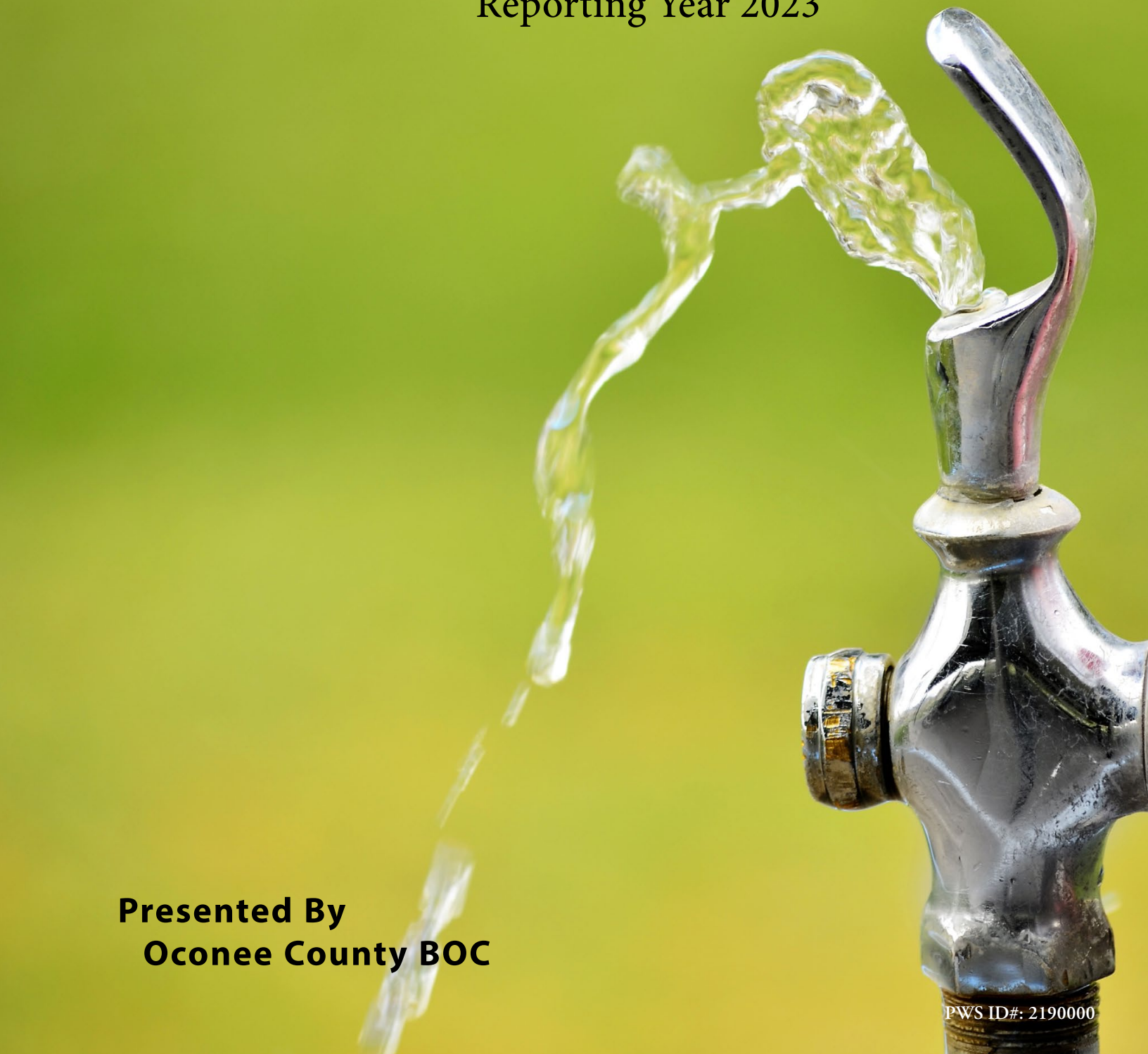
ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By
Oconee County BOC

PWS ID#: 2190000

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, 2023. 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.

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.

> **"When the well is dry, we know the worth of water."**
> *–Benjamin Franklin*

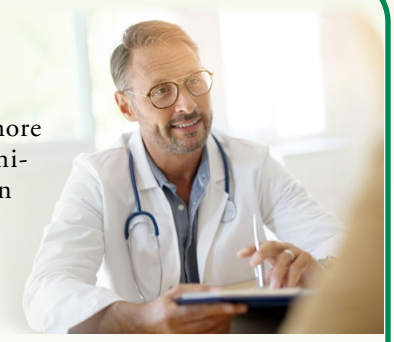
Oconee County has seven permitted well sites that are maintained as water sources; there are no potential hazards within the 15-foot control zone of these well sites. Items that are listed in the 250-foot inner management zone include secondary roads, electrical transformers, utility poles, gravity sewer, and vehicle parking. According to the SWAP, the Oconee County Water System had a susceptibility rating of medium. Bear Creek is rated 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, please feel free to contact our office during regular office hours.

