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Business Hours Monday – Friday 8:00am – 5:00pm

After Hours Emergencies 407-703-1757

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## *City of Apopka 2014 Water Quality Report*

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### ***IT'S TIME FOR OUR ANNUAL WATER QUALITY CHECK-UP!***

As residents of Florida, we are constantly reminded of the importance of protecting our most precious resource – water. But you may not think about what is involved to treat and deliver the water to your home. The City of Apopka's top priority is providing all of our customers with a reliable supply of drinking water, of a superior quality that can be used with confidence. Each day, our operators insure that the water delivered from our treatment plants meets all regulatory requirements and your expectations for safety, reliability and quality.

All information provided in this report has been collected and reported in accordance with the water quality standards established by the U.S. Environmental Protection Agency (USEPA) and the Florida Department of Environmental Protection (FDEP).

We are pleased to provide you with this year's Water Quality Report and an explanation of the numbers and terms included in it. If you have any additional questions or concerns, please contact the Public Services Department at (407) 703-1731. A representative will be happy to assist you.

Informed customers are our best allies in maintaining and protecting our drinking water resources. Remember to always use water wisely to help insure the health of our fresh water supplies for the future. For information regarding water conservation, or the City's Water Conservation Program, please contact the City's Water Conservation Specialist, Jessica Schilling at (407) 703-1731, by email at [jschilling@apopka.net](mailto:jschilling@apopka.net), or visit the City's website at [www.apopka.net](http://www.apopka.net).

## ***OUR SOURCE OF WATER***

The City of Apopka's drinking water comes from an underground source – the Floridan Aquifer. The Floridan Aquifer is primarily fed by rain that is filtered through hundreds of feet of sand and rock, undergoing a natural filtration process.

Before distribution to the community, the drinking water is produced at five water treatment plants: the Jack G. Grossenbacher Water Plant, the Sheeler Oaks Water Plant, the Myrtle Rogers Womble Northwest Water Plant, the Plymouth Regional Water Plant and the Mt. Plymouth Lakes Water Plant.

These five facilities utilize thirteen groundwater wells, ranging from 483 to 1,400 feet in depth. The total daily pumping capacity of these wells is 36.288 million gallons per day. The well water is treated using aeration to reduce organic compounds, such as hydrogen sulfide (odor causing). The water is then disinfected using sodium hypochlorite (chlorine), prior to distribution to you, the consumer.

The City of Apopka routinely monitors for contaminants in your drinking water according to State and Federal laws, rules and regulations. The table included in this report, shows the results of any contaminant that was detected in the water during the period of January 1, 2011 through December 31, 2014, unless otherwise indicated. The State of Florida allows us to monitor for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, may be more than one year old.

As water travels underground and over land, it can pick up substances or contaminants such as microbes, inorganics or organic chemicals and radioactive substances.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

In 2014, the 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 no potential sources of contamination around the thirteen wells in the City. 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) or you can contact the City's Public Services Department for additional information.

### ***Immuno-Compromised Persons***

**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, and 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 U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.**

The City of Apopka is pleased to present you with the 2014 Annual Water Quality Report. This report is designed to inform you about the quality water and service we deliver to you every day. Our constant goal is to provide you with a safe and reliable supply of drinking water. The water quality data table to the right shows that Apopka's drinking water meets all State and Federal requirements.

The sources of drinking water (both tap and bottled water) include rivers, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land and 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 or bacteria, which may come from wastewater 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 and 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 byproducts of industrial processes, 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 insure that tap water is safe to drink, the USEPA 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 be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

### ***Key Abbreviations***

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

**MCL** - Maximum Contaminant Level 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.

**MCLG** - Maximum Contaminant Level Goal 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.

**MRDLG** - Maximum Residual Disinfectant Level Goal 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.

**MRDL** - Maximum Residual Disinfectant Level is 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.

**NA** - Not Applicable.

**ND** - Not Detected and indicates that the substance was not found by laboratory analysis.

**ppb** - Parts Per Billion or micrograms per liter - one part by weight of analyte to 1 billion parts by weight of water sample.

