City of Marco Island
2024 Water Quality Report
MARCO ISLAND SERVICE AREA

This report shows the City's drinking water quality results and what they mean. It also provides important information about your water and how it relates to your health. The information in this report is based primarily on 2024 facts and figures. However, the U.S. Environmental Protection Agency (EPA) does not require the City to perform all tests every year. When necessary, some data was obtained from prior years. As directed by the agencies that regulate the industry, only values from these tests that exceeded specified criteria are included. The City will notify you immediately if there is any reason for concern about the water.

The City operates the water treatment and distribution system serving Marco Island and Marco Shores. The City's water is obtained from two sources: 1. surface water from the source water facility on the mainland and 2. groundwater from the brackish Floridan Aquifer on Marco Island. The water is treated via a thorough multi-step water treatment process that includes enhanced lime softening, membrane filtration, reverse osmosis, chloramine disinfection, and hardness blending for corrosion inhibition. The City also uses an underground water storage system known as Aquifer Storage and Recovery (ASR) to provide the needed water during the dry winter months. The City pumps water into the ASR wells during the rainy months to store it so that it can be recovered during the dry months. During the last several years the City has successfully stored and recovered millions of gallons of water from the ASR system.

If you have any questions about this report or concerns about your water utility, please contact the City of Marco Island at (239) 394-3880. You may also visit the Florida Department of Environmental Protection (FDEP) website at www.myflorida.com or call the EPA Safe Drinking Water Hotline at (800) 426-4791. The City would like the community to be informed about its water utility. If you would like to learn more, then please call the City for information about the next opportunity for public participation in decisions about your drinking water.

Groundwater System

In 2024 the Florida Department of Environmental Protection performed a Source Water Assessment of the City's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the City's wells. There are twelve potential sources of contamination identified for this system with 0.03 to 11.11 susceptibility levels. 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 from Scott Henriksson, at: (239) 389-3972.

Surface Water System

In 2024 the Florida Department of Environmental Protection performed a Source Water Assessment of the City's system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of the City's surface water intakes. The surface water system is a high risk because of the many potential sources of contamination present in the assessment area. 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 from Scott Henriksson, at: (239) 389-3972.

HOW DO I READ THIS?

The table shows the results of the City's water-quality analyses. The column marked "Level Detected" shows the highest results from the last time tests were performed. "Likely Sources" shows where this substance usually originates. Descriptions below explain other important details. In this table you may find unfamiliar terms and abbreviations. To help you better understand unfamiliar terms and abbreviations the following definitions are provided:

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 the addition of a disinfectant is necessary for the 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.

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.

Parts per billion (ppb) or Micrograms per liter (µg/l) – One part by weight of analyte to 1 billion parts by weight of the water sample.

Picocurie per liter (pCi/L) - Measure of the radioactivity in water measured in trillionths of curies per liter.

"ND" means not detected and indicates that the substance was not found by laboratory analysis.

Nephelometric Turbidity Unit (NTU) - Measure of the clarity of water. Turbidity more than 5 NTU is just noticeable to the average person.

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

WHAT CAN I EXPECT TO FIND IN MY DRINKING 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, 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 by-products 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.**

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.

2024 ANNUAL DRINKING WATER QUALITY TEST RESULTS

The City of Marco Island routinely monitors its treated drinking water for contaminants 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, 2024 for Marco Island - PWS ID # 5110183. The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table below are the only contaminants detected in your drinking water. The testing results in the tables below reflect water produced from both city water treatment plants. Data obtained before January 1, 2024 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Turbidity is a measure of the cloudiness of the water. It is a good indicator of the effectiveness of the filtration system. High turbidity can hinder the effectiveness of disinfectants. Monitoring for turbidity is required by FDEP.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	The Highest Single Measurement	The Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU)	Continuous 2024	N	0.130	100%	N/A	TT	Soil runoff

Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic 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.

Radiological 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
Radium 226 + 228 or combined radium (pCi/l)	Monthly 2024	N	1.60	ND – 1.60	0	5	Erosion of natural deposits

Inorganic 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
Arsenic (ppb)	Monthly 2024	N	0.59	0.32 - 0.59	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	5/24	N	0.0076	0.0076	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	5/24, 11/24	N	0.23	0.11 - 0.23	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	5/24	N	77.0	77.0	N/A	160	Salt water intrusion, leaching from soil

Stage 1 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	Monthly 2024	N	3.19	1.0 – 4.8	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	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	Quarterly 2024	N	29.0	21.1 – 36.4	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Quarterly 2024	N	68.2	53.8 – 79.9	N/A	MCL = 80	By-product of drinking water disinfection

The monthly TOC removal ratio is the ratio between the actual TOC removal and the TOC rule removal requirements.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (TOC)	Monthly 2024	N	1.03	1.03 – 1.06	N/A	TT	Naturally present in the environment

Lead and Copper (Tap Water) 2023

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	6/23 7/23	N	0.089	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	6/23 7/23	N	2.9	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

UNREGULATED CONTAMINANTS MONITORING

Unregulated contaminants are those that do not yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard.

Unregulated Contaminants (UCMR-5 testing per EPA)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected (average)	Range of Results	Likely Source of Contamination
Perfluorobutanoic acid (PFBA) (ppb)	11/23, 2/24 5/24, 8/24	0.0084	ND – 0.0092	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites
Perfluorobutanesulfonic acid (PFBS) (ppb)	11/23, 2/24 5/24, 8/24	0.0046	ND – 0.0047	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites

Perfluoroheptanoic acid (PFHpA) (ppb)	11/23, 2/24 5/24, 8/24	0.0032	ND – 0.0032	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites
Perfluorohexanoic acid (PFHxA) (ppb)	11/23, 2/24 5/24, 8/24	0.0060	ND – 0.0062	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites
Perfluorooctanoic acid (PFOA) (ppb)	11/23, 2/24 5/24, 8/24	0.0064	ND – 0.0066	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites
Perfluorooctanesulfonic acid (PFOS) (ppb)	11/23, 2/24 5/24, 8/24	0.0059	ND – 0.0080	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites
Perfluoropentanoic acid (PFPeA) (ppb)	11/23, 2/24 5/24, 8/24	0.0076	ND – 0.0086	Industrial discharges from fluorochemical production; landfills; wastewater treatment plants; fire training and response sites

UCMR- Unregulated Contaminants Monitoring Rule

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 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 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 (800-426-4791) or at www.epa.gov/safewater/lead.

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. EPA/CDC 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).

The City would like you to understand the efforts it makes to continuously provide high-quality drinking water by constantly improving the water treatment process and protecting our water resources. If you have any questions or concerns about the information provided, then please feel free to call any of the numbers listed above.