



# TOWN OF DAVIE UTILITIES

## PWS# 4060344

### 2020 Water Quality Report

(954) 327-3742



*Este informe contiene información importante acerca de su agua potable. Llame al 954-327-3742 para obtener una copia en español o ayuda para traducir el contenido de este reporte or United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline at 1-800-426-4791.*

#### Compliance & Period Covered by Report

We are pleased to provide you with the Town of Davie Utilities 2020 Drinking Water Quality Report. This report contains information about your drinking water quality, including water source, treatment process, the contents of your drinking water and what they mean. The Town 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, 2020 to December 31, 2020. Data obtained before January 1, 2020 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

Town of Davie Utilities continues to provide outstanding services with transparency to our customers. More information on our programs and operations can be found on our webpage: <https://www.davie-fl.gov/372/Utilities-Operations>.

#### Contact Information

For more information or questions about this report, or to request a paper copy, please contact the Town's Utilities Department at (954)-327-3742 or United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline at 1-800-426-4791.

Regular Town Council Meetings are held the first and third Wednesday of each month at 6:30 p.m., held at the Town Hall at 6591 Orange Drive. Open public session occurs at the beginning of the first council meeting of every month. Public Meeting Calendar is available at this link: <https://www.davie-fl.gov/Calendar.aspx>. We encourage our valued customers to be informed about their water utility.

#### Source Water Assessment

##### Source Water Assessment and Protection Program (SWAPP):

The SWAPP program is meant to ensure that your drinking water is safe, not just at the tap, but at its source. The Florida Department of Environmental Protection (DEP) is initiating the SWAPP as part of the federal Safe Drinking Water Act (SDWA). Recently, in 2018 the Florida Department of Environmental Protection (FDEP) performed a Source Water Assessment on our system. The assessment provides the utility with information about any potential source of contamination in the vicinity of our wells. There are eight (8) potential sources of contamination identified for our system with low susceptibility scores (0.01-8.33). The assessment results are available on FDEP Source Water Assessment and Protection Program website at <https://fldep.dep.state.fl.us/swapp> or they can be obtained by calling the Town's Utilities Department at (954)-327-3742.

#### General Drinking Water Information

*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 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 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.*

#### Terms & Abbreviations

*In the 2020 Water Quality table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:*

**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.

**"ND"** means not detected and indicates that the substance was not found by laboratory analysis.

**"NA"** means not applicable.

**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.



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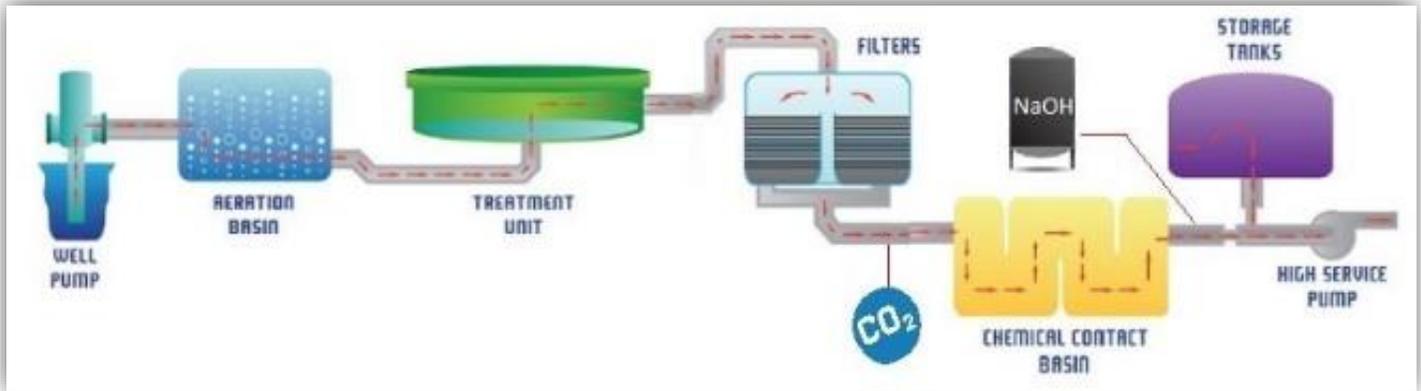


