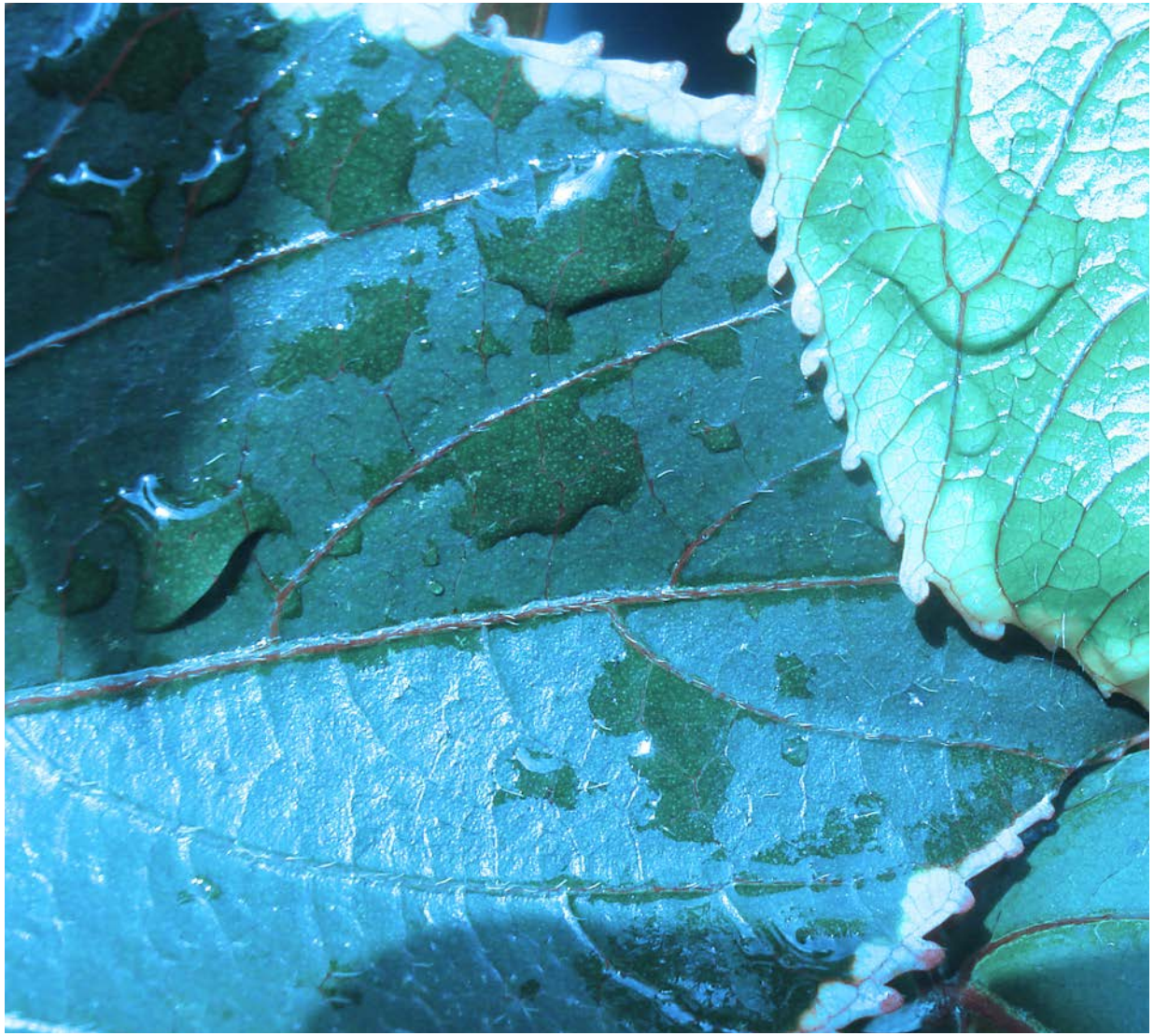


City of Titusville, Florida

The Water We Drink 2020

Annual Drinking Water Quality Report

2021 Edition

City of Titusville Water Resources

Charged with providing safe and dependable drinking water service to the residents, visitors, and businesses in the Titusville service area.

Our staff of water professionals is committed to ensuring the reliability and safety of your drinking water 24 hours a day, 7 days a week, 365 days a year.

When you turn on the tap, you expect the best; we work to make sure that is what you receive, the best quality drinking water possible.

This water quality report, also known as a consumer confidence report (CCR), is produced annually in accordance with both federal and state regulations.

Where Your Water Comes From

Florida's Surficial and Floridan Aquifers are the raw water sources for Titusville's drinking water. Water from Titusville's three wellfields is pumped to the Mourning Dove Water Treatment Plant. At the Mourning Dove, it is treated to drinking water quality prior to delivery to Titusville's homes and businesses.