**ppm** - Parts Per Million or milligrams per liter - one part by weight of analyte to 1 million parts by weight of water sample.

| Microbiological Contaminants                                    |                   |               |                                     |                  |               |             |   |
|---|-------------------|---------------|-------------------------------------|------------------|---------------|-------------|---|
| Contaminants and Unit of Measure                                | Dates of Sampling | MCL Violation | Highest Monthly Percentage / Number | Range            | MCLG or MRDLG | MCL or MRDL | Likely source of Contamination  |
| Total Coliform Bacteria   | 2014              | N             | 1.0 / 1                             | 0.0 – 1.0        | 0             | >5%         | Naturally present in the environment  |
| Radiological Contaminants                                       |                   |               |                                     |                  |               |             |   |
| Contaminants and Unit of Measure                                | Dates of Sampling | MCL Violation | Level Detected                      | Range/Results    | MCLG or MRDLG | MCL or MRDL | Likely source of Contamination  |
| Alpha Emitters (pCi/L)  | Apr 2011          | N             | 2.0                                 | N/D – 2.0        | 0             | 15          | Erosion of Natural Deposits   |
| Inorganic Contaminants  |                   |               |                                     |                  |               |             |   |
| Contaminants and Unit of Measure                                | Dates of Sampling | MCL Violation | Level Detected                      | Range/Results    | MCLG or MRDLG | MCL or MRDL | Likely source of Contamination  |
| Barium (ppm)  | Feb 2014          | N             | 0.0106                              | 0.00530 - 0.0106 | 2.0           | 2.0         | Discharge of drilling wastes; discharge of metal refineries, erosion of natural deposits                                  |
| Fluoride (ppm)  | Feb 2014          | N             | 0.300                               | < 0.200 – 0.300  | 4.0           | 4.0         | Erosion of natural deposits, water additive which promotes strong teeth; discharge from Fertilizer and Aluminum factories |
| Sodium (ppm)  | Feb 2014          | N             | 13.8                                | 6.1 – 13.8       | NA            | 160         | Saltwater intrusion, leaching from the soil   |
| Selenium (ppb)  | Feb 2014          | N             | < 2.0                               | < 2.0            | 50            | 50          | Discharge from petroleum and metal refineries ; erosion of natural deposits ; discharge from mines                        |
| Chromium (ppb)  | Feb 2014          | N             | < 1.0                               | < 1.0            | 100           | 100         | Discharge from steel and pulp mills ; erosion of natural deposits   |
| Nickel (ppb)  | Feb 2014          | N             | < 1.0                               | < 1.0            | NA            | 1.0         | Pollution from mining and refining operations. Natural occurrences in soil  |
| Stage 2 Disinfectant/Disinfection by-Product (D/BBP) Parameters |                   |               |                                     |                  |               |             |   |
| TTHM (Total Trihalomethanes) (ppb)                              | 2014              | N             | 52.6 (Annual Average)               | 35.5 – 78.6      | NA            | 80          | By-Product of drinking water disinfection   |
| HAA5 (Haloacetic Acids) (ppb)                                   | 2014              | N             | 34.1 (Annual Average)               | 22.0 – 45.7      | NA            | 60          | By-Product of drinking water disinfection   |

| Lead and Copper (tap water)                      |                   |                  |                                    |                                     |     |   |  |
|--|-------------------|------------------|------------------------------------|-------------------------------------|-----|---|--|
| Contaminant and Unit of Measurement              | Dates of Sampling | AL Violation Y/N | 90 <sup>th</sup> Percentile Result | No of sample sites exceeding the AL | N/A | AL (Action Level)   | Likely source of Contamination   |
| Lead (ppb)                                       | Jun 2014          | N                | < 1.0                              | 0                                   | 0   | 15  | Corrosion of household plumbing systems ; erosion of natural deposits                                    |
| Copper (ppm)                                     | Jun 2014          | N                | 0.187                              | 0                                   | 1.3 | 1.3   | Corrosion of household plumbing systems ; erosion of natural deposits ; leaching from wood preservatives |
| Unregulated Contaminants Monitoring 3 Parameters |                   |                  |                                    |                                     |     |   |  |
| Contaminant and Unit of Measurement              | Date of Sampling  | MRL              | Average Level Detected             | Range                               | MCL | Likely Source of Contamination  |  |
| Chlorate (ppb)                                   | Oct 2014          | 20               | 593                                | 392 – 1,120                         | NA  | Agricultural defoliant or desiccant; disinfection by-product                          |  |
| Chromium-6 (ppb)                                 | Oct 2014          | 0.03             | .039                               | 0.039                               | NA  | Naturally occurring element found in soil.  |  |
| Molybdenum (ppb)                                 | Oct 2014          | 1                | 6.4                                | 4.5 – 10.9                          | NA  | Natural occurring element found in ores and present in plants, animals, and bacteria. |  |
| Strontium (ppb)                                  | Oct 2014          | 0.3              | 849                                | 590 – 1,060                         | NA  | Natural occurring element found in soil and present in plants and animals.            |  |
| Vanadium (ppb)                                   | Oct 2014          | 0.2              | 0.5                                | 0.5                                 | NA  | Natural occurring elemental metal found in rocks and soil.                            |  |

