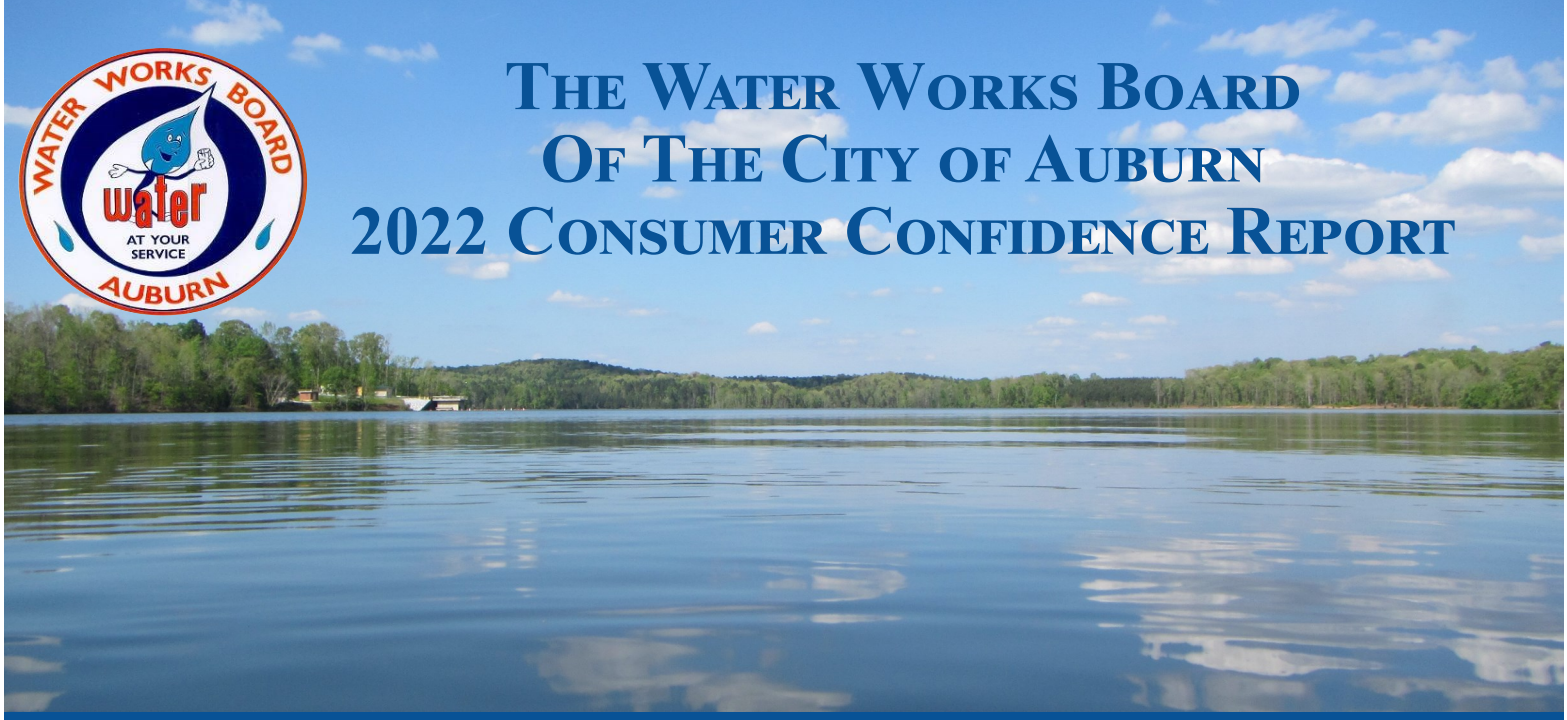


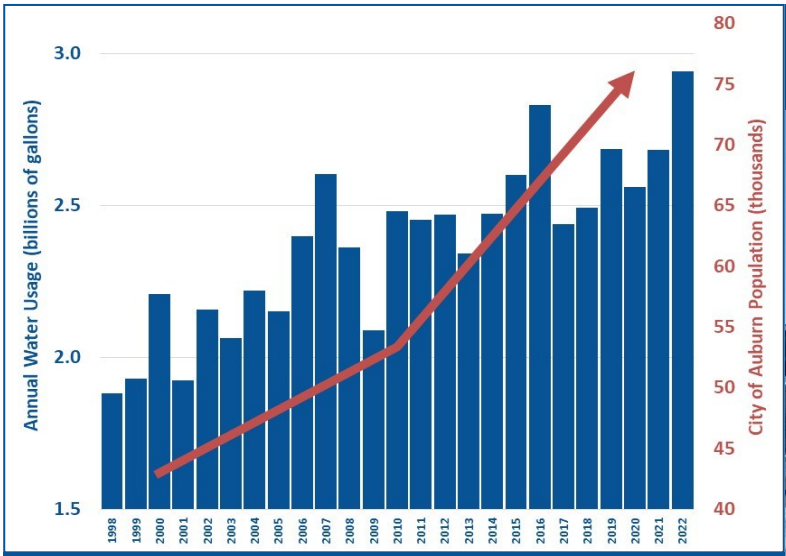
The Water Works Board Of The City of Auburn 2022 Consumer Confidence Report

OUR WATER RESOURCES

The Water Works Board of the City of Auburn (AWWB) is proud to present the 2022 Consumer Confidence Report. In compliance with Federal and State laws, the AWWB routinely monitors for numerous contaminants in your drinking water. The tables in this report present the results of water quality monitoring for the calendar year 2022. Your drinking water met all water quality standards in 2022. This is the 26th issue in a series of water quality reports made available to customers annually, as required by the United States Environmental Protection Agency (EPA). Reports are published mid-year for the previous year's monitoring results.

The AWWB's main water supply comes from Lake Ogletree (pictured above), which is located just southeast of Auburn. Lake Ogletree is approximately 300 acres and is fed primarily by Chewacla and Nash Creeks. The total watershed area contributing to the lake is 33 square miles. Water from Lake Ogletree was used to produce 44.36% of your drinking water in 2022. The AWWB also operates two groundwater wells to meet increasing water demand. These wells draw water from the Chewacla Marble and Hollis Quartzite aquifers. Well #4 contributed 27.29% of your drinking water, and Well #3 provided 14.20% of your drinking water in 2022. In addition to these sources, the AWWB purchases drinking water from Opelika Utilities, which receives its raw water from Saugahatchee Lake and the Halawakee Creek Embayment on Lake Harding. Drinking water is