed customers are our best allies. Our water source is from wells drawing from the Cockfield Aquifer.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identify potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the Black Bayou Water Association have received a moderate ranking in terms of susceptibility to contamination.

If you have any questions about this report or concerning your water utility, please contact David Koehn at 662.822.8601. We want our valued customers to be informed about their water utility. If you want to learn more, please attend the meeting scheduled for the first Monday in January at 10:00 AM at the Black Bayou Water Office.

We routinely monitor for contaminants in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that were detected during the period of January 1st to December 31st, 2017. In cases where monitoring wasn't required in 2017, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that 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 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 agriculture, urban storm-water 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 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 ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily indicate that the water poses a health risk.

In this table you will find many terms and abbreviations you might not be 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 “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.

**Maximum Contaminant Level Goal (MCLG)** - The “Goal”(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk of 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 to control microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG)** – The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in $10,000.

**Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Violation Y/N</th>
<th>Date Collected</th>
<th>Level Detected</th>
<th>Range of Detects or # of Samples Exceeding MCL/ACL/MRDL</th>
<th>Unit Measurement</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Total Coliform Bacteria</td>
<td>Y</td>
<td>July</td>
<td>Positive</td>
<td>2</td>
<td>NA</td>
<td>0</td>
<td></td>
<td>presence of coliform bacteria in 5% of monthly samples</td>
</tr>
<tr>
<td>8. Arsenic</td>
<td>N</td>
<td>2016*</td>
<td>1.1</td>
<td>1 – 1.1</td>
<td>ppb</td>
<td>n/a</td>
<td>10</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes</td>
</tr>
<tr>
<td>10. Barium</td>
<td>N</td>
<td>2016*</td>
<td>.0323</td>
<td>.0317 - .0323</td>
<td>ppm</td>
<td>2</td>
<td>2</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits</td>
</tr>
</tbody>
</table>

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13. Chromium  N  2016*  3.3  .8 – 3.3  ppb  100  100  Discharge from steel and pulp mills; erosion of natural deposits
14. Copper  N  2015/17  .4  0  ppm  1.3  AL=1, 3  Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide  N  2016*  63  17 - 63  ppb  200  200  Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride  N  2016*  .334  .328 -.334  ppm  4  4  Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead  N  2015/17  2  0  ppb  0  AL=1, 5  Corrosion of household plumbing systems, erosion of natural deposits
21. Selenium  N  2016*  4.3  3.4 – 4.3  ppb  50  50  Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

### Disinfection By-Products

81. HAA5  N  2017  19  6 - 4  ppb  0  60  By-Product of drinking water disinfection.
82. TTHM [Total Trihalomethanes]  Y  2017  121  2.03 – 20.1  ppb  0  80  By-product of drinking water chlorination.
Chlorine  N  2017  8  4 – 4  ppm  0  MRDL = 4  Water additive used to control microbes


**Microbiological Contaminants:**

(1) Total Coliform/E Coli. Coliforms are bacteria that are naturally present in the environment and are 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. We found coliform indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessments (s) to identify problems and to correct any problems that were found during these assessments.

**Disinfection By-Products:**

(81) Haloacetic Acids (HAA5). Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of cancer (82) Total Trihalomethanes (TTHMs). 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.

During the past year we were required to conduct and completed 2(two) Level 2 assessment. In addition, we were required to take and completed 2 (two) corrective actions.

Our system exceeded the MCL for Disinfection Byproducts in 2017. The standard for Trihalomethanes (TTHM) is .080 mg/l. We are working with the MSDH to evaluate the water supply and researching options to correct the problem.

We are required to monitor your drinking water for specific constituents on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In an effort to ensure systems complete all monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

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. Our 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. The Mississippi State Department of Health Public Health Laboratory offers lead testing. Please contact 601.576.7582 if you wish to have your water tested.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. 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. 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.

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 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.

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