

2024



Consumer Confidence Report

TESTING PERFORMED IN 2023 PWS# 3050442



A Message From Your Utilities Provider:

The Palm Bay Utilities Department (PBUD) is pleased to present our valued customers with the 2024 Annual Water Quality Report. This report is designed to inform you about the quality services we provide to the community. Our goal is to deliver a safe and dependable supply of drinking water to all our customers within the PBUD's service area. This report will help you understand the efforts we make each day to improve water quality and continuously protect our water resources.

If you have questions about this report or your Utility service, please do not hesitate to contact us at 321.952.3410 or visit www.pbud.org.

PALM BAY'S WATER

Our mission as a public utility is to provide superior drinking water and advanced treatment and disposal of wastewater through an effective utility system, reflecting responsible environmental stewardship and striving for 100% customer satisfaction. We do our job with pride and are committed to ensuring the quality of your water.

"Our mission as a public utility is to provide superior drinking water and advanced treatment and disposal."

The City of Palm Bay utilizes groundwater from 41 wells located throughout the City, which supply PBUD's two water treatment facilities. This water is drawn from the Floridan Aquifer at a depth of 850 feet and surficial aquifers at depths ranging from 80 to 150 feet and is treated using processes known as lime-softening and reverse osmosis. Both treatment processes include disinfection prior to entering our distribution system and being delivered to our customers.

SOURCE WATER ASSESSMENT

To ensure that public drinking water is compliant with national standards set by the Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP) initiated a program called SWAPP – Source Water Assessment and Protection Program. This program is intended to ensure that drinking water is safe at the tap and the source.

In 2023, the FDEP performed a Source Water Assessment of PBUD's water treatment system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our groundwater wells.

The evaluation showed 15 potential sources of contamination identified for this system with low to moderate susceptibility levels. The expanded results of the City of Palm Bay's Source Water Assessment are available for viewing at:

https://prodapps.dep.state.fl.us/swapp/Welcome/links/search_pws_v



Scan the code here to access the above link.



Drink.
Live.
Play.

"PBUD routinely monitors for contaminants in your drinking water..."

TESTING INFORMATION

PBUD routinely monitors for contaminants in your drinking water following Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring from the period of January 1, 2023, to December 31, 2023. Data obtained before January 1, 2023, presented in this report, was obtained from the most recent testing performed under the applicable laws, rules, and regulations.

IMPORTANT HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals 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 healthcare providers.

The EPA's Centers for Disease Control and Prevention guidelines on the appropriate means of lessening the risk of infection by parasites (cryptosporidium) and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated lead levels 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.

PBUD is responsible for providing high-quality drinking water but cannot control the variety of materials used in home plumbing components. When the water has been sitting for several hours within the in-home plumbing, one can minimize the potential for lead exposure by flushing the 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 want to have your pipes tested. Information on lead, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline at (800) 426-4791 or by visiting www.epa.gov.

DRINKING WATER 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.

"PBUD routinely monitors for contaminants in your drinking water..."

DRINKING WATER SOURCES CONTINUED...

(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 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

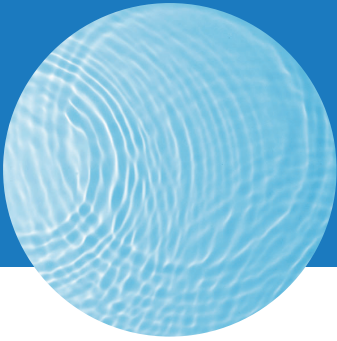
VIOLATIONS & MONITORING

Monitoring (TOTAL TRIHALOMETHANES/HALOACETIC ACIDS):

We are required to regularly monitor your drinking water for specific contaminants and record the location running annual average (LRAA) quarterly. During the January through March 2023 monitoring period, we tested for Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5) as regulated by the Florida Department of Environmental Protection (FDEP). The TTHM compliance limit is 80 parts per billion, and we found that at one location in the Town of Malabar, the LRAA for TTHMs exceeded this limit at 82.75* ug/L during the 1st Quarter of 2023. However, the routine analysis for the remaining quarters of 2023 was within acceptable limits.

