



2020 WATER QUALITY REPORT

INSIDE THE REPORT WHERE DOES MY WATER COME FROM? HOW IS MY WATER PROTECTED? WHAT TO EXPECT IN THE FUTURE? WE RAISE OUR WATER GLASSES TO TOAST OUR 30-YEAR ANNIVERSARY!

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.

We are pleased to present to you the 2020 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 goal is to provide safe and dependable 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.

From time to time, the FRUS water supply may be temporarily disrupted for maintenance of the distribution system. When this occurs, GBRWS has a supply line interconnect with the Emerald Coast Utility Authority (ECUA) for supplemental water supply. For information regarding ECUAs complete annual drinking water quality report, please contact ECUA at (850) 476-0480 or ecua.fl.gov.



SOURCE WATER ASSESSMENT

Performed by: The Department of Environmental Protection

The assessments on FRUS systems were conducted to provide information about any potential sources of contamination in the vicinity of the supply wells. A search of the data sources indicated no potential sources of contamination near the FRUS wells. ECUA assessment results are available on the FDEP Source Water Assessment and Protection Program website at dep.state.fl.us/swapp.



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 CITY COUNCIL MEETINGS. REGULAR SESSIONS ARE HELD THE FIRST AND THIRD MONDAY OF EVERY MONTH. A VOLUNTEER REGIONAL UTILITY BOARD ALSO MEETS EVERY OTHER MONTH TO REVIEW SYSTEM NEEDS AND PROGRESS. ALL MEETINGS ARE AT 5:30 P.M. IN CITY HALL. GULF BREEZE CITY HALL IS LOCATED AT 1070 SHORELINE DRIVE.

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, 2020 to December 31, 2020. Data obtained before January 1, 2020, and presented in this report, are from the most recent testing done in accordance with the state and federal laws, rules, and regulations. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less 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.

DEFINITIONS

To Help You Better Understand These Terms, We've Provided the Following Definitions:



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).





In order 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. In addition, to ensure that drinking water is disinfected, providers of water are required to inject chlorine into the supply and maintain a minimal residual of .2 parts per million. Sodium bicarbonate and orthophosphate are added to increase the alkalinity and help control corrosion of the water lines and valves. The Food and Drug Administration (FDA) 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 trace 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.

2020 TESTS RESULTS TABLE (32561 CUSTOMERS)

Radioactive Contaminants (Sampled by FRUS and ECUA)												
Contaminant and U Measurement	Jnit of	D	ates of sampl (mo./yr.)	ing	MCL V	iolation /N	Level Detecte	а	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi	/I)	July 14-July 20		N	40	6.3		ND = 6.3	0	15	Erosion of natural deposits	
Radium 226 + 228 (pCi/l)	06-14/07-17,04&10-20		10-20	N	40	6.6		ND-6.6	0	5	Erosion of natural deposits
Uranium (ug/l)			Oct 20		N	40	2.2		2.2-2.2	0	30	Erosion of natural deposits
Inorganic Contaminants (Sampled by FRUS and ECUA)												
Arsenic (ppb)		Apr-Oct 20		No		0.10		ND-0.10	10	10	Erosion of natural deposits; runoff from orchids; runoff from glass and electronics production	
Barium (ppm)			Apr-Oct 20		,	io.	0.064		0.011- 0.064	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)			Apr-Oct 20		,	٩o	0.40		ND-0.40	4	4	Discharge from electrical, aerospace and defense industries
Cadmium (ppb)			Apr-Oct 20		No 0.:		0.10	0 ND-0.10		5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)			Apr-Oct-20		,	۹o	0.70		ND-0.70	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide (ppb)			Apr-Oct 20		,	٧o	17		ND-17	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm) Apr		Apr-Oct 20		No		0.74		ND - 0.74	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)		Apr-Oct 20		No		1.0		ND-1.0	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing and solder	
Mercury (ppb)	opb) Apr-Oct :		Apr-Oct 20		No		0.25		ND - 0.25	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Nickel (ppb)		Apr-Oct 20		No		1.4		0.38-1.4	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.	
Nitrate (as Nitrogen) (ppm)			Apr-Oct 20	n n		¥0	3.9		0.17-3.9	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Selenium (ppb)			Apr-Oct-20	No		ło	0.48		ND-0.48	1	1	Discharge from petroleum and metal refineries; erosion of natural deposits
Sodium (ppm)			Apr-Oct 20		1	٩o	9.2		1.8-9.2	N/A	160	Saltwater intrusion, leaching from soil
Volatile Or	gani	c Co	ntamina	nts (Samp	oled by	y FRUS	and	I ECUA)			
Tetrachloroethylen	e	Jan-Dec 20		No		1.08		ND - 1.5	0	3	Discharge from factories and dry	
Trichloroethylene			Jan-Dec 20		1	No	0.68		ND-0.70	0	3	Discharge from industrial chemical factories.
Stage 2 Dis	infec	tant	/Disinfe	ction	By-Pi	roduct	: (D/DBI	P) (S	Sampleo	d by GBRWS	5)	
Disinfectant or Contaminant and Unit of Measurement	r Dates of MCL or sampling Violation D (mo./yr.) V/N		Le Dete	vel ected	Range of Results		N	ICLG or ARDLG	MCL or MRDL	Lii	kely Source of Contamination	
Stage 2 Chlorine (ppm)	Jan/0 202	Dec 0	No	1. (Run Annua	1.13 unning 0.80 ual Avg.))-1.31 M		RDGL=4	MRDL=4.0	Water additive used to control microbes	
TTHM [Total trihalomethanes] July 20		No	1	.3	N	I/A		N/A	MCL=80	By-product of drinking water disinfection		
Lead and C	oppe	r (Ta	ap Water) (Sar	npled	by GI	BRWS)					
Contaminant and Unit of Measurement	Dates sampl (mo./	i of ling yr.)	AL Exceeded Y/N	90 Perce Re:)th entile sult	h No. of samplin ntile sites exceeding		MCLG		AL (Action Level)	Likely Source of Contamination	
Copper (tap water) (ppm)	Sept	20	No	0.	25	0 0	of 20		1.3	1.3	Corrosio	on of household plumbing systems; of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb) Sept 20		20	No	2	.3	0 0	of 20		0	15	Corrosion of household plumbing systems; erosion of natural deposits;	

