Martin County’s Utilities 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.
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.

As you know, 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 should you have additional questions or if you 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,

John Polley, Director
HOW SAFE IS OUR WATER?

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 the 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.

Concerns About Lead Contamination

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 from 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. Immuno-compromised persons such as persons with cancer, those undergoing chemotherapy, who have undergone organ transplants, those 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. No disease-causing microbes have been detected in Martin County Utilities drinking water. The Center for Disease Control (CDC) and EPA guidelines on 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.
Possible Dangerous Contaminants

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.

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.
OUR TREATMENT PLANTS

THE NORTH COUNTY WATER TREATMENT PLANT

The North County Water Treatment Plant utilizes the Surficial and Floridan aquifers, both underground sources of water, to supply drinking water. The water treatment facility consists of two types of treatment. One type is a conventional treatment process which includes aeration, filtration, and disinfection. This type of treatment uses twelve surficial source water wells. The other treatment type is called reverse osmosis (RO), which includes cartridge filtration membrane treatment and disinfection processes. The RO system uses four wells tapping the Floridan aquifer, a much deeper and more mineralized water source. The product water from both treatment types are mixed to form a blend that meets all primary and secondary drinking water standards.

THE TROPICAL FARMS WATER TREATMENT PLANT

The Tropical Farms Water Treatment Plant also utilizes both the Surficial and Floridan aquifers as sources of raw water. Drinking water is produced by blending water from the nano-filtration (NF) membrane softening plant and an RO plant. The NF treatment system is served by ten surficial wells. An iron treatment plant is present to assist in the overall treatment process for water blending purposes. The RO treatment plant is served by five Floridan aquifer wells. Both the North and Tropical Farms Plants consist of chemical feeds to make the water suitable for membrane treatment, cartridge filtration to remove suspended particles, membrane softening, degasification, stabilization, and disinfection. Peripheral equipment includes an auxiliary power generator, storage reservoirs, pumps, and off-gas scrubbers.
WHAT’S ON TAP NOW AND FOR THE FUTURE?

The Martin County Utilities Department (MCU) is dedicated to protecting public health by providing safe drinking water in a cost effective manner. Our customers are our first priority. These values are challenged as EPA safe drinking water standards become more restrictive and as demands on southeast Florida’s limited water resources continue to increase. We are proud of our forward-thinking approach to providing a safe drinking water supply to our citizens. Part of that effort is providing 24-hour-a-day coverage to ensure quality water. We ask that all our customers help us to protect our precious water sources, so that we can all enjoy them now and that they are available for future generations.

Pollution from septic tanks poses a significant threat to our waters. Since the 1990s, MCU has eliminated 70 package wastewater plants in Martin County; fifty of these systems were considered a threat to the Indian River Lagoon. By doing so, we have prevented nearly 6 million gallons per day of wastewater from entering our waterways.

Septic-to-sewer conversions have long been a priority of the Board of County Commissioners (BOCC). In the last 2 years, the BOCC has invested over one million dollars in these projects. Over the years, we have completed projects that have provided sewer service to 2,000 properties formerly served by septic tanks, including areas in Jensen Beach, Golden Gate, North River Shores, Palm City, Hobe Sound, and Indiantown. Current projects underway in Martin County will eliminate an additional 2,500 septic tanks over the next five years.

The County recently updated a report that prioritizes areas in need of septic to sewer conversion. The current report also provides cost estimates for 24 communities located along the St. Lucie Estuary and Indian River Lagoon within Martin County. The BOCC recently received this report and is moving forward with prioritized septic to sewer conversions in Old Palm City, Golden Gate, and North River Shores.

Go to this link for details: https://www.martin.fl.us/martin-county-services/septic-sewer-conversions

Source Water Assessments

The Florida Department of Environmental Protection (FDEP) conducted its most recent assessment of our source water systems in 2016. The assessment was performed to provide information about any potential sources of contamination in the vicinity of our wells. The assessment results indicate a low level of concern for our groundwater sources. The threat of contamination is further mitigated by a well field protection ordinance and extensive water quality testing. Assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://fdep.dep.state.fl.us/swapp/ and can also be obtained from Martin County Utilities at 772.221.1442.
2016

◊ First Runner-up Best Tasting Drinking Water for Region “8” of the American Water Works Association (AWWA).

◊ Three, one-million-gallon reclaimed water storage tanks were constructed and put in service, providing additional storage of high quality reclaimed water for landscape irrigation and further conserving drinking water and groundwater sources.

2015

◊ Best Tasting Drinking Water for Region “8” AWWA.

◊ Two new biosolids treatment systems began producing Class AA biosolids for beneficial reuse as fertilizer.


2014

◊ Best Tasting Drinking Water for Region “8” AWWA.


2013

◊ Martin County Solid Waste Operations ranks first in the State of Florida for recycling.


2012

◊ The Florida Department of Environmental Protection’s Division of Water Resource Management presented its 2012 Plant Operations Excellence Awards to public drinking water and domestic wastewater facilities: Martin County Utilities – Tropical Farms Water Treatment Plant was a winner of the award.

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, 2016. Data obtained before January 1, 2016, and presented in this report are from the most recent testing done in accordance with the applicable laws, rules, and regulations.

Results in the Level Detected column for radioactive 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.

