



TOWN OF DAVIE UTILITIES
PWS# 4060344
2017 Water Quality Report
Phone: (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.

Director's Message

We are pleased to provide you with the Town of Davie Utilities 2017 Drinking Water Quality Report. Inside this report, you will find all the information about the quality of your drinking water, including your water source and treatment processes. We will also take the opportunity to inform you about our additional programs, such as Water Conservation and Cross-Connection Control.

Once again, Town of Davie Utilities has surpassed the drinking water quality standards set by the United States Environmental Protection Agency (USEPA) and enforced by Florida Department of Environmental Protection (FDEP). Providing our customers with safe, high quality of drinking water is our top priority.



In 2017, Hurricane Irma left a path of destruction all over the state of Florida. Our Utilities Department fared well during and after the storm, with our staff working diligently to ensure services were stable, compliant and available to our residents. Our Department continues to make improvements, post Hurricane Irma, to ensure resiliency against future events. One such improvement is the continued development of water and sewer Geographical Information System (GIS). GIS is a central repository for managing and analyzing all of our water and sewer field assets. By knowing the exact location of an asset, its' condition, and integration with other assets, we can make informed decisions and respond quicker to emergency situations, including water and sewer breaks. Utilizing the GIS database helps us identify, isolate, repair and restore services in a cost effective and time efficient fashion-thereby increasing overall customer satisfaction.

We would also like to take this opportunity and share with you that our Utilities was recognized by the Florida Section of the American Water Works Association (FSAWWA) as a 2017 Outstanding Water Treatment Facility. Our award-winning treatment plant demonstrates our commitment to deliver superior drinking water and provide outstanding services. In this regard, we continue to invest in our infrastructure, treatment and monitoring processes as well as our personnel. Outstanding service also means promoting good environmental stewardship. With our "Clean through Green" initiative, we continue to promote the importance of water resources conservation through public education and outreach. The Town of Davie Utilities Department collaborates with local schools for educational tours and the FSAWWA DropSavers Water Conservation Poster Contest. We are also a participant in Broward County's Toilet Rebate & Conservation Pays Program and the *Water Matters Day* event.

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>. If you have any questions about the content of if you wish to request a copy, please do not hesitate to contact us at 954-327-3742.

Town of Davie Utilities will be happy to assist you!

Regards,

Renuka Mohammed - Bajinath

Acting Utilities Director

Compliance & Period Covered by Report

The Town of Davie is pleased to present with you this year's Annual Water Quality Report. This report contains important information about the Town's water source, water supply, treatment process and 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, 2017 to December 31, 2017. Data obtained before January 1, 2017 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

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.



