2024 WATER QUALITY REPORT

The management and staff of the Manatee County Utilities Department are committed to providing the highest quality drinking water to the residents of Manatee County, Sarasota County, and the cities we serve--every day. This report reflects that commitment and represents a summary of the drinking water quality during 2024.

PROTECTING MANATEE COUNTY'S WATER SOURCES

Drinking water for the customers of Manatee County Utilities Department is a blend of purified groundwater and purified surface water. In 2024, an average of 17.51 million gallons per day of deep ground water and 34.04 million gallons per day of surface water was used.

The groundwater is pumped from the Floridan Aquifer from seven, 1200-foot deep wells located in eastern Manatee County. This water is pumped through a 36-inch pipe approximately 13 miles to the Purification Plant. Surface water is taken from the Lake Manatee Reservoir located in central Manatee County.

In 2024 the Florida Department of Environmental Protection (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 or surface water intakes. 12 potential sources of contamination were identified with low levels of susceptibility. The assessment results are available on the FDEP Source Water Assessment and Protection Program website http://prodapps.dep.state.fl.us/swapp or they can be obtained from the Manatee County Water Purification Plant at (941) 746-3020.

The County has taken stringent measures to protect these water sources. In the late 1980s Manatee County voters approved the purchase of 20,500 acres of the 82,000-acre watershed area, which drains into and includes the Reservoir and Wellfield. County and State agencies have continued to purchase additional watershed acreage, and today approximately 35,000 acres are in public ownership. This ownership ensures that activities detrimental to water quality or quantity will not occur on these public lands.

HEALTH AND SAFETY STANDARDS

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 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, EPA prescribes regulations, which limit the amounts 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.

HOW YOUR WATER IS PURIFIED

The Manatee County Water Purification Plant, located on the shore of Lake Manatee, purifies both groundwater and surface water. The groundwater is purified by aeration, lime-softening and filtration. These processes remove odor, a portion of the hardness, and undesirable elements such as suspended matter and microbiological organisms.

The surface water is purified by carbon adsorption, biological filtration, coagulation, sedimentation and filtration. These processes remove odor, color, and undesirable elements such as suspended matter and microbiological organisms. The filtered water from the two sources is then combined. The combined water is further enhanced before leaving the plant.

The water is disinfected to destroy microbes and provide protection against microbial regrowth in the distribution system and your plumbing. The water is also made less corrosive, thus prolonging your home plumbing and fixtures.

The purification plant is staffed with dedicated, professionally trained, State certified operational, laboratory and maintenance personnel. This staff operates and maintains the advanced water purification facility as well as monitors and researches water quality issues.

2024 WATER QUALITY SUMMARY

MICROBIOLOGICAL

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Highest Single Measurement	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
Filter turbidity (NTU)	01/24–12/24	No	1.21	97.2%[A]	N/A	TT[A]	Soil runoff

INORGANIC

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	01/24–12/24	No	0.38	ND-0.38	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	01/24–12/24	No	0.015	0.0073–0.015	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Chromium (ppb)	01/24–12/24	No	0.39	ND– 0.39	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	01/24-12/24	No	0.29	ND – 0.29	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen) (ppm)	01/24–12/24	No	0.26	ND – 0.26	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	01/24–12/24	No	3.6	ND – 3.6	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	01/24–12/24	No	16.0	12.0 – 16.0	N/A	160	Saltwater intrusion, leaching from soil

RADIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Gross Alpha (Including Uranium) (pCi/L)	01/24–12/24	No	2.42	ND –2.42	0	15	Erosion of natural deposits
Radium 226 (pCi/L)	01/24–12/24	No	0.48	ND –0.48	0	5[B]	Erosion of natural deposits
Radium 228 (pCi/L)	01/24–12/24	No	0.62	ND –0.62	0	5[B]	Erosion of natural deposits

SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Atrazine (ppb)	01/24–12/24	No	0.094	ND – 0.094	3	3	Runoff from herbicide used on row crops
Hexachlorocyclopentadiene (ppb)	01/24-12/24	No	0.14	ND-0.14	50	50	Discharge from chemical factories

VOLATILE ORGANIC CONTAMINANTS

Contaminant and Unit of Measurement	Dates of Sampling	MCL Violation Y/N	Max. Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Dichloromethane (ppb)	01/24–12/24	No	0.46	ND –0.46	0	5	Discharge from pharmaceutical and chemical factories

STAGE 2 DISINFECTANT AND DISINFECTION BY-PRODUCTS (D/DBP) PARAMETERS

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling	MCL or TT Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	01/24–12/24	No	3.2[C]	ND – 4.9[D]	MRDLG = 4	MRDL = 4[E]	Water additive used to control microbes
Haloacetic acids (ppb)	01/24–12/24	No	46.2[F]	16.2 – 49.5[D]	N/A	MCL = 60[G]	By-product of drinking water disinfection
Total trihalomethanes (ppb)	01/24–12/24	No	50.2[F]	26.1 – 52.9[D]	N/A	MCL = 80[G]	By-product of drinking water disinfection

Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling	MCL or TT Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Total organic carbon (ratio) [H]	01/24–12/24	No	1.37[I]	1.09 – 1.58	N/A	TT	Naturally present in the environment

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of Sampling	AL Exceeded Y/N	90th Percentile Result	No. of Sampling Sites Exceeding the AL	Range of Tap Sample Results	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	2022 [J]	No	0.15	0	0.01 – 0.22	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	2022 [J]	No	1.7	0	<0.3 – 3.5	0	15	Corrosion of household plumbing systems and service lines connecting buildings to water mains; erosion of natural deposits

TABLE KEY & DEFINITIONS

AL: Action Level

MCL: Maximum Contaminant Level

MCLG: Maximum Contaminant Level Goal

N/A: not applicable

ND: not detected

NTU: Nephelometric Turbidity Units

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: parts per billion, or micrograms per liter (ug/L)

ppm: parts per million, or milligrams per liter (mg/L)

TT: Treatment Technique

FOOTNOTES

[A] filter turbidity must not exceed 0.3 NTU in 95% of daily samples in any month.

[B] MCL limit of Radium-226 and Radium-228 combined.

[C] the value is the highest running annual average, computed quarterly.

[D] these values represent values at individual sample sites.

[E] a public water system (PWS) is in compliance with the MRDL when the running annual average of monthly averages of samples taken in the distribution system, computed quarterly, is less than or equal to the MRDL.

[F] the value is the highest locational running annual average, computed quarterly.

[G] a PWS is in compliance with the MCL when the locational running annual average, computed quarterly, is less than or equal to the MCL.

[H] these values represent the % total organic carbon removal achieved at the treatment plant divided by the % removal required.

[I] this value is the lowest running annual average, computed quarterly, of monthly removal ratio. This value must be above 1.0 for compliance.

[J] the State allows us to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old.

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

Filter Turbidity (NTU): Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. High turbidity can hinder the effectiveness of disinfectants.

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

Maximum Contaminant Level or 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 or 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 or 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 or 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.

Total trihalomethanes: Disinfection by-products expressed as the sum of chloroform, dibromochloromethane, bromodichloromethane and tribromomethane.

Not Detected or ND: Indicates the substance was not found by laboratory analysis.

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

RADON

Radon was detected in the finished water supply in one out of four quarterly samples tested. The third quarterly sample (collected in July) had a radon result of 25.8 pCi/L. There is no federal regulation for radon levels in drinking water; proposed MCL for radon is 300 pCi/L. Exposure to air-transmitted radon over a long period may cause adverse health effects.

LEAD

Lead can cause serious health effects in people of all ages, especially pregnant women, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Manatee County Water Purification Plant is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components 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 the Manatee County Water Purification Plant at 941-746-3020. 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 http://www.epa.gov/safewater/lead.

LEAD SERVICE LINE INVENTORY

Manatee County is currently evaluating the inventory of service line material within the system as required by the EPA's Lead and Copper Rule Revisions. Information and results of the lead service line inventory can be found on the Manatee County website at www.mymanatee.org/lcrr.

UNREGULATED CONTAMINANTS

Manatee County has been monitoring for Unregulated Contaminants (UCs) as part of a study to help the U.S. EPA determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. In 2024, Manatee County tested for lithium and 29 PFAS analytes. All results were below minimum reporting levels. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800) 426-4791.

IMMUNO-COMPROMISED INDIVIDUALS

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). These precautions apply to publicly supplied water, bottled water, private well water or water from home treatment devices.

FIND OUT THE FACTS

Residents may choose to use bottled water or to install home treatment devices. Be sure to learn about the quality of the alternate water or the expected water quality from home treatment devices.

Additional information about tap water can be found on the Manatee County website at www.mymanatee.org/water through the "Water Quality Information" link. If you need help in understanding water quality issues, have questions about this report, or have a water quality concern, please give us a call at 941-746-3020.

GET INVOLVED

Please get involved with discussions regarding drinking water quality. The Manatee County Board of County Commissioners welcomes written comments or public input at regularly scheduled Board Meetings concerning issues related to drinking water. Agenda information can be obtained on the Manatee County website or by calling 941-745-3724.

ATTENTION PROPERTY MANAGERS

If you are a property owner or manager, please provide this water quality report to your tenants. This report may be photocopied or posted in a prominent location at your facility. More copies are available by calling 941-746-3020.

THE BOTTOM LINE

Last year, as in years past, Manatee County met all EPA and State drinking water health standards. The Manatee County Water Purification Plant uses what is known as the multiple barrier approach to ensure the safety of the water. This approach includes source protection, optimized particle removal at the purification plant and appropriate disinfection.