

Please find the latest assessment reports for Lake Mills below. As previously emailed, we are observing a significant amount of hydrilla re-establishing in the inshore area of the lake of which will be treated in Jan/Feb 2012.

We are very excited to announce that the Lake Mills Shoreline Restoration Event is scheduled for Saturday, October 8th from 9am-1pm. On this date, the Seminole County Lake Management and SERV Programs will bring in volunteers and beautiful FREE aquatic plants to help improve the water quality of your lake. Please email Natalee Almeter at [serv@seminolecountyfl.gov](mailto:serv@seminolecountyfl.gov) or call 407-665-2457 if you are interested in becoming a planting site location for this event. We have a few signups already and space is limited!

**On 16 June 2011**, Seminole County Lake Management Program (SCLMP) staff Thomas Calhoun and Marie Lackey surveyed the aquatic plants of Lake Mills. Hydrilla was found throughout the whole lake to a depth of 6 ft. Most of the hydrilla is concentrated to the northwest shoreline however it is expanding. The 2 canals along the west side have been treated for hydrilla and only trace amounts remain within each canal.



*Photo: Hydrilla found along northwest side of lake.*

SAV observed included: lemon bacopa (mostly in the two western canals) to a depth of 3.5 feet, coontail to 7 feet, road grass to 5 feet, filamentous algae to 7 feet, hydrilla to 6 feet, both species of baby tears (mostly in the canals) to 3 feet, stonewort to 9 feet and eelgrass to 3 ft. As mentioned before, hydrilla is expanding around the entire lake perimeter however along the south and south east shoreline, stonewort and southern naiad still remain the dominant species.



*Photo: Hydrilla and algae found along northwest shore.*

Both grass carp barriers were intact in good condition, free of debris, recently maintained. The water level was 39.9 feet above sea level compared to the previous month of 40.49 feet. The Secchi reading (measurement for water clarity) was 4.9 feet in a depth of 12.8 feet.

Recommendations:

- 1 Participate in the upcoming Lake Restoration Event on Saturday, October 8th from 9am-1pm. Contact Natalae Almeter at [serv@seminolecountyfl.gov](mailto:serv@seminolecountyfl.gov).
- 2 Work together or establish a lake association, with other lakefront owners to increase native aquatic plantings along shoreline (such as pickerelweed, canna and duck potato). Have at least one annual lake association meeting to discuss lake specific issues.
- 3 Increase educational outreach programs i.e. Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of pointless personal pollution by using low fertilizer use; phosphorous free fertilizers; keeping a functional shoreline with beneficial native aquatic plants; keeping grass clippings out of your storm drains leading to the lake.

All these activities aid in protecting your lake! Contact Seminole County Lake Management Program Gloria Eby, [GEby@seminolecountyfl.gov](mailto:GEby@seminolecountyfl.gov) or (407) 665-2439 for free educational programs available.

Greetings Lake Mills!

Please find the latest assessment reports for your lake below. As previously emailed, we are observing a significant amount of hydrilla re-establishing in the inshore area of the lake of which will be treated in January/February 2012. Key highlights of this update will include:

- Hydrilla Update
- Torpedo grass status
- 9am Saturday, October 8<sup>th</sup> Restoration Event
- Next scheduled treatment will be mid-October
- Yearly Lake Vegetation Index (LVI) Results
- Recommendations for you and your lake

We are looking forward to the first **Lake Mills Shoreline Restoration Event** scheduled for **Saturday, October 8<sup>th</sup> from 9am-1pm**. On this date the Seminole County Lake Management and SERV Programs will bring in **volunteers and beautiful FREE aquatic plants** to help improve the water quality of your lake (see flyer attached). **We are still in need of boat volunteers to assist in transporting folks to the locations. If you are able to assist in this fashion please contact me.** We continue to thank you for your dedication and support. Your efforts are very much appreciated!!!!

**On July 26, 2011**, Gloria Eby (Seminole County [SC] Senior Environmental Scientist), Marianne Pluchino (SC Senior Environmental Scientist), Thomas Calhoun (Seminole County Contracted Scientist) and Dean Barber (SC Contracted Scientist) surveyed the aquatic plants and conducted a Lake Vegetation Index (LVI) assessment of **Lake Mills**.

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 Mills is 243 surface acres with a mean depth of 9.6 feet, maximum depth of 24 feet, located in the Big Econlockhatchee watershed. Historical LVI scores range from 30 to 73; with the most current score being 45-Healthy.

<b>LVI Range</b>	<b>Description</b>
78-100	Exceptional
38-77	Healthy
0-37	Impaired

**On September 22, 2011**, Seminole County Lake Management Program (SCLMP) staff Thomas Calhoun, Marie Lackey and intern Devin Whitney surveyed the aquatic plants of **Lake Mills**.

The invasive exotic hydrilla has continued to expand throughout the lake to a depth of 8 feet and is now the dominant species within the lake. In water less than 4 feet, the hydrilla is beginning to top out. Five other submersed aquatic vegetation (SAV) were observed during the inspection. These were all native species and included: coontail to 5 feet, road grass to 6 feet, southern naiad to 9 feet, lemon bacopa to 2 feet, and eelgrass to 2 feet. A lake-wide hydrilla treatment is scheduled for January/February 2012.

**Photo: Hydrilla and algae found along northwest shore.**





The 2 canals along the northwest side have been treated for hydrilla and lily pads. An algae bloom was present at the end of the south canal as well as tussocks of treated material.

**Photo: Treated lily pads at the end of the north canal.**



In effort to prepare for the October 8<sup>th</sup> restoration event torpedo grass has been treated very effectively by the Seminole County herbicide contractor. Also elephant ear will be added to the lake wide permit and will be targeted in future treatments.

Both grass carp barriers were intact in good condition, free of debris, recently maintained. The water level was 40.49 feet above sea level compared to the previous month of 39.09 feet. The secchi reading (measurement for water clarity) was 8.6 feet in a depth of 12.6 feet.

**Photo: Grass carp barrier in Lake Mills Park.**





**Recommendations:**

- 1 Participate in the upcoming Lake Restoration Event on Saturday, October 8<sup>th</sup> from 9am-1pm. Contact Natalee Almeter at [serv@seminolecountyfl.gov](mailto:serv@seminolecountyfl.gov) for more details or if you can be a boat volunteer.
- 2 Work together or establish a lake association, with other lakefront owners to increase native aquatic plantings along shoreline (such as pickerelweed, canna and duck potato). Have at least one annual lake association meeting to discuss lake specific issues.
- 3 Increase educational outreach programs i.e. Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal pollution by using low fertilizer use; phosphorous free fertilizers; keeping a functional shoreline with beneficial native aquatic plants; keeping grass clippings out of your storm drains leading to the lake. All these activities aid in protecting your lake! Contact Seminole County Lake Management Program Gloria Eby, [GEby@seminolecountyfl.gov](mailto:GEby@seminolecountyfl.gov) or (407) 665-2439 for free educational programs available.