

# 2024 WATER Quality Report







# A LETTER TO OUR CUSTOMERS

At Palm Beach County Water Utilities Department (PBCWUD), our top priority is providing you with a clean, safe and dependable supply of drinking water. We are excited to announce that for the sixth consecutive year, your drinking water meets and exceeds state and federal drinking water standards, with **ZERO WATER QUALITY VIOLATIONS.** 

I am pleased to present to you the 2024 Annual Drinking Water Quality Report. This report is a snapshot of the water quality delivered to our residents last year and includes details about your water source, what it contains, and how it compares to standards set by regulatory agencies. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

You can also find more information regarding water quality on our website at pbcwater.com. If you have any questions about this report or concerning your water, please call (561) 740-4600 or visit **PBCWATER.COM.** 

Ali Bayat

Ali Bayat, P.E., PMP
Department Director
Palm Beach County Water Utilities Department

# YOUR AWARD-WINNING UTILITY

# PBCWUD'S Continuous Improvement Culture through Asset Management

The ISO 55001 certification is an asset management system standard to which organizations manage the life-cycle of assets. **PBCWUD is the first water utility in North America to be certified.** In 2024, the utility was re-certified with this international recognition, making it one of just ten organizations in North America to reach this achievement.

#### What is the impact of being a certified ISO 55001 utility?

By adopting ISO 55001, our customers can be assured that PBCWUD is focused on long-term asset planning and risk management. This means we are better equipped to anticipate and address potential issues. This proactive approach helps maintain the reliability of your water system with cost efficiency and peace of mind.





FDEP Plant Operations
Excellence Award

Safety Council of PBC
Award of Excellence in
Worker & Vehicle Safety



WateReuse Assoc. Transformational Innovation Award



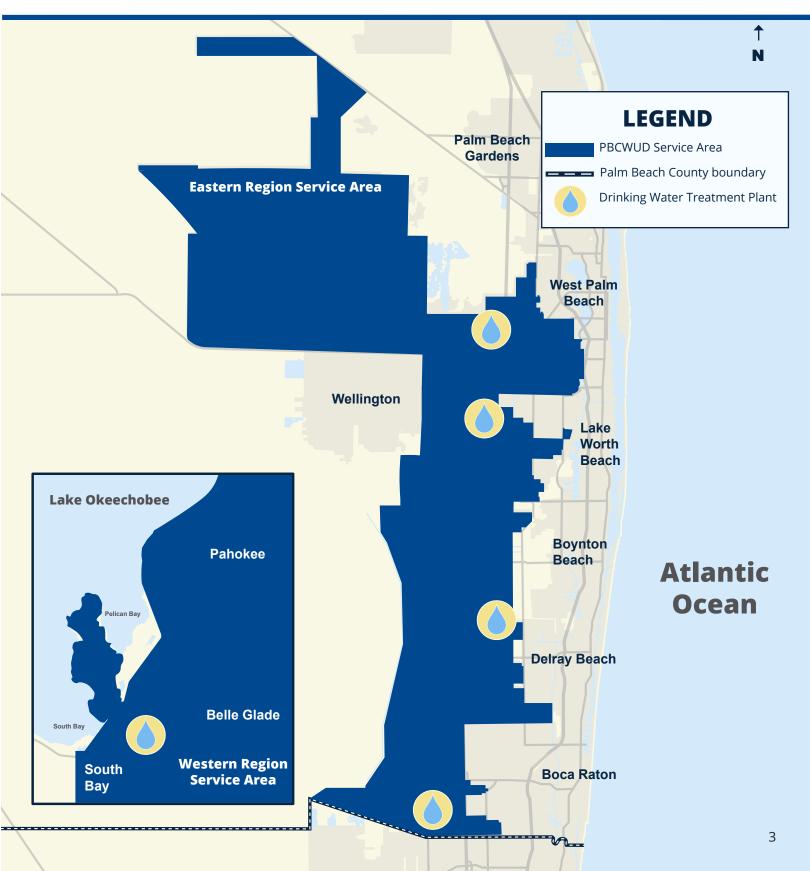
National Association of Clean Water Agencies Peak Performance Gold Award



