**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 2015, January 1st to December 31st. During the calendar year of 2015 the City of Auburn purchased 100% of our drinking water from Barrow County Water and Sewerage Authority (BCWSA).**

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

**BARROW COUNTY ANNUAL WATER QUALITY REPORT - 2015**

**INTRODUCTION**

The Barrow County Water and Sewerage Authority (BCWSA) is pleased to provide you with this Annual

Water Quality Report for the past year’s performance of our water suppliers. 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 BCWSA is committed to provide our service area with clean, safe and reliable drinking water. For more information,

Please call the BCWSA office at 770-307-3014.

This report contains very important information about your drinking water. Translate it or speak with

Someone who understands it.

Este informe contiene information muy importante. Traduscalo o hable con un amgio quien lo entienda bien.

**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.

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.

**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).**

**WHAT IS CRYPTOSPORIDIUM?**

Cryptosporidium (Crypto) is a one-celled parasite protozoan, which is often found in water sources that receives 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 nor drinking water. Samples have been analyzed for over five years and Crypto has never been detected.

**WATER QUALITY DATA**

The following tables list all the drinking water contaminants that we detected during the 2015 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, 2015.

**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 2015, 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)**.**

**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

Corresponds 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** 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

wap. 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.

**The City of Auburn**

**The Chlorine detectable residual .80 ppm average.**

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

**Results (YES/NO)**

**Fluoride** ppm 4.0 4.0 **detectable residual .83 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 0.11 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 19.99 NO mcl violations.

By-product of drinking

Water chlorination.

 **Total Haloacetic Acids** ppb 60 detectable level 11.72 no mcl violations

 By-product of drinking

Water chlorination.

**Chloroform** ppb N/A 56.63 **ppb** NO mcl violation

By-product of drinking

Water chlorination.

**MICROBIOLOGICAL**

The mcl is 1 per month in 2015 the city of Auburn had no positive for bacteria samples.

Naturally present in the environment.

**Upper Oconee Basin Water Authority**

**DETECTED CONTAMINANTS TABLE 2015**

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| **BARROW COUNTY WATER** |
| **2015 DETECTED CONTAMINANTS TABLE** |
|  |  |  |  |  |  |  |  |
| **PRIMARY INORGANIC SUBSTANCES \***  |
| Substance   | Units   | MCL   | MCLG   | Highest LevelDetected | # of sample sitesfound above theAction Level | Violation(yes/no)  | Sourceof Substance |
| Copper | ppm | AL=1.3 | 1.3 | 0.000 | 0 | No | Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives. |
| Lead | ppb | AL=15 | 0 | 0.00 | 0 | No | Corrosion of household plumbing systems, erosion of natural deposits. |
| **UNREGULATED VOLATILE ORGANIC SUBSTANCES** |
| Substance   | Units   | MCL   | MCLG   | HighestLevelDetected | Violation(yes/no)  | SourceofSubstance |
| Bromodichloro methane | ppb | None Established | None Established | 2.1 | No | By-product of drinking water chlorination. |
| Chloroform | ppb | None Established | None Established | 47.8 | No | By-product of drinking water chlorination. |
| Chlorodibromo methane | ppb | None Established | None Established | 9.9 | No | By-product of drinking water chlorination. |
| **PRIMARY INORGANIC SUBSTANCES** |
| Substance   | Units   | MCL   | MCLG   | HighestLevelDetected | Violation(yes/no)  | SourceofSubstance | Substance   |
| Fluoride | ppm | 4.0 | 4.0 | 0.83 | No | 0.13-1.38 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Nitrate/Nitrite | ppm | 10.0 | 10.0 | 0.28 | No | 0.40-0.43 | Runoff from fertilizer use; leaching from septic  |
|   |   |   |   |   |   |   | tanks, sewage; erosion of natural deposits.  |
| **DISINFECTION BY-PRODUCTS** |  |  |  |  |  |  |  |
| Substance   | Units   | MCL   | MCLG   | HighestLevelDetected | Violation(yes/no)  | SourceofSubstance | Substance   |
| Total | ppb | 80 | 0 | 91.3 | No | 7.9-85.4 | By-product of drinking water chlorination. |
| Trihalomethanes |   |   |   |   |   |   |   |
| Total | ppb | 60 | 0 | 41.8 | No | 9.6-35.3 | By-product of drinking water chlorination. |
| Haloacetic Acids |   |   |   |   |   |   |   |
| Bromate | ppm | 0.01 | 0 | 0 | No | 0 | By-product of drinking water disinfection. |
| **TURBIDITY** |  |  |  |  |  |  |  |
| Substance   | Units   | MCL   | MCLG   | HighestLevelDetected | Violation(yes/no)  | SourceofSubstance | Substance   |
| Turbidity | NTU | <0.3 in 95% of monthly samples | <0.3 in 95% of monthly samples | 0.030 | 99.73% | No | Soil Runoff |
| **MICROBIOLOGICAL** |  |  |  |  |  |  |  |
| Substance | MCL | MCLG | Highest | Major |  | Monthly % of Positive Samples | Sources in Drinking Water |
| Total Coliform Bacteria | No more than 5% of monthly Samples can test positive for Coliforms | 0.0 | 0 | Naturally present in the environment. |   |  |  |
| **DISINFECTION RESIDUAL** |  |  |  |  |  |  |  |
| Substance | Units | MRDL | MRDLG | Highest Value | Violation | Range of Detections | Source  |
| Free Chlorine | ppm | 4 | 2 | 2.90 | No | .45-2.9 | Added to drinking water for disinfectant residual. |

Gwinnett County

**DETECTED CONTAMINANTS TABLE 2015**

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| Gwinnett County Drinking Water Quality Data 2015 |
| **EPA Regulated Inorganic Substances or Contaminants** |
| Substance (Unit) | Analysis Frequency  | MCL | MCLG | Average | Range | Major Sources | Violation |
| Fluoride1 (ppm) | Daily | 4 | 4 | 0.76 | 0.50-0.97 | Erosion of natural deposits; water additive which promotes strong teeth | No |
| Nitrate/Nitrite2 (ppm)  | Annually | 10 | 10 | 0.825 | 0.82-0.83 | 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 | 1.5 | 1 of 50 | Corrosion of household plumbing systems  | No |
| Copper4 (ppm) | 1.3 | 0.12 | 0 of 50 | 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 2014, and the next texting will take place in 2017. 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 2014, one site exceeded the lead action level (AL) for lead. |
| 4Of the 50 homes tested in 2014, no sites exceeded the lead 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 | 68.1 | 14.6-68.1 | By-products of drinking water disinfection | No |
| HAA5s (Haloacetic Acids) (ppb) - Stage 2  | Quarterly | 60 | 0 | 34.6 | 11.9-34.6 | By-products of drinking water disinfection | No |
| TOC (Total Organic Carbon) (ppm)  | Monthly | TT | N/A | Average=1.3 | 1.1-1.7 | 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=1.6 | 0.5-2.2 | Drinking Water Disinfectant | NO |
| Bromate (ppb) | Monthly | 10 | 0 | Average=1.7 | 0-7.1 | 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 | 0.28 | 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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|  |  |  |  |  |  |  |  |

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| **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 | 0-0 | Naturally present in the environment  | No |
| 6 270 samples taken monthly  |
|  |  |  |  |  |  |  |  |