Greetings Lake Pickett Residents!

Please find the latest bioassessment for your lake below. Our next scheduled assessment will be March 12th 2014, weather permitting. Key highlights of this update include:

- Lake Vegetation Index (LVI) results
- Hydrilla status and treatment plan
- Bog moss update
- Native Submersed Aquatic Vegetation (SAV) observations
- Native emergent vegetation observations
- Recommendations for you and your lake

On **August 15th, 2013**, Seminole County Lake Management and Watershed Management staff (Gloria Eby, Marianne Pluchino, and Joey Cordell) inspected the aquatic plants within Lake Pickett and conducted a **Lake Vegetation Index (LVI)** bioassessment.

The LVI was created by the Florida Department of Environmental Protection as a rapid screening tool (bioassessment) for ecological condition; it determines how closely a lake's flora (aquatic plants) resembles that of an undisturbed lake.

Lake Pickett is 762 surface acres in size with a mean depth of 11.6 feet, maximum depth of 35.2 feet, and is located in the Big Econlockhatchee watershed. Historical LVI scores range from 71 to 80 with 80 being the most current and in the **Exceptional** category.

LVI Range	**Description**
78-100	Exceptional
38-77	Healthy
0-37	Impaired

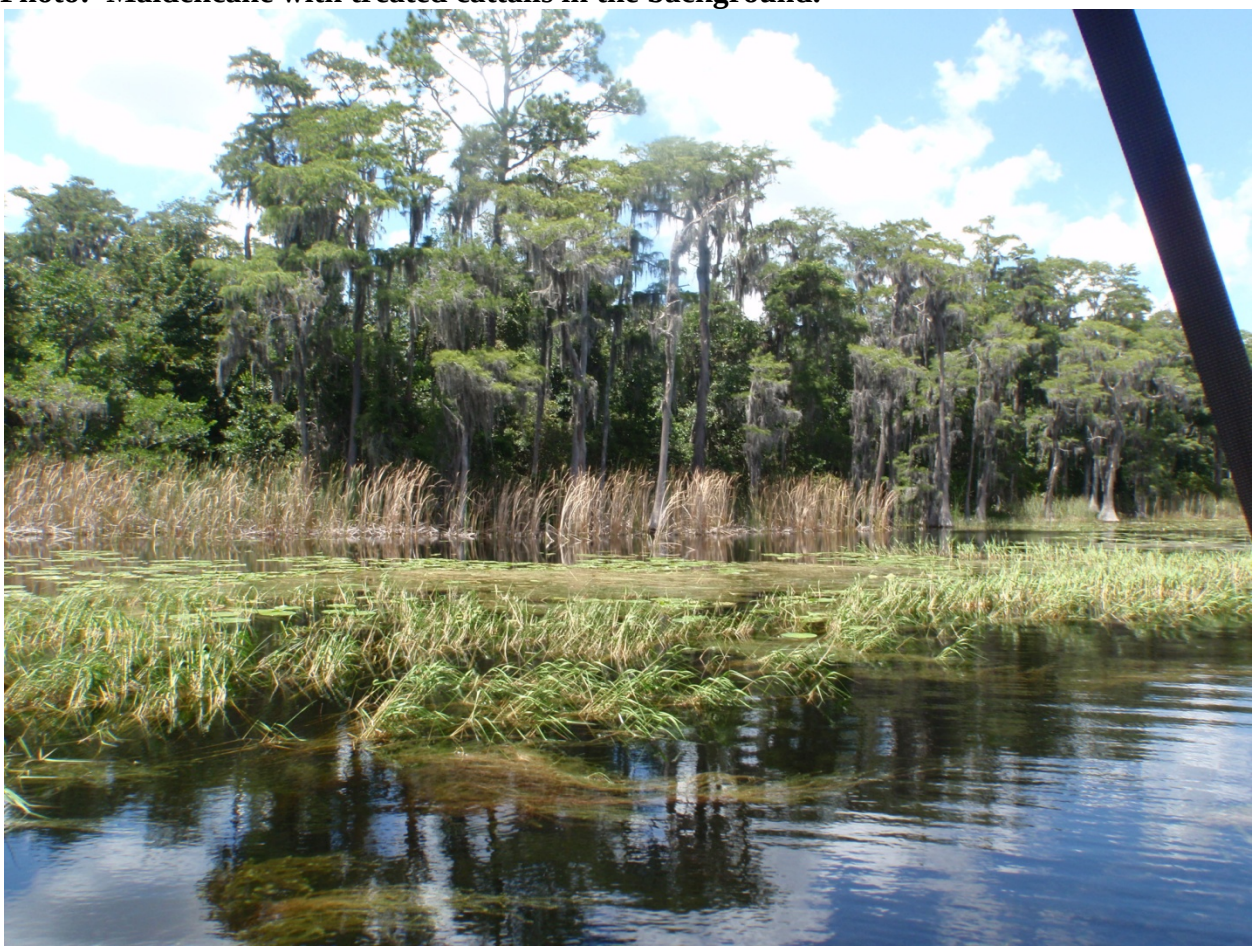
Native submersed vegetation found within the lake included: lemon bacopa to a depth of 3 feet, road grass to 13 feet, southern naiad to 16 feet, stonewort (nitella) to 16 feet, fanwort to 5 feet, and bog moss to 13 feet. The native bog moss was found "topped out" at the surface along the perimeter of the lake to a depth of 9 feet in many areas. The exotic hydrilla was observed sparse and to a depth of 3 feet.

