



WATER QUALITY REPORT

2023



MESSAGE FROM THE UTILITIES DIRECTOR

The City of Plantation is once again pleased to present you with our annual Water Quality Report.

It is an informative record of the quality of the drinking water supplied to you during the period of January 1 through December 31, 2023. This data represents the most recent water quality testing results available in accordance with all applicable laws, rules, and regulations.

We are dedicated to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you, our valued customers. We remain vigilant in meeting the goals of source water protection, water conservation, and community education in our continuing effort to serve the needs of all our water users.

We are delighted to inform you that your drinking water consistently met or exceeded the federal, state and local drinking water requirements during the 2023 reporting period.

Please remember that we are always available should you have any questions or concerns about your drinking water. The Utilities Department staff is dedicated to providing a superior level of service to our customers.

If you have any billing questions or concerns, you may go to Plantation.org to review your account balance, email us at Utilitybilling@plantation.org, or contact customer service at 954-797-2290. Please go online and sign up for EyeOnWater, our new customer portal which allows you to monitor your consumption and receive real time notices regarding usage.

Sincerely,

Daniel Pollio

Daniel Pollio
Utilities Director



By utilizing EyeOnWater, you can effectively monitor and conserve water usage, thereby contributing to both environmental sustainability and potential cost savings on your water bills.

Take advantage of this opportunity to sign up for EyeOnWater today at <https://eyeonwater.com/signup>.



THE CITY OF PLANTATION IS DELIGHTED TO PRESENT THE 2023 WATER QUALITY REPORT. THIS REPORT AIMS TO UPDATE YOU ON THE WATER WE SUPPLY FROM JANUARY 1 - DECEMBER 31, 2023 INCLUDING DETAILS ABOUT THE CITY'S DRINKING WATER SOURCE, WATER SUPPLY, TREATMENT PROCESS, AND THE CONTENTS OF YOUR DRINKING WATER.

WHERE DOES MY WATER COME FROM?



Plantation water is sourced from a network of 16 groundwater wells that extend 110 feet into the Biscayne Aquifer. The source water is then transported by telemetry-controlled well pumps to two treatment plants, the East and Central Water Treatment Plants. These plants purify the groundwater through a process called membrane softening, the water is filtered using specialized composite membranes with tiny pores that effectively remove impurities.

This advanced treatment ensures high-quality water, eliminating health and aesthetic concerns. The water is chlorinated for disinfection and fluoridated for dental health benefits. Additionally, the quality of Plantation water is closely monitored, with daily tests conducted every two hours to ensure its purity. The treated water is then pumped into the water distribution system for the customers' use. Customers can enjoy high-quality drinking water straight from their taps, thanks to our state-of-the-art treatment process.



QUESTIONS? CONTACT US!



