



# Town of Lake Clarke Shores

1701 Barbados Road • Lake Clarke Shores FL 33406

Phone: 561-964-1515 • Fax: 561-964-0685

## 2019 Annual Drinking Water Quality Report

### *Hypoluxo Village Utility System*

The following is important information about the water quality of your area, please call (561) 642-7870 to request a translated report or assistance with the language in the report.

La siguiente es información importante sobre la calidad del agua de su área, llame al (561) 642-7870 para solicitar un informe traducido o asistencia con el idioma en el informe.

Swivan enfòmasyon enpòtan sou dlo kalite zòn ou la, tanpri, rele (561) 642-7870 pou mande yon rapò ke oubyen asistans ak lang nan rapò a.

### **INTRODUCTION:**

We are very pleased to provide you with this year's Annual Drinking Water Quality Report. This report is in compliance with requirements of the latest amendments to the Federal Safe Drinking Water Act regarding consumer confidence, and it is designed to assure that our water consumers are better informed about the quality water and services that we provide. We want 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 to you a safe and dependable supply of drinking water.

The Town of Lake Clarke Shores owns and operates the Hypoluxo Village Water Utility System. The Hypoluxo Village Utility System receives its water supply from the City of Lake Worth and distributes it through a system of piping.

The Lake Worth Water Treatment Plant is supplied raw water from the East Coast Surficial Aquifer and Biscayne Aquifer that are 100-300 ft. deep. It is pumped out of 13 production wells located within a half-mile radius of the plant. The Lake Worth Reverse Osmosis (RO) Water Plant is supplied raw water from the Floridan Aquifer (which is approximately 1,000 ft. deep) and is pumped out of 3 production wells located within a half-mile radius of the plant.

**The City of Lake Worth's 2019 Annual Water Quality Report Data is included with this report as reported by Lake Worth Utilities to the Town of Lake Clarke Shores.**

In 2019 the Department of Environmental Protection performed a Source Water Assessment on the Lake Worth Utilities System which supplies the Hypoluxo Village System with water. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at the following link: [https://fldep.dep.state.fl.us/swapp/DisplayPWS.asp?pws\\_id=4500773](https://fldep.dep.state.fl.us/swapp/DisplayPWS.asp?pws_id=4500773). Or they can be obtained from the City of Lake Worth Utilities Dept.

Our water is obtained from ground water sources and is chlorinated for disinfection purposes.

If you have any questions about this report or concerning your water utility, please contact the Lake Clarke Shores Water Utility Department at (561) 642-7870. We want our customers to be informed about their water utilities, if you want to learn more, please attend any of our regularly scheduled Town Council meetings.

Town Council Meetings are held on the second Tuesday of each month at Town Hall, 1701 Barbados Road, Lake Clarke Shores, FL beginning at 6:30 PM. You can obtain additional information from the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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

## **DEFINITIONS**

**Not-Detected (ND)** - “ND” means not detected and indicates that the substance was not found by laboratory analysis.

**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.

**Parts per billion (ppb) or Micrograms per liter** - 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.

**90<sup>th</sup> percentile value reported** – If the 90<sup>th</sup> percentile value does not exceed the AL, the system is in compliance.

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

**Location 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 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 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 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.

**Initial Distribution System Evaluation (IDSE)** – An important part of the Stage 2 Disinfection By-Products Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**Level 1 Assessment** – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment** – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

## **HYPOLUXO VILLAGE CONSECUTIVE SYSTEM WATER QUALITY TEST RESULTS**

Lake Clarke Shores Water 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, 2019. Data obtained before January 1, 2019, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

