

Athens-Clarke County

2022 WATER QUALITY REPORT

**Your water is safe to drink
right out of the faucet.**

This publication contains important information on the quality of your drinking water. It includes all data required by the EPA Safe Drinking Water Act and fulfills the requirement that all water systems distribute an annual Water Quality Report to our water customers.



WATER SYSTEM #0590000 CONSUMER
CONFIDENCE REPORT (CCR)

¿Habla español? Este Informe contiene información muy importante acerca de su agua potable. Por favor tradúzcalo ó hable con alguien que lo entienda bien.



Public Utilities

Athens-Clarke County is working hard to protect your water quality

4,879,730,000
billion gallons of water delivered

AT WATER PLANT DURING TREATMENT PROCESS:

267 daily tests
97,455 annual tests

BY LAB ON TREATED WATER SENT TO HOMES:

46 average weekday tests
1,000 average monthly tests
12,002 approximate total annual tests

Additional samples are sent to private labs
and the Georgia Environmental Protection Division.



Zachary Rosengarten, Water Treatment Operator, III (left) with Tiger Brooks, Operations Coordinator, J.G Beacham Water Treatment Plant.

LEARN MORE



All PUD records are available to the public. Commission meetings, where all major water and wastewater projects are reviewed and approved, are open to the public and televised on ACTV Cable Channel 180. For more details, visit: accgov.com.



WANT MORE INFORMATION ON WATER QUALITY?

- Contact Laurel Loftin at 706-613-3729
- Email savewater@accgov.com
- Visit epa.gov/ground-water-and-drinking-water

WHAT YOU CAN DO TO PROTECT YOUR WATER

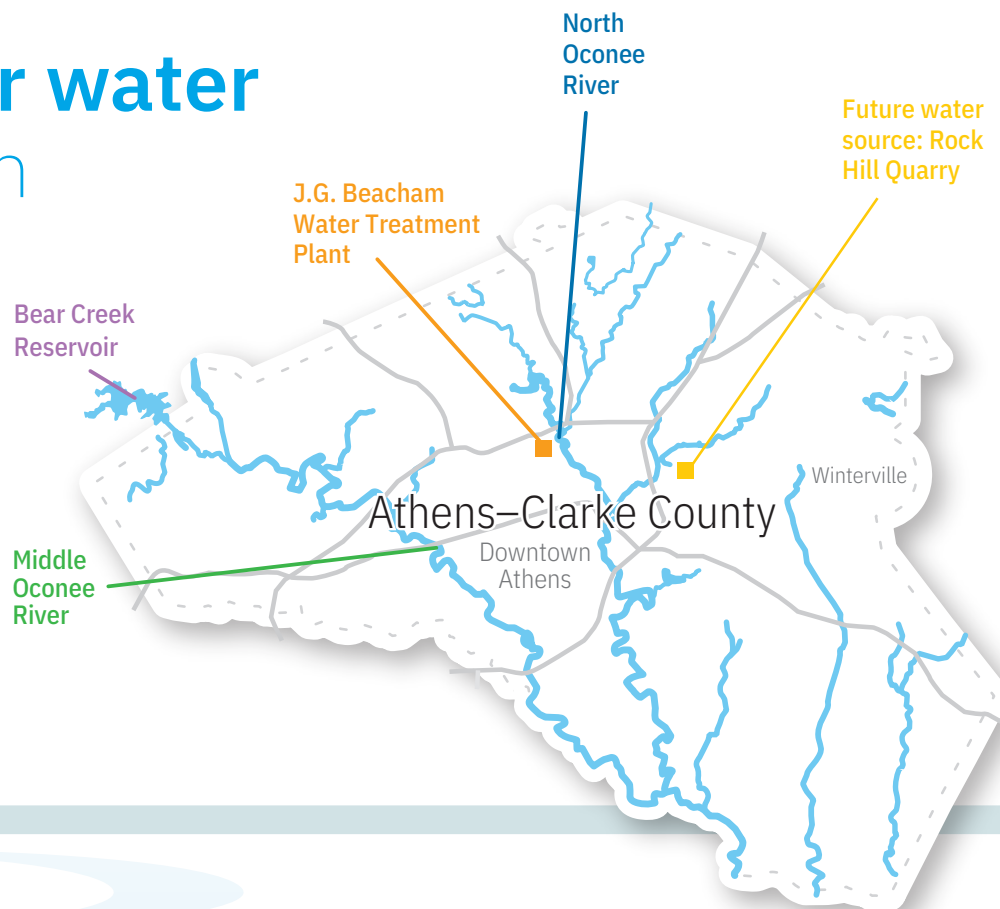
- Never pour hazardous waste down the drain, on the ground, or into storm sewers.
- Limit the use of pesticides or fertilizers, and always follow the label directions.
- Dispose of your medications properly – visit accgov.com/6344/What-should-I-do-with-old-prescriptions
- Always pick up after your dog wherever they go.
- Never sweep litter or debris into a storm drain.



