Lake Wauberg

The Lake can be viewed and enjoyed at
Paynes Prairie Recreational Area along the east side of the lake, which includes a public boat ramp and camp sites. The University of Florida recreational area is open to students and faculty and spans the western shore.

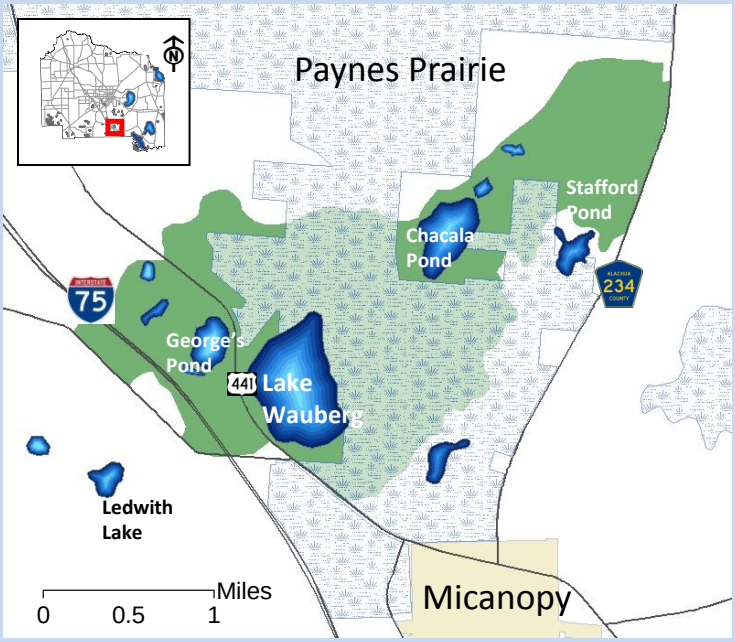


Figure 2. Map of Lake Wauberg watershed (green), Micanopy (tan).

Fun Facts

- The lake covers370acres and encompasses 33% of the watershed.
- The average depth is 12 feet.
- Land use around the lake is a primarily forested with a mixture of wetlands and agriculture.
- Water entering the lake comes from rainfall directly into the lake and surface runoff.
- This lake is located in the southern portion of Paynes Prairie State Park.

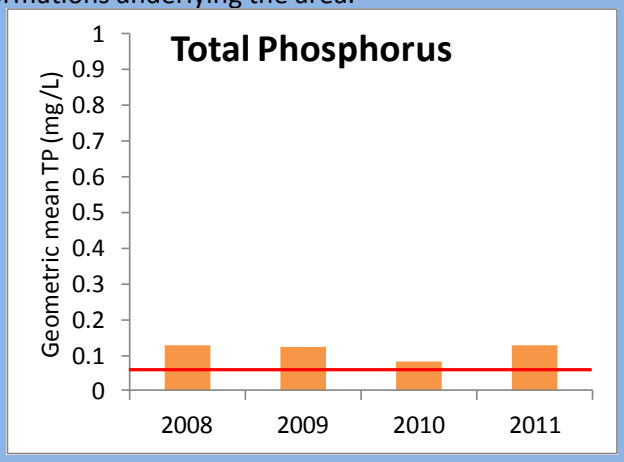
Ways you can help!

- Dispose of oils and chemicals properly at the Hazardous Waste Collection Center.
- Properly maintain your septic system.
- Scoop, bag, and trash pet waste.
- Use fertilizers and pesticides sparingly, or not at all.
- Keep grass clippings out of storm drains, swales, and ditches put it back on the lawn or bag it.
- Report illicit discharges or dumping to 246-6800.

