



2023 ANNUAL DRINKING WATER QUALITY REPORT

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“Greetings! This Water Quality Report is required by the Florida Department of Environmental Protection to inform you about your drinking water.

The law dictates how the information is displayed, including even the font size, and so it can be difficult to understand the data. Your water is clean and safe,

and provided by the Gulf Breeze Regional Water System owned by the City of Gulf Breeze. For decades, the city has chosen to operate with a citizen advisory board that is comprised of city and county residents who make recommendations to the City Council on the long-range planning of the utility.

Gulf Breeze is fairly unique in providing such an advisory board in order to ensure equal representation amongst our customers in decision-making, both inside and outside of its city limits, with a service area nearly ten times our city size!

This booklet was the idea of our Gulf Breeze Regional Water System Board, in an effort to help you better understand the source and quality of your drinking water and its transmission to your faucets. We hope you find this booklet a helpful resource.”

**Tom Naile, Chairman of the Gulf Breeze Regional Water System Board
Mayor Pro Tem Gulf Breeze City Council**

**WHERE DOES MY
WATER COME FROM...**



GULF BREEZE REGIONAL WATER SYSTEM (GBRWS) PROVIDES HIGH-QUALITY DRINKING WATER AS PART-OWNER OF FAIRPOINT REGIONAL UTILITY SYSTEM (FRUS). OUR SOURCE WATER IS SUPPLIED FROM WELLS THAT DRAW NATURALLY FILTERED AND PURIFIED WATER FROM SAND AND GRAVEL AQUIFERS IN NORTH SANTA ROSA COUNTY.

Gulf Breeze Regional Water System is pleased to present to you the 2023 Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. 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 your water resources. We are committed to ensuring the quality of your water. Our water source, for this reporting period, is the Fairpoint Regional Utility System and Emerald Coast Utilities Authority. If you have any questions about this report or concerning our water utility, please contact Thomas Lambert, Director of Public Works, at (850) 934-5100.

The Sand-and-Gravel Aquifer is a high-quality, prolific source of water for our community. Because it does not have a confining layer above it, virtually everything that falls on the ground has the potential to affect the quality of our water supply.

FRUS is a wholesale purveyor of water, owned and operated by the City of Gulf Breeze, Midway Water System and Holley-Navarre Water System. FRUS consists of seven wells which draw from the Sand-and-Gravel Aquifer and are chemically treated with lime & orthophosphates for pH adjustment and chlorine for disinfection. Information on FRUS water supply can be obtained from Donna Lupola, (850) 939-2427 x234.

ECUA helps to supplement the Gulf Breeze water supply when necessary. ECUA has 28 active wells in Escambia that pump water from the Sand-and-Gravel Aquifer. In general, ECUA customers receive water from the wells (two to five) located closest to their residence. Each well is considered a separate treatment plant to comply with regulatory standards.

Additional information regarding the ECUA water supply can be obtained from the ECUA Laboratory Manager at (850) 969-6689. Due to the quality of water received from FRUS and ECUA, the only treatment necessary by the City of Gulf Breeze is re-chlorination to boost the disinfection residual in our system.



SOURCE WATER ASSESSMENT

Performed by: The Department of Environmental Protection

In 2023 the Florida Department of Environmental Protection performed a Source Water Assessment on the FRUS and ECUA systems. The assessments were conducted to provide information about any potential sources of contamination in the vicinity of the supplier's wells. A search of the data sources indicated 1 potential source of contamination with a low susceptibility level near the FRUS wells.

For ECUA, there are 43 potential sources of contamination identified, with a low to moderate susceptibility level.

These assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from the City of Gulf Breeze.

WE ENCOURAGE OUR VALUED CUSTOMERS TO BE INFORMED ABOUT THEIR WATER UTILITY. IF YOU WANT TO LEARN MORE, PLEASE ATTEND ANY OF OUR REGULARLY SCHEDULED MEETINGS OF THE GULF BREEZE REGIONAL WATER UTILITY BOARD, AN ADVISORY BOARD TO THE CITY COUNCIL COMPRISED OF CITY AND COUNTY CUSTOMERS WITHIN THE GBRWS SERVICE AREA. ALL MEETINGS ARE THE SECOND MONDAY ON ALTERNATING MONTHS AT 5:30 P.M. IN GULFBREEZE CITY HALL LOCATED AT 1070 SHORELINE DRIVE. AGENDAS ARE AVAILABLE ON CITY WEBSITE.

ABOUT SOURCE WATER:

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 include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) 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.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) 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.
- (E) 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, the Florida Department of Environmental Protection prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The 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 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

HOW IS MY WATER PROTECTED?



GBRWS and FRUS routinely monitor for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2023. Data obtained before January 1, 2023, and presented in this report, are from the most recent testing done in accordance with the laws, rules, and regulations. As authorized and approved by FDEP, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative, is more than one year old.

2023 test results once again indicated there was no lead found in the GBRWS drinking water supply. GBRWS is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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. 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/safewater/lead>.

