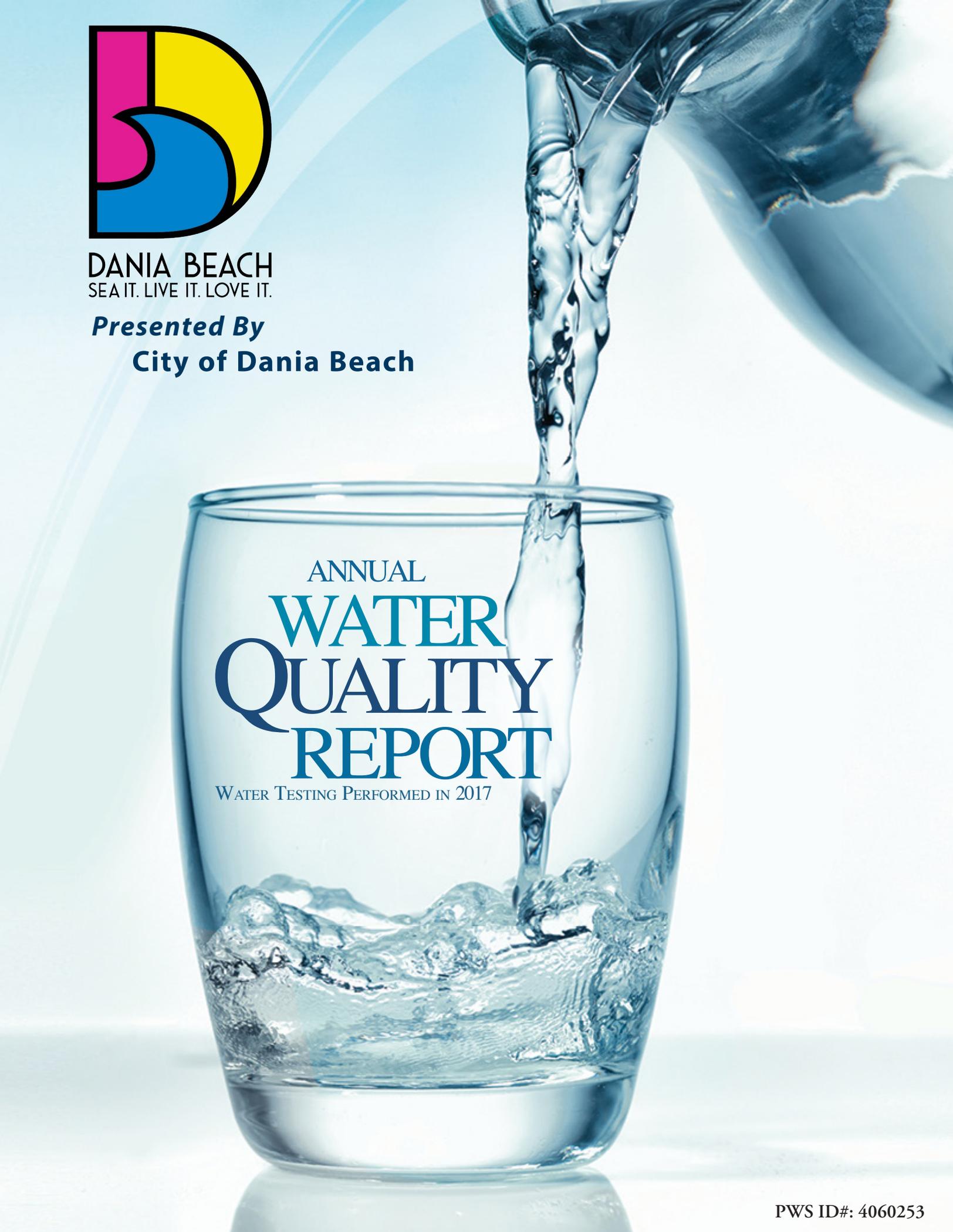


DANIA BEACH
SEA IT. LIVE IT. LOVE IT.

Presented By
City of Dania Beach

A high-quality photograph of a clear glass being filled with water. A stream of water is being poured from a pitcher (partially visible at the top right) into the glass. The water is splashing and creating bubbles at the bottom of the glass. The background is a light, clean white with subtle blue curved lines.

ANNUAL
**WATER
QUALITY
REPORT**

WATER TESTING PERFORMED IN 2017

Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Where Does My Water Come From?

Our water is sourced from the Biscayne Aquifer. We own two wells on the eastern edge of this aquifer, and we also purchase water from the Broward County Regional Wellfield located at Brian Picollo Park. Each month we collected a bacteriological sample and quarterly chemical samples at our wells to test for contaminants associated with potential source contamination. Once the water is pumped from the ground, we treat it with a process called lime softening. This method precipitates calcium carbonate and like elements from the water, making it soft. We filter the water to remove the remaining particulates. The water is then disinfected to inactivate microbial contaminants and fluoride is added to promote dental health. In November 2011, the city added and placed into service a new 2MG nanofiltration membrane plant to supplement the existing 3MG lime softening plant. The resulting water is then blended at an approximate 50/50 ratio prior to discharge into the distribution system.