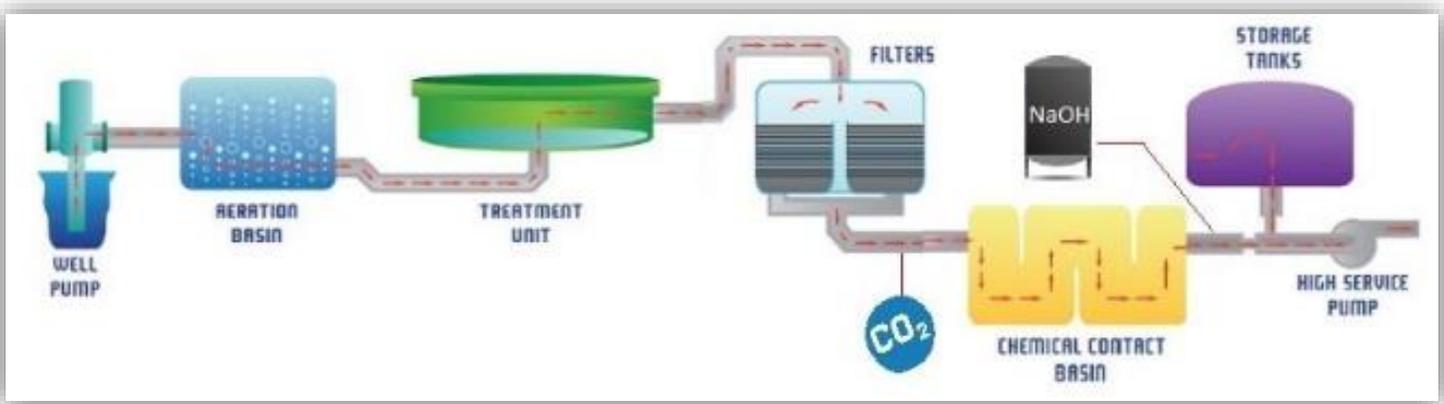
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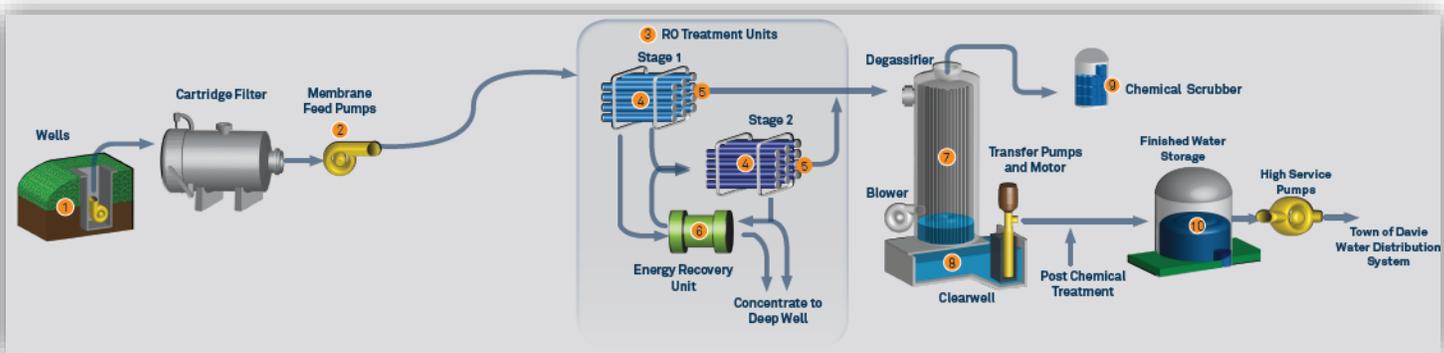
Water Source, Source Plans & Treatment

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:



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). In 2017 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://fdep.dep.state.fl.us/swapp> or they can be obtained by calling the Town's Utilities Department at (954)-327-3742.



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Terms & Abbreviations

In the 2017 Water Quality table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definition

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.

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 activities.

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.

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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2017 Water Quality Table

Inorganic Contaminants							
Contaminant (Unit of Measurement)	Dates of sampling (mo. /yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Arsenic (ppb)	02/17	N	0.65	ND-0.65	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	02/17	N	0.0033	ND-0.0033	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	01/17-12/17	N	0.5	0.048-0.5	4	4.0	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)	02/17	N	0.043	0.034-0.043	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	02/17	N	0.37	ND-0.37	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	02/17	N	82.6	36.4-82.6	N/A	160	Salt water intrusion, leaching from soil

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)	01/17- 12/17	N	2.96	2.55-3.57	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes

Disinfectant and Disinfection By-Products							
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)	2/17, 6/17, 8/17, 10/17	N	1.35	ND-1.35	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2/17, 6/17, 8/17, 10/17	N	0.3625	ND-0.3625	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)	2/17-3/17	N	0.264	0 out of 92	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	2/17-3/17	N	6.5	4 out of 92	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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Backflow & Cross-Connection

What is backflow?

Backflow is the undesirable reversal of flow of water, liquids, mixtures or substances into the public water distribution pipe system from any source or sources other than its intended. For example, when pressure in a property owner's equipment is greater than the pressure in the drinking water line, or when the pressure in the water line drops and dirty or used water from a home or business gets siphoned back into the public water distribution pipe—that ends up at your water tap.