Association of Municipal Water Agencies Sustainable Utility Management Award

# **PBCWUD SERVICE AREA**

The Palm Beach County Water Utilities Department (PBCWUD) is the largest water utility provider in Palm Beach County and is comprised of two regions, eastern and western. To the east, PBCWUD serves residents and businesses in unincorporated Palm Beach County, as well as the Village of Royal Palm Beach, the City of Greenacres, and the Town of Haverhill. To the west, PBCWUD serves customers in the cities of Belle Glade, Pahokee, and South Bay. Visit **PBCWATER.COM** to find your provider if you live out of our service area.

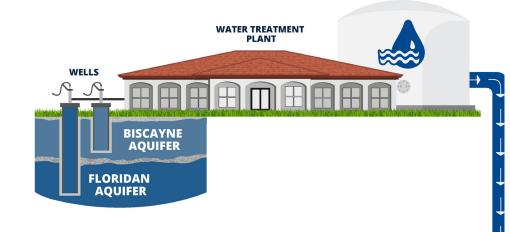


## **YOUR WATER SUPPLY**

PBCWUD sources ground water from the Biscayne and Floridan Aquifers.

#### **EASTERN SYSTEM**

In the East, source water comes from the Biscayne Aquifer. This is a surficial or shallow-depth aquifer that allows for water collection approximately 150 feet underground. PBCWUD pumps water from the most permeable layer of this aquifer to one of our four drinking water plants for treatment.



#### **WESTERN SYSTEM**

In the West, source water comes from the Floridan Aquifer. This deeper aquifer enables collection between 1,000 - 1,200 feet underground. PBCWUD pumps water from the most permeable layer of this aquifer to our western drinking water plant for treatment.



# DID YOU KNOW?



+635,000
Residents served by PBCWUD



**63 MILLION**Gallons (mgd) of drinking water distributed per day



**60 MILLION** 

Gallons of water storage capacity in case of emergency



+ 2,500 MILES

Drinking water pipelines maintained by PBCWUD

**ZERO WATER QUALITY VIOLATIONS IN 2024** 

# **WATER TREATMENT PROCESSES**

At PBCWUD, we continuously invest in the latest technology and treatment processes to ensure that we are always providing our customers with the highest quality water. It is part of this commitment that we have implemented three types of treatment processes. This includes lime softening and ion exchange, nanofiltration, and reverse osmosis.



The first step in the treatment process is sourcing the fresh raw water from the well fields into one of five water treatment plants for processing.

**WELLS** 

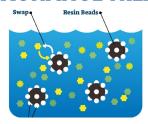
From there, the water undergoes one of the following, several distinct treatment processes designed for the specific water source.

#### LIME SOFTENING AND ION EXCHANGE TREATMENT PROCESSES



#### **Lime Softening**

This process uses lime (Calcium hydroxide) to remove impurities and adjust pH levels, ensuring clean and balanced water.



Ion Exchange

This process uses a specialized resin to remove dissolved organic matter from the water. This process removes substances such as natural organic matter, color, and other impurities.

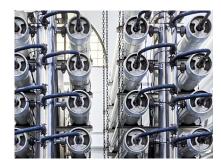


**Filtration** 

Water is then filtered through fine layers of granulated material to remove any remnants.

#### NANOFILTRATION AND REVERSE OSMOSIS TREATMENT PROCESSES

This process is a highly effective water treatment that involves using a semi-permeable membrane to remove impurities from the water. These membranes can remove small impurities such as bacteria, viruses, and heavy metals, making it excellent for water treatment.





