2022 DRINKING WATER
QUALITY REPORT
MARTIN COUNTY UTILITIES AND SOLID WASTE

Martin County's Utilities and Solid Waste Department makes a daily commitment to provide the highest quality drinking water to our residents. This report reflects that commitment and represents a summary of the quality of your drinking water. PWS # 4431891

Martin County Utilities and Solid Waste Department

3473 SE Willoughby Blvd, Stuart | 772.221.1434 | www.martin.fl.us

Dear Martin County Utility Customer,

Martin County Utilities and Solid Waste Department is pleased to present you with this Annual Water Quality Report. The purpose of the report is to keep you informed about water quality and the services we have provided to you during the past year.

Martin County Utilities provides citizens and businesses with reliable water, sewer, and reclaimed water management services. We are proud of our employees who work to ensure we maintain the highest standards of water quality and customer service.

Martin County Utilities strives to provide a standard of excellence to our customers that we can all be proud of. Our goal has always been, and will continue to be, providing you with a dependable supply of drinking water.

There are many aspects to the services we provide, so after reading this information, we encourage you to contact us if you have additional questions or would like to share your thoughts with us. We are always looking for opportunities to improve wherever possible and look forward to your suggestions.

We are here to serve you! Thank you,

Samuel Amerson, P.E.

Director, Martin County Utilities and Solid Waste

If you are a landlord or manager, please provide this water quality report to your residents/tenants. This report may be photocopied or posted in a prominent location at your facility.

Our Treatment Plants

Martin County Utilities is dedicated to protecting public health by providing safe drinking water in a cost effective manner. Our customers are our first priority. As demands on Southeast Florida's limited water resources increase and EPA drinking water standards become more restrictive, these objectives are continually challenged. We are proud of our forward-thinking approach to providing a safe drinking water supply to our citizens.

Tropical Farms Water Treatment Plant

North Water Treatment Plant

Martin County operates two plants: the North County Water Treatment Plant in Jensen Beach and Tropical Farms Water Treatment Plant in the south. Both plants utilize two distinct underground sources of water, the shallower surficial aquifer and the deeper Floridan aquifer, each requiring different treatment methods.

By treating the more mineralized Floridan Aquifer, considered an alternative water source, we conserve the shallow groundwater for the future. Blending it with the surficial product water provides alkalinity and hardness and results in a stable finished product.

Our Tropical Farms plant is a 10 million gallon per day (MGD) facility that consists of 8 MGD of reverse osmosis (RO) treated brackish groundwater and 2 MGD of surficial ground water that has been treated through an Iron Treatment Facility (ITF). The product of the RO process is relatively free of desirable minerals, so ITF product water is then blended to enhance the stability of the water. The blended water is degasified to strip out hydrogen sulfide gas, followed by pH and alkalinity adjustment. Adequate disinfection is then performed to retain an acceptable residual for safety throughout the system, and the finished water is transferred to storage and pumped to distribution.

Our North plant is an 8.8 MGD facility that consists of 5.5 MGD of RO treated brackish groundwater and 3.3 MGD of surficial water blend. The treatment process is very similar to Tropical Farms. Surficial groundwater is chlorinated and flows through multi-media filters.

The RO permeate is degasified and chlorinated prior to mixing with the surficial blend water. Alkalinity and pH are adjusted, disinfection is accomplished, and finally the finished water is transferred to storage for distribution.

AWARDS

The Martin County Utilities & Solid Waste Department is proud of the following awards:

Best Tasting Drinking Water Award, American Water Works Association – Region VIII (2022)

Outstanding Membrane Plant Operator, Southeast Desalting Association (2022), Brittany Bassett, Treatment Plant Operations Administrator

Volunteer of the Year, American Water Works Association – Region VIII (2022), Brittany Bassett, Treatment Plant Operations Administrator

Domestic Wastewater Plant Operations Excellence Award, Florida Department of Environmental Protection (2018 and 2020)

Drinking Water Plant Operations Excellence Award, Florida Department of Environmental Protection (2018)

Drinking Water Quality and Safety

The sources of drinking water (both tap and bottled) 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. Water can pick up substances resulting from the presence of animals or from human activity.