ENTER TO WIN! Find the faucet icon hidden in this water quality report and enter to win a bucket of water gifts! Tell us at accgov.com/LittleLilyLookout. Entries are accepted until July 31, 2023.

Where **your** water comes from

Your drinking water comes from three sources: the Bear Creek Reservoir, the North Oconee River, and the Middle Oconee River. Before ever reaching the faucet, it travels through a carefully monitored, reliable treatment process at the J.G. Beacham Drinking Water Treatment Plant.



The **water treatment** process

A lot happens to your drinking water before it gets to you. It all begins when we pump water into the water treatment plant from North Oconee River, Middle Oconee River, or the Bear Creek Reservoir.

Turn on your tap with confidence

Dedicated personnel keep the water treatment system running smoothly 24 hours a day, seven days a week. Certified water treatment operators and lab technicians carefully test the source water and finished water to ensure you have safe, high quality drinking water.

1

Chemicals are added to make small particles clump together, forming "floc."

2

The floc settles in basins, sinks to the bottom, and we remove it.

3

Filters catch any remaining particles so the water becomes crystal clear.

4

The treated water is held in a tank called a clear well. Here added chlorine continues disinfection to ensure there are no more harmful organisms.

5

Storage tanks safely hold the finished water until it is delivered to homes, organizations, and businesses.





Safeguarding our rivers

In order to protect public drinking water supplies at the source, the State of Georgia established a Source Water Assessment Program. As part of this program, Athens-Clarke County and the Northeast Georgia Regional Commission completed a Source Water Assessment of the Middle Oconee and North Oconee rivers. Both rivers have been ranked with a medium level of pollution susceptibility.

Based on the results of the Source Water Assessment, the county developed a Watershed Protection Plan for safeguarding our water resources.

Copies of the report and plan are available at the Public Utilities Department Administration Office, 124 East Hancock Avenue in downtown Athens.

ThinkAtTheSink.com



Why are there contaminants in water?

Pure water is made up of hydrogen and oxygen. However, all drinking water comes from rivers, lakes, reservoirs, or wells. These sources are never purely hydrogen and oxygen. As water travels over land or through the ground, it dissolves natural minerals, and is subject to potential “contamination” by a variety of naturally occurring and man-made substances.

Some people may be more vulnerable to contaminants in drinking water than the general public. Immuno-compromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers.

To ensure that our tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Water Test Results at left detail the EPA’s ideal goal and highest level allowed.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available by contacting the Safe Drinking Water Hotline (1-800-426-4791).

Important health information from the EPA

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).



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 private service lines and home plumbing. ACC PUD 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 EPA’s Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead.

epa.gov/safewater/lead

2022 Water Test Results

We test for over **190 substances**. This Water Quality Report Summary shows only what we found in the water after treatment. If it isn't listed in these test results, we didn't find it.

Commonly known toxic substances tested for and **NOT FOUND** in your drinking water:

- arsenic
- barium
- cadmium
- cryptosporidium
- cyanide
- giardia lamblia
- legionella
- mercury
- radium
- selenium
- thallium
- uranium

UNDERSTANDING MEASUREMENTS



Part Per Million (ppm)
1 drop in **13.2 gallons of water** = 1 ppm



Part Per Billion (ppb)
1 drop in an **Olympic-size swimming pool** = 1 ppb



Part Per Trillion (ppt)
About 2 drops in **UGA's Lake Herrick** = 1 ppt

TERMS TO KNOW

AL (ACTION LEVEL) The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

MCLG (MAXIMUM CONTAMINANT LEVEL GOAL) 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.

