City of Sunrise 2018 Water Quality Consumer Confidence Report



Español: Este informe contiene information importante acerca de su agua potable. Por favor llame al (954) 888-6000 para adquirir una traducción o solicitar ayuda para entender el contenido.

SAWGRASS AREA

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water services we deliver every day. Our constant goal is to provide a safe and reliable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment processes and protect your water sources. We are committed to ensuring the quality of your water and we are proud that your drinking water meets or exceeds Federal and State Requirements.

This Consumer Confidence Report (CCR) has been prepared and is available on our website for our utility customers as required by the Environmental Protection Agency 40 Code of Federal Regulations (CFR) Part 141 requirements. Our customers receive a statement and a direct URL link on their water bill informing where they can view and print a copy of their CCR report.

Where does my water come from?

The City of Sunrise Utilities Department's drinking water is drawn from the Biscayne aquifer through a series of wells. The aquifer is replenished by surface water recharge that percolates into the aquifer through many feet of soil, sand and rock that act as natural filters to remove impurities. The City's Water Treatment Plants have a capacity to deliver 51.5 million gallons of water per day and the Utility serves approximately 225,000 people within Sunrise, Weston, Davie, and Southwest Ranches. The Utilities Department operates four well fields and three water treatment plants. Treatment of your water includes a membrane softening process followed by disinfection at the Sawgrass Water Treatment Plant. Treated water is stored to meet peak demand periods. Chlorine and ammonia are added for disinfection and fluoride is added for dental health purposes, within regulated limits.

Understanding Water Contaminants

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 that 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 storm water 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 storm water runoff, and residential uses.
- Organic Chemical Contaminants, include synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production. These can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, can be naturally occurring or be the result of oil and gas production and mining activities.

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.

In order to ensure that tap water is safe to drink, 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.

Lead in Tap Water

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. The City of Sunrise 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 www.epa.gov/safewater/lead.

Special Health Considerations

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 to infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Assessing Source Water Quality

In 2018 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment of our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. Potential sources of contamination are those facilities, sites, and activities that have the potential to affect the underlying ground water aquifers or nearby surface waters used for public drinking water supply. Many of these potential sources are regulated by FDEP and the location and status of these sites are maintained within FDEP databases. By utilizing in-house databases and a geographical

information system (GIS), FDEP can access and illustrate the relationships of potential contaminant sources to the public water supply intakes in Florida. Many of these facilities are regulated and operate under stringent construction and maintenance requirements designed to protect both human health and the environment. The purpose of conducting the source water assessments is to provide information that will lead to actions to reduce current risks or avoid future problems. There is one potential source of contamination identified for this system with a low susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://fldep.dep.state.fl.us/swapp/ or they can be obtained from Ted Petrides, Director of Plant Operations at (954) 888-6000.

What are Water Quality Standards?

Our drinking water standards, established by USEPA and the Florida Department of Environmental Protection (FDEP) set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking
 water. MCLs are set as close to the Maximum Contaminant Level Goals (MCLG) as feasible using the
 best available treatment technology.
- Maximum Residual Disinfectant Level (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.
- Primary Drinking Water Standard: MCLs for contaminants that affect health along with their monitoring and reporting.
- Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Locational Running Annual Average (LRAA): the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

How are Contaminants Measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L): one part by weight of the analyte to 1 million parts by weight of the water sample.
- Parts per billion (ppb) or micrograms per liter ($\mu g/L$): one part by weight of the analyte to 1 billion parts by weight of the water sample.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

What is a Water Quality Goal?

In addition to mandatory water quality standards, the USEPA has set voluntary water quality goals for some contaminants. These goals provide useful guide posts and direction for water management practices. The chart in this report includes two types of water quality goals:

- Maximum Contaminant Level Goal (MCLG): 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.
- Maximum Residual Disinfectant Level Goal (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.

2018 Water Quality Data

The City of Sunrise Utilities Department routinely monitors for contaminants in your drinking water according to Federal and State regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2018. Data obtained before January 1, 2018, and presented in this report are from the most recent testing done in accordance with the applicable state laws, rules, and regulations.

To determine how the quality of your drinking water compares to government standards, compare the "Level Detected" column with the maximum allowed "MCL" column.

Table 1- Microbiological Contaminants

Contaminant & Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Result	MCLG	TT	Likely Source of Contamination
Total Coliform Bacteria	Jan Dec. 2018	N	Negative	N/A	TT	Naturally present in the environment

Table 2- Inorganic Contaminants

Contaminant & Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	Apr-18	N	0.51	N/A	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7
Nitrate (as Nitrogen) (ppm)	Apr-18	N	0.063	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	Apr-18	N	0.0098	N/A	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	Apr-18	N	0.52	N/A	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	Apr-18	N	39.8	N/A	N/A	160	Salt water intrusion, leaching from soil

Table 3 – Disinfectants

For bromate, chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

Contaminant & Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range or Results	MRDLG	MRDL	Likely Source of contamination
Chloramines (ppm)	Jan Dec. 2018	N	2.4	0.1 to 3.9	4	4	Water additive used to control microbes

Table 4- Disinfection By-Products

Contaminant & Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range or Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	Jan Dec. 2018	N	18.7	0.83 to 23.0	N/A	60	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	Jan Dec. 2018	N	47	1.8 to 46.8	N/A	80	By-product of drinking water disinfection

Table 5 - Lead and Copper (Tap Water)

Contaminant & 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)	Jun-Sept 2017	N	0.074	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun-Sept 2017	N	3.4	2	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Precautionary Boil Water Notices

As part of ongoing efforts to protect the health of our communities, the state of Florida has developed rules that regulate how water utilities respond to water main breaks. According to the rules, if a water main breaks and its interior is exposed to groundwater, soil, or other foreign matter, a Precautionary Boil Water notice must be issued in the affected area. As the name implies, this is a precautionary measure, and more importantly, such a response is not necessary for most water leaks.

We understand that precautionary boil water notices can be a major inconvenience and we make every effort to avoid them. In the rare event that a significant break does occur, notices are distributed immediately through a high-speed telephone notification system (Code Red). A notice is lifted only after bacteriological testing confirms the water is safe to drink. We care about your safety and encourage you to follow the precautionary notice should one be issued in your area.

If you are listed in the telephone directory, you are automatically included on our call list. However, if you have moved within the last 12 months, or if you use a cell phone as your primary telephone, please take a moment to register your contact information with us online at www.sunrisefl.gov by clicking on the "Utilities" tab under the "Departments & Services" menu and then following the link for "Emergency Notification". If you do not have internet access and wish to register for Code Red call Ted Petrides at 954.888.6000.

CITY OF SUNRISE UTILITIES DEPARTMENT

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Commission meetings are held on the second and fourth Tuesdays of the month at 5:00 p.m. in the Commission Chambers on the first floor of City Hall (meeting dates and times are subject to change).