

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
Oconee County BOC



Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information, because informed customers are our best allies.

Where Does Our Water Come From?

Oconee County imports 98 percent of its water from the Upper Oconee Basin Water Authority's Bear Creek Water Treatment Plant (WTP). The Bear Creek WTP withdraws raw water into the Bear Creek Reservoir from the Middle Oconee River and Bear Creek. Oconee County may import small amounts of drinking water from the neighboring communities of Barrow County and Athens Clarke County Unified Government. We operate groundwater wells permitted by the state of Georgia; we hold an additional five permits to withdraw groundwater at reserve locations.

Community Participation

You are welcome to attend the Oconee County Board of Commissioners meetings. Our board meets on the first and last Tuesday of each month at the Oconee County Administration Building. Please visit oconeecounty.com or call (706) 769-5120 for meeting times.

Source Water Assessment

A Wellhead Protection Plan/Source Water Assessment Plan (SWAP) is available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

Oconee County has five permitted well sites that are maintained as water sources; there are no potential hazards within the 15-foot control zone of these well sites. Items that are listed in the 250-foot inner management zone are as follows: secondary roads, electrical transformers, utility poles, gravity sewer, and vehicle parking. According to the SWAP, the Oconee County water system had a susceptibility rating of medium.

The Bear Creek Source Water Protection Plan is rated as low on the watershed itself and medium on the intakes located at the Middle Oconee River.

If you would like a copy of either SWAP report, please feel free to contact our office during regular office hours at (706) 769-3960.



Water Treatment Process

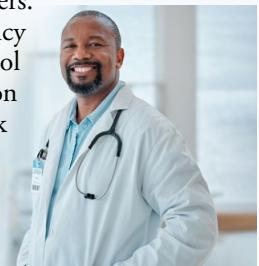
The treatment process consists of a series of steps. First, raw water is drawn from our source and sent to an aeration tank, which allows for oxidation of high iron levels. The water then goes to a mixing tank where polyaluminum chloride and soda ash are added. The addition of these substances causes small particles (called "floc") to adhere to one another, making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, soda ash (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to sanitized underground reservoirs and water towers and into your home or business.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers.

U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 (800-426-4791) or epa.gov/safewater.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Adam Layfield, Utility Director, at (706) 769-3960, or email alayfield@oconee.ga.us.

Substances That Could Be in Water

The sources of drinking water (both tap 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 include:

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 occur naturally in the soil or groundwater or may 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 occur naturally or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791) or visiting epa.gov/safewater.

Lead in Home Plumbing

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 Oconee County Board of Commissioners is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Adam Layfield, Utility Director, at (706) 769-3960. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be found at <https://www.oconeecountyga.gov/1562/Water-Service-Line-Inventory>. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

— BY THE NUMBERS —

 **5.1**
TRILLION

The dollar value needed to keep water, wastewater, and stormwater systems in good repair.

 **12**
THOUSAND

The average amount in gallons of water used to produce one megawatt-hour of electricity.

 **47.5**
TRILLION

The amount in gallons of water used to meet U.S. electric power needs in 2020.

 **1.7**
TRILLION

The gallons of drinking water lost each year to faulty, aging, or leaky pipes.

 **33%**

The percentage of water sector employees who will be eligible to retire by 2033.

 **2**

How often in minutes a water main breaks.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us at (706) 769-3960 if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES										
				Oconee County BOC		Bear Creek WTP				
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation	Typical Source	
Chlorine (ppm)	2024	[4]	[4]	1.10	0.26–1.47	1.59	0.9–2.1	No	Water additive used to control microbes	
Fluoride (ppm)	2024	4	4	0.65	0.54–0.81	0.74	0.68–0.84	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	18.16	12.8–23.0	17.3	0.9–24.6	No	By-product of drinking water disinfection	
Nitrate (ppm)	2024	10	10	ND	NA	ND	NA	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Total Organic Carbon [TOC] ¹ (ppm)	2024	TT	NA	NA	NA	1.6	1.3–2.0	No	Naturally present in the environment	
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	41.73	24.6–74.9	21	10.9–31.9	No	By-product of drinking water disinfection	
Turbidity ² (NTU)	2024	TT	NA	NA	NA	0.09	NA	No	Soil runoff	
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	NA	NA	0.03	NA	No	Soil runoff	

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %ile)	Range Low-High	Sites Above AL/Total Sites	Violation	Typical Source		
Copper (ppm)	2022	1.3	1.3	0.028	NA	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits		
Lead (ppb)	2022	15	0	ND	NA	0/30	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits		

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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.

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.

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.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

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

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Oconee County BOC		Bear Creek WTP		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Bromodichloromethane (ppb)	2024	NA	NA	3.0	NA	Disinfection by-product
Chlorodibromomethane (ppb)	2024	NA	NA	0.95	NA	Disinfection by-product
Chloroform (ppb)	2024	16.75	11.0–26.0	32.6	ND–32.6	Disinfection by-product
Dibromochloromethane (ppb)	2024	1.78	1.5–2.3	NA	NA	Disinfection by-product
Sodium (ppm)	10/25/2024	NA	NA	1.3	NA	Erosion of natural deposits
11-Chloroeicosfluoro-3-Oxaundecane-1-Sulfonic Acid [11Cl-PF3OUDS] (ppb)	02/26/2019	7.3	7.3–7.3	NA	NA	Industrial Runoff
Perfluoro-4-Methoxybutanoic Acid [PFMBA] (ppb)	9/7/2023	NA	NA	NA	NA	Industrial Runoff
Perfluorobutanesulfonic Acid [PFBS] (ppb)	9/7/2023	NA	NA	NA	NA	Industrial Runoff
Perfluorobutanoic Acid [PFBA] (ppb)	9/7/2023	NA	NA	NA	NA	Industrial Runoff
Perfluorodecanoic Acid [PFDA] (ppb)	9/7/2023	NA	NA	NA	NA	Industrial Runoff

¹The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

