The McCarty Woods Conservation Area at the University of Florida

McCarty Woods Conservation Area is 2.9 acres in size. It is an upland mixed forest that is characterized by a variety of hardwood species and mesic soils. In upland mixed forests, limestone or rock containing high levels of phosphate are generally near the ground surface and the soils are usually a mixture of sand and clay. According to the 2000-2010 Campus Master Plan, McCarty Woods should be preserved because of its value as a natural teaching and research laboratory. The primary use of the area is for academic purposes, respite for students and faculty, and as a path through campus. The woods contain a National Champion one-flowered haw (*Crataegus uniflora* Muench.), which means that it is the largest of its species, as recorded in the National Register of Big Trees. The largest recorded White Ash (*Fraxinus americana*) in Florida can also be found in McCarty Woods.

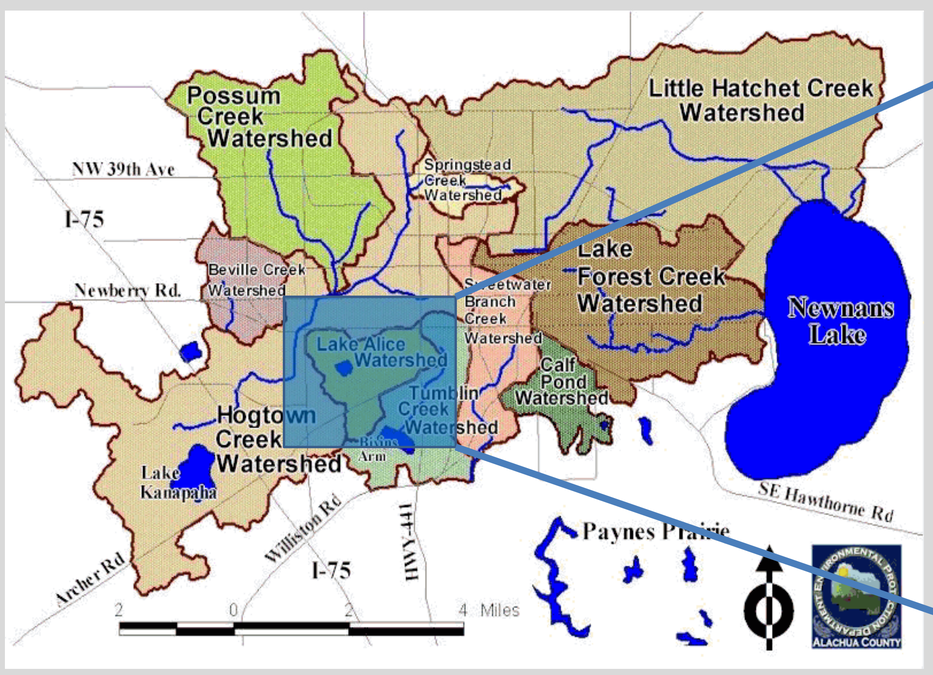
White Ash

One-flowered haw

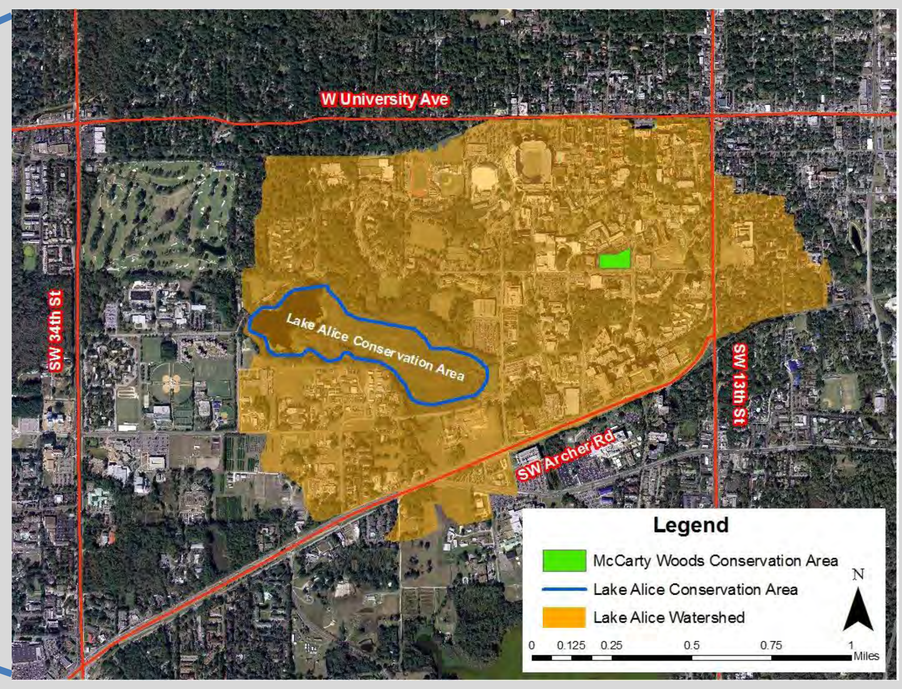
McCarty Woods and the Lake Alice Watershed