We provide water to more than 17,000 citizens of Dania Beach on a continual basis.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses more than 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to <http://goo.gl/QMoIXT>.



Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Source Water Assessment

In 2017 the Department of Environmental Protection performed a Source Water Assessment on our system, and a search of the data sources indicated no potential sources of contamination near our wells. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <https://fldep.dep.state.fl.us/swapp>.



Substances That Could Be in 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:

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 stormwater 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 stormwater 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 come from gas stations, urban stormwater runoff, and septic systems.

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 U.S. 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 (800) 426-4791.



Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Lead in Home Plumbing

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. We are 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 www.epa.gov/lead.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Nate Costa, Treatment Manager, at (954) 924-3747.

Monitoring Requirements Not Met for City of Dania Beach

Our water system violated a drinking water requirement over the past year. Even though this was not an emergency, as our customers, you have a right to know what happened and what we are doing to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2017 we did not complete all monitoring or testing for Synthetic Organic Contaminants (SOCs*) and therefore cannot be sure of the quality of your drinking water during that time.

According to Florida's drinking water regulations, our water system was required to monitor twice for SOCs during 2017. We conducted our first round of sampling in September 2017 and all SOCs were not detected. However, we did not take the second round as required. This represents a monitoring violation for which we are required to publish this notice.

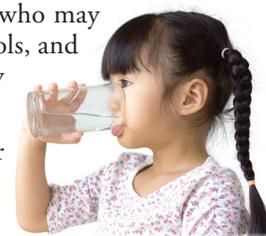
Although SOC testing is not required in our 2018 monitoring period, the City of Dania Beach has as a good faith effort to perform this testing during this monitoring period (sample taken February 28, 2018) to ensure our continued compliance in meeting this regulatory requirement. Results from this testing show all contaminants tested for were not detected.

Our constant goal is to produce quality water that meets and/or exceeds all regulatory standards. For more information, please contact Nate Costa at (954) 924-6800, ext.3616, or ncosta@daniabeachfl.gov.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Dania Beach public water system. State Water System ID#: 4060253.

Date distributed: 03/2018



*SOCs, also known as synthetic organic compounds, are tested by collecting one sample and testing that sample for all the regulated SOCs. Regulated SOCs include 2,4-D, 2,4,5-TP (Silvex); Alachlor; Atrazine; Benzo(a)pyrene (PAHs); Carbofuran; Chlordane; Dalapon; Di (2-ethylhexyl) adipate; Di (2-ethylhexyl)phthalate; Dibromochloropropane; Dinoseb; Dioxin (2,3,7,8-TCDD); Diquat; Endothall; Endrin; Ethylene dibromide; Glyphosate; Heptachlor; Heptachlor epoxide; Hexachlorobenzene; Hexachlorocyclopentadiene; Lindane; Methoxychlor; Oxamyl (Vydate); Pentachlorophenol; Picloram; Polychlorinated biphenyls (PCBs); Simazine; and Toxaphene.

Late Reporting Violation

Due to an administrative oversight during a busy part of the year we had a late reporting violation on our annual Point of Entry testing results. This is a test run once per year to detect Inorganics, Synthetic Organics, Volatile Organics and Secondary Contaminants including metals, odor, color and foaming agents. In 2017, we submitted these results after the required reporting deadline. This violation had no impact on the quality of the water our customers received and the violation posed no risk to public health. All results were within regulatory requirements. We did submit this data to our regulatory authority immediately after we were informed of this violation and have established a report tracking file in house and with our contract laboratory to ensure that all reporting requirements will be met in the future.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables show only those substances that were detected between January 1 and December 31, 2017. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

PRIMARY REGULATED CONTAMINANTS								
Inorganic Contaminants								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Barium (ppm)	09/07/17	No	0.0027	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	
Fluoride (ppm)	09/07/17	No	0.52	NA	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additive that promotes strong teeth when at the optimum level of 0.7 ppm	
Nitrate [as Nitrogen] (ppm)	09/08/2017	No	0.034	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Nitrite [as Nitrogen] (ppm)	09/07/17	No	0.025	NA	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Sodium (ppm)	09/07/17	No	36.3	NA	NA	160	Salt water intrusion, leaching from soil	
STAGE 2 DISINFECTANTS / DISINFECTION BY-PRODUCTS								
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION	
Haloacetic Acids (five) [HAA5] (ppb)	1/17-11/17	No	15.6 ¹	9.1–16.8	NA	60	By-product of drinking water disinfection	
TTHM [Total trihalomethanes] (ppb)	1/17-11/17	No	6.7 ¹	3.5–9.2	NA	80	By-product of drinking water disinfection	

¹The level detected is the highest LRAA.

Definitions

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).