

**Okeechobee Utility Authority
Surface Water Treatment Plant
2019 Annual Drinking Water Quality Report
The Water We Drink**

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. 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. Our water source is Lake Okeechobee for the Surface Water Treatment Plant. After treatment, the water is pumped from the plant into the water distribution system. The Surface Water Treatment Plant treats water from Lake Okeechobee by coagulation, filtration, ozonation and chloramines for disinfection. In December 2016, we stopped producing water at the Ground Water Treatment Plant. All of our water now comes from the Surface Water Treatment Plant and the Ground Water Plant is used as a storage and repump station.

Este documento contiene información importante sobre su agua potable. Si desea una copia en español, llame al (863) 763-9460.

In 2018, Florida's DEP conducted a Source Water Assessment (SWA) of the Surface Water plant. This assessment was conducted to provide information about any potential sources of contamination in the vicinity of your water supply. The surface water system intake is at high risk from numerous potential sources of contamination present within the assessment area of the lake. These sources include petroleum storage tanks, industrial and domestic wastewater facilities, a CERCLA site, a Superfund site, and injection wells. The SWA report for this system is available at the DEP SWAPP web site: at <https://fldep.dep.state.fl.us/swapp/>

This report shows our water quality results and what they mean.

If you have any questions about this report or concerning your water utility, please contact **Kevin Rogers (863) 763-3239**. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 8:30 AM at 100 SW 5th Avenue.

Okeechobee Utility Authority 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 to December 31, 2019. Data obtained before January 1, 2019, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

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/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 (800-426-4791).

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.

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 or on-line at their web site <https://www.epa.gov/sdwa>

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

Term Appearing in Table	Definition
<i>Maximum Contaminant Level or MCL</i>	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.
<i>Maximum Contaminant Level Goal or MCLG</i>	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.
<i>Locational Running Annual Average (LRAA)</i>	The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
<i>Maximum residual disinfectant level or MRDL</i>	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.
<i>Maximum residual disinfectant level goal or MRDLG</i>	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.
<i>Nephelometric Turbidity Unit (NTU):</i>	Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
<i>Not Detected or “ND”</i>	Means not detected and indicates that the substance was not found by laboratory analysis.
<i>Parts per billion (ppb) or Micrograms per liter (µg/l):</i>	One part by weight of analyte to 1 billion parts by weight of the water sample.
<i>Parts per million (ppm) or Milligrams per liter (mg/l):</i>	One part by weight of analyte to 1 million parts by weight of the water sample.
<i>Picocurie per liter (pCi/L)</i>	Measure of the radioactivity in water.
<i>Treatment Technique (TT)</i>	A required process intended to reduce the level of a contaminant in drinking water.

Water Quality Test Results

Microbiological Contaminants

The result in the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operating Report meeting the required turbidity limits.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	1/1/19-12/31/19	N	0.34	100%	N/A	TT	Soil runoff

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.

Radioactive Contaminants

Results in the Level Detected column for radioactive contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

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
Radium 226 + 228 or combined radium (pCi/L)	4/17	N	0.83	N/A	0	5	Erosion of natural deposits

Inorganic Contaminants

Results in the Level Detected column for inorganic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

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
Barium (ppm)	7/19	N	0.024	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	7/19	N	2.1	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppb)	7/19	N	2.5	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	2/19, 4/19, 7/19, 10/19	N	0.326	0.225-0.326	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	2/19, 4/19, 7/19, 10/19	N	0.012	ND-0.0243	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	7/19	N	41.5	N/A	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

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

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
Chloramines (ppm)	Monthly 2019	N	2.1	0.6-3.5	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total organic carbon	Monthly 2019	N	1.60	1.14-2.86	N/A	TT	Naturally present in the environment

Stage 2 Disinfectants and Disinfection By-Products

The “level detected” is the highest locational running annual average (LRAA) for the year, calculated each quarter. The “range of results” is the range of individual sample results for the year.

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)	3/19, 6/19, 9/19, 12/19	Y	64.3 (highest LRAA at Sample Site S-3)	22.4-126.0	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	3/19, 6/19, 9/19, 12/19	N	38.2	18.6-47.1	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)	11/17	N	0.24	1	1.3	1.3	Corrosion of household plumbing systems
Lead (tap water) (ppb)	11/17	N	2.1	0	0	15	Corrosion of household plumbing systems

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. **Our water system was in violation of the maximum contaminant level (MCL) for haloacetic acids (HAAs) during the 3rd and 4th calendar quarters of 2019.** Compliance with the MCL for HAAs is based on the locational running annual average (LRAA) and is updated each quarter with the most recent results. One sample collected in September 2019 had an unusually high result. This caused the LRAA for the 3rd quarter to exceed the MCL. The next sample collected at the site in December was below the MCL, but because of the high result from September, the LRAA for 4th quarter still exceeded the MCL. **The highest LRAA was 64.3 for the 4th quarter. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.**

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. Okeechobee Utility Authority 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 <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. More information is available at <https://floridadep.gov/waste/permitting-compliance-assistance/content/pharmaceutical-waste-management-businesses-and>

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

We at Okeechobee Utility Authority would like 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 or concerns about the information provided, please feel free to call any of the numbers listed.