

# ANNUAL WATER QUALITY REPORT 2021

Banks County Public Utilities WSID# 0110026 Water Testing Performed in 2021

In 2021, the Banks County Public Utilities Department conducted over 5,800 laboratory tests for more than 80 drinking water parameters. This report includes information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Your Banks County Public Utilities Department is committed to providing the community with clean, safe, and reliable drinking water. The tables below list all the drinking water contaminants that we detected during the 2021 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing completed from January 1 through December 31, 2021. EPD requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.



## EPA Regulated Inorganic Substances or Contaminants

| Substance (Unit)                   | Analysis Frequency | MCL | MCLG | Average | Range       | Major Sources   | Violation |
|------------------------------------|--------------------|-----|------|---------|-------------|---|-----------|
| Fluoride <sup>1</sup> (ppm)        | Annually           | 4   | 4    | 0.74    | 0.72 - 0.81 | Erosion of natural deposits; water additive which promotes strong teeth             | No        |
| Nitrate/Nitrite <sup>2</sup> (ppm) | Annually           | 10  | 10   | 0.34    | 0.0 - 0.34  | Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits | No        |

<sup>1</sup>Fluoride is added to water to help promote dental health in children. <sup>2</sup>Nitrate and Nitrite are measured together:

## Banks County's Water Distribution System – Lead and Copper Levels at Residential Taps

| Substance (Unit)          | Action Level 90% | 90 <sup>th</sup> Percentile sample result | Number of sites exceeding Action Level (AL) | Major Sources                           | Violation |
|---------------------------|------------------|---|---|---|-----------|
| Lead <sup>3</sup> (ppb)   | 15               | 0.0                                       | 0 of 20                                     | Corrosion of household plumbing systems | No        |
| Copper <sup>4</sup> (ppm) | 1.3              | 0.059                                     | 0 of 20                                     | Corrosion of household plumbing systems | No        |

Banks County is required to test a minimum of 20 homes for lead and copper every three years. The last testing occurred in August 2016, and the next testing will take place in 2022. Compliance with the Lead and Copper Rule is based on obtaining the 90<sup>th</sup> percentile of the total number of samples collected and comparing it against the lead and copper action levels. To have an exceedance, the 90<sup>th</sup> percentile value must be greater than 15ppb for lead or 1.3ppm for copper.

<sup>3</sup>Of the 20 homes tested in 2019, no sites exceeded the lead action level (AL) for Lead.

<sup>4</sup>Of the 20 homes tested in 2019, no sites exceeded the action level (AL) for Copper.

## Disinfection By-Products, By-Product Precursors, and Disinfectant Residuals

| Substance (Unit)                              | Analysis Frequency | MCL (LRAA) | MCLG (LRAA) | Highest Detected LRAA <sup>5</sup> | Range       | Major Sources   | Violation |
|---|--------------------|------------|-------------|------------------------------------|-------------|---|-----------|
| TTHMs (Total Trihalomethanes) (ppb) – Stage 2 | Quarterly          | 80         | 0           | 70.9                               | 45.0 – 70.9 | By-products of drinking water disinfection  | No        |
| HAA5s (Haloacetic Acids) (ppb) – Stage 2      | Quarterly          | 60         | 0           | 38.0                               | 29.2 – 38.0 | By-products of drinking water disinfection  | No        |
| TOC (Total Organic Carbon) (ppm)              | Monthly            | TT         | N/A         | Average 0.99                       | 0.80 – 1.3  | Decay of naturally-occurring organic matter in the water withdrawn from sources such as lakes and streams | No        |
| Chlorine (ppm)                                | Monthly            | MRDL=4     | MRDLG=4     | Average 1.86                       | 1.76 – 1.96 | Drinking Water Disinfection   | No        |

<sup>5</sup>LRAA=Locational Running Annual Average

## Turbidity

| Substance (Unit) | Analysis Frequency | MCL                                | MCLG | Highest value reported | Lowest % of samples meeting limit | Major Sources | Violation |
|------------------|--------------------|------------------------------------|------|------------------------|-----------------------------------|---------------|-----------|
| Turbidity (NTU)  | Continuous         | TT, <0.3 in 95% of monthly samples | 0    | 0.14                   | 100                               | Soil Runoff   | No        |

Note: Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Banks County's Annual Average Hardness – 25ppm

Banks County's Annual Average Alkalinity – 16ppm

Banks County's Annual Average pH – 7.87 std units

## Microbiological Contaminants

| Substance (Unit)                           | Analysis Frequency | MCL                            | MCL G | Highest % positive samples (monthly) | Range | Major Sources                        | Violation |
|--|--------------------|--------------------------------|-------|--------------------------------------|-------|--------------------------------------|-----------|
| Total Coliform Bacteria <sup>6</sup> (+/-) | Monthly            | <5% positive samples (monthly) | 0     | 0.0%                                 | 0%    | Naturally present in the environment | No        |

<sup>6</sup> 7 Samples taken monthly

# ANNUAL WATER QUALITY REPORT 2021

The Banks County Public Utilities Department WSID# 0110026 provides water to residential, commercial and industrial customers throughout Banks County. The Banks County service area covers approximately 195 square miles. The water system serves a customer base of approximately 2,900 accounts with an estimated 10,000 users. We welcome your comments and participation on issues that concern our drinking water. Horace Gee, Public Utilities Director, may be reached at (706) 677-6889. The information contained in this report summarizes your drinking water for calendar year 2021. This information is provided on or before June 1. If you are interested in getting more information about your water quality or this report, please give us a call. We are proud to inform you that the Banks County water system did not have any violations of water quality parameters during 2021. Included in this report is information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The Public Utilities Department is actively involved in protecting our local water resources and works with various state, federal and local agencies on Watershed Protection issues.

## Protecting Our Source of Drinking Water Starts at Home

Your water department is committed to providing our community with clean, safe and reliable drinking water for all of us. Your water comes from a 55-acre reservoir located between Hwy. 441 and Apple Pie Ridge Road. This source provides ample volumes of water to our community. This reservoir is protected from activities, which could potentially cause contamination of this water source. The water gravity flows to the treatment plant where treatment chemicals are added to remove impurities from the water, then filtered and finally chlorinated to disinfect the water. Banks County occasionally purchases water from Commerce, Franklin County and Toccoa. Your Board of Commissioners meets on the second Tuesday of each month at 6: 30 p.m. at the courthouse boardroom. Your participation or comments are welcome at these meetings.

### Contaminants that may be present in source water BEFORE treatment include:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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.



**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 storm 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.

### Terms & Abbreviations used below:

**Action Level (AL):** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Environmental Protection Agency (EPA):** the United States Environmental Protection Agency.

**Environmental Protection Division (EPD):** the Georgia Department of Natural Resources Environmental Protection Division.

**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):** 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 contamination.

**Treatment Technique (TT):** a required process intended to reduce the level of a contaminant in drinking water. **n/a:** not applicable – **nd:** not detectable at testing limit - **ppb:** parts per billion or micrograms per liter - **ppm:** parts per million or milligrams per liter - **NTU:** nephelometric turbidity units, measurement of suspended material in water.

**Lead in 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. Banks County's 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 at 800.426.4791** or online at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**For More Information, visit us at [www.co.banks.ga.us/dept-water.html](http://www.co.banks.ga.us/dept-water.html) or call 706-677-2261**