South Santa Rosa Utility System 2020 ANNUAL DRINKING WATER QUALITY REPORT THE WATER WE DRINK

South Santa Rosa Utility System (SSRUS) is pleased to present to you the 2020 Annual Drinking Water Quality Report. Our constant goal is to provide you with a safe and dependable supply of drinking water. This report shows our water quality results and what they mean. 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. If you have any questions about this report or concerning your water utility, please contact Jason Randell, Director of Public Services at (850) 934-5100.

Our primary supply of water is purchased from the Fairpoint Regional Utility System (FRUS), 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 which draw from the Sand & Gravel Aquifer and are 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.

We purchase additional water from Midway Water System, Inc. (Midway), whose four (4) groundwater wells draw from the Sand and Gravel Aquifer and the Floridan Aquifer. The production of these wells is chemically treated with lime for pH adjustment, chlorine for disinfection and zinc orthophosphate as a corrosion inhibitor. Additional information on the Midway water supply can be obtained from Jody Anderson, Operations Director, at (850) 932-5188.

Due to the quality of water received from FRUS and Midway, the only treatment done by SSRUS is chlorination to boost the disinfection residual in our system and addition of a blended phosphate for a corrosion inhibitor.

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.

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. 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.

SSRUS, FRUS, and Midway routinely monitor for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this table shows the results of our monitoring for the period of January 1st through December 31st, 2020. Sampling for Trihalomethanes, Haloacetic Acids, Chlorine, Bacteria, Lead, & Copper were performed by SSRUS. All other results were performed by FRUS and Midway. Some of the data, though representative, are more than one year old, but represent the most recent data. As authorized and approved by EPA, the state has reduced monitoring requirements for certain contaminants to less often than once per year because the concentration of these contaminants are not expected to vary significantly from year to year.

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 an assessment to identify problems and to correct any problems that were found during the assessment. During the past year we were required to conduct one Level 1 assessments. One Level 1 assessment was completed. In addition, we were required take two corrective actions and we completed both or these actions.

In 2020 the Department of Environmental Protection performed a Source Water Assessment on the Midway Water System and FRUS systems. The assessments were conducted to provide information about any potential sources of contamination in the vicinity of our supplier's wells. A search of the data sources indicated no potential sources of contamination near the FRUS wells. For Midway, there are 5 potential sources of contamination identified in their system, with a low susceptibility level. Midway's 2020 SWAP can be found here: https://fldep.state.fl.us/swapp/DisplayPWS.asp?pws_id=1570470&odate=01-OCT-20 or they can be obtained from South Santa Rosa Utility System.

Water and Your Health

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).

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. South Santa Rosa Utility System is responsible for providing high quality drinking water, but 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 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.

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.

Definitions

In the following table, you will find terms and abbreviations you may not be familiar with. To help you better understand these terms we've provided the following definitions:

Level 1 Assessment – A Level 1 assessment is 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.

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

N/A - does not apply.

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

Part per billion (ppb) or Micrograms per liter (ug/l) – one part by weight of analyte to 1 billion parts by weight of water sample.

Picocuries per liter (pCi/L) – measure of the radioactivity in water.

Action Level (AL) – the concentration of contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level or MCL – the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG – the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum residual disinfectant level or MRDL: 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.

Maximum residual disinfectant level goal or MRDLG: 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.

TABLES OF WATER QUALITY TEST RESULTS FOR 2020

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)

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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	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contaminants
Stage 1 Chlorine (ppm)	Jan/Dec /2020	N Y/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)

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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 Violation (mo./yr.) (Yes/No) Level Range of Results MCLG						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			

South Santa Rosa Utility System works 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. Conservation of water is of utmost importance to us and we ask that everyone make efforts, wherever possible, to conserve water. Did you know that Florida Statute Chapter 373.62 states, in part, that all irrigation systems must have an automatic rainfall shut-off device?

System Improvements

In 2020 the City of Gulf Breeze and South Santa Rosa Utility System, under the guidance of the Florida Department of Environmental Protection, began implementing a residential cross connection program. As a public water provider, City of Gulf Breeze and South Santa Rosa Utilities are 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.

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 your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. If you have any questions about this report or concerning your water utility, please contact Jason Randall, Director of Public Services at (850) 934-5100. The SSRUS Advisory Board meets on the second Monday of every other month (Feb., Apr., June, Aug., Oct., and Dec.) at 7:00 P.M., Gulf Breeze City Hall, 1070 Shoreline Drive. We want our valued customers to be informed about their water utility.