Water Quality

Nutrients: The total Maximum Daily Load (TMDL) adopted in 2003 for TN and TP will take precedence over the proposed FDEP water quality nutrient standards for Lake Wauberg. TMDL was created to address the nutrient excess in Lake Wauberg, a clear, high alkalinity lake according to long-term data from Lakewatch. TMDLs were determined for both TP and TN to reduce the concentration of Chlorophyll a. Concnetrations of bothe TN and TP are still above the TMDL determined. This lake was included in the Orange Creek Basin Management Action Plan (BMAP), which describes actions that need to be taken to meet nutrient reduction goals. Major sources of nitrogen in the watershed include septic systems and atmospheric deposition. Total nitrogen concentrations have fluctuated drastically over the past several years yet consistently exceed the TMDL goal concentrations. A source of phosphorus in the watershed are naturally occurring phosphorus minerals in the Hawthorne Group formations underlying the area.

a)



b)

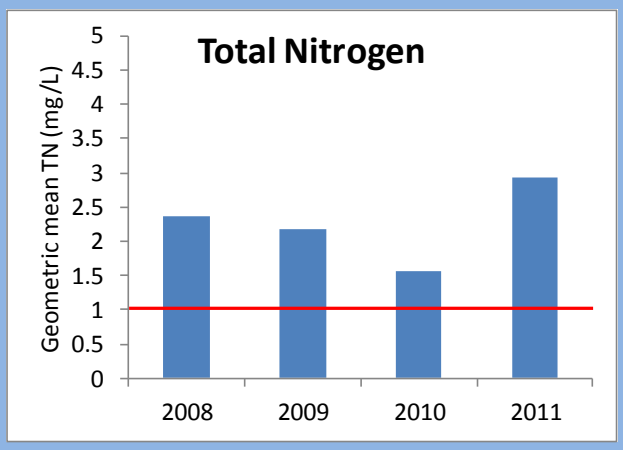


Figure 3. Graph of annual geometric mean of a) total phosphorus (TP) data and b) total nitrogen data (TN) collected by Lakewatch and ACEPD. Total Maximum Daily Load for Lake Wauberg a) TP of 0.056 mg/L and b) TN of 1.01 mg/L.

Chlorophyll a: When the proposed FDEP standard comes into effect Lake Wauberg will be considered impaired for Chlorophyll a. Chlorophyll a is a measure of algae in the water column. High chlorophyll a can indicate a nutrient imbalance.

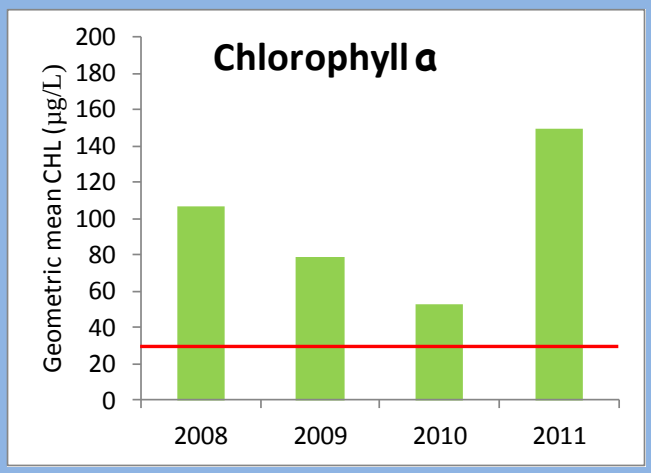


Figure 4. Graph of annual geometric mean of Chlorophyll a collected by Lake Watch and ACEPD. TMDL goal concentration represented by the red line 29.2 µg/L.

Current Human Impacts

•The elevated concentration of nitrogen is the primary pollutant of concern in Lake Wauberg. These nutrients are entering the lake from nonpoint sources originating from leaking septic systems of private residents and recreational areas around the lake or discharge of nutrient laden water from the surficial aquifer system to the lake.

•Currently Lake Wauberg has a limited fish consumption advisory for mercury. Mercury is a heavy metal that can accumulate in fish tissue and can be dangerous if too much is consumed.

Figure 5. ACEPD staff monitoring wind speed during sampling event.

To learn more:

•Read the TMDL http://www.dep.state.fl.us/water/tmdl/docs/tmdls/final/gp1/lake_wauberg_nut_tmdl.pdf and BMAP http://www.dep.state.fl.us/water/watersheds/docs/bmap/OrangeCrkBMAPFacts.pdf

•Visit the St. Johns River Water Management District website at www.SJRWMD.com

•For fish consumption advisories visit http://www.doh.state.fl.us/Environment/medicine/fishconsumptionadvisories/2012Brochure.pdf