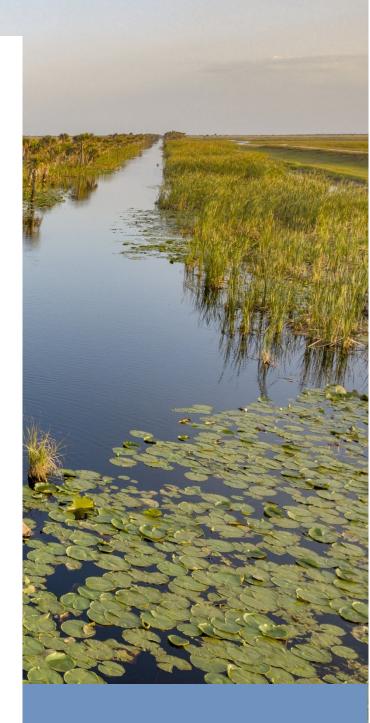
# **Annual Water Quality Report 2021**



PWS ID # 3050057

**Barefoot Bay Water Treatment Facility** 

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





# **Barefoot Bay Water Quality Report**

### 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 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. We routinely monitor 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, 2021. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. Data obtained before January 1, 2021 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 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 <a href="https://www.brevardfl.gov/UtilityServices/DrinkingWater">https://www.brevardfl.gov/UtilityServices/DrinkingWater</a>.

### **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.



### **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 321-952-4610.

### **Register for Emergency Notifications**

Brevard County Utilities suggests all residents register their unlisted landline, cell phone and/or email address with the Brevard County Emergency Operations Center. Emergency Operations will be able to contact residents in the event of a disaster, boil water notice, or other 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 <a href="https://www.embrevard.com">www.embrevard.com</a> and click "Alert Signup". If you do not have access to the internet, please call 321-637-6670.

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

### **Source Water Assessment**

In 2021 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 a low susceptibility concern level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <a href="https://www.dep.state.fl.us/swapp">www.dep.state.fl.us/swapp</a>.



# 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 undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune sy



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).

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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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**

**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.



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 1-800-426-4791.

# **Water Quality Testing Results**

### **Understanding Your Water Quality Results**

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

**Barium**. In 2020 Barium was detected at a level of 0.0038 ppm, which is below the maximum acceptable limit of 2 ppm. Barium may be found in drinking water due to discharge of drilling wastes, discharge from metal refineries, or erosion of natural deposits.

**Sodium**. In 2020 Sodium was detected at a level of 54.1 ppm, which is below the maximum acceptable limit of 160 ppm. Sodium may be found in drinking water due to salt water intrusion or leaching from soil

**Chloramines**. In 2021 chloramines were detected at an average level of 3.5 ppm, which is below the acceptable limit of 4 ppm. Chloramines are added to drinking water to control microbes.

**Haloacetic Acids**. In 2021 Haloacetic Acids were detected at a level of 23 ppb, which is below the maximum acceptable limit of 60 ppb. Haloacetic Acids are a byproduct of drinking water disinfection.

**Total Trihalomethanes**. In 2021 Total Trihalomethanes were detected at a level of 26.1, which is below the maximum acceptable limit of 80 ppb. Total Trihalomethanes are a by-product of drinking water disinfection.

**Copper**. In 2020 Copper was detected at a level of 0.0085 ppm, which is below the maximum acceptable limit of 1.3 ppm. Copper may be found in drinking water due to corrosion of household plumbing systems, erosion of natural deposits, or leaching from wood preservatives.

**Lead**. In 2020 Lead was detected at a level of 1.6 ppb, which is below the maximum acceptable limit of 15 ppb. Lead may be found in drinking water due to corrosion of household plumbing systems or erosion of natural deposits.

**Odor**. In 2020 Odor was detected at a level of 4, which is above the maximum acceptable limit of 3. Odor may be present in drinking water due to naturally occurring organics. No adverse health effects are generally associated with the secondary drinking water contaminants, such as odor. At considerably higher concentrations than those listed in the standards, health implications may exist as well as aesthetic degradation.

### **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.

**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.

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

# **Inorganic Contaminants**

Contaminant and Unit of Measure	Sampling Date (mo./yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	5/2020	No	0.0038	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Sodium (ppm)	5/2020	No	54.1	NA	160	Salt water intrusion; leaching from soil

# **Stage 1 Disinfectants and Disinfection By-Products**

Contaminant and Unit of Measure	Sampling Date (mo./yr.)	MCL Violatio n Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chloramines (ppm)	1-12/2021	No	3.5	2.1-3.5	4	4	Water additive used to control microbes

# **Stage 2 Disinfectants and Disinfection By-Products**

Contaminant and Unit of Measure	Sampling Date (mo./yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	7/2021	No	23	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2021	No	26.1	NA	80	By-product of drinking water disinfection

# **Lead and Copper**

Contaminant and Unit of Measure	Sampling Date (mo./yr.)	AL Violation Y/N	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper – Tap Water (ppm)	8/2020	No	0.0085	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead – Tap Water (ppb)	8/2020	No	1.6	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

# **Secondary Contaminants**

Contaminant and Unit of Measure	Sampling Date (mo./yr.)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination
Odor (threshold odor number)	5/2020	Yes	4	NA	3	Naturally occurring organics

<u>Note</u>: During the 2020 sampling, our water system incurred a violation related to odor, which is considered to be a secondary drinking water contaminant. No adverse health effects are generally associated with the secondary drinking water contaminants. At considerably higher concentrations than those listed in the standards, health implications may exist as well as aesthetic degradation.