PLANTATION.ORG



UTILITYBILLING@PLANTATION.ORG



954-797-2290

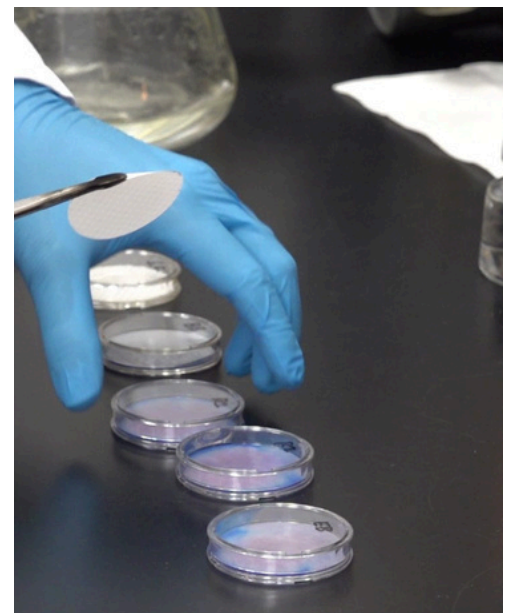
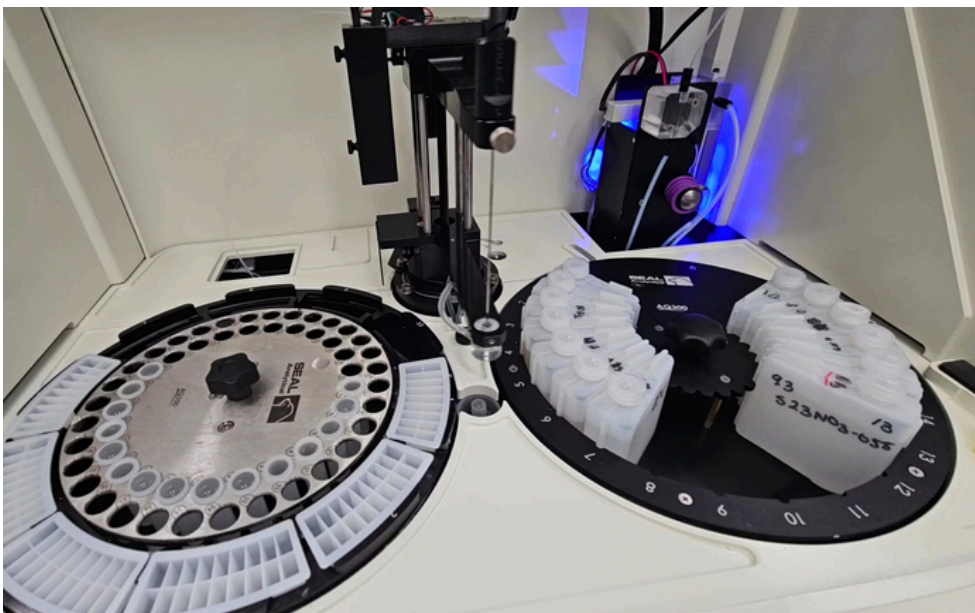


WATER QUALITY DATA TABLE

The data tables included in this report may contain terms and abbreviations that might not be familiar to you. To help you better understand the data, we have provided some definitions and descriptions below.

- **90th Percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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.
- **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 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.
- **NA:** Not applicable.
- **Not detected (ND):** Indicates that the substance was not found by laboratory analysis.
- **Parts per billion (ppb):** One part substance per billion parts water (or micrograms per liter).
- **Parts per million (ppm):** One part substance per million parts water (or milligrams per liter).
- **Picocurie per liter (pCi/L):** A measure of the radioactivity in water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/aboutepa/epa-hotlines.



WATER QUALITY DATA TABLE

The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. The contaminants listed in the tables are the only contaminants detected in your drinking water.

The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old.

We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

INORGANIC CONTAMINANTS							
CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	MCL VIOLATION (YES / NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Arsenic (ppb)	July 2023	No	1.6	0.36 – 1.6	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Fluoride (ppm)	July 2023	No	0.71	0.67 – 0.71	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water
Sodium (ppm)	July 2023	No	14.0	13.0 – 14.0	NA	160	Salt water intrusion; leaching from soil
Nitrate (as Nitrogen) (ppm)	May 2023	No	0.12	0.11 – 0.12	NA	10	Saltwater intrusion; leaching from soil

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	MCL VIOLATION (YES / NO)	LEVEL DETECTED	RANGE OF RESULTS	MRDLG	MRDL	LIKELY SOURCE OF CONTAMINATION
Chlorine and Chloramines (ppm)	January–December 2023	No	2.30	0.40 – 3.50	4	4.0	Water additive used to control microbes

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS							
CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	MCL VIOLATION (YES / NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Haloacetic Acids (five) [HAA5] (ppb)	July–October 2023	No	6.31 ¹	5.56 – 6.31	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	July–October 2023	No	5.02 ¹	3.76 – 5.02	NA	80	By-product of drinking water disinfection