Our wells draw water from the surficial aquifer that is then blended with the product water from our Reverse Osmosis Treatment System, which draws from the Floridan aquifer. Martin County Utilities routinely monitors for contaminants in drinking water in strict accordance with federal and state laws.

In order to ensure that tap water is acceptable to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

Lead Contamination Concerns

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is caused primarily by materials and components associated with service lines and home plumbing. Martin County Utilities 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 drinking 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.

Vulnerable Populations

Some people with special health concerns may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer, those undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly and infant populations can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The Center for Disease Control (CDC) and EPA guidelines regarding the appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are also available from the Safe Drinking Water Hotline at 1.800.426.4791.

Source Water Contamination

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

Source Water Assessments

The Florida Department of Environmental Protection (FDEP) conducted its most recent assessment of our source water systems in 2022. The assessment was performed to provide information about any potential sources of contamination in the vicinity of our wells. For our system, all potential sources of contamination were assigned a LOW susceptibility score.

The threat of contamination is further mitigated by a well field protection ordinance and extensive water quality testing. Assessment results and more information are available on the FDEP Source Water Assessment and Protection Program website at https://prodapps.dep.state.fl.us/swapp/ and can also be obtained from Martin County Utilities at 772.221.1434.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1.800.426.4791.

Martin County Utilities Water Quality Monitoring

An important part of providing drinking water to our customers is monitoring its quality from the point it is first withdrawn from our wells to its final delivery to every home or business. Martin County Utilities water quality monitoring program includes chemical and microbiological sampling and analysis by our own Florida Department of Health, Bureau of Public Health certified laboratory, and FDEP certified treatment plant operators.

Wellfields: The suitability of source water is evaluated prior to the construction of a production well. Well water is then regularly monitored for quality.

Treatment process: The processes are operated by licensed operators 24 hours per day, seven days per week. Process control testing and on-line analyzers provide continuous data.

Finished water: Monitoring and testing at the points-of-entry to the distribution system are an ongoing activity.

Distribution system: Monitoring of the water quality in the network of water mains comprising the distribution system is conducted monthly at 100+ sampling stations located throughout our service area.

Water Quality Glossary of Terms

In our line of work, we use a lot of acronyms. Here are some of the most common ones:

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 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.

MRDL

Maximum Residual Disinfectant Level:

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.

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.

ND

Non Detects:

Means not detected and indicates that the substance was not found by laboratory analysis.

PCi/L

Picocuries Per Liter:

A measure of the radioactivity in water.

PPB

Parts Per Billion:

Means one part by weight of analyte to 1 billion parts by weight of the water sample.

PPM

Parts Per Million:

This means one part by weight of analyte to 1 million parts by weight of the water sample.

Water Quality Results

Martin County Utilities 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 our monitoring for the period of January 1 to December 31, 2022. Data obtained before January 1, 2022, and presented in this report, are from the most recent testing done in accordance with the applicable laws, rules, and regulations.

The Environmental Protection Agency (EPA) requires water quality monitoring for over 80 drinking water contaminants. The tables below do not list those parameters that had only analytical results of "not detected" (ND).

INORGANIC CONTAMINANTS

Results in the "Level Detected" column for inorganics are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

Contaminant & Unit of Measurement	Dates of Sampling (mo. / yr.)	MCL Violation Y / N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	3/20	N	0.0022	0.0014 - 0.0022	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	3/20	N	0.25	0.085 - 0.25	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
Lead (point of entry) (ppb)	3/22	N	0.25	ND - 0.25	0	15	Residue from manmade pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate, as Nitrogen (ppm)	3/22	N	0.026	ND - 0.026	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	3/20	N	55.4	54.7 - 55.4	N/A	160	Salt water intrusion, leaching from soil

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

For total trihalomethanes and haloacetic acids, the level detected is the highest locational running annual average (LRAA) of each of the sample sites, and the range of results is the range of all individual sample results during the past year. For chloramines, the level detected is 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.

