

Greetings Spring Lake Residents!

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

- Submersed Aquatic Vegetation (SAV)
- Native shoreline vegetation
- Invasive emergent vegetation
- Alum treatment
- Recommendations for you and your lake

On **December 5th, 2015**, Seminole County Lake Management staff, Thomas Calhoun, Joey Cordell, and Beth Beals, surveyed the aquatic plants in **Spring Lake**.

Two species of submersed aquatic vegetation (SAV) were observed during the inspection. These species were southern naiad to 3 ft and eelgrass to 3 ft. Eelgrass was the dominant SAV.

Photo: Eelgrass and southern naiad.



Native shoreline vegetation is very low on Spring Lake. Native emergent vegetation found during the inspection included: rush fuirena, hempvine, spatterdock, fragrant water lily, pickerelweed, carolina willow, bulrush, fire flag, cattail, and goldenrod.

Photo: Fragrant water lily.



Invasive emergent vegetation found during the inspection included: wild taro, umbrella sedge, primrose willow, torpedograss, creeping oxeye, and cogongrass. No alligatorweed was seen during the inspection. Cogongrass is an invasive species that was just recently found on Spring Lake. It was found on the southwest shoreline. The Florida Exotic Pest Plant Council has labeled it a Category I invasive species. Cogongrass is identified by its off-centered white vein.

Photo: Example of cogongrass blade.



We are currently in the procurement phase in planning an alum treatment. Alum, or aluminum sulfate, is a flocculating agent used to sequester phosphorus. When applied to the lake alum bonds with phosphorus, effectively inactivating the nutrient. This treatment will lower nutrient levels which will improve water quality and water clarity. A projected schedule for the 3 day application is January 11th, 12th, and 13th.

The water elevation during the time of the inspection was 63.04 feet above sea level. The secchi reading (measurement for water clarity) was 2.9 feet in a total depth of 10.2 feet. No grass triploid (sterile) carp fish were observed during this inspection.

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. SCLMP staff would be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along the shoreline (such as pickerelweed, duck potato, and canna).
- 2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter your waterways. Leaf debris contains phosphorous that can negatively impact your lakes.
- 3 Increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs. Spread the word about reducing personal pollution through reducing total fertilizer use, using only phosphorous-free and slow release nitrogen fertilizers,

keeping a functional shoreline with beneficial native aquatic plants, and keeping grass clippings out of your storm drains leading to the lake. All of these activities aid in protecting your waterbody! Contact Seminole County Lake Management Program (407) 665-2439 to find out about the free educational programs available to you.

4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list so that these reports can be shared with everyone. Valuable information is contained within these assessments.