purchased from Opelika Utilities to supplement seasonal high demand. Water from Opelika Utilities accounted for 14.15% of your drinking water in 2022. Total water use from all sources was 2.94 billion gallons (8.06 million gallons per day), which is the highest on record for the AWWB.

Most drinking water contaminants originate from surface water runoff from natural deposits, vehicles, industry, construction, farming, and wildlife. In addition to mandatory monitoring of its treatment and distribution system, the AWWB voluntarily performs year-round source water monitoring within the Lake Ogletree watershed for nutrients, bacteria, and taste & odor causing compounds. The City of Auburn also helps protect and manage the Lake Ogletree watershed by both regulating development density within its jurisdiction, and working with property owners to encourage best management practices to manage pollutant runoff. Information on the AWWB's various monitoring programs and reports is available for review at the Bailey-Alexander Water and Sewer Complex, located at 1501 W. Samford Avenue, or online at https://www.auburnalabama.org/water-resource-management. Please call (334) 501-3060 for more information.



Above: City of Auburn water usage and population trend since 1998.

Below: The Bailey-Alexander Water and Sewer Complex houses field operations, administration, and billing services.

TABLE OF PRIMARY CONTAMINANTS

At high levels some primary contaminants are known to pose health risks to humans. The table below provides a quick glance of primary contaminants monitored for in 2022, and the results of monitoring if contaminants were detected.