#### DISINFECTION IS THE FINAL STEP OF ANY PROCESS

In the western service area, Chlorine is added before the water leaves the plant. In the eastern service area, Chloramine (a combination of chlorine and ammonia) is added before the water leaves the plant. This is to ensure water quality throughout the distribution system.

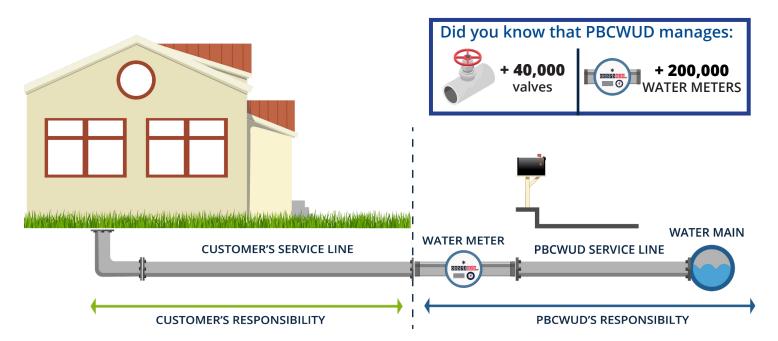
## The water is now ready to enter over 2,500 miles of utility service lines.

Once the water leaves the water treatment plant, it travels through a complex distribution system that includes water mains, valves, hydrants, pump stations, elevated and ground storage tanks, and more.

Our 2,500 miles of potable water main lines deliver safe, clean drinking water to customers throughout PBCWUD's Palm Beach County service area.

# ENJOYING THE BEST WATER YOUR SERVICE LINE

Once drinking water leaves our water main and enters your service line, it is your responsibility.



#### ENSURING THE BEST

Many factors in your household plumbing can affect your water quality. Follow these simple tips to ensure the quality of the water that flows from the PBCWUD water main remain the same as it flows to your tap.



# CLEAN FAUCET AERATORS

Regularly clean your faucet aerators screens located at the tip of your faucets.



# REPLACE FILTER CARTRIDGES

If you use filters, make sure to routinely replace cartridges according to the manufacturer's instructions.



# CHECK YOUR WATER HEATER

A water heater needs to be properly drained as part of its regular maintenance according to the manufacturer's instructions.

## **BACKFLOW PREVENTION**

A backflow prevention assembly (BFP) is a mechanical valve arrangement designed to prevent the reverse flow of water. In accordance with the Florida Administrative Code 62-555.360 and the Safe Drinking Water Act, PBCWUD has an established Cross Connection Control program. All backflow prevention assemblies are tested annually to ensure protection from cross-connections and backflow of contaminants into the distribution system.



#### Backflow Prevention Assembly (BFP)

#### WHY IS BACKFLOW PREVENTION SO IMPORTANT?

The BFP aims to eliminate the potential of contaminated water entering the distribution system. PBCWUD requires non-residential and large meter customers to install and maintain testable backflow prevention assemblies to protect the drinking water distribution system.

#### **ABOUT LEAD & COPPER**

PBCWUD performs rigorous testing to verify that the water leaving PBCWUD's water treatment plants is in compliance with the Environmental Protection Agency (EPA) Regulations, ensuring the safety and well-being of all consumers.

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. When lead is found in tap water, it can typically be traced to lead that is leaching from plumbing material. PBCWUD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

#### **SOURCES OF LEAD CAN INCLUDE:**

**Older fixtures and valves:** Lead can be found in older fixtures and valves inside your home. It may also be found in old solder where pipes are joined together.

**Service lines:** This pipe connects a property's plumbing to the water main in the street. Maintaining or replacing the service line after the meter is the responsibility of the property owner.



