



Orange Lake



The Lake can be viewed and enjoyed at

The Orange Creek Conservation Area along the southeastern side of the lake provides opportunities for hiking, camping, horseback and bike riding. There is also access to the lake and trails in the SJRWMD Longleaf Flatwoods Reserve. An Alachua county boat ramp at Marjorie Kinnan Rawlings Park near Cross Creek and Marion County boat ramp at Heagy Burry Park provide access to the lake and its renowned fishing.

Fun Facts

- The lake ranges between 14,7000 to 5,000 acres depending on rainfall. It averages 5.5 feet in depth and 12 feet is the maximum depth.
- Orange Lake is designated as an Outstanding Florida Water and worthy of special protection because of natural attributes.
- Sources of water into the lake are from rainfall and discharges from Newnans Lake through Prairie Creek, River Styx and Camps Canal and Lochloosa Lake via Cross Creek.
- The lake drains through sink holes in the southwest part of the lake and during high water levels through Orange Creek, on the southeastern end of the lake. Orange Creek flows into the Ocklawaha River.
- Land use in the lake's watershed is predominantly forests, wetlands and other water bodies. Agriculture and urban development make up the remaining 16 %.
- Orange Lake is well known as a fishing and bird watching destination.

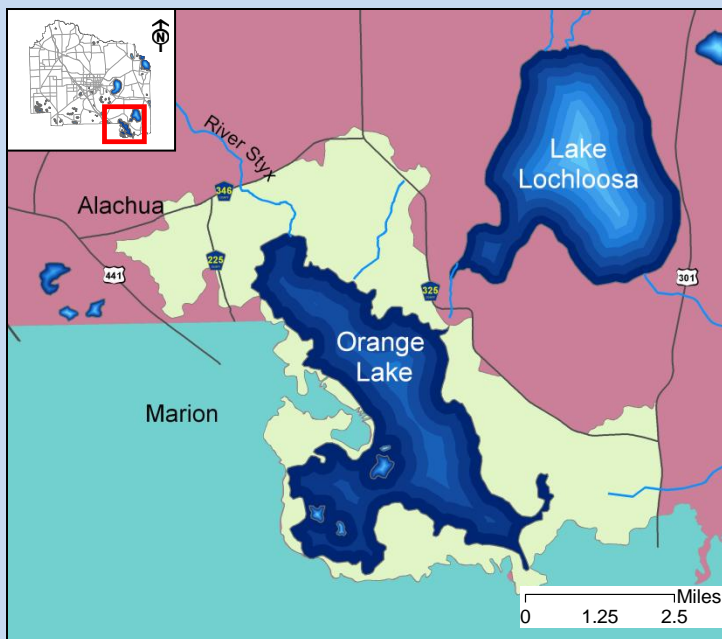


Figure 2. Map of Orange Lake watershed (cream) and surrounding lakes and tributaries, Alachua County (pink), and Marion County (teal).

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

Lake Level: Water level in Orange Lake is monitored by the St. Johns Water Management District. The graph to the right is the recorded stage (water levels) from March 1960 to April 2012 (Figure 4). Lake levels decrease during periods of extended drought especially during the 1999-2001 and during the recent drought.

Nutrients: A Total Maximum Daily Load (TMDL) was adopted in 2003 to address nutrient pollution in Orange Lake. The TMDL was determined for phosphorus in order to reduce the abundance of algae. The lake was included in the Orange Creek Basin Management Action Plan (BMAP) in 2007, which describes nutrient reduction efforts within the lake's watershed to reduce pollutant inputs to the lake. Major sources of phosphorus are fertilizers in stormwater runoff from residential and agricultural activities. Orange Lake receives nutrients from Newnans Lake via River Styx, Prairie Creek and Camps Canal, and Lochloosa Lake Via Cross Creek.

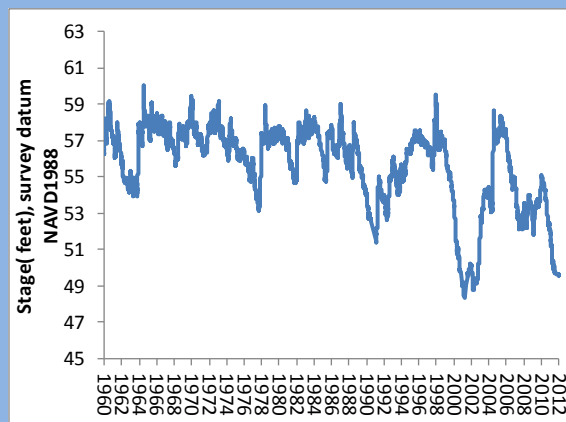


Figure 4. Graph of stage in Orange Lake (1960-2012) data collected by SJRWMD.