Bacteriological	MCL	Highest Detected Level
Total Coliform Bacteria	5%	< 5%
Radiological	**MCL**	**Highest Detected Level**
Gross Alpha	15 pCi/L	1.42
Radium-228	5 pCi/L	0.975†
Turbidity	**MCL**	**Highest Detected Level**
Turbidity	TT (NTU)	0.25
Inorganic Chemicals	**MCL**	**Highest Detected Level**
Antimony	6 ppb	0.22†
Arsenic	10 ppb	ND
Barium	2 ppm	0.0318
Beryllium	4 ppb	ND
Cadmium	5 ppb	ND
Chlorine	4 ppm MRDL	1.53****
Chromium	100 ppb	1.8
Copper	AL = 1.3 ppm	90th percentile value = 0.21
Cyanide	200 ppb	ND
Fluoride	4 ppm	1.6
Lead	AL = 15 ppb	90th percentile value = 0.865
Mercury	2 ppb	ND
Nickel	100 ppb	7.8
Nitrate	10 ppm	0.514
Nitrite	1 ppm	ND
Selenium	50 ppb	ND
Thallium	2 ppb	0.18
Disinfection By-products	**MCL**	**Highest Detected Level**
Total Trihalomethanes (TTHMs)	80 ppb	67.18**
Haloacetic acids (HAA5)	60 ppb	41.58**
Chlorite	1 ppm	0.847*** †
Organic Chemicals	**MCL**	**Highest Detected Level**
Total Organic Carbon	TT (ppm)	1.83*****

Synthetic Organic Chemicals	MCL	Highest Detected
2,4,5-TP (Silvex)	50 ppb	ND
2,4-D	70 ppb	ND
Alachlor (Lasso)	2 ppb	ND
Atrazine	3 ppb	ND
Benzo(A)Pyrene	200 ppt	ND
Carbofuran	40 ppb	ND
Chlordane	2 ppb	ND
Dalapon	200 ppb	ND
1,2 Dibromo-3-Chloropropane (DBCP)	200 ppt	ND
Di(2-Ethylhexl)Adipate	400 ppb	ND
Di(2-Ethylhexl)Phthalate	6 ppb	0.7
Dinoseb	7 ppb	ND
Diquat	20 ppb	ND
Endothall	100 ppb	ND
Ethylene Dibromide (EDB)	50 ppt	ND
Endrin	2 ppb	ND
Glyphosate	700 ppb	ND
Heptachlor	400 ppt	ND
Heptachlor Epoxide	200 ppt	ND
Hexachlorobenzene (HCB)	1 ppb	ND
Hexachlorocyclopentadiene	50 ppb	ND
Lindane	200 ppt	ND
Methoxychlor	40 ppb	ND
Oxamyl (Vydate)	200 ppb	ND
Polychlorinated Biphenyls (PCB)	500 ppt	ND
Pentachlorphenol	1 ppb	ND
Picloram	500 ppb	ND
Simazine	4 ppb	ND
Toxaphene	3 ppb	ND

Volatile Organic Chemicals	MCL	Highest Detected
1,1,1-trichloroethane	200 ppb	ND
1,1,2-trichloroethane	5 ppb	ND
1,2-dichloroethane	5 ppb	ND
1,1-dichloroethylene	7 ppb	ND
1,2,4-trichlorobenzene	70 ppb	ND
1,2-dichloropropane	5 ppb	ND
O-Dichlorobenzene	600 ppb	ND
P-Dichlorobenzene	75 ppb	ND
Benzene	5 ppb	ND
Carbon Tetrachloride	5 ppb	ND
Chlorobenzene	100 ppb	ND
Cis-1,2-dichloroethene	70 ppb	ND
Ethylbenzene	700 ppb	ND
Styrene	100 ppb	0.6
Tetrachloroethylene	5 ppb	ND
Toluene	1 ppm	ND
Trans-1,2 Dichloroethylene	100 ppb	ND
Vinyl chloride	2 ppb	ND
Xylenes	10 ppm	ND
Dichloromethane	5 ppb	ND

LEGEND FOR TABLES

AL: **Action Level** - The concentration of a contaminant that triggers treatment or other requirement a water system shall 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.

