Greetings Sylvan Lake residents!

Please find the latest bioassessment for your lake below. Key highlights of this update include:

- LVI
- Submersed Aquatic Vegetation (SAV) - great diversity observed!
- Hydrilla status- recommend to treat hydrilla and maintain a management plan for this exotic aquatic plant
- Emergent Vegetation
- FWC permit for vegetation removal

On **September 23rd, 2015,** Seminole County Lake Management personnel (Gloria Eby, Thomas Calhoun, and Joey Cordell) along with Seminole County consultant, Dean Barber, and FWC Regional Biologist, Kristine Campbell, surveyed the aquatic plants in **Sylvan Lake** and conducted a Lake Vegetation Index (LVI).

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.

Several species of native submersed aquatic vegetation (SAV) was observed during the inspection. These SAV species consisted of pondweed, southern naiad, lemon bacopa, loose water-milfoil, needle leaf, roadgrass to 9 feet, stonewort to 9 feet, and 3 species of bladderwort to 3 feet. The diverse amount of native SAVs found is important for the water quality of Sylvan Lake. In addition, native SAVs play an important role within the ecosystem of Lake Sylvan by providing habitat for wildlife, reducing nutrients from run-off, and competing for space with hydrilla.

Large patches of hydrilla were found in the two accessible canals but no hydrilla was observed in the lake. Lake Management Program highly recommends treating the hydrilla present on a continual basis to help prevent a lake-wide infestation of hydrilla occurring.

*Please note the canals are permit exempt from Florida Fish and Wildlife Conservation Commission's aquatic plant permitting process. Any chemical treatment within Sylvan Lake will require an aquatic plant permit from FWC. In order to alter your shoreline or treat exotic vegetation with an herbicide, you must apply for a free aquatic plant removal permit through the Florida Wildlife Conservation Commission at http://www.myfwc.com/license/aquatic-plants or contact FWC Regional Biologist Kristine Campbell at Kristine.Campbell@myfwc.com or 407-858-6170.

The canal to the north, off Lake Drive and Sylvan Court was inaccessible due to vegetation overgrowth and low water level for our vessel.

Photo: Hydrilla in access canal.

Photo: Limited access in north canal.

Native emergent plants observed included: watershield, buttonbush, sawgrass, flat sedge, rush fuirena, water spider orchid, pennywort, hempvine, yellow cow lily, fragrant water lily, banana lily, maidencane, beakrush, duck potato, and cattails. Exotic emergent plants observed included: primrose willow, torpedo grass, and Chinese tallow.

Photo: Watersheild, yellow cow lily, and pickerelweed.

Photo: Stand of maidencane, a native, along shoreline at Sylvan Lake Park.

The Secchi (water clarity) reading was 6.0 feet at a depth of 9.0 feet. The Secchi range for 401 samples taken between 1982 and 2015 has been 0.5 to 8.5 feet. More information is available on the Seminole County Water Atlas website at: http://www.seminole.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7503

Recommendations for your waterbody:

1. Continue to with other lakefront owners to control (and if possible eliminate) invasive plants observed during this survey and increase native aquatic plantings along shoreline (such as pickerelweed, maidencane, and duck

potato). Have at least one annual lake association meeting, invite guest speakers (such as county or state biologists), and discuss lake-specific issues, especially lake management recommendations. Seminole County Lake Management staff would be glad to present our findings from this and other surveys.

2. Treat invasive torpedo grass, hydrilla, and other invasive aquatic plants along your waterfront. Either do it yourself by hand removal or obtain the necessary aquatic herbicide (we can provide some sources) or hire a contracted aquatic herbicide application company (we can provide a list of vendors from the state). This recommendation could be managed by Seminole County by establishing an MSBU, Municipal Service Benefit Unit, for aquatic weed control services. For additional information contact Tom Gilbert at (407) 665-7164 or tgilbert@seminolecountyfl.gov or http://www.seminolecountyfl.gov/fs/msbu/. Control of aquatic and wetland plants will in most cases requires a free Florida Fish and Wildlife Conservation Commission (FWC) aquatic plant control permit. Contact Kris Campbell at (321-246-0682) or Kristine.Campbell@myFWC.com for a permit.

3. Utilize the valuable educational outreach programs that are available to you: Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN) interactive presentations, and Lake Management Video mail-outs. Implement a media campaign within the community to promote the reduction of personal pollution; encourage residents to decrease their overall fertilizer usage, use only phosphorous-free and slow-release nitrogen fertilizers, keep a functional shoreline with beneficial native aquatic plants, and keep grass clippings out of your lake and the storm drains that lead to the lake. All of these activities aid in protecting your lake! Contact Seminole County Lake Management Program (407) 665-2439 for more information regarding the free educational programs available.

4. Help spread the word! Obtain email addresses from neighbors not currently on the distribution list in order to share this information with others. Valuable information is contained within these reports.