Current Human Impacts:

- The nutrient pollution sources include surface runoff from the watershed and stream flows into the lake from Newnans Lake and Lochloosa Lake.
- Historically, there was considerable agriculture around the lake. Freezes in the mid-1980's devastated the citrus growing areas and agricultural land use has been slowly replaced by residential uses.
- Orange Lake is included in Florida's fish consumption advisories for mercury.

Chlorophyll a: The TMDL for Orange Lake measures algae by the amount of Chlorophyll a in the water and sets a goal of 24.1 $\mu\text{g/l}$. Algal abundance had greatly exceeded this goal for many years and reflects the nutrient pollution reaching the lake.

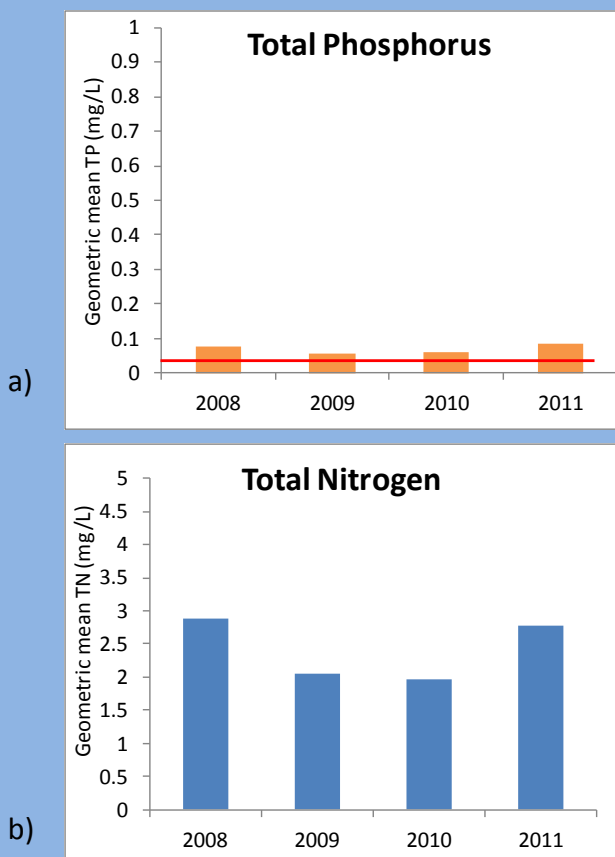


Figure 3. Graphs of annual geometric mean of a) total phosphorus (TP) data and b) total nitrogen data (TN) collected by SJRWMD. A) TMDL goal of 0.031mg/L is represented by the red line.

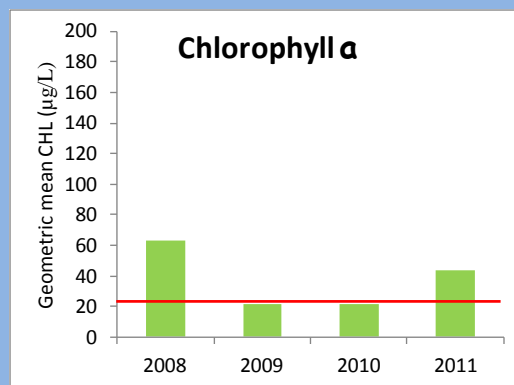


Figure 5. Graph of annual geometric mean of Chlorophyll a collected by SJRWMD. TMDL established target Chlorophyll a concentration of Orange Lake is represented by the red line 24.1 $\mu\text{g/L}$.

To learn more:

- Read the Orange Lake TMDL http://www.dep.state.fl.us/water/tmdl/docs/tmdls/final/gp1/orange_lake_nut_tmdl.pdf.
- Read the Orange Creek BMAP <http://www.dep.state.fl.us/water/watersheds/bmap.htm>
- For fish consumption advisories visit <http://www.doh.state.fl.us/floridafishadvice/>
- Visit the St. Johns River Water Management District website at http://www.sjrwmd.com/organge_creek/