2023 Annual Water Quality Report



PWS ID# 3050057
Barefoot Bay Water Treatment Facility

Brevard County Utility Services 2725 Judge Fran Jamieson Way, A-213 Viera, FL 32940-2093



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A Message to Customers

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 other 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



Figure 1. Sign for Barefoot Bay Water and Sewer District Water Treatment Facility.

process. We routinely monitor your drinking water for contaminants in accordance with 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, 2023. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Data obtained before January 1, 2023, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

How to Obtain a Printed Copy of this Report

This water quality report, also known as a Consumer Confidence Report, is produced annually in accordance with both federal and state requirements. This report will be mailed to customers only upon request by calling (321) 350-8374. It is also available at the Barefoot Bay Billing Office, 931 Barefoot Blvd #2, Barefoot Bay, FL 32976. For more information about this report, for questions relating to your drinking water, or for additional hard copies of this report, please view https://www.brevardfl.gov/UtilityServices/Home.

Community Participation

We encourage all interested customers to attend the Brevard County Board of County Commissioners 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.



Figure 2 - Emergency Alerts Brevard County

Boil Water Notice Hotline

Did you know you can check on the status of Boil Water Notices in your area at any time? Just call the Boil Water Notice Hotline at (321) 633-2118.

Emergency Notification Registration

Brevard County Utility Services Department suggests all residents register their unlisted landline, cell phone and/or email address with the Brevard County Emergency Operations Center (EOC). The EOC will be able to contact residents in the event of a disaster, boil water notice, or other related emergency.

Alert Brevard notifications are action-oriented safety messages based on your physical address. If you register phone numbers and/or email addresses with Alert Brevard, you can receive automated notifications about boil-water notices, shelter-in-place or evacuation orders, law enforcement activity, etc. for your area.

Register by going to <u>www.embrevard.com</u> and clicking "Alert Signup." If you do not have access to the internet, please call (321) 637-6670.





The US Environmental Protection Agency (EPA) 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 undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the EPA's Safe Drinking Water Hotline at (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 EPA's Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Water Supply Sources

Where Does My Water Come From?

The Barefoot Bay Water Treatment Facility obtains groundwater from the Surficial Aquifer from eight wells located in the Barefoot Bay area.

How is it Treated?

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 chlorination disinfection process. The water then passes through multi-media filters for polishing and to remove any remaining particles.

Source Water Assessment

In 2023, the Florida Department of Environmental Protection (FDEP) 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 were three unique potential sources of contamination identified for this system, with a low susceptibility concern level. The assessment results are available at the FDEP Source Water Assessment and Protection Program website.

Contaminants That May Be Present in Source Water

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, which 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 stormwater 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 stormwater runoff and residential uses.
- 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.
- 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 U.S. 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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Testing Results

Understanding Your Water Quality Results

We have included a summary of contaminant and by products found on pages 8-9.

Water Quality Terms Defined

- 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.
- Parts Per Million (ppm) one part by weight of analyte to 1 million parts by weight of the water sample.
- Parts Per Billion (ppb) one part by weight of analyte to 1 billion parts by weight of the water sample.
- Not Applicable (N/A): Does not apply to this section.

Summary of Contaminants and By-products

Inorganic Compounds

Table 1 - Inorganic Compounds

Contaminant and Unit of Measure	Sampling Date (MM/YY)	MCL Violation (Y/N)	Level Detected	MCLG	MCL	Likely Source of Contamination
Sodium (ppm)	5/23	N	54.9	N/A	160	Salt water intrusion; leaching from soil
Barium (ppm)	5/23	N	0.0045	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate as N (ppm)	5/23	N	0.03	10	10	Runoff from fertilizer use; leaching from septic tanks; erosion from natural deposits
Fluoride (mg/L)	5/23	Υ	0.19	N/A	.015	Leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

Table 2 - Stage 1 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measure	Sampling Date (MM/YY)	MCL Violation (Y/N)	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chloramines (ppm)	1-12/23	N	2.1	1.0-3.5	4	4	Water additive used to control microbes

Stage 2 Disinfectants and Disinfection By-Products

Table 3 - Stage 2 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measure	Sampling Date (MM/YY)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	7/23	N	18.7	14.9- 18.7	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/23	N	35.2	18.8- 35.2	N/A	80	By-product of drinking water disinfection

Lead and Copper

Table 4 - Lead and Copper

Contaminant and Unit of Measure	Sampling Date (MM/YY)	AL Violation (Y/N)	90th Percentile Result	No. of Sampling Sites Exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper – Tap Water (ppm)	1/23	N	0.02	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead – Tap Water (ppb)	1/23	N	3.2	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Secondary Contaminants

Table 5 - Secondary Contaminants

Contaminant and Unit of Measure	Sampling Date (MM/YY)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Color	7/23	Y	30	N/A	N/A	15	Naturally occurring organics

In 2023, our system exceeded the MCL for color. Secondary contaminants are considered to be aesthetic violations, and they are not considered to have major health effects.