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.

MRDL: **Maximum Residual Disinfectant Level** - 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.

TT: **Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

ND: Not detected

N/A: Not applicable

NTU: Nephelometric Turbidity Unit

pCi/L: picocuries per liter

ppt: parts per trillion

ppb: parts per billion

ppm: parts per million

µS/cm: microsiemens per centimeter

* Annual average

** Local running annual average of quarterly samples

*** Highest average of sample sets

**** Compliance is based on a running annual average, computed quarterly from monthly samples

***** Running annual average of monthly samples

† Amount detected in water purchased from Opelika Utilities before entering the Auburn Water Works Board distribution system.

Dioxin and Asbestos Monitoring Statement: Based on a study conducted by ADEM with the approval of the EPA, a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

Copper and Lead results are from the most recent testing done in 2022. These samples are conducted every 3 years. The next round of required sampling is currently scheduled for 2025.

TABLE OF DETECTED CONTAMINANTS

PRIMARY STANDARDS - Mandatory standards set by the Safe Drinking Water Act used to protect public health. These apply to all public water systems.

Contaminant	Units	MCL	MCLG	Highest Detected Level	Range of Detected Levels	2022 Test Dates	Likely Sources
Turbidity	NTU	TT	N/A	0.25	0.02 - 0.25	Daily	Soil runoff.
Inorganic Chemicals	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Antimony	ppb	6	6	0.22†	ND - 0.22†	5/18, 8/17, 11/23	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	ppm	2	2	0.0318	0.0113 - 0.0318	5/18, 11/23	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	ppb	100	100	1.8	ND - 1.8	5/18, 11/23	Erosion of natural deposits; discharge from steel and pulp mills.
Chlorine	ppm	MRDL=4	MRDLG=4	1.53****	(Monthly Average) 1.4 - 1.6	70 samples per month	Water additive used to control microbes.
Copper	ppm	AL = 1.3	1.3	90th percentile value = 0.21	0.0078 - 0.395	July - August	Corrosion of household plumbing systems; erosion of natural deposits.
Fluoride	ppm	4	4	1.6	ND - 1.6	Daily	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead	ppb	AL = 15	0	90th percentile value = 0.865	ND - 1.1	July - August	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate	ppm	10	10	0.514	ND - 0.514	5/18	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nickel	ppb	100	100	7.8	0.42† - 7.8	5/18, 8/17, 11/23	Corrosion of household plumbing systems; erosion of natural deposits.
Thallium	ppb	2	0.5	0.18	ND - 0.18	5/18, 11/23	Leaching from ore processing sites; Discharge from electronics, glass, and drug factories.
Disinfection Byproducts	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Total Trihalomethanes (TTHMs)	ppb	80	N/A	67.18**	22.08** - 67.18**	Quarterly	By-product of drinking water disinfection.
Haloacetic acids (HAA5)	ppb	60	N/A	41.58**	22.90** - 41.58**	Quarterly	By-product of drinking water disinfection.
Chlorite	ppm	1	0.8	0.847*** †	0.13 † - 0.99 †	Monthly	By-product of drinking water disinfection.
Radiological	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Gross Alpha	pCi/L	15	0	1.42	ND† - 1.42	2/16, 4/20, 6/15, 7/20, 10/19	Erosion of natural deposits.
Radium 228	pCi/L	5	0	0.975†	0.427 - 0.975†	2/16, 4/20, 6/15, 7/20, 10/19	Erosion of natural deposits.
Synthetic Organic Chemicals	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Di(2-Ethylhexl)Phthalate	ppb	6	6	0.7	ND - 0.7	2/16, 4/20, 7/20, 10/19	Discharge from rubber and chemical factories.
Volatile Organic Chemicals	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Styrene	ppb	100	100	0.6	ND - 0.6	2/16, 4/20, 7/20, 10/19	Discharge from rubber and plastic factories; Leaching from landfills.

