**The following water quality report is presented to the citizens of the City of Auburn using 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. 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. This report details information on our water system for the calendar year of 2017, January 1st to December 31st**

**During the calendar year of 2017 the City of Auburn purchased 100% of our drinking water from Barrow County Water and sewer Authority (BCWSA).**

**We have the ability to purchase water from Gwinnett County if needed.**

**WHERE DOES MY WATER COME FROM?**

The BCWSA purchased all of 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.

**NOTES ABOUT CONTAMINANTS**

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). This same traveling water can pick up substances

resulting from the presence of animals or human activity.

**Contaminants that may be present in source water include the following:**

 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 salt 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

storm water runoff and residential uses.

 Organic chemical contaminants, including synthetic and volatile chemicals (which are byproducts

of industrial processes and petroleum production) can also come from gas stations, urban

storm water runoff and septic systems.

 Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production

and mining activities.

 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.

In order to insure that tap water is safe to drink, the EPA prescribes regulations that limit the amount

of certain contaminants in water provided by public water systems. Food and Drug Administration regulations

established limits for contaminants in bottled water, which must provide the same protection for public health.

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**CONTAMINANTS AND HEALTH RISK**

**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. Barrow County**

**Water and Sewerage Authority 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.

**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 (1-800-426-4791).**

**IMPORTANT HEALTH INFORMATION**

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 persons

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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**WHAT IS CRYPTOSPORIDIUM?**

Cryptosporidium (Crypto) is a one-celled parasite protozoan, which is often found in water sources

that receive runoff from animal waste. Crypto can infect humans and have severe impacts on certain people

including organ transplant recipients, immuno-compromised persons, young children and persons undergoing

cancer treatment. Under the U.S. EPA’s Information Collection Rule, quarterly samples have been collected

from the Upper Oconee Basin Water Authority’s raw and treated water and analyzed. Crypto has not been detected

in neither source water or drinking water. Samples have been analyzed for over five years and Crypto

has never been detected.

**READING THE RESULTS - Definitions of Terms and Abbreviations Used in the Report**

**AL** Action Level (AL): The concentration of a contaminate which if exceeded, triggers treatment or

other requirements which a water system must follow.

**MCL** Maximum Contaminate 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.

**MCLG** Maximum Contaminate 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.

**m/L** Milliliter: A milliliter is one thousandth of a liter. One liter is equal to slightly more than a quart.

**n/a** Not applicable.

**nd** Not detectable at testing limit.

**NTU** Nephelometric Turbidity Unit (NTU): A measure of suspended material in water.

**ppm** A part per Million means one part per 1,000,000 (same as milligrams per liter) and corresponds

to 1 minute in 2 years, or 1 penny in $10,000.

**ppb** A part per Billion means one part per 1,000,000,000 (same as micrograms per liter) and corre

sponds to 1 minute in 2,000, or 1 penny in $10,000,000.

**TT** Treatment Technique (TT): A required process intended to reduce the level of a contaminant in

drinking water.

**Turbidity** Turbidity is a measure of the cloudiness of water.

**(a)** Water from a treatment plant does not contain lead or copper. However, based upon the

Georgia Environmental Protection Division (EPD) testing requirements, water is tested at the

tap. These test show that where a customer may have lead or lead soldered copper pipes, the

water is not corrosive. This means the amount of lead or copper absorbed by the water is limited

to safe levels.

**(b)** Fluoride is added in treatment to bring the natural levels to the EPA Optimum of 1 part per

million. This optimum concentration promotes strong teeth.

**(c)** The EPD requires that no single reading for turbidity exceed 2 NTUs.

**(d)** The EPD requires that no more than 5% of all readings exceed 0.5 NTU.

**>** Greater than.

**<** Less than.

**ne** Not Established.

**WATER QUALITY DATA**

The following tables list all the drinking water contaminants that we detected during the 2017 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 these tables is from testing done January 1-December 31,2017.

**IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OUR OPERATIONS?**

EPD and EPA require us to test our water on a regular basis to ensure its safety. During 2016, we submitted

monthly water samples for bacteriological analysis in accordance with our Operating Permit. All samples tested

satisfactory.

The 1996 Amendments to the Federal Safe Drinking Water Act (SWDA,) brought about a new approach

for either past strengths of the Surface Water Treatment Rule, expansion of water monitoring, and other compliance

measures, the EPA advocates prevention of contamination as an important tool in the protection of public

water supplies. Georgia’s EPD mission is to develop a source water assessment plan for each public water system

to help protect the sources ensuring quality drinking water that meets all state and federal regulations and to assist

the promotion and implementations of the protection plans. Barrow County is pleased to inform you that all of our

water suppliers are in full compliance with the comprehensive Source Water Assessment Programs (SWAP). You

can access detailed information of the plans on the Georgia Regional Development Center’s website.

[**http://www.negrdc.org/swap/index.html**](http://www.negrdc.org/swap/index.html)**.**

**The City of Auburn**

**The Chlorine detectable residual .87 ppm average.**

 **Substance Units MCL MCLG System Violations Source of Substance**

**Results (YES/NO)**

**Fluoride** ppm 4.0 4.0 **detectable residual .76 ppm average no mcl violations.**

Water additive that promotes

Strong teeth; discharge from

Fertilizer and aluminum factories

**Average P.H 7.28**

**Turbidity** NTU <.30 NTU in 95% of N/A **Average turbidity 0.09 ntu** NO mcl violations

 100% Soil Runoff

Samples/month

**Substance Units MCL Violation Amount Source of Substance**

**(YES/NO) Detected**

**Total Trihalomethanes** ppb 80 detectable level 21.20 NO mcl violations.

By-product of drinking

Water chlorination.

