Orange City Utilities (OCU) is a leader in natural resource protection. The City is proud of its treasured natural resources, such as Blue Spring, and is striving to protect them throughout comprehensive management of water resources while ensuring public health. Long-term planning and a strong conservation ethic are essential to the preservation of our natural resources. In 2016, OCU started the water quality improvements planning for your area. Consultants and engineers completed water quality evaluations and the City is working on completing recommended improvements. We are adding new equipment at both wells and will rehabilitate the electrical/electronic components within the next year. For more information on Water Resources and future planned projects visit our web site:

OCU provides this Annual Water Quality Report to our customers so you may understand the concerted and rigorous efforts that are made to continually maintain and improve the water-treatment process and preserve Orange City’s precious water resources.

OCU’s water system provides safe, clean, drinking water to an approximate population of 1,800 individual customers who use a system-wide daily average of approximately 0.137 million gallons per day. Making every drop safe is our top priority. OCU’s water is tested continuously at our water treatment plants and throughout the distribution system. Water straight from the faucet continues to be safe, and the use of home filtration systems remains a matter of preference.

Your tap water is tested for bacteria and other pollutants of concern every year. The City is happy to announce to you that we have met all regulatory compliances as mandated under the Safe Drinking Water Act.

Orange City Utilities is very pleased to provide you with this year’s Annual Water Quality Report. We strive to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide OCU customers a safe and dependable supply of drinking water. OCU treats groundwater pumped from the Floridan Aquifer. Our treatment process for the Country Village, Sherwood Oaks & Monastery Rd. Water System consists of disinfection using injected chlorine.

This report depicts our water quality results. Orange City 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, 2017. Data obtained before January 1st, 2017 and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.
OCU is a municipally-owned utility, governed by the Orange City Council. The Orange City Council meets at City Hall, 201 N Holly Ave, Orange City, Fla., on the second and fourth Tuesday of every month. Additional information is available at www.OurOrangeCity.com, or contact:
Orange City Water Plant
Office 386-775-5442
jappel@ourorangecity.com
Service and Billing Questions: (386) 775-5444 After Hours Contact: (386) 736-5999

Special Health Considerations
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).

Table Terms and Abbreviations
- Non-Applicable (NA): Does not apply
- Non Detect (ND): Indicates the substance was not found by laboratory analysis
- Parts per million (ppm): One part by weight of analyte to 1 million parts by weight of the water sample
- Parts per billion (ppb): One part by weight of analyte to 1 billion parts by weight of the water sample
- Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow
- 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 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 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 contaminant.
The following table shows the results of the monitoring period from January 1 to December 31, 2017. The State of Florida allows for the monitoring of some contaminants less than once a year because the concentration of some of these contaminants does not change frequently. Therefore, some of the provided data, though representative, is more than a year old.

**Inorganic Contaminants**

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Dates of Sampling</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>11/2017</td>
<td>N</td>
<td>0.0132</td>
<td>0.0103 - 0.0132</td>
<td>2</td>
<td>2</td>
<td>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrate (as Nitrogen) (ppm)</td>
<td>02/2017</td>
<td>N</td>
<td>1.21</td>
<td>0.25-1.21</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>11/2017</td>
<td>N</td>
<td>11.4</td>
<td>9.6—11.4</td>
<td>NA</td>
<td>160</td>
<td>Salt water intrusion, leaching from soil</td>
</tr>
</tbody>
</table>

**Lead and Copper (Tap Water)**

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Dates of Sampling</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>AL (Action Level)</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (tap water) (ppm)</td>
<td>07/2015</td>
<td>N</td>
<td>0.59</td>
<td>No sites exceeded the AL</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>07/2015</td>
<td>N</td>
<td>1.4</td>
<td>No sites exceeded the AL</td>
<td>0</td>
<td>15</td>
<td>Corrosion of household plumbing systems, erosion of natural deposits</td>
</tr>
</tbody>
</table>

**Stage 2 Disinfectant/Disinfection By-Product**

<table>
<thead>
<tr>
<th>Disinfectant of Contaminant and Unit of Measurement</th>
<th>Dates of Sampling</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>Chlorine (ppm)</td>
<td>01/2017-12/2017</td>
<td>N</td>
<td>1.42</td>
<td>0.3-1.22</td>
<td>MRDLG = 4</td>
<td>MRDL = 4</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Haloacetic Acids (five) (HAAS) (ppb)</td>
<td>08/2017</td>
<td>N</td>
<td>7.18</td>
<td>7.18</td>
<td>NA</td>
<td>MCL = 60</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM [Total trihalomethanes] (ppb)</td>
<td>08/2017</td>
<td>N</td>
<td>10.0</td>
<td>10.0</td>
<td>NA</td>
<td>MCL = 80</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

Once during the past year, we violated a drinking water monitoring requirement. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct this situation.

We are required to monitor for specific contaminants on a regular basis to ensure our drinking water complies with health standards. During the month of August, 2017, we did not conduct required monitoring for total coliform bacteria at two well sampling sites and therefore cannot be sure of the water quality in those wells during that time. The samples were collected but not delivered to the laboratory for analysis. The City collected two bacteriological samples on September 7, 2017 and both passed the bacteriological analysis. A public notice was issued on October 4, 2017 and a review of operating and sampling procedures was conducted to ensure that this does not happen again.
**Source Water Assessment**

The Florida Department of Environmental Protection (DEP) under the Federal Safe Drinking Water Act has created the Source Water Assessment and Protection Program. The program is designed to ensure the safety of drinking water at the source. Contamination of ground water can occur from contaminants such as hazardous chemicals, stormwater runoff, waste disposal sites and underground storage tanks. In 2017 the Department of Environmental Protection updated the Source Water Assessment on our system. The assessment was updated to provide information about any potential sources of contamination in the vicinity of our wells. There are no potential sources of contamination identified for this system. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at https://fldep.dep.state.fl.us/swapp/ or they can be obtained from Orange City Utilities at 426 S Volusia Ave, Orange City, 32763.

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 (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

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.

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.

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. Orange City 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 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 or at http://www.epa.gov/safewater/lead.