



INSIDE



Almost by definition, summer=water. Be safety savvy when it comes to the most popular wet recreational activity.



Wildfire season is in full swing. Nature uses fire to renew itself, but humans can cause uncontrollable wildfires, too.



All water sources are not created equal. Florida has many underground water supplies and they all have different characteristics.

# fguanews

SUMMER 2008

updates & information from your water and wastewater utility

## Safety First with Water Fun

When the weather turns warm, everyone wants to be in or around the water. Hanging out at the pool or the beach on a hot day is a great way to beat the heat. Between having fun and checking out the lifeguards, most people don't think much about water safety—but they should. For people between the ages of 5 and 24, drowning is the second leading cause of accidental death. It doesn't have to be that way, though. Most water-related accidents can be avoided by knowing how to stay safe and following a few simple guidelines.

**Swimming smarts:** "Buddy up!" That's what swimming instructors say. Always swim with a partner, every time whether you're swimming in a backyard pool or in a lake. Even experienced swimmers can become tired or get muscle cramps, which might make it difficult to get out of the water. When people swim together, they can help each other or go for help in case of an emergency.

**Get skilled:** Speaking of emergencies, it's good to be prepared. Learning some life-saving techniques, such as CPR and rescue techniques, can help you save a life. A number of organizations offer free classes for both beginning and experienced swimmers and boaters. Check with your YMCA or YWCA, local hospital, or chapter of the Red Cross.

**Know your limits:** Swimming can be a lot of fun and you might want to stay in the water as long as possible. If you're not a good swimmer or you're just learning to swim, don't go in water that's so deep you can't touch the bottom and don't try to keep up with skilled swimmers. That can be hard, especially when your friends are challenging you but it's a pretty sure bet they'd rather have



you safe and alive. If you are a good swimmer and have had lessons, keep an eye on friends who aren't as comfortable or as skilled as you are. If it seems like they (or you) are getting tired or a little uneasy, suggest that you take a break from swimming for a while.

**Swim in safe areas only:** It's a good idea to swim only in places that are supervised by a lifeguard. No one can anticipate changing ocean currents, riptides, sudden storms, or other hidden dangers. In the event that something does go wrong, lifeguards are trained in rescue techniques. Swimming in an open body of water (like a river, lake, or ocean) is different from swimming in a pool. You need more energy to handle the currents and other conditions in the open water. If you do find yourself caught in a current, don't panic and don't fight the current. Swim with the current, gradually trying to make your way back to shore as you do so. Even a very good swimmer who tries to swim against a strong current will get worn out. If you're going to be swimming in an open body of water, it's a great idea to take swimming lessons that provide you with tips on handling unexpected hazards.

Some areas with extremely strong currents are off limits when it comes to swimming. Do your research so you know where not to swim.

**Be careful about diving:** Teens are more likely than any other age group to suffer diving injuries, many of which can result in permanent spinal cord damage or death. Only dive in areas that are known to be safe for diving, such as the deep end



## Wildfire Prevention

Wildfires can cause major environmental, social and economic damages. Loss of timber, wildlife habitat, homes and even lives may result from a devastating wildfire. The wildfire that does not start is the one that does not have to be fought.

Prevention is the key in helping to reduce the number of human-caused fires. Even though Florida is the lightning capital of the world, arson and escaped burning debris are still the two main causes of wildfires in Florida.

Florida's fire-dependent ecosystems and year-round fire season pose a challenge to wildland fire fighters in their attempt to continually educate Floridians and visitors about wildfire danger in Florida. The Division of Forestry has several education and mitigation programs aimed at reducing all types of human caused fire.

*This article was retrieved from [www.fl-dof.com](http://www.fl-dof.com)*

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## >> Water Safety, from front

of a supervised pool. If an area is posted with "No Diving" or "No Swimming" signs, pay attention to them. If you see a "No Diving" sign that means the water isn't safe for a head-first entry. Even if you plan to jump in feet first, check the water's depth before you leap to make sure there are no hidden rocks or other hazards. Lakes or rivers can be cloudy and hazards can be hard to see.

**Watch the sun:** Sun reflecting off the water or off sand can intensify the burning rays. You might not feel sunburned when the water feels cool and refreshing, but the pain will catch up with you later so remember to reapply sunscreen frequently and cover up much of the time.

**Drink plenty of fluids:** It's easy to get dehydrated in the sun, particularly if you're active and sweating. Keep up with fluids, particularly water to prevent dehydration. Dizziness, feeling light-headed, or nausea can be signs of dehydration and overheating.

**Getting too cool:** Speaking of temperature, it's possible to get too cool. How? Staying in very cool water for long periods can lower your body temperature. A temperature of 70° Fahrenheit (20° Celsius) is positively balmy on land, but did you know that water below 70° Fahrenheit will feel cold to most swimmers? Your body temperature drops far more quickly in water than it does on land. And if you're swimming, you're using energy and losing body heat even faster than if you were keeping still. Monitor yourself when swimming in cold water and stay close to shore. If you feel your body start to shiver or your muscles cramp up, get out of the water quickly; it doesn't take long for hypothermia to set in. *Information retrieved from kidshealth.org*

**IMPORTANT NOTICE FOR LEHIGH ACRES CUSTOMERS** The FGUA is using the new water treatment plant to supply water to the southern end of Lehigh Acres. Due to high calcium content, you may see deposits on your glassware. The water is safe to drink and the calcium deposits will stop once the reverse osmosis treatment process is installed and online at the plant.