Contaminant & 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
TTHM (Total Trihalomethanes) (ppb)	2/22 - 11/22	N	44.8	29.7 - 54.9	N/A	MCL = 80	By-product of drinking water disinfection
HAA5 (Haloacetic Acid) (ppb)	2/22 - 11/22	N	34.0	23.9 - 42.7	N/A	MCL = 60	By-product of drinking water disinfection
Chloramines (ppm)	1/22 - 12/22	N	3.0	0.6 - 4.7	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

LEAD AND COPPER (TAP WATER)

Contaminant & Unit of Measurement	Dates of Sampling (mo. / yr.)	AL Exceeded Y / N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	Action Level (AL)	Likely Source of Contamination
Copper, tap water (ppm)	8/22	N	0.13	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead, tap water (ppb)	8/22	N	2.4	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits

As you can see by the tables, your drinking water meets or exceeds all Federal and State requirements.

What's on tap now and for the future?

Martin County Utilities continues to expand water and wastewater services to existing residences and businesses within the utility's service area.

Septic to Sewer

Septic to sewer conversions have long been a priority of the Board of County Commissioners. Over the years, we have completed numerous projects to provide sewer service to properties formerly served by septic systems, with more projects planned for the future.

17 neighborhood septic to sewer projects have been completed since 2019, providing service availability to approximately 2,768 properties.

- **Through 2027, 12 additional neighborhood septic to sewer projects are anticipated to be completed, providing service availability to approximately 5,432 properties.**
- **To date, Martin County Utilities has received over $45 million in grants to assist in funding the Septic to Sewer Program.**

Additional details can be found at www.martin.fl.us/SeptictoSewer.

Capital Improvement Plan

Martin County Utilities Capital Improvement Plan (CIP) includes septic to sewer projects, ongoing replacement projects, one-time rehabilitation projects, and capacity/service related projects. The CIP ensures reliable and consistent service to potable water, wastewater, and reclaimed water customers.

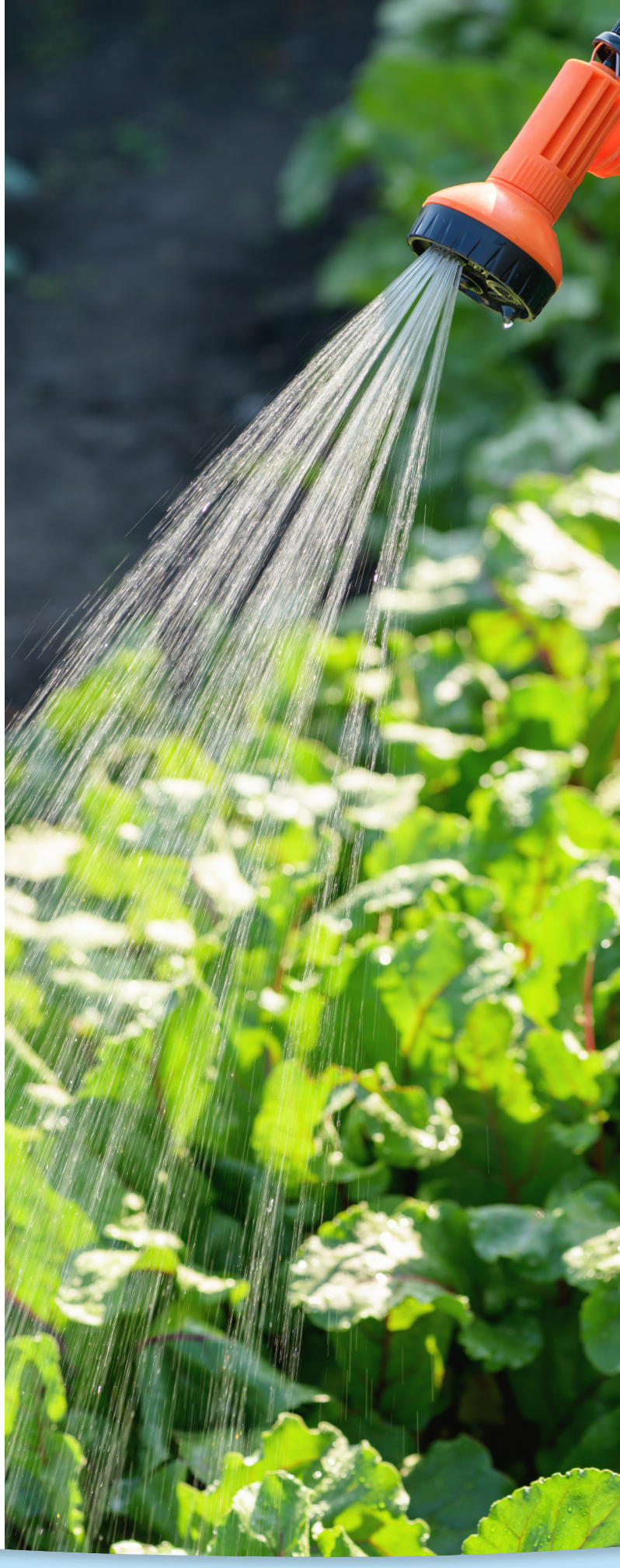
Major CIP projects include a new water plant at Martin Downs, new water supply well, wastewater collection and plant improvements, and water supply planning. Additional details can be found at www.martin.fl.us/CIP.