 **Total Haloacetic Acids** ppb 60 detectable level 10.11 no mcl violations

 By-product of drinking

Water chlorination.

**Chloroform** ppb N/A 57.52 **ppb** NO mcl violation

By-product of drinking

Water chlorination.

**MICROBIOLOGICAL**

The mcl is 1 per month in 2017 the city of Auburn had no positive for bacteria samples.

Naturally present in the environment.

Barrow County Water Authority

DETECTED CONTAMINANTS TABLE 2017

 Highest # Of Violations

|  |  |  |
| --- | --- | --- |
| Substance | Units |  MCL MCLG Level Samples (YES/NO) Source Of Substance |
| Co |  | 1.3 0.093 30 NO Corrosion of household plumbing system', Erosion of natural deposits; Leaching from wood preservatives. |
| Lead | mg/L | 0.015 0.0 0.00059 30 NO Corrosion of household plumbing system.UNREGULATED VOLATILE ORGANIC SUBSTANCESAmount Violations |

|  |  |  |
| --- | --- | --- |
|  | Units | MCL MCLG Detected (YES/NO) Source Of Substance |
| Brornodichloronuethane | ppb |   N/A 5.1 NO By-product of drinking water chlorination. |
| Chlorofornl | ppb | N/A N/A 34 NO By-product of drinking water chlorination. |
| Chlorodibrmnornethane | ppb | N/A N/A 1.1 NO By-product of drinking water chlorinationPRIMARY INORGANIC SUBSTANCEAmount Violations |
|  | MCL |  MCLG Detected (YES/NO) Source Of Substance |

 Substane

|  |  |  |
| --- | --- | --- |
| Fluoride ppm | 4.0 | 4.0 0.75 NO Erosion of natural deposits; water additive that pron10tes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate/Nitrite ppm | 10.0 | 10.0 0.14 NO Run off from fertilizer use; Leaching from septic tanks, sewage: Erosion of natural deposits.DISINFECTION BY-PRODUCTS Amount Violations |
| Substance | Units ppb ppbN/AMCL |  Detected (YES/NO) Source Of Substance |

Substance Units

Total Trihalmnethanes 80 69.25 NO By-product of drinking water chlorination.

Total Haloacetic Acids 60 62 YES By-product of drinking water chlorination.

Total Organic Carbon 1.5 NO By-product of drinking water chlorination

TURBIDITY

 Highest Violation Lowest % of Samples

Substance Units MCLG Reported (YES/NO) Meeting Limits Source Of Substance

Turbidity NTU <0.3 in of N/A 0.10 NO 100% Soil Runoff

|  |
| --- |
| Gwinnett County Drinking Water Quality Data 2017 |
|  |  |  |  |  |  |  |  |
| **EPA Regulated Inorganic Substances or Contaminants** |
| Substance (Unit) | Analysis Frequency  | MCL | MCLG | Average | Range | Major Sources | Violation |
| Fluoride1 (ppm) | Daily | 4 | 4 | 0.75 | 0.63-0.85 | Erosion of natural deposits; water additive which promotes strong teeth | No |
| Nitrate/Nitrite2 (ppm)  | Annually | 10 | 10 | 0.545 | 0.44-0.65 | 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  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **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 | 1.1 | 1 | Corrosion of household plumbing systems  | No |
| Copper4 (ppm) | 1.3 | 0.16 | 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 2017, and the next texting will take place in 2020. 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 2017, one site exceeded the action level (AL) for lead. |
| 4Of the 50 homes tested in 2017, 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 LRAA5 | Range | Major Sources | Violation |
| TTHMs (Total Trihalomethanes) (ppb) - Stage 2  | Quarterly | 80 | 0 | 60.1 | 9.5-60.1 | By-products of drinking water disinfection | No |
| HAA5s (Haloacetic Acids) (ppb) - Stage 2  | Quarterly | 60 | 0 | 32 | 8.525-32.0 | By-products of drinking water disinfection | No |
| TOC (Total Organic Carbon) (ppm)  | Monthly | TT | N/A | 1.17 | 0.89-1.5 | 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 | 2.15 | 0.58-2.15 | Drinking Water Disinfectant | No |
| Bromate (ppb) | Monthly | 10 | 0 | <5.0 | <5.0-6.1 | By-product of drinking water disinfection utilizing ozone | No |
| 5LRAA= 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 | 0.17 | 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.  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| **Microbiological Contaminants**  |
| Substance (Unit) | Analysis Frequency | MCL | MCLG | Highest % positve samples (monthly) | Range | Major Sources | Violation |
| Total Coliform Bacteria6 (+/-) | Monthly | <5% positive samples (monthly) | 0 | 0.364%.  | 0-0.364%.  | Naturally present in the environment  | No |
| 6 270 samples taken monthly  |

samples/month

MICROBIOLOGICAL

# of S stem Violation Substance MCL MCLG Positive Results (YES/NO)

Total Coliforrn Bacteria O 0 NO

Source in Drinking Water Naturally present in the environment.