2017 Annual Drinking Water Quality Report
City of Live Oak, Florida

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your drinking water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to providing you with information because informed customers are our best allies. In addition, we want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

Our water source is ground water from 3 wells that the City of Live Oak maintains. These wells draw water from the Floridan Aquifer. In addition, in 2017 there were 2 wells at Suwannee Correctional Institution, (also operated by the City of Live Oak). These two systems were connected by valves, to provide a secondary source of safe drinking water for the City of Live Oak in emergency situations. All water is treated with sodium hypochlorite for disinfection and fluoride for strong teeth.

In 2017, the Department of Environmental Protection 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. There are three potential sources of contamination identified with a low susceptibility level in the vicinity of our wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.

We encourage our valued customers to be informed about their water utility. If you would like more information on public participation opportunities please call Luis E. Tirado, at 407-222-1100. You can learn more about plans for the City’s drinking water system by attending monthly meetings of the City Council. For information on meeting dates call 386.362.2276 or on the web at http://www.cityofliveoak.org

Water Quality Data Table

The Live Oak Water System 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 1, 2017, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

*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 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.*

*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.

“NA” means not applicable.

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

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.

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.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

### Radioactive Contaminants

<table>
<thead>
<tr>
<th>Contaminant and 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>Alpha emitters (pCi/L)</td>
<td>3/2017</td>
<td>N</td>
<td>3.7</td>
<td>2.9-3.7</td>
<td>0</td>
<td>15</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Radium 226 + 228 or combined radium (pCi/L)</td>
<td>3/2017</td>
<td>N</td>
<td>2.1</td>
<td>1.3-2.1</td>
<td>0</td>
<td>5</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant and 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>3/2017</td>
<td>N</td>
<td>0.012</td>
<td>0.009-0.012</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>3/2017</td>
<td>N</td>
<td>0.935</td>
<td>ND - 0.935</td>
<td>4</td>
<td>4</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>Sodium (ppm)</td>
<td>3/2017</td>
<td>N</td>
<td>8.1</td>
<td>4.99-8.1</td>
<td>N/A</td>
<td>160</td>
<td>Salt water intrusion, leaching from soil</td>
</tr>
</tbody>
</table>

### Stage 1 Disinfectants and Disinfection By-Products

<table>
<thead>
<tr>
<th>Disinfectant or Contaminant and Unit of Measurement</th>
<th>Dates of sampling (mo./yr.)</th>
<th>MRDL Violation Y/N</th>
<th>Level Detected</th>
<th>Range of Results</th>
<th>MRDLG</th>
<th>MRDL</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine (ppm)</td>
<td>1/2017-12/2017</td>
<td>N</td>
<td>1.04</td>
<td>0.73-1.26</td>
<td>4</td>
<td>4.0</td>
<td>Water additive used to control microbes</td>
</tr>
</tbody>
</table>

### Stage 2 Disinfection By-Products

<table>
<thead>
<tr>
<th>Contaminant and 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>Haloacetic Acids (five) (HAA5) (ppb)</td>
<td>2/2017-10/2017</td>
<td>N</td>
<td>38.35†</td>
<td>0.702-58</td>
<td>NA</td>
<td>60</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM [Total trihalomethanes] (ppb)</td>
<td>2/2017-10/2017</td>
<td>N</td>
<td>65.63†</td>
<td>10.4 – 69.4</td>
<td>NA</td>
<td>80</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>
†For Stage 2 Haloacetic Acids or TTHM, the level detected is the highest locational running annual average (LRAA). The locational running average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

### Lead and Copper (Tap Water)

<table>
<thead>
<tr>
<th>Contaminant and Unit of Measurement</th>
<th>Date of sampling (mo./yr)</th>
<th>AL Exceeded (Y/N)</th>
<th>90th Percentile Result</th>
<th>No. of sampling sites exceeding 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>7/2017</td>
<td>N</td>
<td>0.278</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>7/2017</td>
<td>N</td>
<td>7.2</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
</tr>
</tbody>
</table>

*In 2017 due to administrative error we failed to submit the correct number of disinfection byproduct samples for the Town of Live Oak and therefore incurred a monitoring violation. Two sample sites were required to be sampled in the 3rd quarter of 2017, and only one was sampled. Samples resumed from the location in the 4th quarter and the results were found to be below the MCL.*

### Lead in Drinking Water

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 of Live Oak Water Treatment Facility 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 (1-800-426-4791) or at [http://www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. 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 before treatment 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.

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.

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).

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

For more information please contact:

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