



Town of Lake Clarke Shores

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2021 Annual Drinking Water Quality Report

Lake Clarke Shores 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. 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 Lake Clarke Shores Utility System. The Lake Clarke Shores Utility System receives its water supply from the Village of Palm Springs and distributes it through a system of piping.

The Palm Springs Treatment Plant is supplied ground water from the Surficial Aquifer in Eastern Palm Beach County. The water treatment plant pre-treats the ground water with a magnetic ion exchange system (MIEX) for organic removal prior to lime softening to remove hardness. Next, filtration takes place followed by disinfection using chloramines (chlorine and ammonia compound) prior to distribution.

The Village of Palm Springs 2021 Annual Water Quality Report Data is included with this report as reported by Palm Springs Utilities to the Town of Lake Clarke Shores.

In 2021 the Department of Environmental Protection performed a Source Water Assessment on the Palm Springs Utilities System which supplies the Lake Clarke Shore 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/>. Or it can be obtained from the Palm Springs Water Utilities Department.

This report shows our water quality results and what they mean.

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 encourage our valued customers to be informed about their water utility. 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.

LAKE CLARKE SHORES CONSECUTIVE SYSTEM WATER QUALITY TEST RESULTS

The 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, 2021. Data obtained before January 1, 2021, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

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

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.

90th percentile value reported – If the 90th percentile value does not exceed the AL, the system is in compliance.

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.

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.

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

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.

Stage 1 Disinfectants and Disinfection By-Products

*Data from analysis of test results for Lake Clarke Shores

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)	1/21-12/21	N	2.40	0.6 – 3.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

Stage 2 Disinfectants and Disinfection By-Products

*Data from analysis of test results for Lake Clarke Shores

For HAA5 and TTHM, the level detected is the highest locational running annual average (LRAA), computed quarterly, of quarterly averages of all samples collected. Range of Results is the range of individual sample results (lowest to highest) for the monitoring locations.

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
*Total Trihalomethanes (TTHM) (ppb)	02/20-11/20	N	N/A	27.85-114.0	N/A	80	By-product of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	02/20-11/20	N	N/A	15.7-53.57	N/A	60	By-product of drinking water disinfection.

*One sample during August 2020 (1821 Caribbean Rd. West) had a TTHM result of 114.0 ppb which exceeds the MCL of 80ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL.

TTHM (Total Trihalomethanes). Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Lead and Copper (Tap Water)							
*Data from analysis of Lead and Copper test results from 2021 sampling for Lake Clarke Shores. This system is on triennial sampling and will sample again in 2024							
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	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)	08/21	N	0.0155	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	08/21	N	2.2	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that another potentially harmful waterborne pathogen may be present, or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
 During the past year, we were required to conduct one Level 1 assessment & one Level 2 assessment. Both were successfully completed.

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 U.S. 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)

In our continuing efforts to maintain a safe and dependable Utility, it may be necessary to make improvements in your system. The costs of these improvements may be reflected in the rate structure. Future rate adjustments may be necessary in order to address these improvements. A Rate Study was conducted by an independent firm during 2021. The results of this study will help us to better evaluate our rate structure and identify any necessary changes in rates that may be needed.

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.

2021 Village of Palm Springs CCR Data

Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation	Result	MCLG	TT	Likely Source of Contamination
1. Total Coliform Bacteria*	01/21-12/21	N	Negative	N/A	TT	Naturally present in the environment

Stage 1 Disinfectants and Disinfection By-Products

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
78. Chlorine and Chloramines (ppm)	01/21-12/21	N	3.09	1.0 – 4.4	MRDLG = 4	MRDL = 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
83. Haloacetic Acids (HAA5) (ppb)	01/21, 05/21, 08/21, 11/21	N	52.875	22.0 – 60.9	N/A	60	By-product of drinking water disinfection
84. Total Trihalomethanes (TTHM) (ppb)	01/21, 05/21, 08/21, 11/21	N	65.15	18.0 – 108.0	N/A	80	By-product of drinking water disinfection

One sample during 2021 (444 Davis Rd., January) had a Total Trihalomethanes result of 108 parts per billion (ppb), which exceeds the Maximum Contaminant Level (MCL) of 80 ppb. However, the system did not incur an MCL violation, because all annual average results at all sites were at or below the MCL. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Volatile Organic Contaminants

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
65. Dichloromethane (ppb)	12/21	N	0.500	0.500	0	5	Discharge from pharmaceutical and chemical factories

Inorganic Contaminants

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
21. Nitrate (as Nitrogen) (ppm)	12/21	N	0.093	0.058-0.093	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Nitrite (as Nitrogen) (ppm)	12/21	N	0.033	0.026-0.033	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits