Niota Water System
Water Quality Report for 2020

Is my drinking water safe?
Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected 11 of these contaminants.

What is the source of my water?
Your water is purchased surface water from Athens Utilities Board. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to ***potential*** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to ***potential*** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Niota Water system sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at https://www.tn.gov/environment/article/wr-wq-source-water-assessment or you may contact the Water System to obtain copies of specific assessments.

Why are there contaminants in my water?
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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.
For more information about your drinking water, please call Richie Layman at 423-507-7693.

How can I get involved?
Our Water Board meets on the second Monday of each month at the Fellowship Hall which is located at 107 South Green St. Niota, at 6:00 p.m. Please feel free to participate in these meetings.

Is our water system meeting other rules that govern our operations?
The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

Other Information
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.

Contaminants that may be present in source water:

- 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 stormwater 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.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Niota Water System's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Do I Need To Take Special Precautions?
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 under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. The Niota 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 or at **http://www.epa.gov/lead/protect-your-family%23water%23water**

Water System Security
Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 423-568-2584

Pharmaceuticals In Drinking Water Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at https://www.tn.gov/environment/article/sp-unwanted-pharmaceuticals

Water Quality Data

What does this chart mean?

- MCLG - Maximum Contaminant Level Goal, or 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, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- MRDL: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- MRDLG: Maximum residual disinfectant level goal. 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 contaminants.
- AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.
- Parts per million (ppm) or Milligrams per liter (mg/l) – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in $10,000.
- Parts per billion (ppb) or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- RTCR – Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Water Quality Report Results for 2016 Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0		2020		0	TT Trigger	Naturally present in the environment
Turbidity[1]	No	0.07	0.02-0.07	2020	NTU	n/a	TT	Soil runoff
Fluoride	No	0.59 0.73 Avg.	0.06-.89	2020	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Copper*	No	90^{tho}%= 0.0333		2018	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead*	No	90^{tho}%= ND		2018	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate	No	1.40		2020	ppm	10	10	Fertilizer use, septic tanks, erosion of natural deposits
Sodium	No	4.56		2020	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM [Total trihalomethanes]	No	18.9	18.9	2020	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	11.00	11.0	2020	ppb	N/A	60	By-product of drinking water disinfection.
Total Organic Carbon[2]	No			2020	ppm	TT	TT	Naturally present in the environment.
Gross Alpha	No	3.1		2015	pCi/L	0	15	Erosion of natural deposits
Contaminant	Violation Yes/No	Level Found	Range of Detections	Date of Sample	Unit Measurement	MRDL	MRDLG	Likely Source of Contamination
Chlorine	No	2.0 Avg.	1.0-2.9	2020	ppm	4	4	Water additive used to control microbes.

*During the most recent round of Lead and Copper testing, 0 out of 10 households sampled contained concentrations exceeding the action level for lead. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791). Zero out of ten households sampled contained concentrations exceeding the action level for copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. [1]100% of our samples were below the turbidity limit of 0.3 NTU. Turbidity is a measurement of the cloudiness of water. [2]We have met the treatment technique requirements for Total Organic Carbon.

Athens Utilities Board 2020 Water Quality Report

(Data Table on Back)

AUB's Water Division provides water in the city of Athens and McMinn County. The water we delivered in 2020 surpassed the strict regulations of the state of Tennessee and the U.S. Environmental Protection Agency. If you have any questions, contact Craig Brymer, AUB Water & Wastewater Superintendent, at (423) 745-4501.

AUB board meetings are held on the fourth Tuesday of each month at 5:00 PM. You can get on the agenda by calling AUB at least one week prior to the meeting.

Where Does AUB's Water Come From?

AUB obtains drinking water from three sources: a spring that has been in use for decades; three wells that tap an aquifer in the Oostanaula Creek basin, and; the Hiwassee River via purchases of treated water from the Hiwassee Utilities Commission (HUC). Water from the spring and wells is pumped to AUB's filter plant where state-licensed operators work 365 days a year to provide water that surpasses all state and national water-quality standards.

AUB has a Wellhead Protection Plan, available for review at our office, upon request. Further, the Tennessee Department of Environment and Conservation has prepared a Source Water Assessment Program Report for untreated water sources. The report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, public water systems treat and routinely test their water. Water sources are rated as reasonably susceptible, moderately susceptible, or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. AUB's rating is reasonably susceptible. For an explanation of the Tennessee Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings, and to see TDEC's report to EPA, go to https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or contact AUB to obtain a copy of our assessment.

Information about Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, springs, and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or from human activity. Below are some examples:

- Microbial contaminants, like viruses, bacteria, and cryptosporidium can come from livestock operations or sewage and septic systems.
- Inorganic contaminants, like metals, can occur naturally or result from stormwater runoff or industrial discharges.
- Organic chemicals, like pesticides, herbicides, and petroleum products, can come from household use, agriculture, gas stations, or stormwater runoff.
- Radioactive contaminants can occur naturally or come from oil and gas production or mining.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish similar limits on contaminants in bottled water.

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.

To ensure top water quality, AUB operators have collected samples and tested your water for a variety of chemicals and contaminants. Those that were detected are listed in the Water Quality Table of this report. The table describes the existing EPA/TDEC maximum contaminant level (MCL), maximum contaminant level goal (MCLG), AUB and HUC results, and potential sources from where the contaminants originated.

Some people may be more vulnerable to contaminants found in drinking water than others. Individuals with weakened immune systems, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS, some elderly, 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 also available at EPA's hotline telephone number.

Cryptosporidium

Cryptosporidium is a microscopic parasite found in surface water throughout the U.S. and comes from animal waste and runoff. When ingested, it can result in diarrhea, fever and other gastrointestinal symptoms. Cryptosporidium can be eliminated by an effective treatment combination including coagulation, sedimentation, filtration, and disinfection. As part of the Long Term 2 Enhanced Surface Water Treatment Rule, AUB and HUC analyzed their source (untreated) water. AUB's samples resulted in zero detections of cryptosporidium out of twelve samples. HUC's samples resulted in seven detections out of twelve samples of their untreated water. AUB does not purchase any untreated water from HUC, only treated water. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).