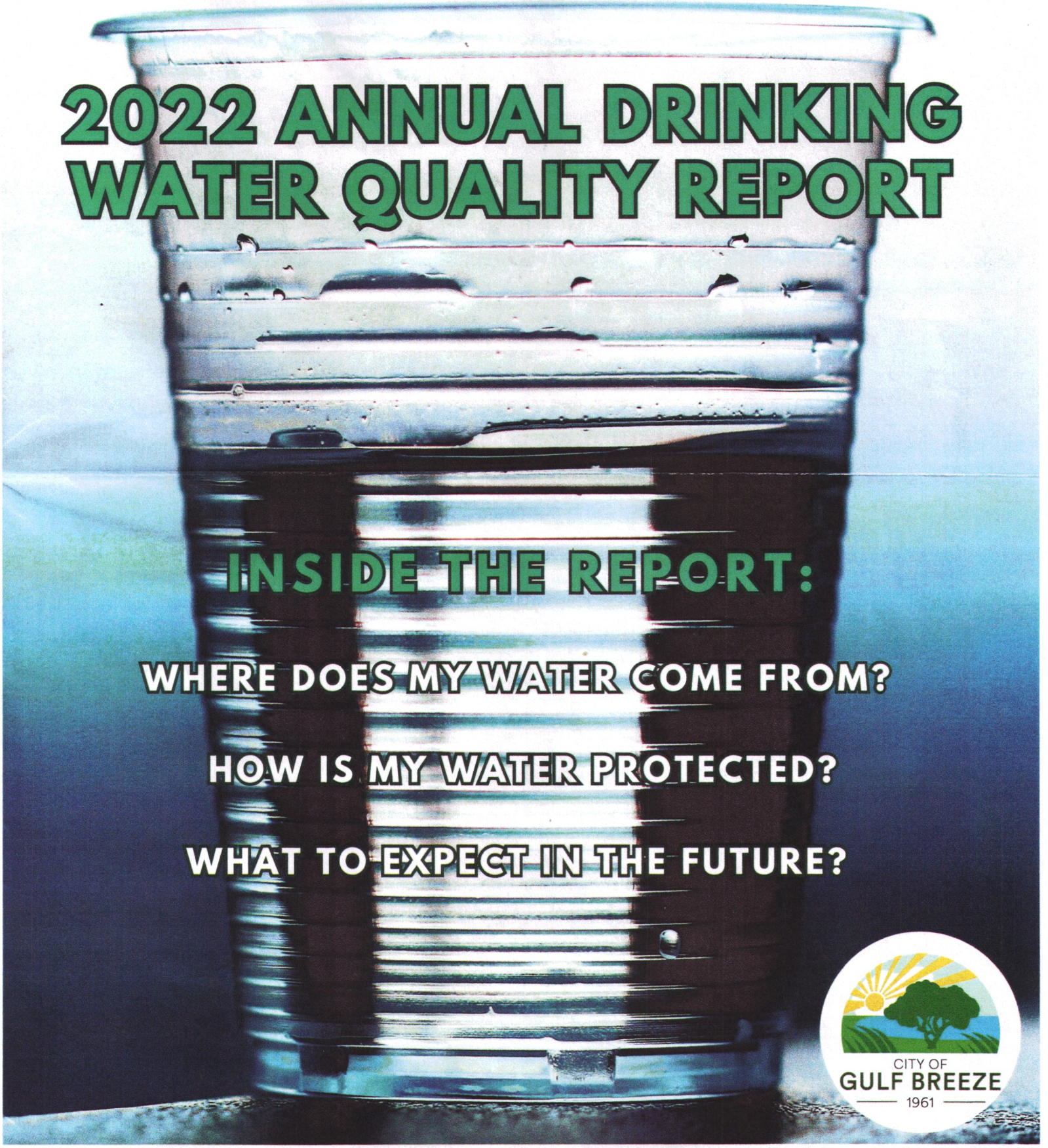
GULF BREEZE REGIONAL WATER SYSTEM

2022 ANNUAL DRINKING WATER QUALITY REPORT



INSIDE THE REPORT:

WHERE DOES MY WATER COME FROM?

HOW IS MY WATER PROTECTED?

WHAT TO EXPECT IN THE FUTURE?

CITY OF GULF BREEZE 1961

WHERE DOES MY WATER COME FROM?

THE 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 (GBRWS) is pleased to present the 2022 Annual Drinking Water Quality Report. This report is designed to provide information about the quality of water and the services delivered to customers. The City of Gulf Breeze provides customers with a safe, dependable supply of drinking water. This report explains the water treatment process and efforts to protect our water resources. If you have any questions about this report or concerning your water utility, please contact Thomas Lambert, Director of Public Services, at 934-5100.

GBRWS water is purchased from the Fairpoint Regional Utility System and on an emergency basis, the Emerald Coast Utilities Authority. 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 six (6) wells that draw from the Sand & Gravel Aquifer in East Milton. Water is chemically treated with lime & orthophosphates for pH adjustment and chlorine for disinfection. Additional information regarding FRUS water supply can be obtained from Donna Lupola, (850) 939-2427 x234.

ECUA has 28 active wells distributed throughout its service area 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 residences. Each well is considered a separate treatment plant, where water quality parameters are adjusted to maximize operational efficiencies and comply with regulatory standards.