Photo Credit: U.S. Environmental Protection Agency

#### **HOW WE MONITOR LEAD & COPPER**

PBCWUD takes the responsibility of providing safe water seriously and regularly monitors Lead and Copper levels according to EPA guidelines. The detailed results of these sampling events are public and sent to the Florida Department of Health. PBCWUD conducted a system-wide Service Line Inventory of all water linesincluding pipelines on the customer's side of the meter- in response to new regulations from the EPA. No lead service lines have been found in the PBCWUD service area. For more information and to access the PBCWUD's interactive Service Line Inventory map, please visit: <a href="https://discover.pbcgov.org/waterutilities/Pages/Lead-and-Copper.aspx">https://discover.pbcgov.org/waterutilities/Pages/Lead-and-Copper.aspx</a>.

#### WAYS TO REDUCE EXPOSURE

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fd and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. PBCWUD is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time.

You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute-accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period.

If you are concerned about lead in your water and wish to have your water tested, contact PBCWUD's Environmental Program Supervisor at **WUDRCM@pbcwater.com**.

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>.

# SAFETY IS OUR PRIORITY



Preparing water quality control sample

Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1, 2024, to December 31, 2024.

Data obtained before January 1, 2025, and presented in this report, are from the most recent testing done in accordance with the laws, rules, and regulations. This report shows our water quality results and what they mean. As illustrated by this annual report, our system had **ZERO VIOLATIONS.** 

Before you turn on the tap, PBCWUD has numerous safeguards to protect your drinking water. PBCWUD tests and monitors drinking water quality as it flows through the system, ensuring that our water meets all required Federal and State laws, rules, and regulations.



Collecting a field quality sample

# To ensure drinking water quality, every year our laboratory:



Collects **5,500** samples



Tests for +100 contaminants



Analyzes **+50,000** water quality tests

#### **CONTINUOUS MONITORING**



SCADA monitoring at Water Treatment Plant 9

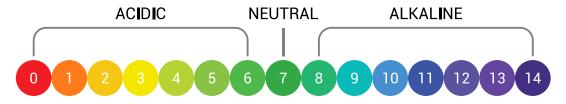
team comprises over 75 state-licensed water plant operators who diligently oversee the water supply system round the clock, every day of the year. These operators are constantly alerted to any fluctuations in water levels, pressure, flow, chlorine levels, pH, and other

PBCWUD's operations

crucial parameters through a central computer known as Supervisory Control and Data Acquisition (SCADA). This system provides a comprehensive visualization of the water plant's instrumentation and equipment, ensuring prompt action and effective management at all times.

# **BALANCING PH LEVELS**

Balancing pH levels is one way we minimize corrosion. Daily pH readings are taken with water quality samples using calibrated field multimeters. A pH level of 7 is the baseline for water. We target a pH level of 7.8 - 9 in the East and 7.8 - 8.5 in the West.



### SEMIANNUAL WATER SYSTEM MAINTENANCE

To ensure water quality year-round, it is a common practice to implement a two-part maintenance process that includes treatment modification and pipeline flushing.

#### 1. TREATMENT MODIFICATION

Twice a year, PBCWUD changes from using chloramine (a combination of chlorine and ammonia) to using only chlorine, cleaning the pipes to ensure optimum water quality throughout the year.

PBCWUD monitors drinking water to ensure the disinfectant levels are safe and consistent within our distribution system. Although chlorine is safe for consumption, it must be removed from water used for kidney dialysis and aquariums.

This process does not affect Western Region customers in Belle Glade, Pahokee, and South Bay.

#### 2. PIPELINE FLUSHING

During this same time treatment modification starts, you may notice PBCWUD out in your community conducting hydrant flushing. This is a common practice for many U.S water systems to bring freshly treated water to distant parts of the pipeline network. This process helps maintain healthy levels in all parts of the distribution network, which keeps the water safe to drink as it is transported, sometimes miles from the treatment to your tap.

#### WILL I NOTICE A CHANGE IN MY WATER?

During the temporary switch, some customers may notice a stronger chlorine taste or smell in their drinking water. The taste and odor are not a health risk. Chlorine levels continue to meet EPA standards. If you notice a taste or smell, we recommend refrigerating tap water in an open pitcher. Within a few hours, the taste and odor will disappear.