Monitoring (LEAD & COPPER):

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. This includes monitoring for lead at customers' taps. In September 2023, lead levels at two taps sampled exceeded the action level (AL) of 15 parts per billion (ppb). The test results table shows the 90th percentile result and the number of sampling sites exceeding the AL.



KEY TERMS TO KNOW

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

Alkalinity (Total & Phenolphthalein): The capacity of water to neutralize acids. Is a measure of how much acid must be added to water to lower the pH.

Ammonia: Both chlorine and small amounts of ammonia are added to the water, which reacts together to form chloramines (also called combined chlorine), a long-lasting disinfectant. It is also naturally occurring in water.

Chloride: Water high in sodium chloride will taste unpleasant and can damage plants if used for watering or irrigation. It is also highly corrosive and can damage plumbing, causing toxic metals to leach into the water. Water high in sodium chloride can damage appliances and hot water heaters over time.

Conductivity: A measure of the ability of a solution (water) to carry an electric current.

Hardness (Total, Calcium & Magnesium): Caused by calcium and magnesium ions. Hard water can cause scale when the water evaporates or when heated in household hot water heaters and piping. Hardness-producing substances in water also combine with soap to form insoluble precipitates.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four quarters.

Maximum Contaminant Level or MCL: The highest level of contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Maximum Residual Disinfectant Level or MRDL: The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal or MRLDG: The level of a drinking water disinfectant below which there is no known or expected risk to health.

Non-Detects (ND): Indicates that the substance was not found by laboratory analysis.

Parts per billion (ppb) or Micrograms per Liter ($\mu\text{g}/\text{l}$): One part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) or Milligrams per Liter (mg/l): One part by weight of analyte to 1 million parts by weight of the water sample.

Picocurie per Liter (pCi/L): Measure of the radioactivity in water.

Running Annual Average (RAA): The average of sample analytical results for samples taken during the previous four calendar quarters.

2023 TESTING DATA

RADIOLOGICAL CONTAMINANTS

Contaminant	POE Samples	Date of Sample	MCL/AL Violation	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Alpha Emitters	South Regional ASR Well	03/01/2023 Jan-Dec 2023	No	2.7 0.69 (RAA)	N/A ND – 4.4	0 0	15 15	Erosion of natural deposits.
Combined Radium	ASR Well North Regional South Regional	Jan-Dec 2023 03/01/2023 03/01/2023	No No No	0.79 (RAA) 0.6 1.0	0.4 - 1.2 N/A N/A	0 0 0	5 5 5	Erosion of natural deposits.

INORGANIC CONTAMINANTS

Contaminant	Units	POE Samples	Date of Sample	MCL/AL Violation	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Arsenic	ppb	ASR Well	Jan-Dec 2023	No	0.94 (average)	ND – 2.6	N/A	10	Erosion of natural deposits; runoff from orchards; runoff from glass & electronics production waste.
Barium	ppm	North Regional South Regional ASR Well	03/01/23 03/01/23 03/01/23	No No No	0.0078 0.017 0.011	N/A N/A N/A	2 2 2	2 2 2	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries.
Fluoride	ppm	North Regional South Regional ASR Well	03/01/23 03/01/23 03/01/23	No No No	0.18 0.13 0.22	N/A N/A N/A	4 4 4	4 4 4	Erosion of natural deposits; discharge from fertilizer & aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7.
Lead	ppb	ASR Well	03/01/23	No	1.3	N/A	0	15	Residue from man-made pollution such as auto emissions & paint; lead pipe, casing & solder.
Nitrate (as Nitrogen)	ppm	North Regional South Regional ASR Well	03/01/23 03/01/23 03/01/23	No No No	0.074 0.075 0.34	N/A N/A N/A	10	10	Runoff from fertilizer use; leaching from septic tank, sewage; erosion of natural deposits.
Nitrite (as Nitrogen)	ppm	North Regional South Regional ASR Well	03/01/23 03/01/23 03/01/23	No	0.068 0.097 0.10	N/A	1	1	
Sodium	ppm	North Regional South Regional ASR Well	03/01/23 03/01/23 03/01/23	No No No	76 65 97	N/A N/A N/A	N/A N/A N/A	160 160 160	Saltwater intrusion, leaching from soil.

