**The following water quality report is presented to the citizens of the City of Auburn using the information provided by the Barrow County Water and Sewerage Authority and from Gwinnett County Water Authority, also from testing in and around the City of Auburn.**

**This report details information on the water system for the calendar year of 2022, from January 1st to December 31st.**

**During the calendar year of 2022, the City of Auburn purchased 98% of its drinking water from Barrow County Water and Sewer Authority (BCWSA). 2% of the water was purchased from Gwinnett County as needed.**

**Should you have any questions regarding the information in this report, you may contact Elbert Blackstock, Auburn’s Public Water Licensed Operator at (770) 963-4002.**

Logo, company name

Description automatically generated CITY OF AUBURN 2022

WATER QUALITY REPORT

(Water System ID# 0130000)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Inorganic  Contaminants | Date | Units | MCL | MCLG | Detected | Above Advisable Level | Major  Sources | Violations |
| Fluoride | Daily | ppm | 4.0 | 4.0 | 0.83 ppm average | 0 | Erosion of natural deposits; water additive that promotes strong teeth | No |
| Turbidity | Daily | NTU | .300 | .300 in 95% of samples | 0.011 NTU average | 0 | Soil runoff | No |
| Chlorine | Daily | ppm | 4.0 | 4.0 | 0.78 ppm  average | 0 | |  | | --- | | Added to water | | as a disinfectant | | No |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total Trihalomethanes | Qrtly. | ppb | 80 | 80 | 94 | 14 PPB | The byproduct of water disinfection with chlorine | Yes |
| Total Halo Acetic Acids | Qrtly. | ppb | 60 | 60 | 53.25 | 0 | By-product of drinking  Water chlorination. | No |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lead | 2022 | ppb | AL 15 | 0 | 0 | 0 | Corrosion of Household Plumbing systems, erosion of Natural deposits | No |
| Copper | 2022 | ppb | AL 1300 | 1300 | 26 | 0 | Corrosion of household plumbing system, erosion of natural deposits | No |
| Microbiological | Monthly | Positive /Absent | 5% of the monthly sample  may be positive | N/A | 0 | 0 | Naturally present in the environment | No |

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| **Table Key** |
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| **AL** = Action Level |
| **MCL** = Maximum Contaminant Level |
| **MRDL** = Maximum Residual Disinfectant |
| **MCLG** = Maximum Contaminant Level Goal |
| **MRDLG** = Maximum Residual Disinfectant Level |
| **ppm** = parts per million or milligrams per liter (mg/L) |
| **ppb** = part per billion or micrograms per liter (ug/L) |
| **p/a** = presence/absence (microbial) |
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| **Water-Quality Table Footnotes** |
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| 1. ppb of lead reported as the 90th percentile  of samples taken |
| 2. ppb of copper reported as the 90th percentile  of samples taken |
| 3. Turbidity is a measure of cloudiness in water. We monitor turbidity because it is a good indicator  of the effectiveness of our filtration system |

**Barrow County Water System 2022 Water-Quality Report (Water System ID #0130031)**

The Barrow County Water System is pleased to present a summary of the quality of water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to their customers. This report details where our water comes from, what it contains, and the risks our water testing and treatment are designed to prevent. Barrow County Water System is committed to providing you with the safest and most reliable water supply. Informed consumers are our best allies in maintaining safe drinking water. We encourage public interest and participation in our community’s decisions affecting our drinking water.

The Barrow County Board of Commissioners meets each month on the second and fourth Tuesday at 6:00 pm in the Commission Meeting Room located on the second floor of the Historic Courthouse, 30 North Broad Street in Winder, GA. Any comments are welcomed; please contact our office at 770-307-3014.

**Water Source:**

Barrow County purchased all its drinking water from the Upper Oconee Basin Water Authority. The water supply sources for the Upper Oconee Basin Water Authority are Bear Creek and the Middle Oconee River.

**How to Read This Table:**

The chart in this report provides representative analytical results of water samples, collected in 2022 unless otherwise noted from the Barrow County Water System. Please note the following definitions:

**Maximum Contaminant Level or MCL:** The highest level of 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 or MCLG:** The level of contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant, which triggers treatment or other requirements, that a water system must follow.

