HORSESHOE LAKE BIOASSESSMENT
JUNE AND JULY 2015

Greetings Horseshoe Lake North residents!

Below, please find the latest bioassessment for your lake. Our next inspection will be August 11th; weather permitting. Key highlights of this bioassessment include:

- Herbicide treatment status (treatment for July scheduled for next week weather permitting)
- Hydrilla update
- Native submersed aquatic vegetation (SAV) found
- Invasive vegetation observations
- Native emergent vegetation observations
- Restoration Event updates
- Recommendations for you and your lake

On **June 9th, 2015**, Seminole County Lake Management Program (SCLMP) personnel, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in Horseshoe Lake North.

Ramp access was blocked on this date. Canal was inspected and found to be in good condition with impact on invasives from the previous herbicide treatment. Due to the performance of the previous herbicide treatment, no herbicide treatment was scheduled for the month of June.

Photo: Treated torpedo grass, sedge, and primrose willow in canal.

7-14-2015

On **July 14th, 2015**, Seminole County Lake Management Program (SCLMP) personnel (Thomas Calhoun, Joey Cordell and UCF student Alyssa Alers) surveyed the aquatic plants in Horseshoe Lake North.

One sprig of hydrilla was found during this inspection at the culvert of the stormwater canal. This area will be treated for hydrilla as well as torpedo grass and alligatorweed during the July treatment.

Photo: Hydrilla sprig in the canal.

Other invasive species included: alligatorweed, wild taro, water hyacinth, torpedo grass, bur-head sedge, and salvinia. Bur-head sedge has expanded since the previous inspection and will be targeted during this month's herbicide treatment. A few small pockets of water hyacinths were observed during this inspection and will be treated as well.

Photo: Monoculture of bur-head sedge scheduled for treatment.

Much of the native vegetation planted during the March 28th restoration event were found in great condition. We are seeing a better success rate in establishment than in previous years! Thank you to all residents who have replanted “pop-ups” and cared for these beneficial natives

Photos: Maidencane establishing nicely.

Native vegetation including duck potato, pickerelweed, fire flag, lizard tail, and southern water grass was found expanding around the lake. Native SAV found included eelgrass, baby's tears, stonewort, and roadgrass.

Photo: Stonewort.

The Secchi measurement (for water clarity) was 2.9 feet in a total depth of 7.5 feet. The lake elevation was 37.00 feet above sea level at the time of inspection. The grass carp barrier was inspected and found to be clear of debris and in good condition. No grass carp were observed during the inspection.

Recommendations for you and 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 and lake management recommendations. SCLMP staff would be glad to present our findings from this and other surveys.

2 Continue to establish a beneficial native shoreline for Horseshoe Lake North, especially in locations that are devoid of emergent aquatic plants. Given that some plants are stressed, or did not survive from the previous planting session, the planting of native species should continue until successful establishment is achieved. SCLMP recommends planting in new locations that are shallower and have more sunlight.

3 Native and non-native invasive species sometimes grow very close together, making the non-native species difficult to treat. Non-native species can be hand-pulled from patches of native plants, or a directed herbicide treatment can be used to target the non-native species. Although directed treatments may impact adjacent native species, such herbicides may be necessary to prevent expansion of the non-native species. For overall success in lake management, everyone must become stewards of the lake. Residents should assist whenever possible in the removal of non-native plants in close proximity to native vegetation, and replant the area with beneficial native plants.

4 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.

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

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