LEAD & COPPER HOME SAMPLING

Contaminant	Units	Date of Sample	MCL/AL Violation	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Copper (tap water)	ppm	Sep- 2023	No	0.062 (90 th percentile)	No sample sites exceeded AL.	1.3	AL = 1.3	Erosion of natural deposits; corrosion of household plumbing systems; leaching from wood preservatives.
Lead (tap water)	ppb	Sep- 2023	No	2.2 (90 th percentile)	Two sample sites exceeded AL.	0	AL = 15	Erosion of natural deposits; corrosion of household plumbing systems.

2023 TESTING DATA CONT.

TTHM'S & STAGE 1 DISINFECTANT/DISINFECTION BY-PRODUCT (D/DBP) CONTAMINANTS

Contaminant	Units	Date of Sample	MCL/AL Violation	Level Detected	Range	MCLG	MCL	Likely Source of Contamination
Chloramines	ppm	2023	No	3.0 (running annual average)	0.1 – 4.0	MRDLG = 4.0	MRDL = 4.0	Water additive used to control microbes.
Haloacetic Acids	ppb	2023	No	31.34 (locational annual average)	1.97 – 29.54	N/A	MCL = 60	By-product of drinking water disinfection.
TTHM (Total Trihalomethanes)	ppb	2023	Yes	82.75* (locational annual average)	2.78 – 82.3	N/A	MCL = 80	By-product of drinking water disinfection.

*See pg. 04. Description of public notice for exceedance of MCL for TTHMs

PWS NO. 3050442 PALM BAY UTILITIES - TEST RESULTS SECONDARY WATER STANDARDS FOR YEAR 2023

Contaminant	POE Samples	Date of Sample	MCL/AL Violation	Level Detected	MCLG	MCL	Likely Source of Contamination
Color (color units)	North Regional Plant ASR Well	03/01/23	Yes**	20		15	Naturally occurring organics.
		03/01/23	Yes**	17		15	

**Color Exceedance - During the 2023 monitoring, Color exceeded the maximum contaminant levels (MCL). These secondary contaminants have no health effects. They do have aesthetic effects on the water and can change the tint and the taste. The City is aware of this issue and is making every effort to monitor our water supply and keep it within the MCL parameters.

CONSERVATION MISSION

PBUD's mission and commitment to promoting water conservation depends on the number of people reached every year. Water conservation is essential, and we strive to reach out to all residents of Palm Bay and share information about our vital yet fragile resource: water.

The world only has a small amount of fresh water available for consumption. Nearly 70% of the world is covered by water; however, only 2.5% of it is fresh, with the rest being saline and ocean-based. Just 1% of our freshwater is easily accessible, while the rest is trapped in glaciers and snowfields. According to the latest report from the U.S. Geological Survey, the United States uses 408 billion gallons of water per day. In Florida, each person uses up to 120 to 150 gallons of water per day. According to the World Resources Institute, global projections for potable water (consumable water) availability are becoming strained every year. It is exceedingly important to educate our communities as it relates to water conservation.

DRINK IT. ENJOY IT. DON'T WASTE IT.

Outdoor Conservation Tips

- Outfit your hose with a shut-off nozzle that can be adjusted down to a fine spray so that water flows only as needed. When finished, turn the water off at the faucet instead of at the nozzle to avoid leaks.
- Plant the right plant in the right place. Ask a landscape professional to help you choose native plants. Use drought-tolerant grass, shrubs, ground cover, and trees.
- Using a hose to clean a driveway can waste hundreds of gallons of water. Use a blower or broom to clean leaves and other debris from these areas.
- The grass is often your yard's biggest water user. Save grass for areas where children or pets will play. In other areas, consider mulch, gravel, or ground cover.
- Do not leave sprinklers or hoses unattended. Your garden hose can put out 600 gallons or more in only a few hours.