***Frequently Asked Questions***

***Does the City’s water supply contain fluoride?***

The City of Apopka does not add Fluoride to the water; however, there are small amounts that occur naturally in the water supply. The April 2011 test results for Fluoride produced a range between < 0.20 and 0.30 mg/L naturally occurring in the water.

***Is the City’s water hard or soft?***

The City’s water supply is considered moderately hard. Recent test results indicated a range of 122 mg/L (7.1 grains per gallon) to 219 mg/L (12.8 grains per gallon). Please contact the City to determine the actual hardness level in your area.

***Is there chlorine in my drinking water?***

The City is required by Federal and State regulations to maintain a chlorine residual in the water. This is to protect the water from microbial contamination as it travels from the treatment plants to your home.

## ***Reclaimed Water System***

The City of Apopka experiences wide variations in water use between wet weather and dry weather seasons. Spring and summer use approaches 8 MGD (million gallons per day), while winter use is closer to 4 MGD. Irrigation is a substantial portion of the increased demand during the dry months.

In an effort to provide major irrigators with a source of water other than potable water, the City of Apopka expanded its water reclamation facility and built Project ARROW (Apopka Regional Reuse of Water) in 1990. This system provides treated reclaimed water to three golf courses, a horticultural nursery, an agricultural grower, and over 5,000 residents with reclaimed water for their irrigation needs today. This results in a reduction in demands on our ground water supply by an average of 2.6 MGD throughout the year. The City continues to explore opportunities for alternative water supplies for the reclaimed water system in an effort to conserve our precious potable water supply.

***PLEASE ASSIST IN CONSERVING OUR WATER SUPPLY BY  
IRRIGATING ONLY ON YOUR ALLOTTED DAYS***

***RESIDENTIAL ODD NUMBERED ADDRESSES  
WEDNESDAY AND SATURDAY***

***RESIDENTIAL EVEN NUMBERED ADDRESSES  
THURSDAY AND SUNDAY***

***COMMERCIAL AREAS  
TUESDAY AND FRIDAY***

***NO WATERING IS PERMITTED ON ANY DAY BETWEEN 10:00 AM  
AND 4:00 PM***

## ***Water Conservation Facts and Tips***

- Landscaping accounts for over half the water used at home.
- Water your lawn only when it needs it. If you step on the grass and it springs back up when you move, it doesn't need water. If it stays flat, it does need water.
- Water lawns during the early morning, or evening hours when temperatures and wind speed are the lowest.
- Limit the amount of water applied to your lawn to one-half to two-thirds of an inch of water per application.
- One inch of rainfall drops approximately 7,000 gallons of water on a 60' x 180' piece of land.
- We drink very little of our drinking water. Generally speaking, less than 1% of drinking water is actually consumed. The rest goes on lawns and landscape, washing machines, and down toilets and drains.
- Adjust lawn watering to the weather. Following a heavy rain, for instance, skip your regular watering day until the grass needs it again. Teach the family how to turn off an automatic sprinkler system in case a storm comes up during the sprinkling cycle. Test the rain sensor equipped with your irrigation system to insure it is working properly. Typically, it takes one-half an inch of rain to cause the rain sensor to lock out your irrigation system.
- Minimize grass areas in your yard, because less grass means less water demand. Survey the lawn and consider whether it might make sense to remove grass from areas that aren't used much. Replace it with low-water use landscaping.
- Consider installing drip irrigation for individual bushes, trees, flowers and garden areas. Drip systems are designed to get water slowly and directly to the roots of plants where they need it most. They deliver water in terms of quarts or gallons per hour instead of per minute.

## ***Monitoring and Reporting Violations***

The City's water system experienced no monitoring and reporting violations during 2014. Descriptions of the violations are summarized below:

- None