MCL (MAXIMUM CONTAMINANT LEVEL) 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 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.

ND NOT DETECTED

NTU (NEPHELOMETRIC TURBIDITY UNIT) is a measurement of the clarity of the water.

TT (TREATMENT TECHNIQUE) A required process intended to reduce the level of a contaminant in drinking water.

TURBIDITY (cloudiness of water) has no health effects, but we measure turbidity because it can interfere with disinfection and provide a medium for microbial growth.

RESULTS OF ATHENS-CLARKE COUNTY'S PUBLIC UTILITIES DEPARTMENT TESTS OF TREATED WATER SHOWN IN COMPARISON TO EPA STANDARDS.

Meets EPA Standard	Substance	Typical Source	EPA Goal (MCLG)	Highest EPA Allowed Level (MCL)	Detected Level (what we found)
YES	Copper**	Corrosion of private household plumbing systems	1.30 ppm	AL 1.30 ppm	0.036 ppm 0.00 over AL
YES	Lead**	Corrosion of private household plumbing systems	0.00 ppb	AL 15.00 ppb	7.5 ppb 2.0 over AL
YES	Fluoride	Water additive that promotes strong teeth	4.00 ppm	4.00 ppm	Max 1.38 ppm Average 0.66 ppm Actual Range 0.20–1.38 ppm
YES	Nitrate (Nitrogen)	Runoff from fertilizer use	10.00 ppm	10.00 ppm	0.77 ppm
YES	Haloacetic Acids	By-product of drinking water disinfection	0.00 ppb	60.00 ppb (annual average)	21.67 ppb* Range ND–53.00 ppb
YES	Filtered Turbidity	Soil runoff	0.00 NTU	TT = 1.00 NTU	0.17 (highest single measurement)
				TT = 95% of samples ≤ 0.30 NTU	100.00% ≤ 0.30 NTU
NO See Violation Below	Total Trihalomethanes (TTHMs)	By-product of drinking water chlorination	0.00 ppb	80.00 ppb* (annual average)	54.68 ppb* Range ND–147.9 ppb

Meets EPA Standard	Substance	Typical Source	EPA Goal (MRDLG)	Highest EPA Allowed Level (MDRL)	Detected Level (what we found)
YES	Chlorine	Water additive for disinfection	4.00 ppm (MRDLG)	4.00 ppm (MRDL)	Max 2.00 ppm Average 0.86 ppm

Meets EPA Standard	Substance	Typical Source	EPA Goal (MCLG)	Highest EPA Allowed Level (MCL)	Range of Removal	Annual Average Removal
YES	Total Organic Carbon	Naturally present in the environment	N/A	TT	0.50–1.1 ppm 33.33%–40.0%	0.74 ppm 36.88%

Violation	Violation Began	Violation End	Violation Explanation
MCL, LRAA (Locational running annual average)	01/01/2022	03/31/2022	TTHMs were monitored at 8 locations across the county. In 2022, there were 2 locations reading above the MCL .82 and .83 ppb (MCL is 80.0) – River Shoals Drive and Barnett Shoals Road, resulting in 2 violations.
	07/01/2022	09/30/2022	

This finding was not an emergency or a health threat. We increased flushing of the lines, installed automatic flushers, and continue to evaluate process changes to further reduce formation of disinfection byproducts in the distribution system.

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.

*System-wide running annual average. **EPA regulations require testing every three years; latest testing done in 2021 for copper and lead.

Summary of 2022 Water Test Results

Copper**

Amount we found
0.036 ppm

Highest EPA
Level Allowed
AL 1.30 ppm



Meets EPA Standards

How it gets into the water:

Corrosion of household plumbing systems

Lead**

Amount we found
7.5 ppb

Highest EPA
Level Allowed
AL 15.0 ppb



Meets EPA Standards

How it gets into the water:

Corrosion of household plumbing systems

Haloacetic Acids

Amount we found
21.67 ppb*

Highest EPA
Level Allowed
60.0 ppb*



Meets EPA Standards

How it gets into the water:

By-product of drinking water disinfection

Total Trihalomethanes (TTHMS)

Amount we found
54.68 ppb*

Highest EPA
Level Allowed
80.0 ppb*



Meets EPA Standards

How it gets into the water:

By-product of drinking water disinfection

In 2022, two location tests were above 80.00 ppb. There was no immediate health threat and levels are now acceptable.