Indoor Conservation Tips

- Check for leaks. Leaks can drip away 90 gallons a day or more from old fixtures such as leaky faucets.
- Insulate your water pipes. You'll get hot water faster, plus avoid wasting water while it heats.
- Reuse household water instead of just pouring it down the drain; use it for watering a plant or garden or for cleaning.
- Don't let the water run while shaving, washing your face, or brushing your teeth.
- Don't use running water to thaw frozen foods. Instead, defrost overnight in the refrigerator or use the defrost setting on your microwave.
- Store drinking water in the refrigerator rather than letting the tap run every time you want a cool glass of water.

GET CONNECTED

If your organization or school is interested in partnering with the City of Palm Bay Utilities Department to promote water conservation efforts or other educational opportunities, please contact the Utilities Community Outreach Coordinator, at outreach@palmbayflorida.org.



WATERING DAYS

Watering Restrictions are established and enforced by the St. Johns River Water Management District. For residential customers, watering days are based on your house number (even or odd). You should only water before 10:00 a.m. and after 4:00 p.m. and foremost on your designated day(s).



St. John's Watering Guidelines		Designated Day
November - March	Water one time per week.	Saturday (Odd Address) Sunday (Even Address) Tuesday (Commercial)
April-October	Water two times per week.	Wednesday, Saturday (Odd Address) Thursday, Sunday (Even Address) Tuesday, Friday (Commercial)

RECLAIMED WATER

Reclaimed water is the highly treated, filtered, and disinfected water from PBUD's wastewater treatment facilities that may be safely used for irrigation of residential lawns, medians, common areas, etc. Because of its nature and origin, reclaimed water may NOT be used for drinking or other sanitary purposes, although incidental human contact, such as being splashed with reclaimed water, is not a cause for alarm.

In order to maintain a healthy system and bring you quality service, the Palm Bay Utilities Department has implemented an irrigation schedule for reclaimed water customers.

Neighborhoods currently under irrigation schedules are:

- Sandy Pines Preserve
- Country Club Lakes Estates



Scan the code for more information about reclaimed water and a copy of your community's irrigation schedule.

EDUCATION

PBUD's commitment to sustainability is dependent on an active outreach and education program. Each year staff members visit local K-12 schools to educate young people about conservation, water and wastewater treatment, careers in the water industry, and how the department uses technology such as geographic information systems (GIS) to assist in day-to-day operations and decisions.

During the school year, PBUD sponsors the WaterWise Conservation Program in several area schools. As part of the WaterWise program, students and teachers discuss the significance of water conservation through carefully designed lesson plans and in-classroom activities. Each student receives a WaterWise Resource Kit to take home, containing a high-efficiency showerhead, kitchen and bathroom sink aerators, and tools for monitoring water usage at home.

PBUD is a proud sponsor of the Academy of Environmental Water Technology (AEWT) program at Heritage High School, which prepares and equips students to become future water professionals. In 2013, PBUD launched an internship pilot program with two students, and the program continues today with up to four students per year. Teaching today's young people how to effectively manage our water resources and the value of clean, safe, and reliable drinking water is imperative, and we are excited to partner with Heritage High School in this effort.



RESOURCES

WE LOVE FEEDBACK

We value our customers' opinions and would like to hear how you think we are doing. We welcome any suggestions you may have about how we can better serve the public. Visit www.pbud.org for more information.

STAY INFORMED

We encourage our customers to stay informed about their Palm Bay Utilities Department and the services we provide. There are several ways for customers and the public to receive updates and information including the website, social media, and e-notifications. We invite you to take advantage of these resources. Attending regularly scheduled City Council meetings are encouraged to share suggestions, ideas, and concerns regarding the City's municipal water and sewer systems.

Regular City Council Meetings

Council Chambers

120 Malabar Road SE

6:00 p.m. | 1st & 3rd Thursday of the month

FOR MORE INFORMATION

Palm Bay Utilities Department Customer Service

120 Malabar Road SE • Palm Bay, FL 32907

321-952-3420

Palm Bay Utilities Department Administration

250 Osmosis Drive SE • Palm Bay, FL 32909

321-952-3410

www.pbud.org

