



CITY OF DELRAY BEACH 2022 WATER QUALITY REPORT



The City of Delray Beach is pleased to present the 2022 Water Quality Report. This report is designed to inform you of the quality of water and services we deliver everyday. Our constant goal is to provide you with a safe and dependable supply of drinking water. We are committed to ensuring the quality of your water by continuously improving the water treatment process, while also protecting our water resources. We are proud to inform you that our system had **NO VIOLATIONS** and meets all Federal, State, and local regulations, and continues to meet our water quality standards.

(ESPAÑOL) Este es un documento muy importante con respecto a su agua potable. Este reporte está disponible en Español en La Casa Municipal cuando llame a (561) 243-7312 o visitenos en la Internet a www.delraybeachfl.gov.

(KREYOL) Ti Liv sa, se yon Dokiman trè enpotan Konsènan Kalite Dlo Ke ou bwe. Si ou ta vle, ou Kapab jwen'n li an Kreyol nan Komitè Delray Beach la.

COMMUNITY PARTICIPATION

The Utilities Department is open Monday through Friday, from 7:30 AM to 3:30 PM, and may be contacted directly for questions and concerns relating to water quality at 561-243-7312.

If you would like to participate in any of our scheduled board meetings at City Hall, dates and times may be found on our City's website at www.delraybeachfl.gov.

We have worked diligently to maintain a first-rate facility and we welcome the public to tour our water treatment plant. Tours can be scheduled by contacting the water treatment plant directly at 561-243-7318.

The City withdraws water from a shallow under-ground source called the East Coast Surficial Aquifer. There are 30 raw water wells located throughout the City from which water is drawn and piped to the water treatment plant. We are currently operating under a water use permit issued by the South Florida Water Management District. Our water use permit allows for the withdrawal of up to 19.1 million gallons per day (MGD).

The water treatment plant uses a process known as "lime softening" to treat raw water prior to distribution to our customers. Upon arrival to the plant, the raw water is first aerated to remove natural gasses. The water is then blended with lime in settling tanks (clarifiers) for softening and color and iron removal. After the blending process, the water is then filtered and disinfected to meet federal Safe Drinking Water Act and Florida state standards. Prior to distribution, fluoride is injected to help prevent tooth decay. For more information on our treatment process, visit our website at www.Delraybeachfl.gov/WaterTreatment.

SOURCE WATER ASSESSMENT PLAN (SWAPP)

In 2022, The Florida Department of Environmental Protection (FDEP) performed a source water assessment of our system. The assessment was conducted to provide information about potential sources of contamination near the City's wells. There were 15 potential sources of contamination identified for the City's system, with low to moderate susceptibility levels, of which none are of concern at this time. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp.



The City of Delray Beach Utilities Department 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 Jan. 1 to Dec. 31, 2022. Data obtained before Jan. 1, 2022, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

Data Table Definitions AND ABBREVIATIONS

- 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
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow
- 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
- Parts per billion (ppb) or micrograms per liter ($\mu\text{g/l}$): 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
- Not Applicable (N/A): Does not apply

TEST RESULTS
2022 CCR - CITY OF DELRAY BEACH

Primary Inorganic Contaminants

| Contaminant and Unit of Measurement | Dates of sampling (mo./yr.) | MCL or MRDL Violation Y/N | Level Detected | Range of Results | MCLG | MCL | Likely Source of Contamination |
|--|------------------------------------|----------------------------------|-----------------------|-------------------------|-------------|------------|---|
| Barium (ppm) | 01/20 | N | 0.0045 | 0.0045 | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits. |
| Chromium (ppb) | 01/20 | N | 1.2 | 1.2 | 100 | 100 | Discharge from steel and pulp mills, erosion of natural deposits |
| Fluoride (ppm) | 01/22 -12/22 | N | 0.31 | 0.07 – 0.53 | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth at optimum levels between 0.7 and 1.2 ppm; discharges from fertilizer and aluminum factories. |
| Nitrate as Nitrogen (ppm) | 09/22 | N | 0.15 | 0.15 | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Nitrite as Nitrogen (ppm) | 09/22 | N | 0.14 | 0.14 | 10 | 10 | |
| Sodium (ppm) | 01/20 | N | 26.5 | 26.5 | N/A | 160 | Saltwater intrusion; leaching from soil. |

Stage 2 Disinfectant/Disinfection By-Product (D/DBP) Parameters / Stage 1 Chloramines

| 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 (ppb) | 01/22 -12/22 | N | 20.6 | 12.6 – 26.1 | N/A | 80 | By-product of drinking water disinfection |
| Total Halo Acetic Acid (ppb) | 01/22 -12/22 | N | 22.6 | 14.3 – 26.9 | N/A | 60 | |
| Chloramines (ppm) | 01/22 -12/22 | N | 3.6 | 0.3 – 5.4 | 4 | 4 | Water additive used to control microbes. |

Lead and Copper (Tap Water)

| 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 |
|--|------------------------------------|--------------------------|--|---|-------------|--------------------------|---|
| Lead (tap water) ppb | 09/22 | N | 4 | 0 | 0 | 15 | Corrosion of household plumbing systems; erosion of natural deposits. |
| Copper (tap water) ppm | 09/22 | N | 0.14 | 0 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |

Results in the Level Detected column for inorganic contaminants, stage 2 disinfectant/disinfection by-product parameters and stage 1 chloramines are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

Voluntary Monitoring

| Contaminant and Unit of Measurement | Dates of sampling (mo./yr.) | MCL or MRDL Violation Y/N | Level Detected | Range of Results | MCLG | MCL | Likely Source of Contamination |
|--|------------------------------------|----------------------------------|-----------------------|-------------------------|-------------|------------|--|
| Perfluoro-n-octanoic acid (PFOA) | 01/22 -12/22 | N | 0.013 µg/L | 0.011-0.014 | N/A | N/A | A by-product of chemical manufacturing because of their useful properties. |
| Perfluorooctanesulfonic acid (PFOS) | 01/22 -12/22 | N | 0.034 µg/L | 0.028-0.040 | N/A | N/A | |

Potential Contaminants in Source Water

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 storm water 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 storm water 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 storm water runoff, and septic systems.

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

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 Delray Beach 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 two 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>.



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.

IMMUNO-COMPROMISED CUSTOMERS

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. U.S. Environmental Protection Agency/Center for Disease Control 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)

We at the City of Delray Beach Utilities Department would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are fully committed to ensuring 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:

City of Delray Beach Utilities Department- Customer Service (561) 243-7312
City of Delray Water Treatment Plant (561) 243-7318
City of Delray Beach Utilities Billing Inquiries (561) 243-7101