#### WHAT IS A CONTAMINANT?

A contaminant is anything found in your water that is not a water molecule. Impacts depend on the substance and quantity. For example, E. coli is a very small organism that is harmless at low levels but makes people sick in large quantities. On the other hand, chlorine, which is used in the water treatment process as a disinfectant against bacteria like E. coli, is also an impurity, but is added at very safe levels to ensure high-quality drinking water makes it to your home.

#### SPECIAL CONSIDERATIONS

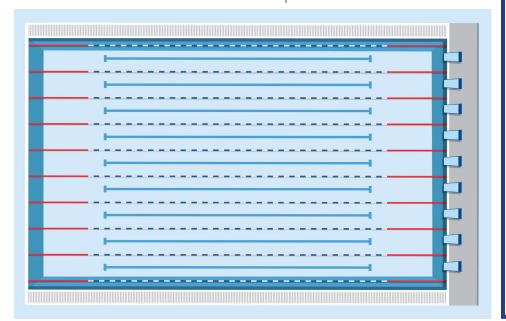
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. Environmental Protection Agency/Center for Disease Control 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).

## UNDERSTANDING THE MEASUREMENTS

Laboratory results are reported as "parts per million" (ppm) or "parts per billion (ppb)." Here's a visual representation of what that looks like:

#### This is an Olympic-sized swimming pool.

A pool of this size contains 660,000 gallons of water or 507 million teaspoons.



#### Example:

#### ppm (parts per million):



Means 1 part per 1,000,000 parts. This is the equivalent of two thirds of a gallon in an Olympic-sized swimming pool.

#### ppb (parts per billion):



Means 1 part per 1,000,000,000 parts. This is the equivalent of half a teaspoon in an Olympic-sized swimming pool.

# **TERMS & ABBREVIATIONS**

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

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

**MRDL** (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

N/A: Not Applicable

**ND:** Not Detected - indicates that the substance was not found by laboratory analysis.

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**Picocurie per liter (pCi/L):** The measure of the radioactivity in water.

**Trihalomethanes (TTHM):** Compounds formed during chloramination (disinfection) of drinking water. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system.

Haloacetic Acids (HAA5): The five haloacetic acid species regulated by EPA.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

#### **SOURCE WATER ASSESSMENT**

In order to ensure that your drinking water is safe, not just at the tap, but at its source, the Florida Department of Environmental Protection (FDEP) conducts potential contamination studies of all source water. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the wells that provide source water to our water treatment plants. The contaminant susceptibility levels only describe potential contamination due to nearby activity and are not based on monitoring data.

The 2024 assessment identified 130 potential sources of contamination in eastern region and 11 potential sources of contamination in our western region in the vicinity of our system, with susceptibility levels ranging from low to moderate. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://prodapps.dep.state.fl.us/swapp/.

#### **HOW DO CONTAMINANTS GET INTO 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:

- (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 byproducts 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.

#### WHAT DO THESE TABLES EXPLAIN?

The first table shows substances that the EPA requires our utility to report. To determine how our water compares to the federal regulation, compare the column that shows the level allowed by EPA (MCLs) to the column that shows the highest level detected at our utility during the year 2024.

The State of Florida 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.