In 2020, Titusville purchased less than two percent of its drinking water from the City of Cocoa.

Continuously tested and monitored from the time it is pumped out of the ground, until its delivery to your home and business

Treatment Process

1. *Coagulation.* Lime and a coagulant are mixed with the raw water to reduce hardness and to remove any suspended solids.
2. *Disinfection.* The water is injected with chlorine for disinfection, carbon dioxide (CO_2) to stabilize pH, fluoride to promote dental health, and ammonia. The ammonia combines with the chlorine to form chloramines. Chloramines reduce any chlorine taste or smell in the finished water and helps to maintain disinfectant residual in the distribution system.
3. *Filtration.* The treated water passes through rapid sand filters to remove any remaining impurities prior to storage.

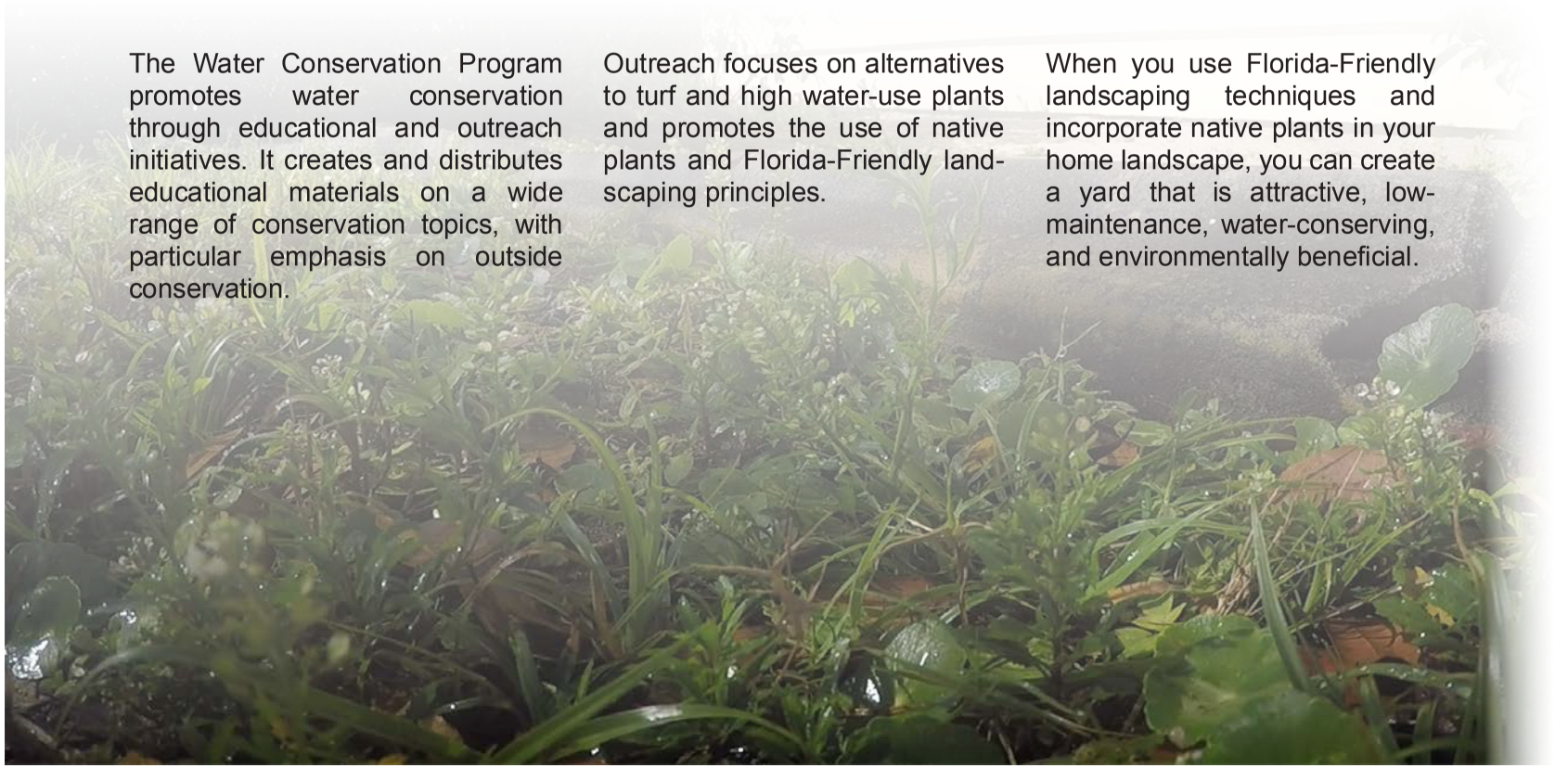
Additional information on drinking water is available from the EPA Safe Drinking Water Hotline (800) 426-4791.