#### Water Source, Source Plans & Treatment

##### Source of Water Supply:

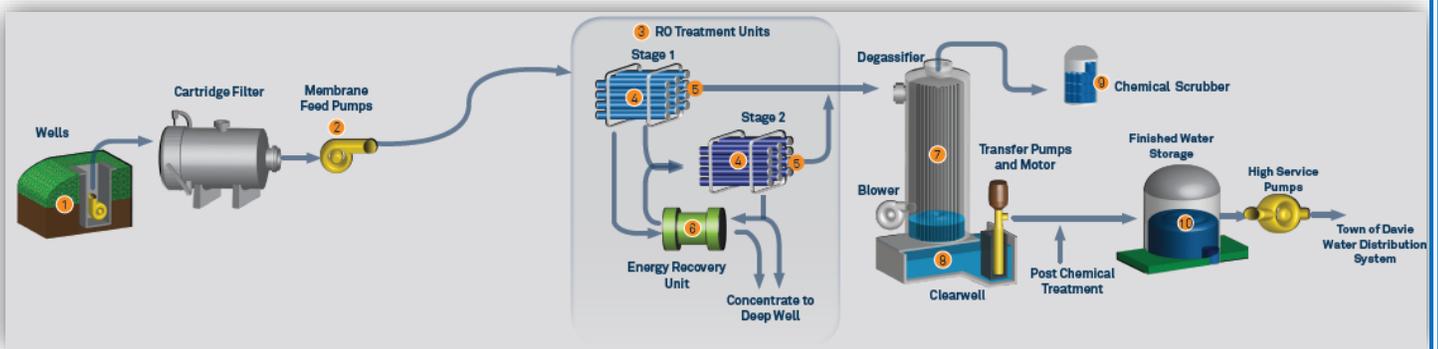
The Town of Davie System III Water Treatment Plant obtains its ground water from the Biscayne Aquifer, a shallow underground geologic formation where water is stored. Water is pumped from the wells to the water treatment facility, which aerate, soften, filter, disinfect with sodium hypochlorite and fluoridate water from the wells and transmit treated water into a common distribution system (See schematic of Town of Davie Utilities - System III below).

Town of Davie System III Treatment Process Diagram:



The Town of Davie System V Water Treatment Plant obtains its ground water from the Floridan Aquifer, a deep underground geologic formation where water is stored. Water is pumped from the wells to the water treatment facility, where reverse osmosis membranes remove high concentration of salts and other contaminants. The water is then aerated, disinfected with sodium hypochlorite and fluoridated and transmitted into a common distribution system (See schematic of Town of Davie Utilities – System V diagram below).

Town of Davie System V Treatment Process Diagram:



#### For Customers with Special Health Concerns

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).



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**2020 Water Quality Table**

Microbiological Contaminants						
Contaminant (Unit of Measurement)	Dates of sampling (mo. Jyr.)	TT Violation Y/N	Result	MCLG	TT	Likely Source of Contamination
Total Coliform Bacteria*	1/20-12/20	N	2 Positive Sample	N/A	TT	Naturally present in the environment
Contaminant	Dates of sampling (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely source of contamination
E. Coli**	1/20-12-20	N	1 Positive Sample	0	Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i>	Human and animal fecal waste

\*Total Coliform (T.C.) 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. The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. We found coliforms indicating the need to look for potential problems in water treatment or distribution.

\*\* *E. Coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. Coli* bacteria, indicating the need to look for potential problems in water treatment or distribution.

When bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. During the past year we corrected all identified defects that were found during our routine distribution system and ground water source assessments:

- \* On March 3, 2020, we sampled the distribution system for the Total Coliform bacteria. We were notified on March 5, 2020 that one (1) distribution site was tested positive for Total Coliforms\* and *E. Coli*\*\*. On the same day (March 5, 2020), we recollect sample at the same site and took two (2) additional samples from sites close by. All recollected samples were negative for both bacteria, Total Coliform and *E. Coli*.
- \* On April 7, 2020 we sampled the water source (Well 5) for the Total Coliform bacteria. We were notified on April 8, 2020 that Well 5 tested positive for Total Coliform\*, but negative for *E. Coli*. On the same day (April 8, 2020), we recollect sample and were notified on the next day (April 9, 2020) that recollect sample was negative for both bacteria (T.C. and *E. Coli*).