<b>Stage 1 Disinfectants and Disinfection By-Products</b>							
*Data from analysis of test results for Hypoluxo Village							
For bromate, chloramines, or chlorine, 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.							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine and Chloramines (ppm)	1/19-12/19	N	3.15	1.7 – 4.6	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
<b>Stage 2 Disinfectants and Disinfection By-Products</b>							
*Data from analysis of annual test results for Hypoluxo Village							
For chloramines, or chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For halo-acetic acids or TTHM, the level detected is the highest RAA. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations.							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	08/19	N	8.28	8.28	N/A	80	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	08/19	N	20.55	20.55	N/A	60	By-product of drinking water disinfection.
<b>Lead and Copper (Tap Water)</b>							
*Data from analysis of 2018 Lead and Copper test results for Hypoluxo Village. This system is on triennial sampling and will sample again in 2021							
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	AL Exceeded Y/N	90 <sup>th</sup> Percentile Result	No. of Sampling Sites Exceeding the AL	MCLG	AL (Action Level)	Likely source of Contamination
Copper (tap water) (ppm)	08/18	N	0.47	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	08/18	N	2.5	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Lake Clarke Shores Utilities have been monitoring for Unregulated Contaminants (UC) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UC and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UC. 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 (UCMR), please call the Safe Drinking Water Hotline at (800)-426-4791.

<b>Unregulated Contaminants</b> *Data from UCMR4 sampling done in 2019			
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	Level Detected (average)	Range
Manganese (ppb)	05/19 11/19	0.58	0.53 - 0.63
Germanium (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Chlorpyrifos (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Total permethrin (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Alpha-hexachlorocyclohexane (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Dimethipin (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Oxyflufen (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Profenofos (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Tebuconazole (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Tribufos (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Ethoprop (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
Butylated Hydroxyanisole (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
O-Toluidine (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level

Quinoline (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
1-Butanol (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
2- Methoxyethanol (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
2-Propen-1-ol (ppb)	05/19 11/19	< Minimum Reporting Level	< Minimum Reporting Level
HAA5 (ppb)	05/19 11/19	56.905	13.6 – 103.28
HAA6Br (ppb)	05/19 11/19	18.75	5.2-31.45
HAA905 (ppb)	05/19 11/19	71.8	17.3 - 128.88

### **ADDITIONAL INFORMATION**

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 Town of Lake Clarke Shores 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>.

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.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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/Center for Disease Control (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)

Please DO NOT FLUSH your unused/unwanted medications down toilets or sink drains. For more information, please go to <http://www.dep.state.fl.us/waste/categories/medications/pages/disposal.htm>.

## **CONCLUSION**

We at The Town of Lake Clarke Shores Utilities Department work around the clock to provide top quality water service to every tap. We ask that our customers help protect our water sources, which are the heart of our community, our way of life and our children's future.

The Town of Lake Clarke Shores would like you to understand the efforts we make to continually improve our Water Utility Department. We are committed to insuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.

## LAKE WORTH BEACH WATER TREATMENT PLANT TEST RESULTS FOR 2019

The City of Lake Worth Beach 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, 2019. Data obtained before January 1, 2019, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

Inorganic Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (Month/Year)	MCL Violation Y/N	Level Detected	MCLG	MCL	Likely Source of Contamination	
Barium (ppm)	02/19	N	0.0024	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	
Fluoride (ppm)	02/19	N	0.072	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7 ppm.	
Sodium (ppm)	02/19	N	40.8	N/A	160	Salt water intrusion, leaching from soil.	
Nitrate (as Nitrogen) (ppm)	02/19	N	0.062	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Nitrite (as Nitrogen) (ppm)	02/19	N	0.026 l	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Stage 2 Disinfectants and Disinfection By-Products							
Contaminant and Unit of Measurement	Dates of sampling (Month/Year)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chloramines (ppm)	01/19 – 12/19	N	3.87	0.2 – 5.4	MRDLG = 4	MRDL = 4	Water additive used to control microbes.
TTHM [Total Trihalomethanes] (ppb)	08/22/19	N	13.1	6.0 – 13.1	N/A	80	By-product of drinking water disinfection.
Haloacetic Acids (five) (HAA5) (ppb)	08/22/19	N	24.9	12.6 – 24.9	N/A	60	By-product of drinking water disinfection.
Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (Month/Year)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	July – Sept 2019	N	0.2	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	July – Sept 2019	N	1.4	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits.

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. We have learned through our monitoring and testing that some constituents have been detected.