Comments about FGUA News? Contact Yvette Hartsfield, Editor, at [yhartsfield@govmserv.com](mailto:yhartsfield@govmserv.com)

# The Water Down Under

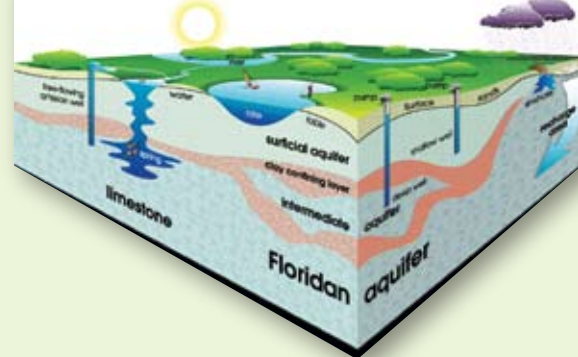
*Florida's drinking water comes from many aquifers that lie deep beneath our feet*

Florida's aquifers vary in depth, composition, and location, and are divided into two general categories: **Surficial and Floridan.**

**Surficial aquifers** are shallow beds of shells and sand that lie less than 100 feet underground. They are separated from the Floridan aquifer from a confining bed of soil. Some have been contaminated by saltwater, yet they provide most of the public freshwater supply southwest of Lake Okeechobee and along the Atlantic coast north of Palm Beach.

In surficial aquifers, the groundwater continuously moves along the hydraulic gradient from areas of recharge to places of discharge. Surficial aquifers are recharged locally as the water-table fluctuates in response to drought or rainfall. Therefore, the temperature and flow from water-table springs varies.

The **Floridan** aquifer, in contrast to surficial aquifers, is the portion of the **principal artesian** aquifer that extends into Florida. The principal artesian aquifer is the largest, oldest, and deepest aquifer in the southeastern U.S. Ranging over 100,000 square miles, it



underlies all of Florida and parts of southern Alabama, southeastern Georgia, and southern South Carolina. The Floridan portion developed millions of years ago during the late Paleocene to early Miocene periods, when Florida was underwater.

Unlike water in surficial aquifers, groundwater in the Floridan aquifer is contained under pressure by a confining bed of impermeable sediments. When the water pressure is great enough, the groundwater breaks to the surface and a spring flows. Water temperature and flow from a Floridan spring is relatively constant.

The Floridan aquifer supplies fresh water to many cities such as Daytona, Gainesville, Jacksonville, Ocala, St. Petersburg, Tallahassee, and numerous rural communities. In areas where the Floridan contains saltwater, due to saltwater intrusion along the southwest Florida coast, it is injected with sewage and industrial waste.

*Retrieved from: <http://aquat1.ifas.ufl.edu/guide/aquifers.html>*

## Project Updates in Your Area

### Golden Gate

A **Lift Station Rehabilitation project** is currently under construction in Golden Gate and is scheduled for completion December 2008. This project is intended to rehabilitate lift stations that require repairs and replacements of equipment in excess of regular maintenance. • The **Water Distribution System Improvement project** is expected to begin August 2008. This project will improve water quality and increase fire flow in the Golden Gate System. • The **Wastewater System Collection & Transmission Improvement project** began in March and is expected to be complete by September. This project consists of additions and replacements in the wastewater collection and force main system, thereby improving hydraulic conditions in the Golden Gate system. • The **construction phase of the Deep Injection Well Project** is under way. The injection well will help dispose of wastewater by products. The project is estimated to

be complete in August 2008. Once completed, this well at the Golden Gate Water Treatment Plant site (Tropicana Blvd. and 32nd Avenue) will safely inject water waste nearly 3,500 feet underground, well below drinking water sources. This common method of waste disposal is approved by all federal and state regulatory agencies. • The **expansion of the Golden Gate WWTP** is expected to begin in September 2008 and will expand the current plant capacity from 0.95 MGD to 1.50 MGD, also included in this project is a dedicated brine disposal line that will directly route RO concentrate byproduct from the WTP to the newly constructed deep injection well at the WWTP.

### Lehigh Acres

**Water Treatment Plant Improvement Project** that will replace aged valves and meters is estimated to start September 2008. • A **reuse expansion project** is currently under design that will

increase the availability of reclaimed water in Lehigh Acres. • A **well rehabilitation project** is currently underway in Lehigh Acres which is for the yearly rehabilitation of the existing groundwater wells in the Lehigh Acres Utility System. The rehabilitation consists of video inspection, flushing, pump inspection etc. • The **expansion of the Lehigh Acres WWTP** is currently under design. The expansion will increase the treatment capacity of the Lehigh Acres WWTP. • Construction is currently underway for a **potable water main construction project** which will improve hydraulic conditions in the water system through looping and line extensions. Construction started June 2008 and is scheduled for completion November 2008. • There is currently a project for an **exploratory well evaluation** at the Lehigh Acres WTP No. 2, construction is estimated to start September 2008.

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