IMPORTANT HEALTH INFORMATION FROM EPA

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States EPA Safe Drinking Water Hotline at 1-800-426-4791. 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 land or through the ground, it dissolves naturally occurring minerals and radioactive material, and can pick up substances resulting from the presence of animals or human activity.

Some people may be more vulnerable to contaminants in drinking water than the general population. Individuals with compromised immune systems such as cancer patients undergoing chemotherapy, organ transplant recipients, individuals who have AIDS or who are HIV-positive, individuals with immune system disorders, elderly persons and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their health care providers. EPA and the Centers for Disease Control (CDC) guidelines for the appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 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 service lines and home plumbing. The AWWB 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 *https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water*.

TABLE OF DETECTED CONTAMINANTS

SECONDARY STANDARDS - Non-mandatory standards established as guidelines to assure good aesthetic qualities such as taste, color, and odor.

Inorganic Chemicals	Units	MCL	MCLG	Highest Detected Level or Annual Average (*)	Range of Detected Levels	2022 Test Dates	Likely Sources
Chloride	ppm	250	N/A	15.7†	6.68 - 15.7†	5/18, 8/17	By-product of drinking water disinfection.
Iron	ppb	300	N/A	40	ND - 40	Daily	Erosion of natural deposits.
Manganese	ppb	50	N/A	30	ND - 30	Daily	Erosion of natural deposits; runoff from landfills.
Sulfate	ppm	500	N/A	26.7†	2.18 - 26.7†	5/18, 8/17	Erosion of natural deposits.
Total Dissolved Solids	ppm	500	N/A	114	68.6 - 114	5/18, 8/17	Erosion of natural deposits.
Zinc	ppm	5	N/A	0.225	0.0034 - 0.225	5/18, 8/17, 11/23	Corrosion inhibitor.
pH	units	6.5-8.5	N/A	7.26*	7.00 - 7.60	Daily	Natural deposits; treatment at water plant.
Aluminum	ppm	0.2	N/A	0.277†	ND - 0.277†	5/18, 8/17, 11/23	Erosion of natural deposits.
Unregulated Inorganic Chemicals	**Units**	**MCL**	**MCLG**	**Highest Detected Level or Annual Average (*)**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Calcium	ppm	N/A	N/A	22.6	3.99† - 22.6	5/18, 8/17, 11/23	Natural deposits; treatment at water plant.
Specific Conductance	µS/cm	N/A	N/A	202†	93.5 - 202†	5/18, 8/17, 11/23	Natural deposits.
Carbon Dioxide	ppm	N/A	N/A	13.61*	6 - 87.4	Daily	Natural deposits.
Magnesium	ppm	N/A	N/A	12.2	2.19† - 12.2	5/18, 8/17, 11/23	Natural deposits.
Sodium	ppm	N/A	N/A	28.7†	3.72 - 28.7†	5/18, 8/17, 11/23	Natural deposits.
Alkalinity	ppm	N/A	N/A	53.18*	11 - 68	Daily	Natural deposits.
Total Hardness	ppm	N/A	N/A	101	16† - 101	5/18, 8/17, 11/23	Natural deposits.
Unregulated Organic Chemicals	**Units**	**MCL**	**MCLG**	**Highest Detected Level**	**Range of Detected Levels**	**2022 Test Dates**	**Likely Sources**
Total Organic Carbon	ppm	TT	N/A	1.83*****	1.71 - 1.83	Monthly	Naturally present in the environment.

PER & POLYFLUOROALKYL COMPOUNDS (PFAS) - A group of manufactured chemicals used in a variety of industries and products since the 1940s. PFAS compounds are found in a wide range of items, and there is evidence that exposure to high levels of PFAS may lead to adverse health outcomes. The EPA has proposed new regulations for certain PFAS compounds that are expected to be finalized by the end of 2023. These new regulations will likely place limits (MCL's) on PFAS compounds in drinking water. More information is available from the EPA at *https://www.epa.gov/pfas*.

