2018 CITY OF DELRAY BEACH

UTILITIES DEPARTMENT
CONSUMER CONFIDENCE REPORT

Revised 6/24/2019

***Our Vision:** Build a resilient utility that exceeds customer expectations by providing value and quality through sound planning, effective and efficient operations and environmental stewardship now and into the future.*

Our System Overview

- one lime softening water treatment plant
- averages 16 million gallons per day (MGD)
- about 70,000 people served (includes Town of Gulfstream)
- 8.5 million gallons of total storage capacity
- one elevated storage tank
- five ground water storage tanks
- over 3,000 fire hydrants; 5,000 system valves and related equipment

Our Commitment

Annually the City of Delray Beach (City) Utilities Department prepares and delivers a consumer confidence report (CCR) to our water customers. It presents a summary of testing and analyses of the drinking water we delivered over the previous calendar year and information on our operations. The quality of our water is excellent, having met or surpassed the standards set by the Environmental Protection Agency (EPA); we are proud of the service we provide to our customers and strive to perform better every year!

The City's new website www.delraybeachfl.gov keeps you informed of upcoming meetings and news. Consider subscribing to "Code Red," an automated notification program so you can be alerted in case of emergencies or other critical news. Online bill pay continues to be offered through the Finance Department's Utility Billing Division's link and is a convenient way to make sure your City utilities bill gets paid, saves paper and a stamp or waiting in line.

Building a Resilient Utility Together

The City continues to improve our water utilities services through:

- innovative problem solving
- implementation of water conservation initiatives through public outreach and education
- conducting phased utilities system-wide condition assessments to help prioritize infrastructure needs and identify opportunities to optimize our resources
- encouraging reclaimed water use through public outreach, education and system extensions
- investigate alternative water resources and treatment options for our water future

Our mission is to ensure safe, reliable and sustainable utilities services through our commitment to excellence, best management practices and continuous improvement for the health, safety and welfare of our customers.

"Water is a Limited Resource"

For tips on how to conserve water go to the South Florida Water Management District (SFWMD) website at:
www.sfwmd.gov/community-residents/water-conservation

Water Treatment Operators and Laboratory Staff

Water treatment plant operators are a critical part of providing safe drinking water to our customers. These individuals must be certified by the State of Florida; be knowledgeable about the water system and procedures; skilled in math, chemistry, mechanics, computers, heavy equipment operation and much more. Our laboratory is certified through a national environmental laboratory accreditation program (NELAP) and performs over 35,000 analyses (drinking water parameters) per year to ensure safe water. Above all, our staff works hard to keep your water safe and to protect public health. We are proud of the services they provide to our community each day.

DRINKING WATER QUALITY REPORT FOR 2018

(This report is mandated by the Florida Department of Environmental Protection and has been produced and distributed at our customers' expense)

This report summarizes the water quality supplied to our customers from January 1, 2018 to December 31, 2018. Our drinking water is produced within stringent governmental guidelines and regulations. (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) 243-7000 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 Komi'n Delray Beach la.

Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders and some elderly and infants can be particularly at risk of infection. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 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 (above) or at http://www.epa.gov/safewater/lead.

Microbiological Contaminants: total coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens 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.

Why are Contaminants Present in Drinking 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.

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 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 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 (1-800-426-4791).

Contaminants that may be Present in Source Water Include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- 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.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Where Does Our Water Come From?

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 MGD. In 2018, 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 nineteen potential sources of contamination identified for the City's system with low to high 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 web site at **www.dep.state.fl.us/swapp**. The City monitors for source water contaminants on a semiannual basis to ensure its safety.

How is Our Water Treated?

The water treatment plant uses what is known as "lime softening process" to treat raw water prior to distribution to our customers. Upon arrival at the water treatment plant the raw water is first aerated to remove natural gasses. The water is then blended with lime in settling tanks (clarifiers) for softening, 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.

How we Ensure the Highest Water Quality?

During the treatment process, as well as after the water is released into the distribution system, it undergoes a series of intense testing. Thousands of samples are analyzed each year for chemical, physical and microbiological parameters. The results of these tests are compared with standards set by the EPA. These results are indicated on the tables included on the last page of this pamphlet. When reading these tables, the lower the test results, the higher the water quality. This ongoing testing and research are your assurance that water produced by the City will be of the highest quality for consumption each time you turn on your faucet.

