

2017 Sarasota County Drinking Water Quality Report

This report provides a summary of the quality of water provided to Sarasota County Public Utilities customers during 2017. It reflects our dedication to bring you high-quality, reliable drinking water. It includes details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies.

Drinking water standards

The raw water we supply contains various substances or contaminants, some of which must be removed by a treatment process to produce water that meets federal safe drinking water standards. Naturally occurring drinking water sources are never 100 percent "pure" as even rainwater contains dissolved minerals or other chemicals.

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. It can also pick up substances resulting from the presence of animals or from human activity.

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 (EPA) Safe Drinking Water Hotline at 800-426-4791.

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, can also come from gas stations, urban stormwater runoff and septic systems.

(E) Radioactive contaminants can be either 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 EPA prescribes regulations that 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 that must provide the same protection for public health.

(F) Lead, if present in elevated levels, 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. Sarasota County Public Utilities 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 two 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 at epa.gov/safewater/lead.

Sarasota County's drinking water sources

Sarasota County utilizes several water sources for its drinking water.

% of supply	Location	Water source	Treatment method
10%	T. Mabry Carlton, Jr. Water Treatment Facility	Wellfield, 16 wells, draw from Intermediate and Floridan aquifers	Aeration, electro dialysis, disinfection, corrosion control and filtration
4%	University Parkway Jacaranda Water Treatment Facility	Wellfield with 7 wells draw from the Floridan Aquifer Wellfield with 7 wells draw from the Floridan Aquifer	Aeration and disinfection Reverse osmosis, aeration and disinfection
22%	Purchase from Manatee County	Manatee River and wells draw from the Floridan Aquifer	Aeration, flocculation, coagulation, filtration and disinfection
64%	Purchase from Peace River/Manasota Regional Water Supply Authority	Peace River and wells draw from the Floridan Aquifer	Aeration, flocculation, coagulation, filtration and disinfection, then blended with Carlton facility water

All our water sources are permitted by the Southwest Florida Water Management District.

Sarasota County routinely monitors for contaminants in your drinking water, according to federal and state laws. Except where indicated otherwise, this report is based on the results of our monitoring for the period of Jan. 1, to Dec. 31, 2017. 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.

Sarasota County continues to provide an adequate and reliable supply of water daily while balancing the needs of our environment. We believe that by emphasizing nature's needs, people will ultimately benefit as well.

Source water assessment was conducted by the Florida Department of Environmental Protection in 2017 on Sarasota and Manatee counties' systems. Results are available at fldep.dep.state.fl.us/swapp and search by Sarasota or Manatee counties.

Concerns?

Some people may be more vulnerable to contaminants in drinking water than the general population. People with compromised immune systems, such as infants, seniors, cancer patients undergoing chemotherapy, organ transplant recipients, or people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

Sarasota County 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 at the heart of our community, our way of life and our children's future.

Attention property managers:

If you are a property owner or manager, please provide this water quality report to your tenants. This report may be photocopied or posted in a prominent location at your facility. For additional copies, call the Sarasota County Contact Center at 941-861-5000 or visit scgov.net (keywords water services) to download a copy.

Questions?

If you have questions about this report or water quality in Sarasota County, contact 941-861-5000, visit scgov.net (keywords water services) or email waterquality@scgov.net.

On July 1, 2018, you can access the Sarasota County's annual water quality report online at scgov.net/waterqualityreport. To learn more about our water, please attend any of the regularly scheduled Water and Sewer Advisory Board meetings. Schedules are advertised on the County Page ad in local sections of Sunday editions of the Sarasota Herald-Tribune, the Venice Gondolier, North Port Sun Herald and the Tempo News.

Sarasota County Water Quality Summary 2017

Results are from the most recent testing done in accordance with regulations.

MICROBIOLOGICAL CONTAMINANTS							
Contaminant and unit of measurement	MCLG	MCL	The highest single measurement	The lowest monthly percentage of samples meeting regulatory limits	Likely source of contamination	Sampling date	MCL violation
Turbidity (NTU) Manatee	N/A	TT	0.67	93.5%	Soil runoff	Daily	No
Turbidity (NTU) Peace River	N/A	TT	0.16	95%	Soil runoff	Daily	No
RADIOACTIVE							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Alpha emitters (pCi/L)	0	15	3.82	ND-3.82	Erosion of natural deposits	2017	No
Combined Radium (pCi/L)	0	5	1.05	ND-2.0	Erosion of natural deposits	2017	No
INORGANIC							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Antimony (ppb)	6	6	0.57	ND-0.57(M)	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	2017	No
Arsenic (ppb)	0	10	0.73	ND-0.73(M)	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	2017	No
Barium (ppm)	2	2	0.017	ND-0.017	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits	February 2017	No
Cyanide (ppb)	200	200	21	4-21	Discharge from steel/sheet metal factories; discharge from plastic and fertilizer factories	February 2017	No
Fluoride (ppm)	4	4	0.77	0.12-0.77	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm	February 2017	No
Sodium (ppm)	N/A	160	86	26-86	Salt water intrusion, leaching from soil	February 2017	No
NITRATES & NITRITES							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Nitrate (ppm)	10	10	0.12	0.12-.0.24	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	February 2017	No
SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Diquat (ppb)	20	20	0.97	ND-0.97(M)	Runoff from herbicide use	2017	No
VOLATILE ORGANIC CONTAMINANTS							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Toluene (ppb)	1000	1000	0.34	ND-0.34(M)	Discharge from petroleum factories	2017	No
STAGE 1 DISINFECTANT/DISINFECTION BY-PRODUCT (D/DBP) For the following parameters monitored under Stage 1 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids and/or TTHM (MCL 80 ppb). Range of results is the range of results (lowest to highest) at the individual sampling sites.							
Contaminant and unit of measurement	MCLG or MRDLG	MCL or MRDL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Chloramines (ppm)	4 ^E	4 ^F	3.3 ^C	0.60-5.30	Water additive used to control microbes	Daily 2017	No
TOTAL ORGANIC CARBON (TOC)							
Contaminant and unit of measurement	MCLG	MCL	Level detected	Range of monthly removal ratios	Likely source of contamination	Sampling date	TT violation
Total Organic Carbon Manatee	N/A	TT	1.30 ^C	1.11-1.88	Naturally present in the environment	Monthly 2017	No
Total Organic Carbon Peace River	N/A	TT	1.56 ^C	1.40-1.83	Naturally present in the environment	Monthly 2017	No
STAGE 2 DISINFECTANT/DISINFECTION BY-PRODUCT (D/DBP) For the following parameters monitored under Stage 2 D/DBP regulations, the level detected is the annual average of the quarterly averages: Bromate, Chloramines, Chlorine, Haloacetic Acids and/or TTHM (MCL 80 ppb). Range of results is the range of results (lowest to highest) at the individual sampling sites.							
Contaminant and unit of measurement	MCLG or MRDLG	MCL or MRDL	Level detected	Range of results	Likely source of contamination	Sampling date	MCL violation
Haloacetic Acids (Five) (HAA5) (ppb)	N/A	60	30	28-50 ^D	By-product of drinking water disinfection	Quarterly 2017	No
TTHM [Total Trihalomethanes] (ppb)	N/A	80	50	38-71 ^D	By-product of drinking water disinfection	Quarterly 2017	No
LEAD AND COPPER (TAP WATER)							
Contaminant and unit of measurement	MCLG	AL (action level)	90 th percentile result	No. of sites exceeding the AL	Likely source of contamination	Sampling date	AL exceeded
Copper (tap water) (ppm)	1.3	1.3	0.28	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	2017	No
Lead (tap water) (ppb)	0	15	1.6	0	Corrosion of household plumbing systems; erosion of natural deposits	2017	No

SARASOTA COUNTY PURCHASES 22 PERCENT OF ITS WATER FROM MANATEE COUNTY AND IS REQUIRED TO REPORT ANY VIOLATIONS.

^CThese values represent an annual average. ^DThese values represent values at individual sample sites. ^EThis value is a MRDLG (see definition at right). ^FThis value is a MRDL (see definition at right). (M) - Manatee County Water Source. (PR) - Peace River Water Source.

Ensuring quality

- Daily water samplings throughout the distribution system, including more than 120 samples, are analyzed monthly for bacteria content.
- Specialized samples from the treatment facilities and the distribution system are analyzed daily for treatment process control, surpassing even regulatory requirements.

What does this mean?

We have learned through our monitoring and testing that some compounds have been detected; however, the EPA has determined that your water meets all standards.

Maximum Contaminant Levels (MCLs) are set at very stringent levels. To exhibit the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Definitions

MRDLG - Maximum residual disinfectant level goal – 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.

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.

ND - Not detected – Not detected indicates the substance was not found by laboratory analysis.

TT - Treatment technique – A required process intended to reduce the level of a contaminant in drinking water.

AL- Action level- The concentration of a contaminant which, 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.

N/A – Not applicable.

NR – Not regulated.

NTU – Nephelometric turbidity unit – A measure of water clarity. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/l – Picocuries per liter – A measure of the radioactivity in water.

ppb – Parts per billion or micrograms per liter – One part by weight of analyte to 1 billion parts by weight of the water sample.

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