Again meeting EPA standards since November 2022

Chlorine

Amount we found
max 2.00 ppm

Highest EPA
Level Allowed
4.0 ppm



Meets EPA Standards

How it gets into the water:

By-product of drinking water disinfection

Flouride

Amount we found
max 1.38 ppm

Highest EPA
Level Allowed
4.0 ppm



Meets EPA Standards

How it gets into the water:

Water additive that promotes strong teeth

The State of Georgia requires fluoridation of our water supplies. We add flouride during water treatment at 0.7 ppm, the level recommended by the U.S. Public Health Service and Georgia Rural Water Association.

Filtered Turbidity

Amount we found
**100.00%
≤0.3 NTU**

Highest EPA Level Allowed
TT = 1 NTU
TT = 95% of samples ≤0.3 NTU



Meets EPA Standards

How it gets into the water: Soil runoff

Nitrate (Nitrogen)

Amount we found
0.77 ppm

Highest EPA
Level Allowed
10.0 ppm



Meets EPA Standards

How it gets into the water:

Runoff from fertilizer use

Total Organic Carbon

Range of removal
0.50–1.1 ppm

Highest EPA
Level Allowed
TT



Meets EPA Standards

How it gets into the water:

Naturally present in the environment

*System-wide running annual average

**EPA regulations require testing every three years; latest testing done in 2021 for copper and lead.

Let's be WATER WISE!

The PUD website is flush with water saving resources. Do a household water assessment, get tips for leak detection, and more at ThinkAtTheSink.com.

use trees & shade to keep areas cool

turn off sprinklers on windy days

use a carwash facility that recycles water

fill your garden with native plants



coreopsis



aster

avoid fertilizers & pesticides that can pollute our water

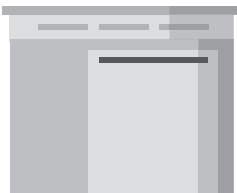
water infrequently but deeply (4-6 inches)

use drip irrigation and only water soil that is dry

keep mulch at least 3 inches deep

install high efficiency appliances

wait for a full load before running the dishwasher



improve soil so it dries more slowly – add organic matter

like compost to potted plants and gardens

use porous materials for patios and walkways so water can flow through

showers can use up to 50% less water than baths



use a low flow showerhead + take short showers



install a WaterSense labeled toilet or a dual flush toilet



use a rain barrel to collect water for landscaping

Barrel art by Marisa Leilani Mustard



sweep your patio instead of spraying down with a hose

cover your pool to prevent evaporation

manually clean your pool filter

ThinkAtTheSink.com

Ripple Effect Film Project

Local students submit short, water-themed films promoting conservation and water's importance. Everyone is welcome to attend the Blue Carpet Premiere – finalist films debut on the big screen and prizes are awarded. RippleEffectFilmProject.org



Rivers Alive

Participate in the annual clean-up of our local waterways. For more info, visit www.accgov.com/riversalive

Join us.
Community counts!



Athens Water Festival

Learn, splash, and play at our annual water celebration – one of the best family events in town! AthensWaterFestival.com



Facility Tours

The journey of your drinking water is an exciting trip. See the treatment process firsthand through a tour of our plant. Visit ThinkAtTheSink.com for updates about the next public tour or view our engaging tour video.



Green Thumb Lectures

The ACC Extension Office offers a variety of free monthly gardening presentations. Learn more and register at accgov.com/gardening.

FOLLOW US ON FACEBOOK, TWITTER, AND INSTAGRAM.

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Public Utilities

124 East Hancock Ave.
Athens, Georgia 30601

accgov.com/publicutilities
ThinkAtTheSink.com

Water Bill Questions
706-613-3500

Administration
706-613-3470

Water Conservation
706-613-3729

To Report a Water Leak
706-613-3495

Emergencies
706-613-3481