### RADIOACTIVE CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant &amp; Unit of Measurement</th>
<th>Dates of Sampling (mo. / yr.)</th>
<th>MCL Violation Y / N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radium 226 + 228 (pCi/L)</td>
<td>3/2014</td>
<td>N</td>
<td>0.614</td>
<td>ND - 0.614</td>
<td>0</td>
<td>5</td>
<td>Erosion of natural deposits.</td>
</tr>
</tbody>
</table>

### INORGANIC CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant &amp; Unit of Measurement</th>
<th>Dates of Sampling (mo. / yr.)</th>
<th>MCL Violation Y / N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG</th>
<th>MCL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium (ppm)</td>
<td>3/2014, 7/2014</td>
<td>N</td>
<td>0.0035</td>
<td>0.0018 - 0.0037</td>
<td>2</td>
<td>2</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>3/2014, 7/2014</td>
<td>N</td>
<td>0.33</td>
<td>ND - 0.36</td>
<td>4</td>
<td>4.0</td>
<td>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.</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen) (ppm)</td>
<td>1/2016</td>
<td>N</td>
<td>0.061</td>
<td>0.054 - 0.061</td>
<td>10</td>
<td>10</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.</td>
</tr>
<tr>
<td>Sodium (ppm)</td>
<td>3/2014, 7/2014</td>
<td>N</td>
<td>71.2</td>
<td>52.0 - 74.5</td>
<td>N/A</td>
<td>160</td>
<td>Salt water intrusion, leaching from soil.</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Contaminant &amp; Unit of Measurement</th>
<th>Dates of Sampling (mo. / yr.)</th>
<th>MCL Violation Y / N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MCLG or MRDLG</th>
<th>MCL or MRDL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTHM (Total Trihalomethanes) (ppb)</td>
<td>2/2016 - 11/2016</td>
<td>N</td>
<td>48.6</td>
<td>14.2 - 42.0</td>
<td>N/A</td>
<td>MCL = 80</td>
<td>By-product of drinking water disinfection.</td>
</tr>
<tr>
<td>HAAS (Haloacetic Acid) (ppb)</td>
<td>2/2016 - 11/2016</td>
<td>N</td>
<td>43.4</td>
<td>16.6 - 46.5</td>
<td>N/A</td>
<td>MCL = 60</td>
<td>By-product of drinking water disinfection.</td>
</tr>
<tr>
<td>Chloramines (ppm)</td>
<td>1/2016 - 12/2016</td>
<td>N</td>
<td>2.5</td>
<td>0.6 - 4.0</td>
<td>MRDLG = 4</td>
<td>MRDL = 4.0</td>
<td>Water additive used to control microbes.</td>
</tr>
</tbody>
</table>

### LEAD AND COPPER (TAP WATER)

<table>
<thead>
<tr>
<th>Contaminant &amp; Unit of Measurement</th>
<th>Dates of Sampling (mo. / yr.)</th>
<th>AL Exceeded Y / N</th>
<th>90th Percentile Result</th>
<th>No. of sampling sites exceeding the AL</th>
<th>MCLG</th>
<th>Action Level (AL)</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (tap water) (ppm)</td>
<td>8/2016</td>
<td>N</td>
<td>0.15</td>
<td>0</td>
<td>1.3</td>
<td>1.3</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.</td>
</tr>
<tr>
<td>Lead (tap water) (ppb)</td>
<td>8/2016</td>
<td>N</td>
<td>4.6</td>
<td>2</td>
<td>0</td>
<td>15</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits.</td>
</tr>
</tbody>
</table>

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

As you can see by the tables, your drinking water meets or exceeds all federal and state requirements.
Water Quality Acronyms and Terms To Know

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. MCL’s are set as close to the MCLG’s 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. MCLG’s 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. MRDLG’s 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):** Means one part by weight of analyte to 1 million parts by weight of the water sample.
Citizens can do their part to help maintain the quality of our drinking water. Reducing stormwater pollution can have a positive impact not only on our beautiful Martin County waterways, but also on our drinking water. Here are the top 10 things you can do to reduce runoff pollution.

1. **ONLY RAIN GOES DOWN THE STORM DRAIN.**
   Never dump anything you wouldn’t want to drink or swim in onto the street, down a storm drain or into a drainage ditch, including grass clippings or leaves.

2. **THROW TRASH IN ITS PLACE.**
   Report any illicit discharges to Martin County’s waterways or storm drains to our STORMWATER HOTLINE at 772.228.5658.

3. **CLEAN UP AFTER YOUR PET.**

4. **CHECK YOUR VEHICLES FOR LEAKS – AND REPAIR THEM.**

5. **REDUCE HOUSEHOLD HAZARDOUS WASTES.**
   If you already have them at home, dispose of them properly.

6. **USE FERTILIZER AND PESTICIDE SPARINGLY.**
   They pose a serious threat to your health and safety and pollute both ground and surface water. It’s far cheaper to prevent pollution than it is to clean it up!

7. **THINK GREEN.**
   Compost leaves and yard clippings. Use rain barrels to collect water or plant a rain garden with deep-rooted native plants and grasses designed to capture rainwater runoff and stop the water from reaching the storm sewer system.

8. **WASH YOUR VEHICLE ON YOUR LAWN rather than on pavement.**

9. **TELL A FRIEND or neighbor about how to prevent stormwater pollution and get involved in your community’s programs.**

10. **ORIGINALLY DUMPED DOWN THE STORM DRAIN.**
    Never dump anything you wouldn’t want to drink or swim in onto the street, down a storm drain or into a drainage ditch, including grass clippings or leaves.