# **EASTERN WATER QUALITY DATA REPORT FOR 2024**

				Inorga	nic Conta	minants	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(1)</sup>	Range of Results <sup>(1)</sup>	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	5/23	N	0.00614	0.0041 I - 0.00614	2 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	5/23	N	0.898	0.738 - 0.898	4 ppm	4.0 ppm	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong tee when at the optimum level of 0.7 ppm
Nitrate, as Nitrogen (ppm)	6/24	N	0.048	0.044 - 0.048	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage erosion of natural deposits
Nitrite, as Nitrogen (ppm)	6/24	N	0.01 l	ND - 0.010 I	1 ppm	1 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage erosion of natural deposits
Sodium (ppm)	5/23	N	49.7	18.2 - 49.7	N/A	160 ppm	Salt water intrusion, leaching from soil
				Radioa	ctive Cont	aminants	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(2)</sup>	Range of Results <sup>(2)</sup>	MCLG	MCL	Likely Source of Contamination
Radium 228 (pCi/L)	5/23	N	1.20 ± 0.461	ND - 1.20 ± 0.461	0 pCi/L	5 pCi/L	Erosion of natural deposits
			Stage	a 1 Disinfectan	ts and Dis	infection By-Products	
Disinfectant or	Dates of	MRDL	Level		MRDLG	MRDL	Likely Source of Contamination
Contaminant and Unit of Measurement	Sampling (mo/yr)	Violation Y/N	Detected <sup>(3)</sup>	Range of Results <sup>(3)</sup>	WIKDLG	MKDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	1/24 to 12/24	N	3.09	0.2-4.05(4)	4 ppm	4 ppm	Water additive used to control microbes
			Stag	e 2 Disinfectan	ts and Dis	infection By-Products	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(5)</sup>	Range of Results <sup>(5)</sup>	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	3/24, 6/24, 9/24, 12/24	N	28.4	4.9 - 35.8	N/A	60 ppb	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	3/24, 6/24, 9/24, 12/24	N	40.7	11.3 - 47.7	N/A	80 ppb	By-product of drinking water disinfection
				Lead &	Copper (T	ap Water)	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	AL Exceeded Y/N	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	8/23	N	0.153	0	1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natur deposits; leaching from wood preservatives
Lead (tap water) (ppb)	8/23	N	1.44	0	0 ppb	15 ppb	Corrosion of household plumbing systems; erosion of natur deposits.
Qualifier Cades							<u>'</u>

#### **Qualifier Codes**

Quantific Codes

I = Between lab detection limit and lab practical quantitation limit

J = Estimated Value

Notes:

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. (2) 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

The results in the column indicating "Highest Level Detected" for Chlorine and Chloramines are 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.

(a) The highest level detected for chloramine represents 1 out of 6,440 samples.

(b) The results in the column indicating "Highest Level Detected" for total trihalomethanes and HAA5 are the highest locational running annual average (LRAA), computed quarterly, of quarterly averages of all samples collected. The range of results are the range of individual sample results (lowest to highest) for all monitoring locations.

Unregulated Contaminants (UCMR 5)* continued on next page								
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(6)</sup>	Range of Results	MRL (7)	Likely Source of Contamination		
6.2 FTS (ug/L)	11/24	N/A	0.0130	ND-0.013	0.005 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFBS (ug/L)	11/24	N/A	0.0038	ND-0.0039	0.003 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFHxA (ug/L)	11/24	N/A	0.00495	ND-0.005	0.003 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFHxS (ug/L)	11/24	N/A	0.0046	ND - 0.0062	0.003 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFOA (ug/L)	11/24	N/A	0.0067	ND-0.0073	0.004 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFOS (ug/L)	11/24	N/A	0.0135	ND-0.018	0.004 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		
PFPeA (uf/L)	11/24	N/A	0.00665	ND-0.0071	0.003 ug/L	From industry and consumer products like nonstick cookware, waterproof clothing, and stain-resistant furniture.		

