

Greetings Spring Wood Lake and Spring Wood Waterway!

Our next scheduled inspection will be on September 6th (weather permitting).

Below please find the latest lake assessments for your waterways. Key highlights of this update will include:

- Storm-drain markings in Spring Lake Hills Subdv.
- Results from Spring Wood Lake's, Lake Vegetation Index (LVI).
- Hydrilla status- new growth.
- Monthly herbicide treatment status.
- Results from this year's restoration events- **KUDOS to you** for another successful year!
- Continued encouragement of planting native aquatic plants along your shoreline.
- Recommendations for you and your lake.

Recently, placards were affixed to the various storm-drains within Spring Lake Hills subdivision that leads to your waterway by one of our fine SERV volunteers. Please note that they indicate "drains to lake/river" in efforts to reduce/prevent pollutants from entering the drain, such as leaf litter and grass clippings, then ultimately into your waterways. Thank you Devin for your efforts!

Spring Wood Lake

On July 15th, 2011, Gloria Eby (Seminole County [SC] Senior Environmental Scientist), Marianne Pluchino (SC Senior Environmental Scientist), Thomas Calhoun (Seminole County Contracted Scientist) and Michelle Shelton (Seminole County Contracted Scientist) surveyed the aquatic plants and conducted a Lake Vegetation Index (LVI) assessment of **Spring Wood Lake**.

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.

Spring Wood Lake is 8.26 surface acres located in the Little Wekiva watershed. LVI score for 2011 was 48; healthy.

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

On July 15th, 2011, Gloria Eby (Seminole County [SC] Senior Environmental Scientist), Marianne Pluchino (SC Senior Environmental Scientist), Thomas Calhoun (Seminole County Contracted Scientist) and Michelle Shelton (Seminole County Contracted Scientist) surveyed the aquatic plants in **Spring Wood Lake**.

Submersed aquatic vegetation (SAV) found during inspection included: hydrilla to a depth of 8 feet, stonewort to 8 feet, roadgrass to 8 feet and lemon bacopa found to 3feet. Hydrilla was observed with new growth intermixed within other SAV. Additionally observed was the potato- like tubers generating new hydrilla plant. Hydrilla tubers can remain viable in lake sediments for up to 4 years.

Stonewort continues to be the dominant aquatic plant, blanketing the bottom of the lake to depths of 8 feet. With this dominance, stonewort assists in hindering hydrilla from establishing due to competition for space. We will closely monitor the hydrilla growth to determine if more grass carp fish will be needed to control hydrilla within the deep waters of Spring Wood Lake.

Photo: Hydrilla tubers (potato-like bulbs) with new plant growth found during inspection.



Photo: Hydrilla intermixed with stonewort.



Torpedo grass continues to be treated by the Seminole County contractor via the MSBU. This, coupled with the shoreline restoration events, has resulted in torpedo grass no longer being the dominant shoreline plant in many parcels. A GREAT achievement! Plants from the April restoration event continue to do well and show signs of expansion. To encourage the expansion of the planted native vegetation, it is suggested that torpedo grass be removed from around the new plants where the monthly herbicide treatments may not impact due to affecting the new native plants.

Photo: Duck potato and pickerel weed from restoration event.



Secchi disc reading (a measurement for water clarity) was 6.2 feet in a depth of 10.6 feet, compared to 6.0 feet on the April 2011 survey.

Springwood Waterway

On **July 15th, 2011** SCLMP staff: Gloria Eby (Seminole County [SC] Senior Environmental Scientist), Marianne Pluchino (SC Senior Environmental Scientist), Thomas Calhoun (Seminole County Contracted Scientist) and Michelle Shelton (Seminole County Contracted Scientist) surveyed the aquatic plants in **Springwood Waterway**.

The July 16th restoration event on Springwood Waterway was a great success. We had ~80 volunteers that planted more than 2,500 plants at various locations within the waterway. These plants included pickerelweed, duck potato, canna and fire flag (Thalia).

Photo: Volunteers planting beneficial native plants.





Native submersed aquatic vegetation (SAV) observed included: lemon bacopa to a depth of 2 feet, both stonewort and purple bladderwort to the bottom of the waterway for the first 1/3 of the canal, and eelgrass in shallow water. The invasive exotic hydrilla was not observed during this inspection.

Photo: Location examples that were planted during July's event.



