

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.



Public Services Department
748 E. Cleveland St.
Apopka, FL 32703
(407) 703-1731

Business Hours
Monday – Friday
8:00 am – 5:00 pm
After Hours Emergencies
(407) 703-1757

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 two monitoring and reporting violations during 2011. Descriptions of the violations are summarized below:

- The Source Water Assessment and Protection Program statement was omitted from the 2010 Annual Water Quality Report. This was an administrative oversight and has been corrected in this year's report. You will find this statement in the section describing the City's *Source of Water*.
- In July 2011, a positive bacteriological result was experienced within the water distribution system. Repeat sampling was conducted on the distribution system with satisfactory results, however, per the Groundwater Rule; triggered monitoring was not conducted on the wells in the affected area. The City has since been approved by DEP for having 4-log treatment in place at all of our water plants, which will eliminate the requirement for any triggered monitoring in the future.

City of Apopka 2011 Water Quality Report

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, or visit the City's website at 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 twelve groundwater wells, ranging from 483 to 1,400 feet in depth. The total daily pumping capacity of these wells is 33.696 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, 2010 through December 31, 2011, 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 2011, 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 eight (8) potential sources of contamination identified for this system, with a 33.33 susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or you can contact the City's Public Services Department for additional information.

The City of Apopka is pleased to present you with the 2011 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.

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.

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 0.12 and 0.18 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 113 mg/L (6.6 grains per gallon) to 270 mg/L (15.8 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.

The following table shows the results of the monitoring period from January 1, 2010 to December 31, 2011. The State of Florida allows for the monitoring of some contaminants less than once per year because the concentration of these contaminants does not change frequently. Therefore, some of the data provided, though representative, is more than a year old.

Microbiological Contaminants							
Contaminant and Unit of Measure	Date of Sampling	MCL Violation Y / N	Highest Monthly Percentage / Number	MCL or MRDLG	MCL or MRDL	Likely Source of Contamination	
Total Coliform Bacteria	2011	N	2.7%	0		Naturally present in the environment	
Radiological Contaminants							
Contaminant and Unit of Measure	Date of Sampling	MCL Violation Y / N	Level Detected	Range / Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Alpha Emitters (pCi/L)	Apr 2011	N	2.0	ND – 2.0	0	15	Erosion of natural deposits
Inorganic Contaminants							
Barium (ppm)	Apr 2011	N	0.0124	0.00617 – 0.0124	2	2	Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits
Fluoride (ppm)	Apr 2011	N	0.18	0.12 – 0.18	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from aluminum factories
Sodium (ppm)	Apr 2011	N	13	6.1 – 13	N/A	160	Saltwater intrusion; leaching from the soil
Selenium (ppb)	Apr 2011	N	2.2	ND – 2.2	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Chromium (ppb)	Apr 2011	N	6.8	5.8 – 6.8	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Nickel (ppb)	Apr 2011	N	2.0	1.1 – 2.0	N/A	100	Pollution from mining and refining operations; natural occurrences in soil
Stage 1 Disinfectant/Disinfection Byproducts (D/DBP)							
TTHM (Total Trihalomethanes (ppb))	2011	N	49.19 (Annual Average)	44.78 – 51.70	N/A	80	Byproduct of drinking water disinfection
HAA5 (Haloacetic Acids) (ppb)	2011	N	24.15 (Annual Average)	9.24 – 49.64	N/A	60	Byproduct of drinking water disinfection
Chlorine (ppm)	2011	N	1.9 (Annual Average)	0.4 – 3.8	MRDLG = 4	MRDL = 4	Water additive to control microbes
Lead and Copper (Tap Water)							
Contaminant and Unit of Measure	Dates of Sampling	AL Violation Y / N	90 th Percentile Result	No. of Sample Sites Exceeding the AL	N/A	AL (Action Level)	Likely Source of Contamination
Copper (ppm)	2010	N	0.291	0	0	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table Terms and Abbreviations

Non-Applicable (N/A) – does not apply	Maximum Contaminant Level (MCL) – The “Maximum Allowed” 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.
Units: ppm (Parts per Million) – One part by weight of analyte to one million parts by weight of water sample; ppb (Parts per Billion) – One part by weight of analyte to one billion parts by weight of water sample; pCi/L (Picocuries per Liter) – A measure of radioactivity.	Maximum Contaminant Level Goal (MCLG) – The “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.
Maximum Residual Disinfectant Level (MRDL) – 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) – The level of 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.
Action Level (AL) – The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.	

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 Apopka 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 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>. The City of Apopka did not detect any lead during its 2010 Lead and Copper monitoring cycle.