Conservation is key to increasing the sustainability of water supplies

The Water Conservation Program promotes water conservation through educational and outreach initiatives. It creates and distributes educational materials on a wide range of conservation topics, with particular emphasis on outside conservation.

Outreach focuses on alternatives to turf and high water-use plants and promotes the use of native plants and Florida-Friendly landscaping principles.

When you use Florida-Friendly landscaping techniques and incorporate native plants in your home landscape, you can create a yard that is attractive, low-maintenance, water-conserving, and environmentally beneficial.



Spring & Summer Irrigation Schedule
March 14, 2021 — November 7, 2021

Even-Numbered Residential Addresses	Thursday & Sunday
Odd-Numbered Residential Addresses	Wednesday & Saturday
All Commercial & Non-Residential Addresses	Tuesday & Friday

Fall & Winter Irrigation Schedule
November 7, 2021 — March 13, 2022

Even-Numbered Residential Addresses	Sunday Only
Odd-Numbered Residential Addresses	Saturday Only
All Commercial & Non-Residential Addresses	Tuesday Only

50% of all household water use is outside

50% of all water used outside is wasted

Sources

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:

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

(E) Radioactive contaminants, which can be 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, 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 (800) 426-4791.

EPA Guidance On Drinking Water
EPA Guidance On Drinking Water
EPA Guidance On Drinking Water

Vulnerability

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. The Environmental Protection Agency (EPA)/Center 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 Drinking Water Hotline at (800) 426-4791.

EPA Guidance On Drinking Water

Lead

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 Titusville Water Resources Department 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.

EPA Guidance On Drinking Water

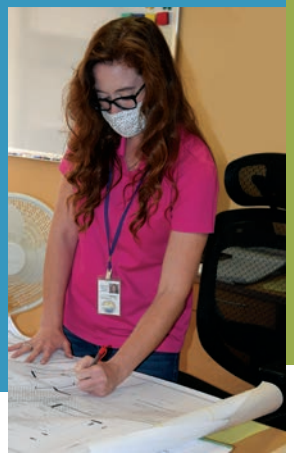
SWAPP ensures that Florida's drinking water is safe at its sources

Through the Source Water Assessment and Protection Program (SWAPP), the Florida Department of Environmental Protection (FDEP) performs assessments on public water systems to help communities understand potential threats to their water supply.

Titusville's 2020 assessment identified 16 unique potential contaminant sources. Susceptibility scores ranging from 6.66 to 25 and concern levels from low to moderate. Titusville's assessment results can be obtained from Titusville's Water Production Division, (321) 567-3855 or found on the FDEP's website https://fldep.dep.state.fl.us/swapp/.

The City of Cocoa's 2020 source water assessment can be obtained from the City of Cocoa, (321) 433-8705 or email ddowns@cocoafl.org or at FDEP's website https://fldep.dep.state.fl.us/swapp/.

The Water We Drink 2020 — designed to inform you about your drinking water & drinking water utility