Photo: Bog moss "topped out" near shoreline.

Photo: Southern naiad mixed in with bog moss.

Lake Pickett contained a very healthy amount of native shoreline vegetation. The shoreline vegetation observed during the inspection included: saw grass, rush fuirena, maidencane, pickerelweed, and duck potato.

Photo: Maidencane with treated cattails in the background.



The Secchi reading (measurement for water clarity) was 10.6 feet in a depth of 12 feet. This information can be found online at either County's Water Atlas website:
http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7521&wbodyatlas=lake
http://www.orange.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7521

12/2/2013

On **December 2nd, 2013**, Seminole County Lake Management and Watershed Management staff, Thomas Calhoun and Joey Cordell, inspected the aquatic plants within Lake Pickett.

Orange County Environmental Protection Division (OCEPD) conducted a thorough hydrilla inspection October 28th-29th. An herbicide treatment has been scheduled to treat 18 acres of hydrilla and 1 acre of cattails. Collaboratively, we will continue to monitor the inshore areas of the lake to enable rapid response to new hydrilla growth (via chemical spot treatments).

Figure: Green flags represent areas with hydrilla present recorded by OCEPD.

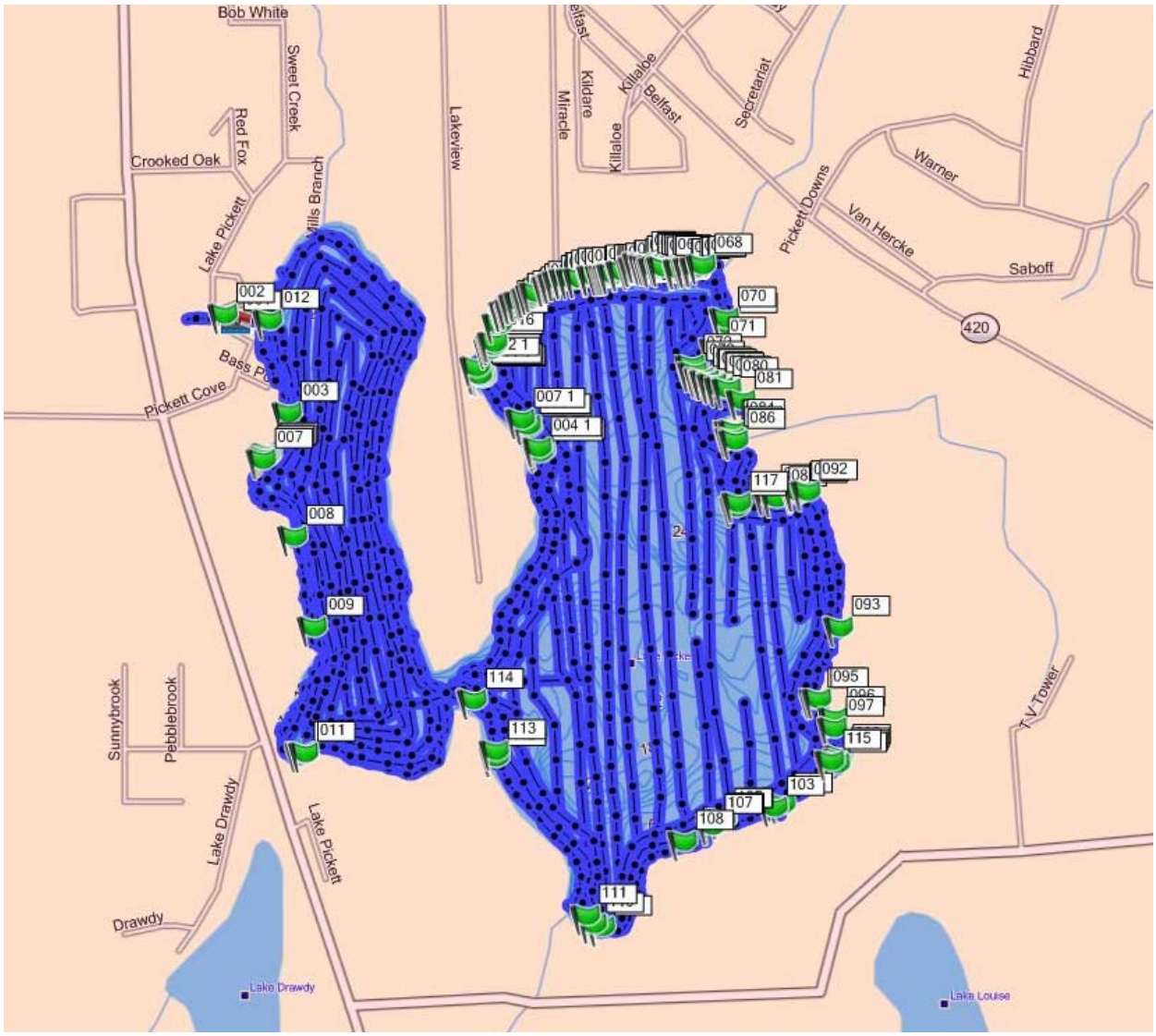


Photo: Hydrilla found mixed in with bog moss.

Native submersed vegetation found within the lake included: lemon bacopa to a depth of 3 feet, road grass to 3 feet, southern naiad to 4 feet, stonewort to 8 feet, bladderwort to 3 feet, and bog moss to a depth of 8 feet. Bog moss was found topped out (floating at the surface) in depths less than 6 feet but was found to be reduced from previous inspections. As winter approaches, bog moss should naturally recede from the surface of the lake as it enters its winter senescence. The invasive Asian marshweed (*Limnophila sesseleflora*) was also found in several areas of the lake. As mentioned, hydrilla was found intermixed with the native bog moss along northeast potion of the east lobe and around the Lake Pickett Woods HOA boat ramp. Other points of hydrilla observation coincide with the OCEPD map.