Preventing Backflow

Martin County is committed to providing safe, reliable drinking water; however, safeguarding drinking water is everyone's responsibility. To protect against backflow contamination, the county has a Cross Connection Control program that includes requirements for residential and commercial customers. Cross connections are any actual or potential connections between a drinking water system and any source containing non-potable water or any other substance from which backflow may occur. Improper plumbing and cross connections can allow backflow, contaminating your water and the county drinking water system.

Residents must ensure no conditions exist on their property that could contaminate their water supply. There are several ways to reduce the risk of contamination by backflow:

- **Hoses:** Never place the end of a hose where contaminants could siphon back into your drinking water. Examples include: a bathtub, pool, aquarium, laundry sink, bucket, or floor drain.
- **Hose-end Sprayers:** Often used with house/deck washes and lawn fertilizers/ pesticides. Do not connect a sprayer to your hose without first installing hose-connection vacuum breakers on your home's outdoor taps.
- **Irrigation:** Install an approved backflow prevention device on all underground lawn irrigation systems. Please contact your irrigation specialist to ensure a backflow preventer is in place and functional.
- **Onsite Wells/Reclaimed Water:** Never connect any auxiliary water source into your plumbing system, either directly or indirectly.



Water Wisely

Mandatory Year-round Landscape Irrigation Conservation

The South Florida Water Management District's (SFWMD) irrigation rule is being implemented in unincorporated Martin County

Ordinance No. 1173

Effective June 12, 2022

What you need to know...

- Users with existing landscaping with property addresses ending in an:
  - ODD number or letters N-Z: permitted to water on Wednesdays and/or Saturdays only
  - EVEN number, letters A-M or no number/letter: permitted to water on Thursdays and/or Sundays only
- Irrigation systems that water multiple addresses within the same zones such as multi-family units, homeowners' associations or rights-of-way, are permitted to water on Thursdays and/or Sundays only

If your address ends in...	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
ODDS 1, 3, 5, 7, 9, N-Z			✓			✓	
EVENS 0,2,4,6,8, A-M, *no address, systems with even & odd addresses*				✓			✓

- Landscape and lawn watering ARE NOT permitted between 10 a.m. and 4 p.m.
- Hand watering plants, as well as other select outdoor activities, are allowed at any time when using a hose with a self-cancelling nozzle
- For more details about watering restrictions, variances and other exempted activities, visit: martin.fl.us/WaterWisely

Help protect our water resources and ecosystems for future generations!