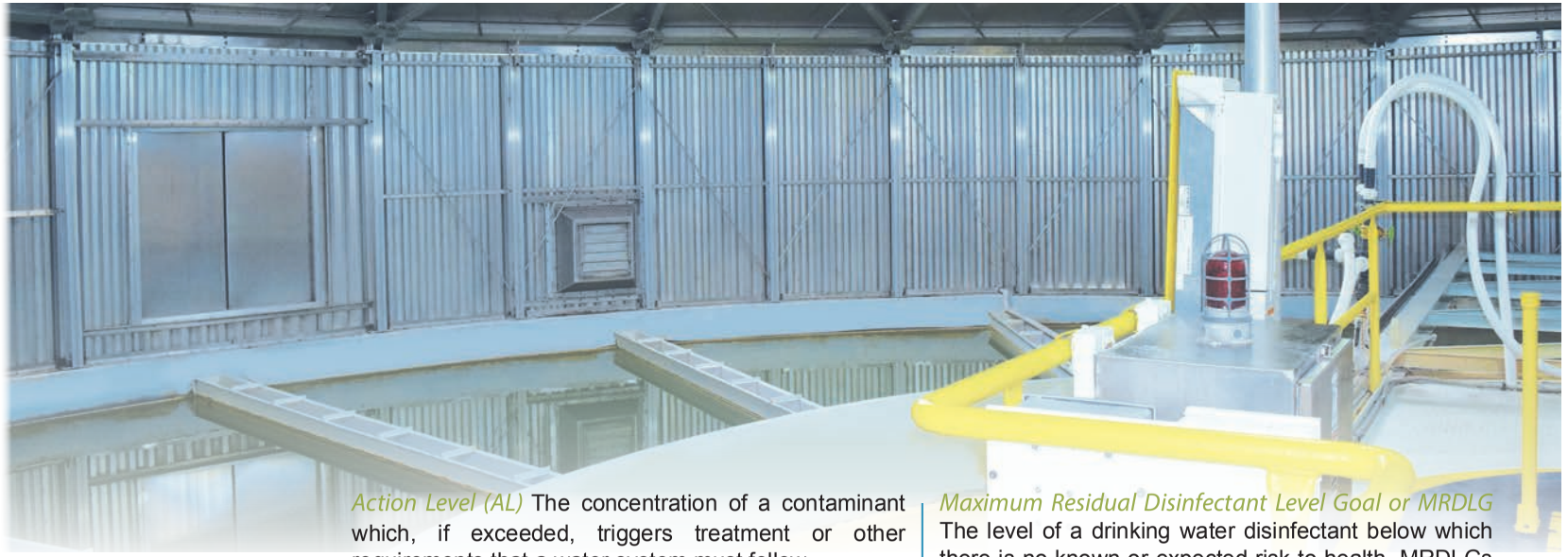
Citizen input is a vital to our utility

The public is invited to attend Titusville City Council meetings to learn more about their utility and its services. Meetings are regularly held on the second and fourth Tuesday of each month at 6:30 p.m. in the Council Chamber at City Hall. City Hall is located at 555 S. Washington Avenue in Titusville, Florida.

The water quality testing results shown in this report are from drinking water monitoring performed by Titusville Water Resources during 2020.

Titusville routinely monitors 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 through 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 laws, rules, and regulations.



Terms & Abbreviations

Understanding the terms used in the tables in this report:

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

Maximum Contaminant Level or MCL 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.

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. MCLGs 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.

N/A Not applicable.

Parts per billion (ppb) One part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) One part by weight of analyte to 1 million parts by weight of the water sample.

Testing Results

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected[1]	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	07/20	N	0.70	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	07/20	N	0.0058	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cyanide (ppb)	07/20	N	11	N/A	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	07/20	N	0.71	N/A	4	4	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
Nitrate (as Nitrogen) (ppm)	09/20	N	0.082	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	07/20	N	40	N/A	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

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 Contamination
Chlorine & Chloramines (ppm)[2]	2020 (Monthly)	N	3.4	0.6 - 4.9	MRDLG=4	MRDL=4.0	Water additive used to control microbes

Stage 2 Disinfectants and Disinfection By-Products[3]

Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	2020 (Quarterly)	N	20.75	4.10-30.90	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2020 (Quarterly)	N	9.61	3.85-13.13	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and 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)	08/20, 09/20	N	0.0286	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	08/20, 09/20	N	<1.4	1	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Table Notes

[1]Results in the *Level Detected* column for inorganic contaminants are the highest detected level at any sampling point.

[2]For Chlorine & Chloramines, 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 individual samples collected during the past year.

[3]For Haloacetic Acids (HAA5) and Total Trihalomethanes (TTHM), *Level Detected* is the highest RAA, computed quarterly, of quarterly averages of all samples collected. The *Range of Results* is the range of individual sample results (lowest to highest) for all monitoring locations.

As authorized and approved by the Environmental Protection Agency (EPA), the State of Florida has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of our data, though representative, is more than one year old.

Less than two percent of Titusville's water came from the City of Cocoa in 2020. Cocoa monitors for *Cryptosporidium,* a microbial parasite found in surface water throughout the United States.

Cocoa detected *Cryptosporidium* in its untreated surface water in two out of twenty-five samples tested from 2006 through 2008. Cocoa sampled Taylor Creek Reservoir for *Cryptosporidium* once a month from October, 2006 through October, 2008 in accordance with FDEP's Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Cocoa again tested per LT2 compliance from March, 2015 to March, 2017. Although filtration can remove *Cryptosporidium*, it does not guarantee 100 percent removal. To ensure the highest possible removal rate, Cocoa ozonates all surface water. Ozone is a powerful disinfectant that destroys *Cryptosporidium*.

Cryptosporidium may cause serious illness in immuno-compromised persons. These individuals should consult their health care provider. For further information on Cocoa's water quality, contact the City of Cocoa at (321) 433-8705.

Promoting a dialogue between Titusville water customers and Titusville Water Resources

This report is available online at titusville.com/ccr and on the Water Resources pages at www.titusville.com.

Copies are also available at the Mourning Dove Water Production Plant (2836 Garden Street, Titusville).To request a copy by mail, call (321) 567-3865.

Questions about this report or water quality?

Call Water Resources
Water Production Superintendant
(321) 567-3877

City of Titusville Water Resources

2836 Garden Street
Titusville, FL 32796
(321) 567-3855

For more information on Titusville water, including job opportunities, visit www.titusville.com.