# **WESTERN WATER QUALITY DATA REPORT FOR 2024**

				Inorga	nic Conta	minants	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(1)</sup>	Range of Results <sup>(1)</sup>	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	5/23	N	0.716	0.716	4 ppm	4.0 ppm	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
Sodium (ppm)	5/23	N	61.9	61.9	N/A	160 ppm	Salt water intrusion, leaching from soil
			Stage	1 Disinfectan	ts and Dis	infection By-Products	
Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MRDL Violation Y/N	Level Detected <sup>(2)</sup>	Range of Results <sup>(2)</sup>	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	1/24 to 12/24	N	2.51	1.19 - 3.7 (3)	4 ppm	4 ppm	Water additive used to control microbes
			Stage	2 Disinfectan	ts and Dis	infection By-Products	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected <sup>(5)</sup>	Range of Results <sup>(5)</sup>	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	8/24	N	2.20	0.90- 2.2	N/A	60 ppb	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	8/24	N	12.8	1.4 - 12.8	N/A	80 ppb	By-product of drinking water disinfection
				Lead &	Copper (T	ap Water)	
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	AL Exceeded Y/N	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	8/23	N	0.0432	0	1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	8/23	N	Not Detected	0	0 ppb	15 ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

I = Between lab detection limit and lab practical quantitation limit

(a) System 11 qualified for reduced sampling for disinfection by products in August 2018.

(b) The results in the column indicating "Highest Level Detected" for total trihalomethanes and HAA5 are the highest locational running annual average (LRAA), computed quarterly, of quarterly averages of all samples collected. The "Range of Results" are the range of individual sample results (lowest to highest) for all monitoring locations.

(c) Total Coliform Bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these

During the past year, three Level 2 Assessments were required to be completed for our water system. Three Level 2 assessments were completed. In addition, we were required to take three corrective actions and we completed three of these actions.

Western Region Water Quality Data Unregulated Contaminants (UCMR 5)

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025. The data collected under UCMR 5 improves understanding of the prevalence and amount of 29 per- and polyfluoroalkyl substances (PFAS) and lithium in the nation's drinking water systems. There were none detected in the Western Region 2024 sampling period.

#### \*EASTERN WATER QUALITY DATA UNREGULATED CONTAMINANTS (UCMR 5) - CONTINUED FROM PREVIOUS PAGE

The Safe Drinking Water Act (SDWA) requires that once every five years the EPA issue a list of unregulated contaminants to be monitored by public water systems.

PBCWUD has been monitoring for unregulated contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) are in effect for UC. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the

The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021. UCMR 5 requires sample collection for 30 chemical contaminants between 2023 and 2025. The data collected under UCMR 5 improves understanding of the prevalence and amount of 29 per- and polyfluoroalkyl substances (PFAS) and lithium in the nation's drinking water systems. (6) Results in the Level Detected column for unregulated contaminants are the average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency

(7) The EPA-established UCMR Minimum Reporting Level (MRL) is the lowest concentration that laboratories may report to the EPA during UCMR monitoring.

<sup>10</sup> 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.

(a) The results in the column indicating "Highest Level Detected" for Chlorine are 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.

(a) The highest level detected for chlorine represents 1 out of 843 samples.

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- Sign up to receive emergency alerts about your property address, including hurricanes, storms, flooding or outages: *alertPBC.com*



#### **Customer Billing**

- Manage your account: <u>pbcwater.com/PayBill</u>
- Speak with a customer service specialist:
   Monday Friday, 7:30am 6:00pm- (561) 740-4600, option #4
- Learn about the several convenient ways for customers to pay their bill: <u>pbcwater.com/PayBill</u>



#### **myAMI**

- Monitor your hourly, daily, and weekly water usage: <u>pbcwater.com/myAMI</u>
- Speak with a customer service specialist to help you set up your account: Monday Friday, 7:30am 6:00pm- (561) 740-4600, option #4



#### **Water Conservation**

 Explore tips to help you save water and money on your next water bill: <u>pbcwater.com</u>



## **Stay Informed**

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# **ABOUT THIS REPORT**

This annual report contains important information about drinking water quality. We are pleased to report that the Palm Beach County Water Utilities Department meets or exceeds state and federal requirements. If you have any questions about the information in this report, call us at (561) 740-4600 for assistance.

To view this report online visit **pbcwater.com/waterquality**.

Please share this report with those who may not have received this notice directly (for example, people in apartments, nursing homes, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. To receive a printed copy of this report, please email *WUDPR@pbcwater.com* or call (561) 740-4600.