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| Inorganic Contaminant | Date | Units | MCL | MCLG | Detected | # Above AL | Major sources | Violations? |
|  |
| ***Lead1***  Barrow County | 2022 | ppb | AL=15 | 0 | 0 | 0 | Corrosion of household plumbing systems, erosion of natural deposits | No |  |
| ***Copper2*** Barrow County | 2022 | ppb | AL=1300 | 1300 | 62 | 0 | Corrosion of household plumbing systems, erosion of natural deposits | No |  |
| ***Chlorine Residual*** Barrow County  Barrow  County Bear Creek | Monthly    Daily | ppm | 4 | 4 | 0.94    1.79 | 1.5-2.20 | Water disinfectant | No    No |  |
| ***Fluorides*** Bear Creek | Daily | ppm | 4 | 4 | 0.78 | 0.75-0.82 | Erosion of natural deposits, water additive that promotes strong teeth | No |  |
| ***TTHM's*** Barrow  County  Bear Creek | Quarterly  Quarterly | ppb  ppb | 80  80 | N/A  N/A | 48.25  38.3 | 32-71  19.57 | A by-product of drinking water chlorination | No  No |  |
| ***HAA5*** Barrow County  Bear Creek | Quarterly  Quarterly | ppb ppb | 60 | N/A | 55.5  34.6 | 30-75  18-67 | By-product of drinking water chlorination | No  No |  |
| ***Turbidity3*** Bear Creek | Daily | NTU | TT=1 | N/A | 0.02 |  | Soil runoff | No |  |
| ***Turbidity3*** Bear Creek |  | NTU 0.3 | Sample | N/A 100% | N/A |  | Soil runoff | No |  |
| ***Total Coliform*** Barrow  County  Bear Creek |  | < 5% of monthly samples | 0 | 0 |  |  | Naturally present in the environment | No |  |
| ***Total Organic Carbon*** Bear Creek |  | ppm | TT | N/A | 1.6 | 1.4-1.9 | Naturally present in the environment | No |  |

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| Gwinnett County Drinking Water Quality Data 2022 | | | | | | | |
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| **EPA Regulated Inorganic Substances or Contaminants** | | | | | | | |
| Substance (Unit) | Analysis Frequency | MCL | MCLG | Average | Range | Major Sources | Violation |
| Fluoride1 (ppm) | Daily | 4 | 4 | 0.84 | 0.70-1.00 | Erosion of natural deposits; water additive which promotes strong teeth | No |
| Nitrate/Nitrite2 (ppm) | Annually | 10 | 10 | 0.37 | 0.33-0.41 | Runoff from fertilizer use; leaching from septic tanks;erosion of natural deposits | No |
| 1 Fluoride is added to water to help promote dental health in children. | | | | | | | |
| 2Nitrate and Nitrite are measured together | | | | | | | |
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| **Gwinnett County Water Distribution System - Lead and Copper Levels at Residential Taps** | | | | | | | |
| Substance (Unit) | Action Level 90% | 90th Percentile sample result | | Number of sites exceeding Action Level (AL) | | Major Sources | Violation |
| Lead3 (ppb) | 15 | 1.2 | | 0 | | Corrosion of household plumbing systems | No |
| Copper4 (ppm) | 1.3 | 0.17 | | 0 | | Corrosion of household plumbing systems | No |
| Gwinnett is required to test a minimum of 50 homes for lead and copper every three years. The last testing occurred in 2020, and the next testing will take place in 2023. Compliance with the Lead and Copper Rule is based on obtaining the 90th percentile of the total number of samples collected and comparing it against the lead and copper action levels. To have an exceedance, the 90th percentile value must be greater than 15 ppb for lead or 1.3 ppm for copper. | | | | | | | |
| 3Of the 50 homes tested in 2020, no sites exceeded the action level (AL) for lead. | | | | | | | |
| 4Of the 50 homes tested in 2020, no sites exceeded the action level (AL) for copper. | | | | | | | |
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| **Disinfection By-Products, By-Product Precursors and Disinfectant Residuals** | | | | | | | |
| Substance (Unit) | Analysis Frequency | MCL (LRAA) | MCLG (LRAA) | Highest Detected LRAA5 | Range | Major Sources | Violation |
| TTHMs (Total Trihalomethanes) (ppb) - Stage 2 | Quarterly | 80 | 0 | 63.7 | 11.8-63.7 | By-products of drinking water disinfection | No |
| HAA5s (Haloacetic Acids) (ppb) - Stage 2 | Quarterly | 60 | 0 | 26.9 | 11.6-26.9 | By-products of drinking water disinfection | No |
| TOC (Total Organic Carbon) (ppm) | Monthly | TT | N/A | Average=1.15 | 0.89-1.7 | Decay of naturally-occurring organic matter in the water withdrawn from sources such as lakes and streams | N/A |
| Chlorine (ppm) | Monthly | MRDL=4 | MRDLG=4 | Average = 1.41 | 0.14-2.13 | Drinking Water Disinfectant | No |
| Bromate (ppb) | Monthly | 10 | 10 | < 5.0 | < 5.0 | By-product of drinking water disinfection utilizing ozone | No |
| 5LRAA= Locational Running Annual Average | | | | | | | |
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| **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 NTU | 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. | | | | | | | |
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| **Microbiological Contaminants** | | | | | | | |
| Substance (Unit) | Analysis Frequency | MCL | MCLG | Highest % positve samples (monthly) | Range (year) | Major Sources | Violation |
| Total Coliform Bacteria6 (+/-) | Monthly | <5% positive samples (monthly) | 0 | 0.32% | 0%-0.32% | Naturally present in the environment | No |
| 6 Approx 306 samples taken monthly | | | | | | | |