Recommendations for waterbodies:

- 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 shoreline (such as pickerelweed, duck potato and canna).
- 2 Consider increasing street sweeping services during times of peak leaf fall to ensure this debris does not wind up in your waterways. Leaf debris contains phosphorous that can 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, 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 waterbody! Contact Seminole County Lake Management Program (407) 665-2439 for free educational programs available.

Greetings Spring Wood Lake and Spring Wood Waterway!

Below please find the latest lake assessments for your waterways. Key highlights of this update will include:

- Hydrilla status- new growth around Lake Destiny boat ramp and canal.
- Monthly herbicide treatment status.
- Results from this year's restoration events.
- Lake Destiny hydrilla survey.
- Continued encouragement of planting native aquatic plants along your shoreline.
- Recommendations for you and your lake.

Recently, placards were affixed to the various storm-drains within Spring Lake Hills subdivision that leads to your waterway by one of our fine SERV volunteers. Please note that they indicate "drains to lake/river" in efforts to reduce/prevent pollutants from entering the drain, such as leaf litter and grass clippings, then ultimately into your waterways.

Spring Wood Lake

On September 7th, 2011, Thomas Calhoun (Seminole County Contracted Scientist) and Michelle Shelton (Seminole County Contracted Scientist) surveyed the aquatic plants in **Spring Wood Lake**.

Submersed aquatic vegetation (SAV) found during inspection included one exotic and three natives: exotic hydrilla to a depth of 8 feet (same depth as previous inspection), stonewort to 10 feet, roadgrass to 8 feet, and lemon bacopa to 3 feet. Hydrilla was observed with new growth intermixed within the other native SAV and filamentous algae along the bottom. Additionally observed was the potato- like tubers generating new hydrilla plant. Hydrilla tubers can remain viable in lake sediments for over 4 years.

Photo: Hydrilla intermixed with filamentous algae (left) and tuber generating new hydrilla plant (right).



Plants from the April Restoration Event continue to do well and show signs of expansion. To encourage continued expansion of the planted native vegetation, it is suggested that torpedo grass be hand removed from around the new plants where the monthly herbicide treatments may not be able to treat due to impacting the new native plants. Torpedo grass and cattails continue to be treated by the Seminole County contractor via the MSBU. This, coupled with the shoreline restoration events, has resulted in torpedo grass no longer being the dominant shoreline plant in many parcels.

Photo: Treated torpedo grass and cattails.



Secchi disc reading (a measurement for water clarity) was 6.2 feet in a depth of 12.1 feet.

Springwood Waterway

On September 7th, 2011, Thomas Calhoun (Seminole County Contracted Scientist) and Michelle Shelton (Seminole County Contracted Scientist) surveyed the aquatic plants in **Springwood Waterway**.

Many sites that were planted during the July 9th restoration event are doing great and plants are expanding however some sites have lost plants. We suspect that the plants are either “popping up” or have been mowed. Please take extra care when doing lawn maintenance in these areas. If you have a lawn maintenance contractor, please flag the vegetation or tell your contractor to proceed with caution in these areas.

Photo: Duck potato expanding in the waterway.



Native submersed aquatic vegetation (SAV) observed included: lemon bacopa to a depth of 2 feet, stonewort (*Nitella*) to 5 feet, purple bladderwort to 5 feet, and eelgrass in shallow water. Stonewort and bladderwort are found in 2 to 3 feet mats along the bottom and at the entrance of the waterway.

The invasive exotic hydrilla was observed during this inspection for the first time in several months where a few springs were found near the bend. In addition, the boat ramp for Lake Destiny, at the end of Lake Destiny Trail, contains hydrilla that encompasses the entire dock area that will be scheduled for treatment next month.

Photo: Hydrilla found in waterway.



Photo: Stonewort (*Nitella*) mat found at the entrance of the waterway.



In **Lake Destiny**, several lake vegetation samples were deployed using frotus in which no hydrilla was found inshore or in deeper waters. This lake was surveyed for hydrilla presence only.

Recommendations for waterbodies:

- 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 shoreline (such as pickerelweed, duck potato and canna).
- 2 Consider increasing street sweeping services during times of peak leaf fall to ensure this debris does not wind up in your waterways. Leaf debris contains phosphorous and nitrogen that can 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, 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 waterbody! Contact Seminole County Lake Management Program (407) 665-2439 for free educational programs available.