McCarty Woods is located within the Lake Alice watershed. At 1,140 acres in size the watershed covers more than 60 % of the 1,827 acre UF main campus. Portions of campus drain to other watersheds – Hogtown Creek and Bivens Arm. There are several depressional basins that have no surface water outlet and drain directly to the aquifer. The Lake Alice watershed is a closed basin, which means that water entering the lake can only leave the basin through evaporation, transpiration, or infiltration to groundwater.

Gainesville Watersheds

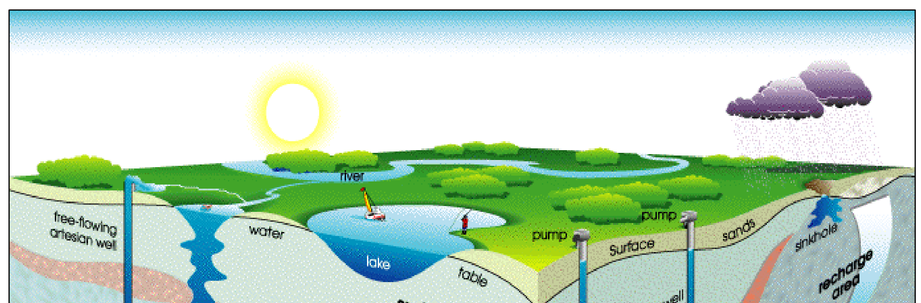


The Lake Alice Watershed



Urban Natural Areas

McCarty woods does not contain any permanent water features, but does provide some water resource protection through recharge to the surficial aquifer and stormwater abatement. Urban nature parks, such as McCarty Woods, can reduce the amount of stormwater runoff during rain events by slowing the rate of runoff, and by allowing rainfall to infiltrate into the ground or be intercepted by vegetation. Rainfall that infiltrates into the ground can also help to maintain base flow conditions in nearby streams. For example, water moves through the soil and into streams, eventually making its way into receiving waterbodies, such as Lake Alice. The slow movement of water through the soil acts as a natural filter. Urban natural areas also help improve air quality and reduce temperatures through shading.



Fact: *The Floridan aquifer is the principal source of water supply for most of north and central Florida, including Gainesville.*

FYI: McCarty Woods has not been a Conservation Area for very long. Up until 20 years ago, it was maintained as lawn and regularly mowed. This is why the understory is full of small samplings and vines .

UF UNIVERSITY of FLORIDA IFAS Extension

University of Florida Clean Water Campaign

In 2003, a collection of faculty, students, and staff started the UF Clean Water Campaign to educate the UF community and raise awareness about stormwater and water quality issues on campus. The Campaign was started in support of a National Pollutant Discharge Elimination System (NPDES) Phase II permit obtained by the University in 2003. The NPDES Phase II program was implemented by the US Environmental Protection Agency in 1999 to help identify, manage, and prevent non-point source water pollution from municipalities and communities nationwide.

If you see this logo, stop to think about how your actions may be affecting campus water quality.