To comply with the stricter microbiological protection, we have increased the average amount of chlorine in the distribution system. Also, the Town conducted a five-weeks free chlorination, from April 10 to May 15 of 2020.

**Radioactive Contaminants**

Contaminant (Unit of Measurement)	Dates of sampling (mo. Jyr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or combined Radium (pCi/L)	1/21***	N	0.5	0.5	0	5	Erosion of natural deposits

\*\*\*Dept. of Health in Broward County (DOH-BC) scheduled compliance for 2023, but to meet the Florida Dept. of Environmental Protection (FDEP) 2020 schedule, samples were collected 01/21. Combined Radium. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

**Inorganic Contaminants**

Contaminant (Unit of Measurement)	Dates of sampling (mo. Jyr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	2/20	N	0.58	ND-0.58	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2/20	N	0.0028	ND-0.0028	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	2/20	N	0.20	ND-0.20	0.004	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Fluoride (ppm)	2/20	N	0.58	0.50-0.58	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
Nitrate (as Nitrogen) (ppm)	2/20, 5/20	N	1.2	ND-1.2	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite**** (as Nitrogen) (ppm)	2/20, 5/20, 9/20	N	0.50	ND - 0.5	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	2/20	N	37	37-77	N/A	160	Saltwater intrusion, leaching from soil

\*\*\*\*Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.



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**2020 Water Quality Table**

**Synthetic Organic Contaminants including Pesticides and Herbicides**

Contaminant (Unit of Measurement)	Dates of sampling (mo. /yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Dalapon**** (ppb)	2/20, 9/20	Y*	1600	900-1600	200	200	Runoff from herbicide used on rights of way

\*\*\*\* Dalapon. Some people who drink water containing Dalapon well in excess of the MCL over many years could experience minor kidney changes. This contaminant was discovered with second round sampling on September 23, 2020 in the Water Treatment Plant - System III, which obtained its ground water from the shallow Biscayne Aquifer. Currently, this Water Treatment Plant - System III ceased its operations for maintenance and treatment improvements. Utilities department is in contact with FDEP, and we will start quarterly monitoring for this contaminant once the System III returns to operation.

**Disinfectant Residuals**

Disinfectant or Contaminant (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
Chloramines (ppm)	1/20- 12/20	N	3.08	2.1-3.7	MRDLG = 4	MRDL= 4.0	Water additive used to control microbes

**Disinfectant and Disinfection By-Products**

Disinfectant or Contaminant (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
Haloacetic Acids (HAA5) (ppb)	2/20, 5/20, 8/20, 11/20	N	0.98	ND – 3.9	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2/20, 5/20, 8/20, 11/20	N	ND	ND	N/A	MCL = 80	By-product of drinking water disinfection

**Lead and Copper (Tap Water)**

Contaminant (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)	7/20	N	0.14	0 out of 32	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	7/20	N	1.4	1 out of 32	0	15	Corrosion of household plumbing systems; erosion of natural deposits

**Lead**

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 Davie 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.