DEFINITIONS:

In the 2023 Tests Results Table below, you may find unfamiliar terms and abbreviations; to help you better understand these terms we've provided the following definitions:

AL

Action Level

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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 the addition of a disinfectant is necessary for control of microbial contaminants.



MRDLG

Maximum Residual Disinfectant Level Goal

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.



ND

Not Detected

This means not detected and indicates that the substance was not found by laboratory analysis.



PPM

Parts Per Million

Or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.



Level 1

Level 1 Assessment

A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.



PPB

Parts Per Billion

Or Micrograms per liter ($\mu\text{g/l}$) – one part by weight of analyte to 1 billion parts by weight of the water sample.



PCI/L

Picocurie Per Liter

The measure of the radioactivity in water.



NA

Not Applicable

Does not apply or not applicable.



2023 TEST RESULTS TABLE

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants (Sampled by FRUS And Midway water)							
Alpha Emitters (pCi/l)	04/2017 & 06/2020	No	2.3	ND – 2.3	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/l)	07/2023 & 12/2023	No	2.77	ND-2.77	0	5	Erosion of natural deposits
Inorganic Contaminants (Sampled by FRUS and Midway)							
Barium (ppm)	07/2023 & 08/2023	No	0.084	0.052–0.084	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	08/28/2023	No	0.83	0.06-0.084	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (ppb)	07/2023	No	0.4	ND-0.4	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing and solder
Nitrate (as Nitrogen) (ppm)	07/2023	No	1.0	0.2-1.0	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Nitrate (as Nitrogen) (ppm)	07/2023	No	1.0	0.2-1.0	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Sodium (ppm)	08/2023 & 07/2023	No	120	1.7-120	N/A	160	Salt water intrusion, leaching from soil
Stage 2 Disinfectant/Disinfection By-Product (D/DBP) (Sampled by Gulf Breeze Reginal Water System)							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Feb-Dec 2023	No	1.07	1-1.18	MRDGL=4	MRDL=4.0	Water additive used to control microbes
TTHM [Total trihalomethanes] (ppb)	07/2023	No	3	ND-3.6	N/A	MCL=80	By-product of drinking water disinfection
Lead and Copper (Tap Water) (Sampled by GULF BREEZE REGIONAL WATER SYSTEM)							
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	08/2023	No	0.27	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water)(ppb)	08/2023	No	2.3	0 of 30	0	15	Corrosion of household plumbing systems; erosion of natural deposits;



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 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. 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).

SYSTEM IMPROVEMENTS:



In 2019 the GBRWS under the guidance of the FDEP, began implementing a residential cross connection program. As a public water provider, City of Gulf Breeze is responsible for overseeing prevention of water contamination from cross-connections in the water distribution system. The cross-connection plan was developed using recommended practices of the American Water Works Association set forth in Recommended Practice for Backflow Prevention and Cross-Connection Control: AWWA Manual M14, Third Edition.

We have been installing residential back flow devices at any connection that has an alternate water source such as an irrigation meter or a permitted well. These steps have been taken to prevent serious chemical or microbiological contamination events in our drinking water systems that could shut down the community's water supply. Water users can help prevent back flows by always having an approved backflow device at the hose spigot and an air gap between the level of liquid and whatever you are filling. In other words, don't leave the end of the hose in a place where contaminants can be drawn back through the hose and into your water pipes. These devices are inexpensive and can be found at most local hardware stores.

In 2024, our water system was made aware that FRUS, which a portion of your drinking water is purchased from, did not collect a subset of drinking water samples between April-September 2023 after a new well was brought online. Although this incident is not an emergency and no action is needed on your part, as our customers, you have a right to know what happened and what we are doing to correct this situation.

While our community's drinking water comes directly from the pristine Floridan aquifer and requires minimal treatment, we are required to monitor your drinking water for specific contaminants to ensure it meets health standards.



During the third quarter of last calendar year (July-September 2023), FRUS did not monitor for Synthetic Organic Contaminants (SOCs) at one of their seven wells. Furthermore, during the second quarter (April-June 2023), FRUS did not monitor for Volatile Organic Contaminants (VOCs), SOC's and Radionuclides (RADs) at this same well. Sampling has since commenced at this well, though we cannot be sure of the quality of the drinking water during second and third quarters of 2023.



For further information about this violation, visit

<https://cityofgulfbreeze.us/wp-content/uploads/2024/04/Public-Notice-GBWS.pdf>



In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system.

The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We at the City of Gulf Breeze work around the clock to provide top quality water to every tap.



**THANK YOU FOR ALLOWING GULF BREEZE
REGIONAL WATER SYSTEM TO PROVIDE
YOUR FAMILY WITH SAFE, DEPENDABLE
DRINKING WATER.**



**WE ASK THAT ALL OUR CUSTOMERS HELP US
PROTECT OUR WATER SOURCES, WHICH ARE
THE HEART OF OUR COMMUNITY, OUR WAY
OF LIFE, AND OUR CHILDREN'S FUTURE.**





**GULF
BREEZE
REGIONAL
WATER
SYSTEM**