Over 75 storm drains on campus have been marked with the Clean Water Campaign logo (as seen above).

Water Quality Monitoring

The campus water quality monitoring program was started in 2003. 20 locations on the UF main campus are monitored for 12 different parameters. Data from the monitoring program indicate that several of the sites have elevated nitrogen and phosphorus levels. An analysis of 5 years of data shows that nitrate levels are decreasing slightly at most of the sampling locations, while phosphorus levels are increasing. For more campus water quality information, visit http://campuswaterquality.ifas.ufl.edu/

The UF Clean Water Campaign is raising awareness about simple behaviors that can prevent stormwater pollution. For example, there are over **23,000 parking spaces on campus**, most of which are used at least once a day. A recent survey done by the Clean Water Campaign indicated that 10% of vehicles may be leaking engine fluids. This equates to over 2,300 vehicles every day adding hydrocarbons, heavy metals and other potential contaminants to road and parking surfaces that are prone to runoff during a rain event. **Just checking your car once or twice a week for any fluid leaks and getting regular tune-ups can reduce stormwater pollution.**

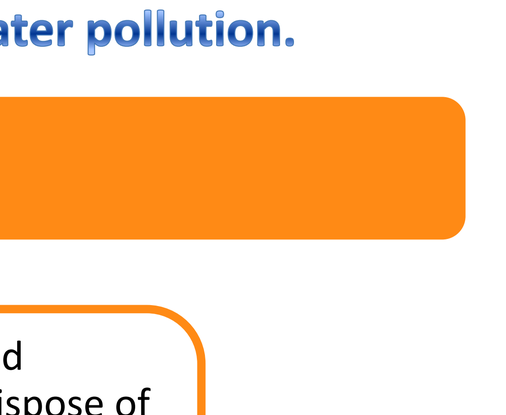
What you can do to help

On Campus

- Report any water pollution at the Clean Water Campaign website (http://campuswaterquality.ifas.ufl.edu/
- Ride the bus, walk, or bike
- Support campus sustainability efforts

At Home

- Identify and properly dispose of hazardous waste
- Pick up after your pets
- Minimize or eliminate use of fertilizers
- Plant a Florida friendly lawn



In Your Car

- Tune up vehicles
- Repair leaks
- Check tire pressure
- Properly dispose of car fluids
- Drive less

Volunteer

- Storm, drain marking events
- Creek cleanups
- Campus Water Quality Monitoring Program

For more information

Visit the Clean Water Campaign website at http://campuswaterquality.ifas.ufl.edu/

Spotlight on McCarty Woods

CANOPY TREES – Look UP to find these

Laurel Oak (*Quercus laurifolia*)

Pignut Hickory (*Carya glabra*)

Sweet Gum
(*Liquidambar styraciflua*)

UNDERSTORY PLANTS, VINES, and SHRUBS – Look DOWN to find these

American Beautyberry
(*Phytolacca americana* var. *rigida*)

Muscadine Grape (*Vitus rotundifolia*)

Carolina Wild Petunia
(*Ruellia caroliniensis*)

INVASIVE NON-NATIVE PLANTS

Wandering Jew
(*Tradescatia fluminensis*)

Glossy Privet
(*Ligustrum lucidum*)

Coral Ardisia
(*Ardisia crenata*)

Restoration Efforts

During the 2005 – 2006 academic year, the Student Government Association directed the use of $ 500,000 dollars to environmental stewardship of the University's Conservation Areas. The UF Agronomy and Soils Club received some of the grant money to improve, protect, and promote the Conservation Area with respect to its natural and educational attributes, as well as its overall value to the university community.

Restoration activities and efforts are focused on three principal outcomes.

1) The removal of invasive species and the re-vegetation of disturbed communities.
2) Trail management and delineation based on selective plantings and natural barriers.
3) Increase overall awareness of teaching and educational activities.

Keep an eye out for wildlife

Broad-headed Skink
(*Eumeces laticeps*)

Yellow-rumped Warbler
(*Dendroica coronata*)

Red-bellied Woodpecker
(*Melanerpes carolinus*)