¹ Results reported are highest results found in annual sampling

RADIOACTIVE CONTAMINANTS							
CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	MCL VIOLATION (YES / NO)	LEVEL DETECTED	RANGE OF RESULTS	MRDLG	MRDL	LIKELY SOURCE OF CONTAMINATION
Gross Alpha including Radium & Uranium (pCi/L)	July–2023	No	1.5	1.4 – 1.5	0	5	Erosion of natural deposits
Combined Radium 226 & Radium 228 (pCi/L)	July–2023	No	1.5	1.0 – 1.5	0	5	Erosion of natural deposits

WATER QUALITY DATA TABLE

LEAD AND COPPER (TAP WATER) from Residential Sources

CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	AL EXCEEDED (YES / NO)	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING THE AL	MRDLG	AL (ACTION LEVEL)	LIKELY SOURCE OF CONTAMINATION
Copper (ppm)	July-2022	No	0.056	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	July-2022	No	ND	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

LEAD AND DRINKING WATER

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 we 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 at 1-800-426-4791 or at www.epa.gov/safewater/lead.

UNREGULATED CONTAMINANT MONITORING

We have been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (U.S. EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. For example, we participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking and source water. At present, no health standards (e.g., maximum contaminant levels) have been established for UCs. 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 U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at 1-800-426-4791.

UNREGULATED CONTAMINANT MONITORING RULE – PART 4 (UCMR 4)

Drinking Water

CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	AVERAGE RESULT	RANGE OF RESULTS	LIKELY SOURCE OF CONTAMINATION
HAA6Br (ppb)	March-September 2018	1.662	ND – 1.877	By-product of drinking water disinfection
HAA9 (ppb)	March-September 2018	1.79	0.251 – 4.098	By-product of drinking water disinfection
Manganese (ppb)	March-September 2018	0.796	ND – 0.796	Natural occurrence from soil leaching

Source Water

CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO. / YR.)	AVERAGE RESULT	RANGE OF RESULTS	LIKELY SOURCE OF CONTAMINATION
Bromide (ppb)	March - September 2018	136.75	119 – 166	Naturally presented in the environment
Total Organic Carbon [TOC] (ppb)	March - September 2018	10,080	7,920 – 12,200	Naturally presented in the environment

PROTECTING WHERE YOUR WATER COMES FROM

SOURCE WATER ASSESSMENT & PROTECTION

To ensure that your drinking water is safe, not only at the tap, but at the source, Florida Department of Environmental Protection (FDEP) performs potential contamination studies of all source water.

In 2023, 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.

The 2023 assessment identified 11 potential sources of contamination; primarily with low to moderate and one high susceptibility levels for 16 assessed wells. The contaminant susceptibility levels only describe potential contamination due to nearby activity, and does not indicate sample results. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at dep.state.fl.us/swapp/ or they can be obtained from the Plantation Utilities Department.



POTENTIAL SOURCES OF CONTAMINATION

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.

COUNT ON US

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified.

Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water
- Monitoring and inspecting machinery, meters, gauges, and operating conditions
- Conducting tests and inspections on water and evaluating the results
- Maintaining optimal water chemistry
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels
- Documenting and reporting test results and system operations to regulatory agencies
- Serving our community through customer support, education, and outreach.



WATER CONSERVATION TIPS

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water.

Here are a few tips:

CHECK YOUR WATER METER



1

Simply turn off all taps & all water-using appliances. Then check the meter after 15 minutes.

If it moved, then you have a leak.

TURN IT OFF

2



Turn off the tap when brushing your teeth.

WAIT TO RUN



3

Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded.

So get a run for your money and load it to capacity.

CHECK YOUR TOILETS



4

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl.

It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year



Per irrigation restrictions, water your lawn only two days a week, preferably mornings (before 10 a.m.) to take advantage of cooler temperatures.



THE NEXT TIME YOU TURN ON YOUR FAUCET, THINK OF THE SKILLED PROFESSIONALS WHO STAND BEHIND EACH DROP.