Principles to Protect Florida's Springs

- A spring is only as healthy as its recharge basin (*springshed*).
- Human activities within the springshed can adversely impact the quality and quantity of the spring water.
- Spring water must be protected before it reaches the spring.



To protect the water, you must protect the land.

Chinese Proverb

Spring Champions

Wakulla Springs Alliance strives to protect and restore the Wakulla Spring and River ecosystem through research and advocacy.

Friends of Wakulla Springs State Park supports stewardship and conservation of natural and cultural resources of the park.

1000 Friends of Florida, Florida Wildlife Federation, and Audubon Florida are strong allies.

Good Things Are Happening in the Wakulla Spring Basin

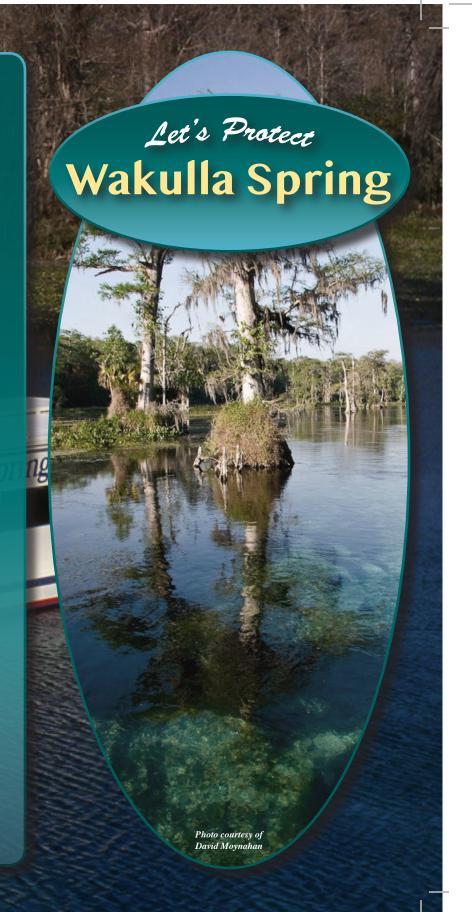
- Dye studies indicate that nitrogen from storm water and septic tanks entering Lakes Iamonia, Jackson, Lafayette, and Munson flows to the spring.
- Wakulla and Leon Counties have established spring protection zones.
- Tallahassee has upgraded its sewage treament facilities to remove 95% of its nitrogen discharge to ground water.
- A Basin Management Action Plan adopted by the Department of Environmental Protection requires local governments to reduce nitrogen from septic tanks and fertilizer over the next 20 years.
- Leon and Wakulla Counties are extending central sewers to remove thousands of septic tanks from the most vulnerable areas of the springshed.
- Leon and Wakulla Counties are developing plans for cost-effectively reducing nitrogen discharges from septic tanks that cannot be connected to sewer.
- The state has purchased over 8,000 acres in vulnerable areas of the springshed that will never be developed.
- The Florida Department of Transportation has stopped applying fertilizer on the grass shoulders of state roads in the spring basin.

Do You Live in the Wakulla Spring Basin?

- Encourage the Tallahassee City
 Commission and the Leon and
 Wakulla County Commissions to
 protect our ground water and
 Wakulla Spring from nitrogen
 pollution through wise land use and
 development decisions.
- Understand that whatever you put on the ground can get into the Floridan Aquifer that Feeds Wakulla Spring.
- Stop or minimize fertilizer use, pick up after your pets, do not dump trash or chemicals into storm drains or sinkholes.
- Replace your old septic system with one that removes nitrogen and connect to central sewer when available.
- Use less water and encourage the Northwest Florida Water Management District to regulate ground water use to protect historic spring flow.
- Join the Wakulla Springs Alliance: wakullaspringsalliance.org
- Join the Friends of Wakulla Springs State Park: wakullasprings.org
- Visit Florida's Springs: floridasprings.org