What is a Cross-Connection?

Cross-Connection means any physical connection or arrangement of piping or fixtures between two (2) otherwise separate piping systems, one (1) of which contains potable water and the other non-potable water or industrial fluids, through which, or because of which, backflow or back siphonage may occur into the water system.

Who is required to have a backflow preventer?

Per the Florida Administrative Code (FAC) –Chapter [62-555.360](#) and Town ordinances, [Chapter 25 Article V and Article VIIA](#), an approved backflow device is required on all commercial, institutional and industrial businesses, multifamily residences, dedicated irrigation lines, and fire suppression lines. In addition, all single family residences with irrigation systems must have an approved testable backflow prevention device installed. Per Town of Davie Ordinance, failure to install an appropriate backflow constitutes grounds for discontinuing water service. In order to better protect the public water system the Utilities department is working on implementation the backflow devices for our residential customers.

Public Outreach & Education

16th Annual Broward County Water Matters Day

Once again, the Town has participated in the annual Water Matters Day, held at the Broward County Tree Tops Park in Davie. Water Matters day is a Broward County educational effort to educate local residents about their water resources, management and future needs. The residents received information on water conservation principles, practices and how to receive credit for replacing an old toilet for a new high-efficient, low flow WaterSense® toilet. The event was packed with children's activities, interactive educational booths and exhibits, conservation ideas and giveaways. Participants were also able to take home free native plants by visiting at least 12 of the event's exhibits and obtaining stamps from each on their event program. The theme was "Water Matters ...and Conservation Pays" and the Town of Davie Utilities focused their message on what initiatives can be taken at home or community to conserve water resources and could actually save you money. We hope to see you again, at the next Water Matters Day!



Broward Water Partnership

The Town of Davie is a member of the Broward Water Partnership's Programs. This multi-year program has an aggressive media campaign to enhance awareness of water conservation and to achieve the program's goal to save water, save money, and save the environment. This partnership helps to inform various communities throughout the County about the importance of year-round water conservation to meet today's water demands, as well as our future demands. To learn more about the program and qualifying rebates visit <http://conservationpays.com/> or call at 1-800-270-9794.



Broward Water Partnership
 A Collaboration of Local Governments.



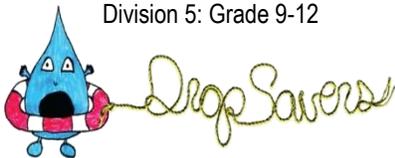
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AWWA Drop Savers Water Conservation Poster Contest

The Town of Davie Utilities is proud to announce the winners of the annual AWWA "Drop Savers" poster contest. The program fosters the importance of water conservation through education and awareness. The contest is open to (5) divisions based on grades:

- Division 1: K-1st grade
- Division 2: Grade 2, 3
- Division 3: Grade 4, 5
- Division 4: Grade 6-8
- Division 5: Grade 9-12

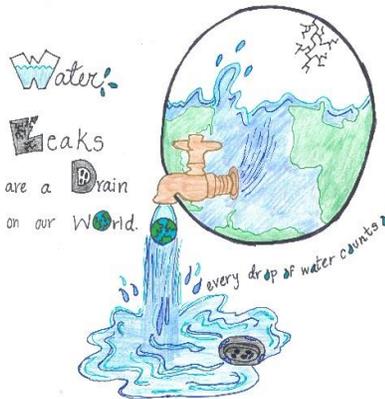


Division 1: K-1st grade



Division 1 Winner
Ashly Sapon Vail,
 Davie Elementary

Division 2: Grade 2, 3



Division 2 Winner
Anabia Anwar,
 Nova Blanche Forman Elementary

Division 3: Grade 4, 5



Division 3 Winner
Hailey Gonzalez,
 Somerset Academy Davie

Division 4:
 Grade 6-8



Division 4 Winner
Novie Rubio,
 Nova Middle School

Division 5:
 Grade 9-12



Division 5 Winner
Sofia Canessa,
 Nova High School