Photo: Asian marshweed.

Lake Pickett contained a very healthy amount of native shoreline vegetation and intact shoreline. The vegetation observed during the inspection included: saw grass, rush fuirena, maiden cane, pickerelweed and duck potato. Invasive shoreline vegetation included: bur-head sedge, para grass, and torpedo grass. The majority of torpedo grass was found in disturbed areas such as boat ramps, sea walls, and cleared shorelines.

Photo: Saw grass along the shoreline.

Photo: Torpedo grass at boat ramp.

The Secchi reading (measurement for water clarity) was 11.1 feet in a depth of 12.5 feet. This information can be found online at either county's Water Atlas website:
http://www.seminole.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7636
http://www.orange.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7636

Recommendations for your lake:

1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues, especially nutrients/lake management recommendations. Seminole County and Orange County staff would be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shoreline (such as pickerelweed, duck potato, and canna) and reduce exotic species such as torpedo grass.

2 Lake Pickett is in need of a LAKEWATCH or Adopt-a-Lake volunteer, who would assist in collecting valuable water quality data for your lake. Please contact Seminole County (Geby@seminolecountyfl.gov) or Orange County (Dan.Homblette@ocfl.net) to become a LAKEWATCH volunteer, or for more information.

3 Increase educational outreach programs, including Shoreline Restoration Projects (planting days), Florida Yards and Neighborhoods (FYN) Workshops, and Lake Management Video mail-outs. Most importantly, share the word about reducing personal pollution to your lake by decreasing total fertilizer usage and using **only phosphorous free** fertilizers, properly maintaining/cleaning septic tanks, maintaining a healthy shoreline with beneficial native aquatic plants, constructing a berm and swale feature along your shoreline, and keeping grass clippings out of your lake and out of storm drains that lead to the lake. All of these activities help to protect and preserve your waterbody!