

# South Santa Rosa Utility System

2012 ANNUAL WATER QUALITY REPORT

## THE WATER WE DRINK

South Santa Rosa Utility System (SSRUS) is pleased to present to you the 2012 Annual 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 Vernon Prather, 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 x225.

We purchase additional water from Midway Water System, Inc. (Midway), whose groundwater wells draw from the Sand and Gravel Aquifer and the Floridan Aquifer. The production of these wells is chemically treated with lime and orthophosphates for pH adjustment and chlorine for disinfection. Additional information on the Midway water supply can be obtained from Bobby Cooley 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 disinfection residual in our 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).**

Infants and children who drink water containing lead in excess of the Action Level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.

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 1<sup>st</sup> through December 31<sup>st</sup>, 2012. Sampling for Trihalomethanes, Haloacetic Acids, Chlorine, Bacteria, Lead, Copper & Asbestos were performed by SSRUS. All other results were performed by FRUS, and/or Midway. Some of our 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.

In 2012 the Department of Environmental Protection performed a Source Water Assessment on the Midway Water System and the FRUS. 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 their wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from South Santa Rosa Utility System.

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?

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 Vernon Prather, 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.

### Definitions

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

**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.

**Initial Distribution System Evaluation (IDSE)** - An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**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.

**TABLE OF WATER QUALITY TEST RESULTS FOR 2012**

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
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**Radioactive Contaminants**

Alpha Emitters (pCi/l) (FRUS)	05/2008 10/2011 & 02/2012	N	6.1	ND – 6.1	0	15	Erosion of natural deposits
Radium 226 + 228 (pCi/l) (FRUS)	05/2008 10/2011 & 02/2012	N	3.7	ND – 3.7	0	5	Erosion of natural deposits

**Inorganic Contaminants**

Barium (ppm) (Midway)	01-10 2011 & 02/2012	N	0.063	0.0086-0.063	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb) (Midway)	01-10 2011 & 02/2012	N	0.1	ND-0.1	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Fluoride (ppm) (Midway)	01-10 2011 & 02/2012	N	0.8	ND – 0.8	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) (FRUS)	01-10 2011 & 02/2012	N	2.2	ND-2.2	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm) (FRUS)	09-11/2012	N	1.3	ND – 1.3	10	10	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks, sewage
Sodium (ppm) (Midway)	01-10 2011 & 02/2012	N	100	1.2 – 100	N/A	160	Salt water intrusion, leaching from soil

**Stage 1 Disinfectant/Disinfection By-Product (D/DBP)<sup>1</sup>**

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
Chlorine <sup>1</sup> (ppm)	01-12/2012	N	1.00 (running annual avg.)	0.93 – 1.10	MRDLG = 4	MRDL=4.0	Water additive used to control microbes
TTHM (Total trihalomethanes) <sup>1</sup> (ppb)	07/2012	N	3.13 Annual Avg.	2.11 – 4.6	N/A	80	By-product of drinking water disinfection
HAA5 <sup>1</sup> (ppb)	07/2012	N	0.14 Annual Avg.	ND – 0.43	N/A	60	By-product of drinking water disinfection

**Microbiological Contaminants<sup>1</sup>**

Disinfectant or Contaminant and unit of measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contaminants
Total Coliform Bacteria <sup>1</sup>	01-12/2012	N	1 positive sample	0	Presence of coliform bacteria in 1 sample collected during a month	Naturally present in the environment.

**Lead and Copper (Tap Water)<sup>1</sup>**

Contaminant and unit of measurement	Dates of sampling (mo./yr.)	AL Exceeded Y/N	90 <sup>th</sup> Percentile Result	No. of sampling sites exceeding the AL	MCL Goal	AL (Action Level)	Likely Source of Contaminant
Copper <sup>1</sup> (Tap Water) (ppm)	06/2011	N	0.29	0 of 60	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead <sup>1</sup> (Tap Water) (ppb)	06/2011	N	3.8	2 of 60	0	15	Corrosion of household plumbing systems; erosion of natural deposits

<sup>1</sup> Sampled by SSRUS. All other samples are the combined data submitted by FRUS and Midway