PFAS Compound	Units	Highest Detected Level	Range of Detected Levels	2022 Test Dates
11 Cl-PF3OUdS	ppt	1.4	ND† - 1.4	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
9Cl-PF3ONS	ppt	1.0	ND† - 1.0	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	ppt	0.66	ND† - 0.66	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ppt	1.5	ND† - 1.5	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
N-EtFOSAA	ppt	0.85	ND† - 0.85	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
N-MeFOSAA	ppt	1.4	ND† - 1.4	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorobutanesulfonic acid (PFBS)	ppt	3.7	ND† - 3.7	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorodecanoic acid (PFDA)	ppt	0.88	ND† - 0.88	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorohexanoic acid (PFHxA)	ppt	5.4†	ND† - 5.4†	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorododecanoic acid (PFDoDa)	ppt	1.3	ND† - 1.3	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluoroheptanoic acid (PFHpA)	ppt	4.5	ND† - 4.5	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorohexanesulfonic acid (PFHxS)	ppt	2.9	ND† - 2.9	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorononanoic acid (PFNA)	ppt	1.8	ND† - 1.8	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorooctanesulfonic acid (PFOS)	ppt	7.19†	ND† - 7.19†	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorooctanoic acid (PFOA)	ppt	13	1.8† - 13	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perflourotetradecanoic acid (PFTeDA)	ppt	1.7	ND† - 1.7	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluorotridecanoic acid (PFTrDA)	ppt	1.6	ND† - 1.6	3/2, 5/25, 8/31, 9/8, 11/16, 12/9
Perfluoroundecanoic acid (PFUnA)	ppt	1.8	ND† - 1.8	3/2, 5/25, 8/31, 9/8, 11/16, 12/9

AWWB NEWS AND PUBLIC INFORMATION

The AWWB continuously strives to provide the highest quality drinking water services for the City's increasing population of 78,564 (2021 U.S. Census Estimate). The AWWB encourages the public to participate in the monthly Board meetings. Board meetings are typically held at 4:00 P.M. on the Thursday following the third Tuesday of each month in the AWWB Conference Room at the Bailey-Alexander Complex located at 1501 W. Samford Avenue. The Water Board members are Brad Wilson (Chair), Jennifer Chambliss, Esq. (Vice Chair), Bernard Hill, Ph. D. (Secretary), Thomas Sparrow, and David Reaves. If you have any questions concerning public participation or water quality, please call the Water Resource Management Office at (334) 501-3060. If you have questions about setting up an account, water service changes, or billing inquiries, please contact the Utility Billing Office at (334) 501-3050. For additional information, please visit us online at https://www.auburnalabama.org/water-resource-management.

REPORTING NON-COMPLIANCE NOTICE

The AWWB is required to monitor your drinking water for specific contaminants on a regular basis. The AWWB routinely samples your drinking water for the presence of radionuclides (Radium-228 and gross alpha emitters). In accordance with Alabama Department of Environmental Management (ADEM) regulations, sample results must be submitted to ADEM either by the 10th of the following month that the samples were collected, or 10 days after the end of the monitoring period. In November 2021, the Radium-228 and gross alpha samples were taken, however the laboratory did not report the results to ADEM by the deadline of January 10th, 2022. This resulted in a reporting non-compliance violation. The AWWB included this same notice in last year's CCR. The results of these tests showed the level of Radium-228 and gross alpha were below the maximum contaminant level required by EPA and ADEM. This reporting non-compliance violation does not impact the quality of water delivered to our customers, nor does it affect public health.

WATER TREATMENT PROCESS

Water is pumped from Lake Ogletree to the James Estes Water Treatment Plant. At the plant, a staff of highly trained employees are responsible for the proper maintenance and operation of the various equipment and treatment infrastructure to ensure that your water is consistently treated to levels that meet or exceed Federal and State water quality standards. Below is a diagram outlining this process.