

# *City of Dania Beach*



## *2012 Annual Drinking Water Quality Report*



This report is available at [daniabeachfl.gov](http://daniabeachfl.gov). If requested will be mailed to customers

- *We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is: wells drawn from the Biscayne Aquifer at a depth of 65 feet.*

## Source Water Assessment Result

*"In 2012 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 [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp)."*

Every year we collect monthly bacteriological samples and four quarterly chemical samples at our wells to test for contaminants associated with potential sources of ground water. Once the water is pumped from the ground, we treat it with a process called lime softening. This process precipitates the calcium and carbonates in the water, making it soft. We then filter the water to remove the remaining particulates. The water is disinfected to remove microbiological contaminants and fluoride is added to promote dental health. In November 2011, the City added and placed in service a new 2-mgd Nanofiltration/reverse osmosis membrane plant to the City's existing 3-mgd lime-softening plant. The flows from each process are mixed at approximately 50/50 ratio prior to discharge into the distribution system. We provide water to approximately 17,000 citizens of the City of Dania Beach.

### ***This report shows our water quality results and what they mean.***

*If you have any questions about this report or concerning your water utility, please contact **Philip W. Skidmore** at (954) 924-6316. We encourage our valued customers to be informed about their water utility.*

***The City of Dania Beach** 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 to December 31, 2012. Data obtained before January 1, 2012, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.*

*In the 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.

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

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.

Nephelometric Turbidity Unit (NTU): measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

“ND”: means not detected and indicates that the substance was not found by laboratory analysis.

“N/A”: means not available or not applicable

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 ( $\text{mg/l}$ ): one part by weight of analyte to 1 million parts by weight of the water sample.

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

U: means undetected or under minimum detection threshold limit.

### Microbiological Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Number	MCLG	MCL	Likely Source of Contamination	
1. Total Coliform Bacteria (positive samples)	1/12-12/12	N	2.98%	0	For systems collecting at least 40 samples per month: presence of coliform bacteria in >5% of monthly samples. For systems collecting fewer than 40 samples per month: presence of coliform bacteria in >1 sample collected during a month.	Naturally present in the environment.  One organism detected in one sample in one month.	
Contaminant and Unit of Measurement	Dates of sampling (mo. / yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination

### Inorganic Contaminants

12. Barium (ppm)	8/12	N	0.0025	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
16. Cyanide (ppb)	8/12	N	5	N/A	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
17. Fluoride (ppm)	8/12	N	0.764	N/A	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

18. Lead (point of entry) (ppb)	03/12; 04/12 & 8/12	N	11	ND-11	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
21. Nitrate (as Nitrogen) (ppm)	8/12	N	0.062	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
24. Sodium (ppm)	8/12	N	22.2	N/A	N/A	160	Salt water intrusion, leaching from soil


### Stage 1 Disinfectants and Disinfection By-Products

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 MRDL G	MCL or MRDL	Likely Source of Contamination
79. Chlorine (ppm) LRAA	1/12-12/12	N	3.133	0.2/4.0	MRDL G = 4	MRDL = 4.0	Water additive used to control microbes
80. Haloacetic Acids (five) (HAA5) (ppb)	1/12-12/12	N	53.8	15.1-8.70	NA	MCL = 60	By-product of drinking water disinfection
81. TTHM [Total trihalomethanes] (ppb)	1/12-12/12	N	60.4	12.0-2.9	NA	MCL = 80	By-product of drinking water disinfection
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 and Copper (Tap Water)

87. Copper (tap water) (ppm)	6/12	N	0.15	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
88. Lead (tap water) (ppm)	6/12	N	0.0040	1	0	0.015	Corrosion of household plumbing systems; erosion of natural deposits

*We failed to complete required sampling for tap water lead and copper during the period of July to December 2012 and therefore were in violation of monitoring and reporting requirements. Once we were aware of the required second sampling we immediately tested the water at point of distribution and the water was clear. However, because we did not complete the required sampling, we did not know whether the contaminants were present in your drinking water, and we are unable to tell you whether your health was at risk during that time. Sampling will be resumed during the first semester of 2013.*

***\*\*Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.*

*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 Dania 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 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 <http://www.epa.gov/safewater/lead>.*

*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.*

*The Environmental Protection Agency (EPA) requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the table above are the only contaminants detected in your drinking water.*

*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](tel:1-800-426-4791).*

*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. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.*

*In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.*

*Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.*

*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).*

*“We at **The City of Dania Beach** work around the clock to provide top quality water to every tap,” said **Philip W Skidmore**. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.*

*We at The City of Dania Beach would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring 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.*