



2023 WATER QUALITY REPORT

CITY OF MARGATE



DEAR VALUED UTILITY CUSTOMER

The City of Margate Department of Environmental and Engineering Services (DEES) is pleased to provide you with the 2023 Water Quality Report, which summarizes our water quality testing results and provides our customers with an overview of our water supply source and treatment; our source water assessment and protection program; our water conservation programs; and general health information related to drinking water, including facts on lead. The mission of DEES staff is to provide you a safe and reliable drinking water supply. As you will see from the results provided in this report, **our drinking water, once again, meets or exceeds all Federal and State regulatory requirements.**

If you have questions about this report, please call (954) 972-0828 or visit www.margatefl.com/dees. For water billing questions, please call (954) 884-3666.

Margate City Commission

Tommy Ruzzano, **Mayor**

Arlene R. Schwartz, **Vice-Mayor**

Commissioners: Antonio V. Arserio,
Anthony N. Caggiano, Joanne Simone

Regular City Commission Meetings normally take place the first Wednesday of the month beginning at 6:30PM and the third Wednesday of the month beginning at 7:00PM. Please visit margatefl.com to confirm meeting dates.

Dept. of Environmental & Engineering Services (DEES)

901 N.W. 66th Avenue, Ste. A, Margate, FL 33063

Water Billing: (954) 884-3666 / DEES: (954) 972-0828
After Hours Service Calls: (954) 605-9812

Web: margatefl.com/dees / E-Mail: dees@margatefl.com Fax: (954) 978-7349

Office Hours: Monday - Friday: 8 a.m. - 6 p.m.
Operations: 24/7



WATER SOURCE & OVERVIEW OF TREATMENT

The sole source of drinking water supply for the City of Margate Water Treatment Plant is the Biscayne Aquifer.

The City of Margate owns and operates two 13.5 million gallon per-day water treatment clarifiers located at 980 NW 66th Ave., in the City of Margate. Well water enters the treatment plant for processing. The treatment process includes aeration, lime softening to reduce hardness, followed by multi-media filtration, fluoride injection, and chloramine for disinfection purposes. Polymer is added at the softening units as a settling aid and orthophosphate is added to filters as a filtering aid. The treated water is pumped to three above-ground storage tanks with a total capacity of 5.9 million gallons, and subsequently, into your homes and businesses through a network of pipes. A backup generator ensures an uninterrupted supply of water even during power outages.



**City Winner & FSAWWA Div 2, 2nd Place Winner:
Ameer Johnson, Div 2, Grade 2, RISE Academy**

SOURCE WATER ASSESSMENT & PROTECTION PROGRAM (SWAPP)

In 2023, 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 27 potential sources of contamination identified for our system with low to moderate susceptibility levels. None of the contaminants from the sources identified have been detected in our source water samples. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <https://prodapps.dep.state.fl.us/swapp> or they can be obtained by calling (954) 972-0828 or emailing dees@margatefl.com.

The sources of drinking water (both tap 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 storm water 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 storm water 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 storm water 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 (800) 426-4791**.

DEFINITIONS

AL (Action Level):

The concentration of a contaminant which, 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.

MCL (Maximum Contaminant Level): The highest level of a contaminant 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.

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.

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.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

N/A: Not Applicable



*Water Conservation Poster Contest City Winner:
Brilaan Ingram, Div 4, 8th Grade, RISE Academy*

WATER CONSERVATION POSTER CONTEST CITY WINNER:



*Caleb McMorris, Div 3, 4th Grade,
Abundant Life Christian Academy*

WATER QUALITY TESTING RESULTS *(For the period January 1 - December 31, 2023)*

The City of Margate routinely monitors 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 monitoring for the period of January 1 to December 31, 2023. 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.

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation	Result	MCLG	TT	Likely Source of Contamination
1. Total Coliform Bacteria*	01/2023 - 12/2023	N	Positive	N/A	TT	Naturally present in the environment

Radioactive Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
2. Alpha emitters (pCi/L)	10/2023	N	1.6	N/A	0	15	Erosion of natural deposits
3. Radium 226 (pCi/L)	10/2023	N	0.2	N/A	0	5	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
4. Barium (ppm)	7/2023	N	.0060	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
5. Cadmium (ppb)	7/2023	N	.075	N/A	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
6. Fluoride (ppm)	7/2023	N	0.59	N/A	4	4.0	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
7. Sodium (ppm)	7/2023	N	45.6	N/A	N/A	160	Saltwater intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

Disinfectant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
8. Chloramines (ppm)	1/2023-12/2023	N	3.24	1.10 – 3.90	MRDLG = 4	MRDL = 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 (Y/N)	Level Detected (LRAA)	Range of Results	MCLG	MCL	Likely Source of Contamination
9. Haloacetic Acids (HAA5) (ppb)	3/2023	N	11.0	10 -11.0	N/A	60	By-product of drinking water disinfection
10. Total Trihalomethanes (TTHM) (ppb)	3/2023	N	7.5	5.9 – 7.5	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
11. Copper (tap water) (ppm)	7/2021	N	0.039	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
12. Lead (tap water) (ppb)	7/2021	Y	1.76	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected	Range	Likely Source of Contamination
13. PFBA (ppb)	12/2023	0.0063	N/A	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications including: non-stick cookware, water-repellent clothing, stain resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world.
14. PFBS (ppb)	12/2023	0.0048	N/A	
15. PFHpA (ppb)	12/2023	0.0029	N/A	
16. PFHxA (ppb)	12/2023	0.0051	N/A	
17. PFHxS (ppb)	12/2023	0.0047	N/A	
18. PFOA (ppb)	12/2023	0.0054	N/A	
19. PFOS (ppb)	12/2023	0.0222	N/A	
20. PFPeA (ppb)	12/2023	0.0074	N/A	

*E. coli was detected on 12/27/23 at the isolated construction site's fire hydrant while a precautionary boil water advisory was already in effect for that location.

GENERAL HEALTH INFORMATION

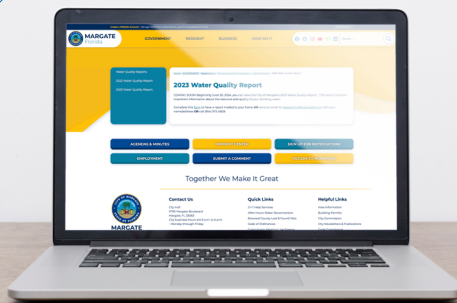
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for 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**.

FACTS ON LEAD...

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. The City of Margate is 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 request to have your water tested by calling (954) 972-0828. 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 (800) 426-4791** or at www.epa.gov/safewater/lead.



Water Conservation Poster Contest City Winner:
Juan Criollo, Div 1, 1st Grade, RISE Academy



Visit www.margatefl.com/ccr2023 to view this report digitally. It will be mailed to customers only upon request and is also available at City of Margate facilities including City Hall, Department of Environmental and Engineering Services Administration building, Broward County Margate Catharine Young Library, Northwest Focal Point Senior Center, and various parks and recreation facilities throughout the City.

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