2020 TESTS RESULTS TABLE (32563 CUSTOMERS)

Radioactive Contaminants (Sampled by FRUS and Midway)											
Contaminant and unit of measurement (Source that had highest value)	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCL Goal	Maximum Contaminant Level (MCL)	Likely Source of Contaminants				
Alpha Emitters (pCi/l) (Midway)	04-07/17, 06/20	N	2.3	ND – 2.3	0	15	Erosion of natural deposits				
Radium 226 + 228 (pCi/l) (FRUS)	06-14, 4-7/17, 06/20	N	2.3	ND - 2.3	0	5	Erosion of natural deposits				

Inorganic Contaminants (Sampled by FRUS and Midway)

Contaminant and unit of measurement (Source that had highest value)	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCL Goal	Maximum Contaminant Level (MCL)	Likely Source of Contaminants
Barium (ppm)	06/20	N	0.085	0.011 - 0.085	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	06/20	N	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 (point of entry)(ppb)	06/20	N	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)	06/20	N	1.0	ND - 1.0	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Sodium (ppm)	06/20	N	150	1.8 - 150	N/A	160	Salt water intrusion, leaching from soil

Stage 2 Disinfectant/Disinfection By-Product (D/DBP) (Sampled by SSRUS)

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 Contaminants
Stage 1 Chlorine (ppm)	Jan/Dec /2020	N	1.13	0.90 - 1.31	MRDLG = 4	MRDL=4.0	Water additive used to control microbes
TTHM (Total trihalomethanes) (ppb)	July 2020	N	2.6	1.1 – 2.6	N/A	MCL=80	By-product of drinking water disinfection

Lead and Copper (Tap Water) (Sampled by SSRUS)

Contaminant and unit of measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90 th Percentile Result	No. of sampling sites exceeding the AL	MCL Goal	AL (Action Level)	Likely Source of Contaminant
Copper (Tap Water) (ppm)	Sept 2020	N	0.4	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (Tap Water) (ppb)	Sept 2020	N	0.9	0 of 30	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Volatile Organic Contaminants (Midway Water System, Inc. Data Only)

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation (Yes/No)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Xylenes (ppm)	7/17& 8/19	No	0.00065	ND-0.00065	10	10	Discharge from petroleum factories; discharge from chemical factories

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:



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 be naturally-occurring or 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 be naturally occurring or be the result of oil and gas production and mining activities.

PRECAUTIONARY BOIL WATER NOTICES (PBWN)



If you receive a PBWN, it doesn't necessarily mean something is wrong with the water. It is simply a precaution as we check our system. These interruptions are usually due to a decrease in pressure from a water main break or planned system maintenance.

Customers are advised as a precautionary measure to boil tap water for cooking, making ice, brushing teeth, washing dishes, and drinking until water quality testing confirms that water is safe for normal use. A rolling boil of one minute is sufficient.

We usually issue a PBWN for 48 hours, until tests show your water is safe to drink. If you received a notice on your door that we have issued an advisory, we will also hand-deliver a door notice when we cancel the alert. If you received a door hanger but no phone call, it may indicate our offices do not have the current phone number to reach you. Please contact us at 850-934-5100 to update your information.

SYSTEM IMPROVEMENTS

In 2019 the GBRWS, under the guidance of the Florida Department of Environmental Protection, began implementing a residential cross connection program. As a public water provider, GBRWS 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 disrupt 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.

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

THANK YOU FOR ALLOWING US TO CONTINUE PROVIDING YOU WITH CLEAN, QUALITY WATER THIS YEAR.

WE AT THE CITY OF GULF BREEZE WORK AROUND THE CLOCK TO PROVIDE TOP QUALITY WATER TO EVERY TAP. 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.

FOR MORE INFORMATION, OR TO REQUEST THE FULL CCR REPORT, PLEASE CONTACT THE CITY OF GULF BREEZE AT (850) 934-5100 OR VISIT US ONLINE: CITYOFGULFBREEZE.US

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WATER System

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