

## 2015 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 informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.

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

In 2015, 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 no potential sources of contamination identified 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](http://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 Todd Hunt, at 386-590-2456. 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, 2015. Data obtained before January 1, 2015, 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.*

*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.*

*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*

*“NA” mean 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.*

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

<b>Microbiological Contaminants</b>						
Contaminant and Unit of Measurement	Dates of sampling (mo./yr)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (positive samples)	1/2015 - 12/2015	N	1	0	Presence of coliform bacteria in >1 sample collected during a month.	Naturally present in the environment

Results in the Level Detected column for 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.

<b>Radioactive Contaminants</b>								
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination	
Alpha emitters (pCi/L)	3/2015	N	4	NA	0	15	Erosion of natural deposits	
Radium 226 + 228 or combined radium (pCi/L)	3/2015	N	2.4	NA	0	5	Erosion of natural deposits	

<b>Inorganic Contaminants</b>							
Contaminant and 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)	2/2015	N	0.01	0.008 - 0.01	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	2/2015	N	0.93	0.79-0.93	4	4	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

Selenium (ppb)	2/2015	N	7.7	3.0 – 7.7	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	2/2015	N	8.0	5.4 – 8.0	N/A	160	Salt water intrusion, leaching from soil

### Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
2,4-D (ppb)	2/2015	N	7.8	ND – 7.8	70	70	Runoff from herbicide used on row crops
Picloram (ppb)	2/2015	N	6.1	ND – 6.1	500	500	Herbicide runoff

### Stage 1 Disinfectants and Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MRDL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	1/2015-12/2015	N	1.05	0.36-1.57	4	4.0	Water additive used to control microbes

### Stage 2 Disinfectants and Disinfection By-Products

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (five) (HAA5) (ppb)	2/2015-11/2015	N	51.5†	2.64– 79.8	NA	60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	2/2015-11/2015	N	76.5†	10.4 – 106.3	NA	80	By-product of drinking water disinfection

†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)

Contaminant and Unit of Measurement	Date of sampling (mo./yr)	AL Exceeded (Y/N)	90 <sup>th</sup> Percentile Result	No. of sampling sites exceeding AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	9/2014	N	0.30	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	9/2014	N	7.2	3	0	15	Corrosion of household plumbing systems; erosion of natural deposits

### Unregulated Contaminant Monitoring Regulation (UCMR3) Testing

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected	Range	Likely Source of Contamination
Chlorate (ppb)	1/2014, 7/2014	830	160 - 830	Refer to EPA
Chloromethane (ppb)	1/2014, 7/2014	0.3	ND - 0.3	Refer to EPA
Chromium-6 (ppb)	1/2014, 7/2014	0.08	ND - 0.08	Refer to EPA
Manganese (ppb)	1/2014, 7/2014	18	ND - 18	Refer to EPA

Molybdenum (ppb)	1/2014, 7/2014	7.3	ND - 7.3	Refer to EPA
Strontium (ppb)	1/2014, 7/2014	63	51- 63	Refer to EPA
Vanadium (ppb)	1/2014, 7/2014	0.5	ND - 0.5	Refer to EPA

Live Oak has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

### **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>.

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.
- (E) *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.

<b>For more information please contact:</b>
---

Contact Name: Todd Hunt, Project Manager III
Address: 701 Lime Ave.
Live Oak, FL 32064
Phone: 386.590.1575