CITY OF FORT LAUDERDALE

2014 WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua de beber. Para una copia en Español, por favor llamar al teléfono 954-828-8000.

Ti liv-sa-a gen ladann ransèyman enpòtan sou dlo nap bwè-a. Si nou vle yon kopi nan kreyòl ayisyen-an tanpri rele nimewo 954-828-8000.

The City of Fort Lauderdale is pleased to provide you with the 2014 Water Quality Report to inform you about the water we deliver to you every day. This report contains information about the City's water source, water supply, the treatment process, and the contents of your drinking water. The City of Fort Lauderdale 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, 2014 to December 31, 2014. Data obtained before January 1, 2014 and presented in this report are from the most recent testing done in accordance with laws, rules, and regulations.

DRINKING WATER SOURCES AND CONTAMINANTS

The sources of drinking water (both tap 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, 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 also 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.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-com-promised 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/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

2014 WATER QUALITY TABLE AND INFORMATION

The EPA requires the City of Fort Lauderdale to provide an annual report on laboratory tests taken on its drinking water. The 2014 Water Quality Table on the following page provides a summary of those test results.

WATER QUALITY TABLE DEFINITIONS

Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL) is 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 (MCLG) is 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.

Maximum Residual Disinfectant Level (MRDL) is the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) is 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.

Not Detected (ND) indicates that the substance was not found by laboratory analysis.

Parts per Billion (ppb) is one part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per Million (ppm) is one part by weight of analyte to 1 million parts by weight of the water sample.

Picocuries per liter (pCi/l) is a measure of radioactivity in water.

ABOUT 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 City of Fort Lauderdale 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 your 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 by calling the Safe Drinking Water Hotline at 1-800-426-4791 or visiting www.epa.gov/safewater/lead.

SOURCE WATER ASSESSMENT

In 2014 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 3 potential sources of contamination identified for this system with low-moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained by calling the City of Fort Lauderdale Customer Service at 954-828-8000.

MICROBIOLOGICAL CONTAMINANTS

CONTAMINANT AND UNIT OF MEASUREMENT	DATES OF SAMPLING (MO./YR.)	MCL VIOLATION Y/N	HIGHEST MONTHLY PERCENTAGE/NUMBER	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
Total Coliform Bacteria	1/14-12/14	Y*	10.3	0	For systems collecting at least 40 samples per month: presence of coliform bacteria > 5.0 % of monthly samples	Naturally present in the environment

* This was a one time occurrence that took place in April 2014. Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. The violation occurred between the dates of 4/29/14 through 5/7/14. The standard for coliform bacteria is that no more than 5.0% of the samples collected can show a positive presence. Samples collected during the period showed that 10.3% had a positive presence of coliform bacteria. Via extensive targeted flushing, the situation was corrected and subsequent sampling showed that the issue was resolved. Notices were sent as required. This was not an emergency; total coliform bacteria are generally not harmful themselves.

RADIOACTIVE CONTAMINANTS

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
Radium 226 + 228 or combined radium (pCi/L)	6/11	N	1.19	ND - 1.19	0	5	Erosion of natural deposits

INORGANIC CONTAMINANTS

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
Arsenic (ppb)	6/14	N	1.30	0.500 - 1.30	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	6/14	N	0.0038	0.0015 - 0.0038	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	6/14	N	0.619	0.562-0.619	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)	6/14	N	0.026	ND - 0.026	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	6/14	N	36.5	25.6 - 36.5	N/A	160	Salt water intrusion, leaching from soil

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

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
Chloramines (ppm)	1/14 - 12/14	N	2.4	1.9 - 2.9	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	1/14, 4/14, 7/14, 10/14	N	31.8	0.61 - 39.0	N/A	MCL = 60	By-product of drinking water disinfection
TTHM [Total trihalomethanes] (ppb)	1/14, 4/14, 7/14, 10/14	N	64.0	4.20 - 100.0	N/A	MCL = 80	By-product of drinking water disinfection

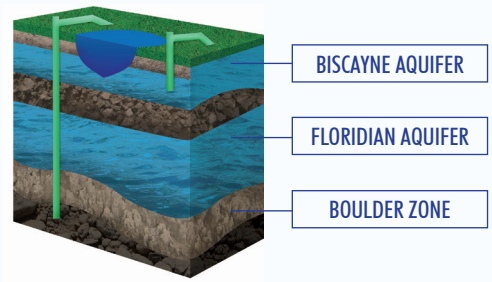
LEAD AND COPPER (TAP WATER)

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
Copper (tap water) (ppm)	7/14	N	0.137	0 (0 out of 53)	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	7/14	N	5.30	0 (0 out of 53)	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Lead and Copper sampling is being conducted again in September 2017.

FROM SOURCE TO TAP: WHERE YOUR DRINKING WATER COMES FROM

Where does Fort Lauderdale's water come from and how does it get from its source to the tap? The City of Fort Lauderdale pumps water from wells that draw it from the Biscayne Aquifer, which is an underground water supply and the sole source of the City's drinking water.