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and sent to an aeration tank, which allows for oxidation of iron. 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, water towers, and 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (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 at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

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.

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.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Community Participation

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

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

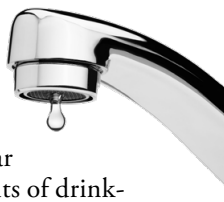
Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

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. The Bear Creek Water Treatment Plant withdraws raw water into the Bear Creek Reservoir from the Middle Oconee River and Bear Creek. Oconee County also imports small amounts of drinking water from neighboring communities: Barrow County and Athens Clarke County Unified Government. We operate groundwater wells permitted by the state of Georgia and hold an additional seven permits to withdraw groundwater at reserve locations.

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 are 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 it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us 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 Water Treatment Plant			
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)	2023	[4]	[4]	1.01	0.23–1.40	1.42	1.0–1.9	No	Water additive used to control microbes
Fluoride (ppm)	2023	4	4	0.73	0.50–0.80	0.78	0.57–0.95	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha (pCi/L)	2023	15	0	4.75	0 – 4.75	NA	NA	No	Erosion of natural deposits
Haloacetic Acids [HAAs]–Stage 2 (ppb)	2023	60	NA	26.68	23–79.1	21.3	11–43	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	1.14	ND–4.3	ND	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon (removal ratio)	2022	TT[1]	NA	NA	NA	1.6	1.3–1.7	No	Naturally present in the environment
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80	NA	36.09	14.4–70.9	19.5	11–30	No	By-product of drinking water disinfection
Turbidity[2] (NTU)	2023	TT	NA	NA	NA	0.1	ND–0.1	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	NA	NA	0.03	NA	No	Soil runoff

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.

pCi/L (picocuries per liter): A measure of radioactivity.

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

ppm (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.

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	Oconee County BOC: AMOUNT DETECTED (90TH %ILE)	Oconee County BOC: SITES ABOVE AL/TOTAL SITES	Bear Creek Water Treatment Plant: AMOUNT DETECTED (90TH %ILE)	Bear Creek Water Treatment Plant: SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.037	0/30	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	ND	0/30	NA	NA	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Oconee County BOC: AMOUNT DETECTED	Oconee County BOC: RANGE LOW-HIGH	Bear Creek Water Treatment Plant: AMOUNT DETECTED	Bear Creek Water Treatment Plant: RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2022	NA	NA	0.004	NA	Disinfection by-product
Chlorodibromomethane (ppb)	2022	NA	NA	0.062	NA	Disinfection by-product
Chloroform (ppb)	2023	25.37	7.6–62.0	32.6[3]	ND–32.6[3]	Disinfection by-product
Dibromochloromethane (ppb)	2023	1.82	ND–3.7	NA	NA	Disinfection by-product
Sodium (ppm)	10/25/2022	NA	NA	5.4	NA	Erosion of natural deposits

OTHER UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Oconee County BOC: AMOUNT DETECTED	Oconee County BOC: RANGE LOW-HIGH	Bear Creek WTP: AMOUNT DETECTED	Bear Creek WTP: RANGE LOW-HIGH	TYPICAL SOURCE
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid [11Cl-PF3OUdS] (ppb)	02/26/2019	7.3	7.3–7.3	NA	NA	NA
Perfluoro-4-methoxybutanoic Acid [PFMBA] (ppb)	2019	0.36	0.36–0.36	NA	NA	Naturally present
Perfluorobutanesulfonic Acid [PFBS] (ppb)	2019	7.05	4.60–8.54	NA	NA	Disinfection by-product
Perfluorobutanoic Acid [PFBA] (ppb)	2019	47.80	30.70–74.64	NA	NA	Disinfection by-product
Perfluorodecanoic Acid [PFDA] (ppb)	2019	375.84	13–947	NA	NA	Naturally occurring

UCMR 5

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED
Lithium (ppb)	2023	9.00
Perfluorobutanoic Acid [PFBA] (ppb)	2023	0.0050

[1] The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed and 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.

[2] Turbidity 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.

[3] Sampled in 2022.