Additional Testing

We also conduct tests for the presence of 85 additional contaminants such as volatile organic compounds (VOC), polychlorinated biphenyl (PCB) & pesticides, arsenic, asbestos, mercury, unregulated contaminants and many others. We are pleased to report that all these additional contaminants were below detection limits. Compliance monitoring requirements for certain contaminants are less frequent than once per year since concentrations are not expected to vary significantly from year to year. Some results are from previous years monitoring.

Additional Information

The Utilities Department is open Monday through Friday from 7:30 AM to 4:30 PM and can be contacted directly for questions and concerns relating to water quality. Regular City Commission meetings are generally held on the first and third Tuesday of every month in the Commission Chambers at City Hall. We have worked very hard 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. Further details of our water treatment process are also available at our web site **www.delraybeachfl.gov.**

Important Telephone Numbers

City of Delray 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
Environmental Protection Agency (Safe Drinking Water Hotline)	(800) 426-4791
Florida Department of Health, Palm Beach County	(561) 837-5900
Florida Department of Health, Tallahassee (Headquarters)	(904) 791-1599

TEST RESULTS

2018 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)	12/17	N	0.0056 ppm	0.00050	2 ppm	2 ppm	(a)
Fluoride (ppm)	01/18	N	0.53 ppm	0.08 – 0.77	4 ppm	4 ppm	(b)
Lead (point of entry) (ppb)	12/17	N	0.50 ppb	0.50	0 ppb	15 ppb	(c)
Nitrate as Nitrogen (ppm)	12/18	N	0.147 ppm	0.147	10 ppm	10 ppm	(d)
Nitrite as Nitrogen (ppm)	12/18	N	0.040 ppm	0.040	10 ppm	1 ppm	(d)
Sodium (ppm)	12/17	N	34.0 ppm	34.0	160 ppm	160 ppm	(e)

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)	01/18 -12/18	N	44.6 ppb	16.3 – 76.0	0 ppb	80 ppb	(f)
Total Haloacetic Acid (ppb)	01/18 -12/18	N	38.0 ppb	17.9 – 55.7	0 ppb	60 ppb	(f)
Chloramines (ppm)	01/18 -12/18	N	3.5 ppm	0.0 – 5.2	4 ppm	4 ppm	(g)

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)	01/18 -12/18	N	5 - 7 ppb	2	0 ppb	15 ppb	(h)
Copper (tap water) (ppm)	01/18 -12/18	N	0.26 – 0.29 ppm	0	1.3 ppm	1.3 ppm	(i)

Microbiological Contaminants

Contaminant and Unit of Measurement	*Dates of Sampling (mo./yr.)*	TT Violation	Results	MCLG	TT	*Likely Source of Contamination*
Total Coliform Bacteria (positive samples)	10/18	Y	Positive	N/A	N/A	(j)

THE FOLLOWING IS A LIST OF THE LIKELY SOURCE OF CONTAMINATION FOR EACH DETECTED CONTAMINANT

(a) Barium	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
(b) Fluoride	Erosion of natural deposits; discharges from fertilizer and aluminum factories. Water additive which promotes strong teeth at optimum levels of 0.7 ppm.
(c) Lead (point of entry)	Residue from man-made pollution such as auto emissions and paint; lead pipe; casing and solder.
(d) Nitrate/Nitrite as Nitrogen	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
(e) Sodium	Salt water intrusion; leaching from soil.
(f) TTHM's & HAA's	TTHM's & HAA's are contaminants formed when chlorine reacts with carbon compounds naturally occurring in ground water, such as chloroform. These items are a by-product of drinking water chlorination.
(g) Chloramines	Water additive used to control microbes.
(h) Lead (tap water)	Lead is an element occurring in nature and often occurs in water as the result of corrosion of household plumbing systems.
(i) Copper (tap water)	Copper is an element occurring in nature and often occurs in water as the result of corrosion of household plumbing systems.
(j) Total Coliform Bacteria	Naturally present in the environment.

Definitions

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level of (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (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.

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

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

Abbreviations

Parts per million (ppm)
Parts per billion (ppb)
Not detected (ND)
Treatment technique (TT)
Not applicable (N/A)