Sponsored by: Wakulla Springs Alliance

2019



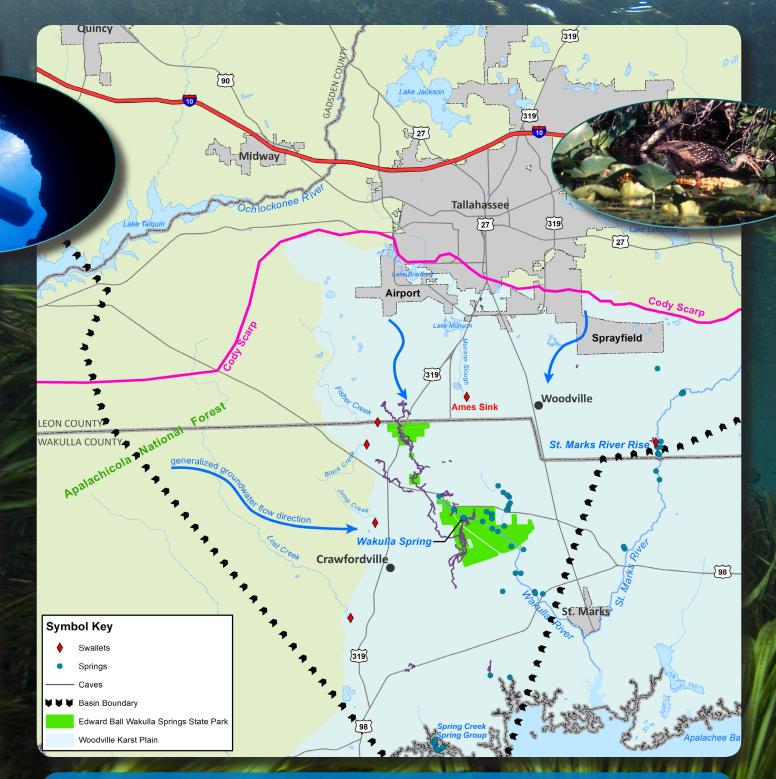
The Past and Present

Wakulla Spring, Florida's largest, discharging about 400 million gallons a day, creates the ninemile Wakulla River. Divers have mapped over 35 miles of cave network that conducts water to the spring; it is among the longest and deepest in the world.

The spring has been a magnet for humans and wildlife for at least 14,500 years. Pleistocene mammals once came to drink. The Apalachee were there long before the Spanish arrived in 1528. Glass bottom boats have provided breathtaking views since the 1870s. Ed Ball built the lodge in 1937. The state park was established in 1986. River boat tours encounter otters, manatee, alligators, birds, and numerous other animals.

The spring is a great swimming hole too! With these wonderful features, the park attracts over 200,000 visitors annually from all over the world.

Photo courtesy of Lou Kellenberger



The 1,300 square-mile Wakulla Spring Basin originates in South Georgia and lies predominantly in Gadsden, Leon, and Wakulla Counties.

Map prepared by Northwest Florida Water Management District

Restoring and Protecting Wakulla Spring

Today, Wakulla Spring is in trouble.

Excessive nitrogen in ground water has fed the growth of noxious algae and hydrilla leading to dramatic drops in plant and animal diversity and abundance. Prolonged dark water has severely limited glass bottom boat tours and may be inhibiting underwater vegetation growth.

The excess nitrogen comes primarily from septic tanks as well as lawn and agricultural fertilizer and pet and livestock waste. Nitrogen can leach into the Floridan Aquifer through soil and underlying limestone or be carried in storm water to creeks, lakes, and sinkholes, which seep into the aquifer and then to the spring.

The sandy soils of southern Leon County and Wakulla County are especially prone to ground water pollution. There are over 52,000 septic tanks in the springshed; with nearly 12,000 in these most vulnerable areas.

While natural tannins have always caused periodic dark water, research indicates that chlorophyll in ground water entering the spring is contributing to more prolonged dark water conditions. That chlorophyll likely comes from algae blooms in one or more lakes fueled by fertilizer runoff.

We must protect the spring from these pollutants.