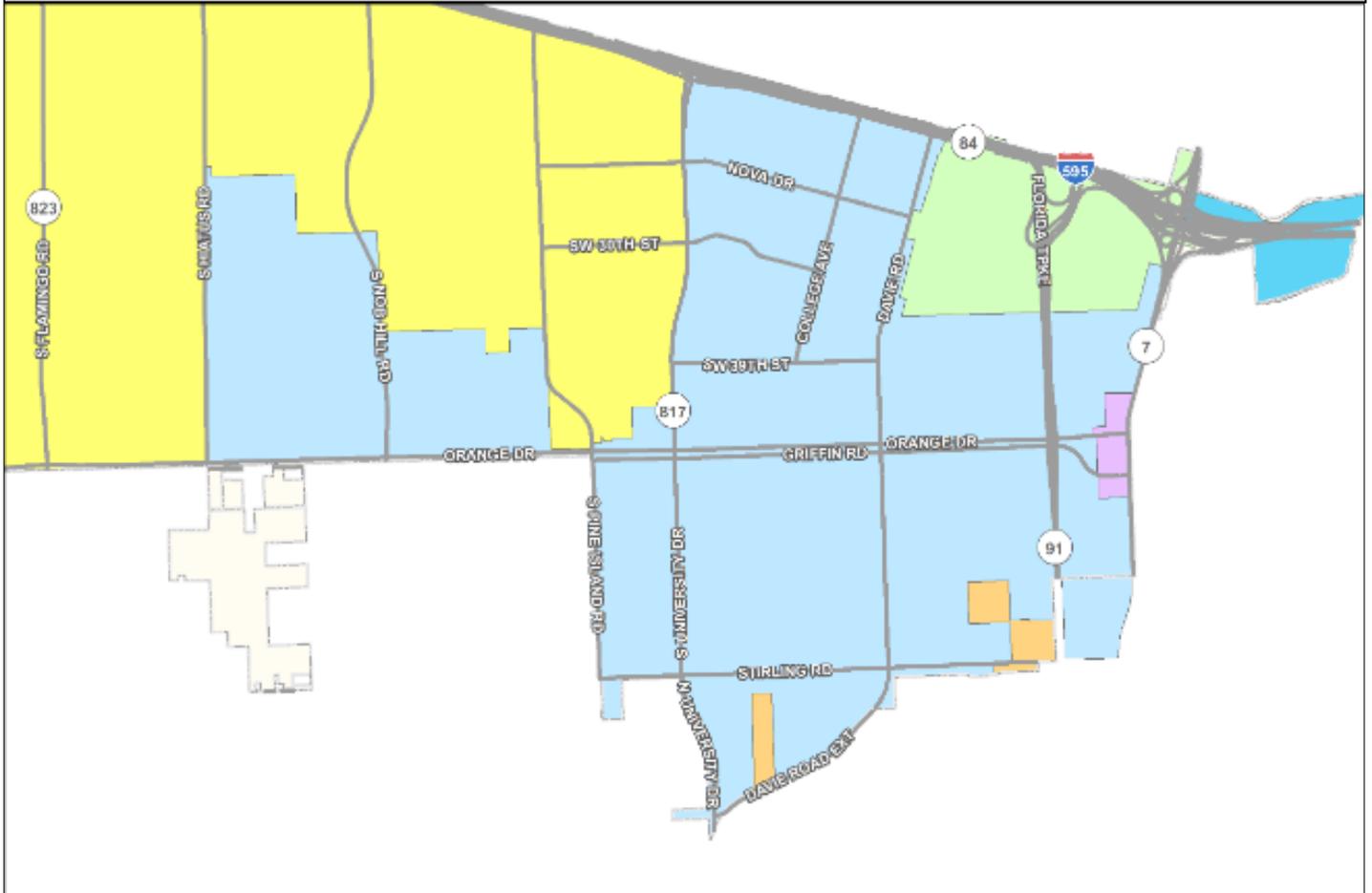
Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.



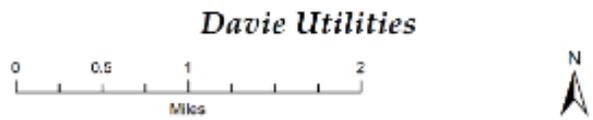
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**Town of Davie Utilities Service Area**



- |                     |   |
|---------------------|---|
| Sunrise Utilities   | Davie Bulk Agreement with Ft Lauderdale |
| Hollywood Utilities | Davie Utilities                         |
| Ferncrest Utilities | Broward County Utilities                |



The Town of Davie provides water and sewer services to a portion of the Town. Other portions of the Town are serviced by other municipalities or by private utility companies.

If you do not know what provider services your area, please visit: <https://www.davie-fl.gov/375/Utility-Service-Area>

If you have any questions about the information contained in this report, your drinking water, or the Authority in general, please call us at 954-327-3742.

This Drinking Water Quality Report is available on our website: <https://www.davie-fl.gov/DocumentCenter/View/2233/2016-Water-Quality-Report-PDF>

Thank you for taking the time to read this report.