

2018 Annual Water Quality Report Barefoot Bay Water Treatment Facility, PWS #3050057



Brevard County Utility Services Department is pleased to present this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand, and be involved in, the efforts we make to continually improve the water treatment process. Please be sure to review the chart on Pages 3 and 4 for the summary of water quality data collected during 2018.

Where does my water come from and How is it Treated?

The Barefoot Bay Water Treatment Facility obtains groundwater from the Sand and Gravel aquifer from eight wells located in the Barefoot Bay area. The raw groundwater enters the plant where it is softened with lime to reduce hardness and suspended solids. After the pH is adjusted with carbon dioxide, chlorine and ammonia are added for the chloramination disinfection process. The water then passes through multi-media filters for polishing and to remove any remaining particles.

Source Water Assessment

In 2018 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are three unique potential sources of contamination identified for this system with low susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

Community Participation

We encourage all interested customers to attend the Brevard County Board of County Commissioner's regularly scheduled meetings held at the Viera Government Center. Please contact the County Manager's office at (321) 633-2001 to confirm day, time and location of the meetings. And thank you for taking the time to review this summary of your water quality!

How to Contact Us:

For questions about this report, your drinking water, or for additional copies of this report, please contact:

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The US Environmental Protection Agency wants you to know:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer under-going 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. Environmental Protection Agency (EPA) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791).

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 EPA’s Safe Drinking Water Hotline at 1-800-426-4791.

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. We are 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 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.

Table of Definitions

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 Contaminant Level (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.

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

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.

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.

ppm = Parts Per Million - one part by weight of analyte to 1 million parts by weight of the water sample.

ppb = Parts Per Billion - one part by weight of analyte to 1 billion parts by weight of the water sample.

pCi/L = Picocurie Per Liter - measure of the radioactivity in water.

Not Applicable (N/A): does not apply to this section

Inorganic Contaminants

Contaminant and Unit of Measure	Sampling Date	Maximum Contaminant Level Violation Y/N	Level Detected	Range of Results	Maximum Contaminant Level Goal	Maximum Contaminant Level	Likely Source of Contamination
Fluoride (parts per million)	6/2017	N	0.23	Not Applicable	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

Contaminant and Unit of Measure	Sampling Date	Maximum Contaminant Level Violation Y/N	Level Detected	Range of Results	Maximum Contaminant Level Goal	Maximum Contaminant Level	Likely Source of Contamination
Sodium (parts per million)	6/2017	N	74.1	Not Applicable	Not Applicable	160	Salt water intrusion; leaching from soil
Barium (parts per million)	6/2017	N	0.0055	Not Applicable	2	2	Discharge of drilling wastes; discharge from metal refineries

Stage 2 Disinfectants and Disinfection By-Products

Disinfectant/Contaminant and Unit of Measure	Sampling Date	Maximum Contaminant Level Violation Y/N	Level Detected	Range of Results	Maximum Contaminant Level Goal	Maximum Contaminant Level	Likely Source of Contamination
Chloramines (parts per million)	1-12/2018	N	3.5	1.5-3.5	4	4	Water additive used to control microbes
Haloacetic Acids 5 (parts per billion)	7/2018	N	15.5	14.1-15.5	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (parts per billion)	7/2018	N	15.5	12-15.5	NA	80	By-product of drinking water disinfection

Lead and Copper

Contaminant and Unit of Measure	Sampling Date	Action Level Exceeded Y/N	90 th Percentile Result	Number of Sampling Sites Exceeding the Action Level	Maximum Contaminant Level Goal	Action Level	Likely Source of Contamination
Copper – Tap Water (parts per million)	8/2017	N	0.0084	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead – Tap Water (parts per billion)	8/2017	N	4.3	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Please note: Contaminants with sampling dates prior to 2018 were analyzed per the Florida Department of Environmental Protection’s approved schedule for those contaminants.