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. Granular Activated Carbon (GAC) filters are installed on twelve (12) wells for iron or organic contamination removal. Calcium Hydroxide (lime) is added for pH adjustment; Phosphoric Acid is added for corrosion control in the distribution system and Chlorine is added for disinfection. Fluoride is added at select wells and helps prevent tooth decay. Additional information regarding the ECUA water supply can be obtained from the ECUA Laboratory Manager at (850) 969-6689.

Due to the high quality of water received from FRUS and ECUA, the only treatment necessary by the GBRWS is re-chlorination to boost the disinfection residual in our system.

SOURCE WATER ASSESSMENT

Performed by: The Department of Environmental Protection

In 2022 the 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 no potential sources of contamination near the FRUS wells. For ECUA, there are 35 potential sources of contamination identified, with a low to moderate susceptibility level.

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 SYSTEM BOARD OF DIRECTORS COMPRISED OF CITY AND COUNTY RESIDENTS THROUGHOUT THE SERVICE AREA. THE GBRWS BOARD MEETS THE SECOND TUESDAY QUARTERLY AT 5:30PM AT GULF BREEZE CITY HALL.

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 storm water 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 storm water 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 storm water runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The 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 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?

Gulf Breeze Regional Water System and FRUS routinely monitors 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 monitoring for the period of January 1 to December 31, 2022. Data obtained before January 1, 2022, and presented in this report, are from the most recent testing. As authorized and approved by EPA, 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.

The City of Gulf Breeze is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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 1-800-426-4791.

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).

DEFINITIONS:

In the 2022 Tests Results Table below, you may find unfamiliar terms and abbreviations; o 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 (µg/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.

2022 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)	4/17 & 6/20	No	2.3	ND – 2.3	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/l)	6/14, 4-7/17, & 6/20	No	2.3	ND-2.3	0	5	Erosion of natural deposits
Inorganic Contaminants (Sampled by FRUS and Midway)							
Barium (ppm)	6/20	No	0.085	0.011–0.085	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	6/20	No	0.83	ND – 0.83	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)	06/2020	No	1.0	ND-1.0	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing and solder
Nitrate (as Nitrogen) (ppm)	6/22 & 8/22	No	4.28	1.1-4.28	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Sodium (ppm)	6/20	No	150	6.4-150	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)	Jan-Dec 22	No	1.15	1.005-1.24	MRDGL=4	MRDL=4.0	Water additive used to control microbes
TTHM [Total trihalomethanes] (ppb)	7-22	No	3.1	ND-3.1	N/A	MCL=80	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	7-22	No	1.5	ND-1.5	NA	MCL=60	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)	10/2020	No	0.25	0 of 20	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water)(ppb)	10/2020	No	2.3	0 of 20	0	15	Corrosion of household plumbing systems; erosion of natural deposits;

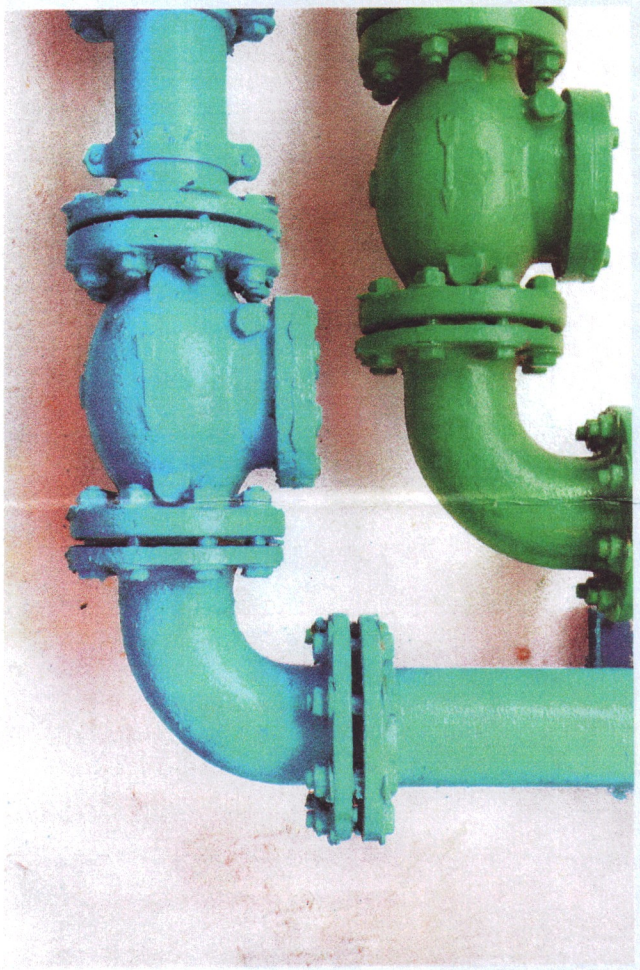
Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation	Result	MCLG	TT	Likely Source of Contamination
1. Total Coliform Bacteria*	Jan-Dec	2022	2 Positive samples	N/A	TT	Naturally present in the environment

SYSTEM IMPROVEMENTS:

In 2019 the Gulf Breeze Reginal Water System under the guidance of the Florida Department of Environmental Protection, began implementing a residential cross-connection program. As a public water provider, the City of Gulf Breeze and Gulf Breeze Regional Water System are responsible for the 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.



Residential back flow devices are installed at alternate water sources, such as irrigation meters and permitted wells. 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.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year, we were required to conduct 1 Level 1 assessment(s). 1 level 1 assessment(s) were completed. In addition, we were required to take 6 corrective actions and we completed 6 of these actions.

For more information on back flow and cross-connection go to www.epa.gov or floridadep.gov.

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