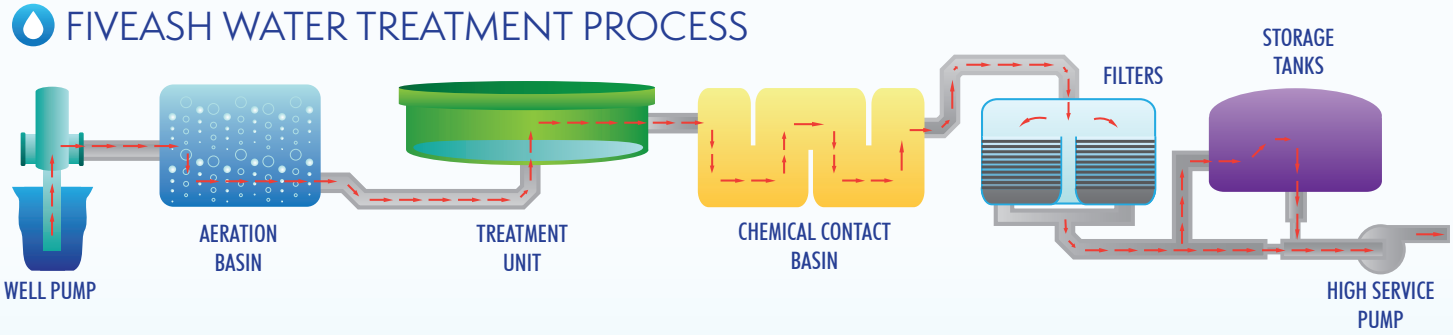
Before it reaches the faucet, the water travels from the Biscayne Aquifer to one of the City's two treatment plants – Fiveash, a lime softening plant, or Peele Dixie, a nanofiltration membrane plant.

At the treatment plants, the water is softened, fluoridated, filtered, aerated, and cleaned to remove naturally occurring minerals, particles, and dissolved gasses. The water is then disinfected with chloramines and fluoride is added to promote healthy teeth.

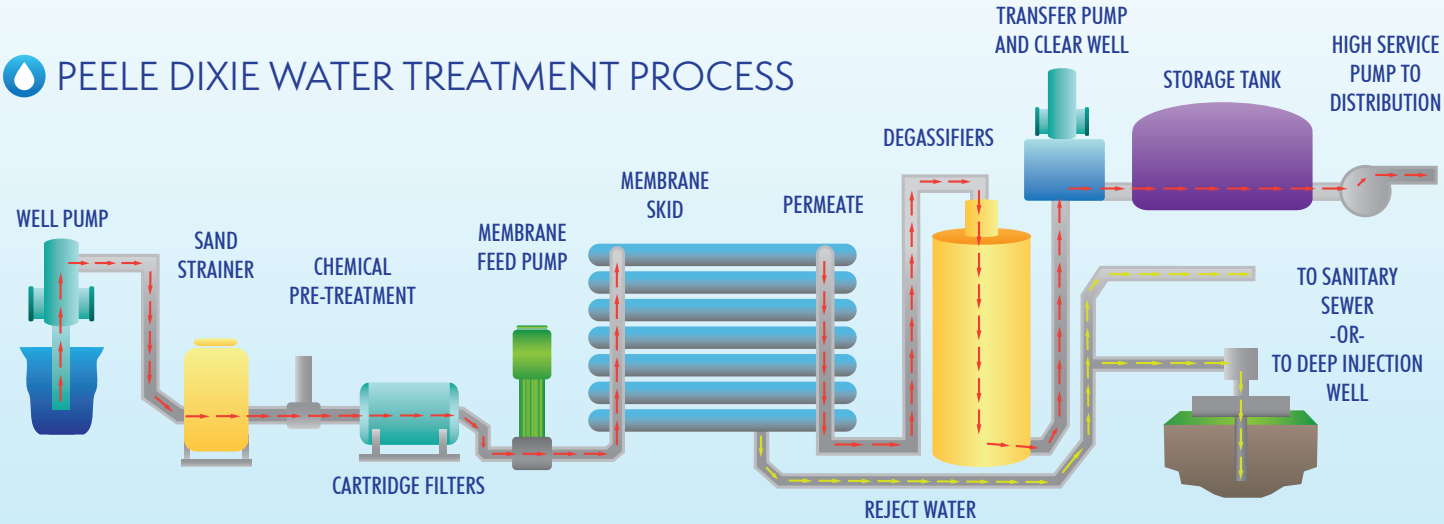
Once the treatment process is complete, the finished water is then pumped to storage tanks or to the distribution system for use.

Throughout the year, Fort Lauderdale's water is routinely monitored and tested to ensure customers receive high quality drinking water that meets all federal, state, and local regulations.

FIVEASH WATER TREATMENT PROCESS



PEELE DIXIE WATER TREATMENT PROCESS



FOR MORE INFORMATION

For more information or questions about this report, please contact the City of Fort Lauderdale 24-hour Customer Service Center at 954-828-8000 or online at www.fortlauderdale.gov/wqr. This report is also available on the City's website at www.fortlauderdale.gov/2014wqr.

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