

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

*Presented By*  
**Oconee County BOC**



## Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

## Community Participation

You are encouraged 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 Courthouse. Please visit [www.oconeecounty.com](http://www.oconeecounty.com) or call (706) 769-5120 for meeting times.

### Source Water Assessment

A Well head 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 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.

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, please feel free to contact our office during regular office hours.



## Where Does Our Water Come From?

Oconee County imports 98 percent of its water from the Upper Oconee Basin Water Authority's Bear Creek WTP. The Bear Creek WTP 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 we hold an additional six permits to withdraw groundwater at reserve locations.

## 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. EPA/CDC (Centers for Disease Control and Prevention) 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>.



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Tim Durham, Utility Director, at (706) 769-3960 or email [tdurham@oconee.ga.us](mailto:tdurham@oconee.ga.us).

## 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](http://www.epa.gov/safewater/lead).

### Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.



### 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.



## 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 fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 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 in order to determine if U.S. EPA 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 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)	2020	[4]	[4]	0.82	0.28–1.29	1.8	1.8–1.9	No	Water additive used to control microbes	
Chromium (ppb)	2015	100	100	1.4	ND–1.4	NA	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits	
Fluoride (ppm)	2020	4	4	0.71	0.50–0.89	0.77	0.76–0.80	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAAs] (ppb)	2020	60	NA	49.71	45.85–55.00	40.8	29–59	No	By-product of drinking water disinfection	
Nitrate (ppm)	2020	10	10	1.6	1.6–1.6	NA	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
TTHMs [Total Trihalomethanes] <sup>1</sup> (ppb)	2020	80	NA	51.74	41.15–64.00	31.7	26.5–51.3	No	By-product of drinking water disinfection	
Total Organic Carbon [TOC] <sup>2</sup> (ppm)	2020	TT	NA	NA	NA	1.5	1.3–1.6	No	Naturally present in the environment	
Turbidity <sup>3</sup> (NTU)	2020	TT	NA	NA	NA	0.05	0.01–0.05	No	Soil runoff	
Turbidity (lowest monthly percent of samples meeting limit)	2020	TT = 95% of samples meet the limit	NA	NA	NA	100	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)	Sites Above AL/Total Sites	Violation	Typical Source
Copper (ppm)	2019	1.3	1.3	0.082	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	1.5	0/30	No	Lead service lines, corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

## UNREGULATED SUBSTANCES

		Oconee County BOC		Bear Creek WTP			
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Typical Source	
Bromodichloromethane (ppb)	2020	NA	NA	5.2	ND-5.2	Disinfection by-product	
Chlorodibromomethane (ppb)	2020	NA	NA	0.63	ND-0.63	Disinfection by-product	
Chloroform (ppb)	2020	38.25	27.00-79.00	26.0	ND-26.0	Disinfection by-product	
Dibromochloromethane (ppb)	2020	1.62	1.1-2.5	NA	NA	Disinfection by-product	

## OTHER UNREGULATED SUBSTANCES (OCONEE COUNTY BOC)

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
1-Butanol (ppb)	2019	7.3	7.3-7.3	NA
Chromiuzm-6 (ppb)	2015	0.16	ND-0.16	NA
Dichloroacetic Acid (ppb)	2020	26.27	20.00-33.00	Disinfection by-product
Germanium (ppb)	2019	0.36	0.36-0.36	Naturally occurring
HAA6Br (ppb)	2019	7.05	4.60-8.54	Disinfection by-product
HAA9 (ppb)	2019	47.80	30.70-74.64	Disinfection by-product
Manganese (ppb)	2019	375.84	13-947	Naturally occurring
Monochloroacetic Acid (ppb)	2020	2.2	1.7 – 2.2	Disinfection by-product
Trichloroacetic Acid (ppb)	2020	23.38	18.00-29.00	Disinfection by-product

<sup>1</sup> 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 system and may have an increased risk of getting cancer.

<sup>2</sup> The value reported under Amount Detected for TOC is the lowest ratio of the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one indicates that the water system is in compliance with TOC removal requirements. A value of less than one indicates a violation of the TOC removal requirements.

<sup>3</sup> 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.

## 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 (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.