

Greetings Buck Lake Residents!

Please find the latest bioassessment for your lake below. Our next bioassessment is scheduled for September 18<sup>th</sup>, 2013.

Key highlights of this update will include:

- Submersed aquatic vegetation updates- only 1 species observed
- Water hyacinth update- biomass (amount) noted as same
- Recommendations for you and your lake

On **April 3<sup>rd</sup>, 2012**, Seminole County Lake Management Program (SCLMP) staff Thomas Calhoun and Watershed Management intern Devin Whitney surveyed the aquatic plants in **Buck Lake**.

Many areas of the lake were inaccessible due to extremely shallow water. A good diversity of emergent shoreline vegetation was observed during the inspection which included pickerelweed, sawgrass, soft rush, and rush fuirena.

**Photo: Example of rush fuirena.**



The only native submersed aquatic vegetation (SAV) observed during this inspection was road grass (*Eleocharis baldwini*) to a depth 4.5 feet. Southern naiad and eelgrass found during previous inspection was not observed. Native SAV plays an important role in the aquatic ecosystem by providing habitat and reducing nutrients (thus improving water quality) within a lake.

**Photo: Road grass found during the inspection.**



Two invasive plants species were observed during this inspection which included water hyacinth (*Eichornia crassipes*) and bur-head sedge (*Scirpus cubensis*). Bur-head sedge and water hyacinth out competes other plants by creating a floating mat that can shade out beneficial native vegetation. In addition, as this floating mat creeps further into the lake, it reduces the acreage of open navigable water.

**Photo: Bur-head sedge.**



**Photo: Water hyacinth along shoreline.**



The Secchi reading (a measurement for water clarity) was 5.9 feet in a depth of 11.3 feet compared to 9.3 feet on the previous survey. Historic readings have been 1.6 to 10.6 feet. The water elevation at the end of October was 22.55 feet above sea level. This information and much more is available on the Seminole County Wateratlas website at:

<http://www.seminole.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7520>

### **Lake Recommendations:**

1 Work together or establish a lake association 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 grass, 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 invasives (water hyacinth, torpedo grass, and bur-head sedge): Either do it yourself and establish a spray program or hire a contracted aquatic herbicide application company (we can provide a list of companies). Control of aquatic and wetland plants could require a free Florida Fish and Wildlife Conservation Commission (FWC) aquatic plant control permit. Contact CJ Greene at (407) 858-6170 or [Carl.Greene@MyFWC.com](mailto:Carl.Greene@MyFWC.com) for a permit.

3 These recommendations could be managed by Seminole County by establishing a Municipal Service Benefit Unit (MSBU); a funding format for aquatic weed control services via a special assessment. For additional information contact Carol Watral at (407) 665-7164 or [cwatral@seminolecountyfl.gov](mailto:cwatral@seminolecountyfl.gov)

4 Increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal pollution by decreasing fertilizer usage; using only phosphorous free

fertilizers; keeping a functional shoreline with beneficial native aquatic plants; keeping grass clippings out of your lake and 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 Buck Lake Residents! Please find the latest assessment for your lake below.

Key highlights of this update will include:

- Submersed aquatic vegetation updates
- Water hyacinth updates
- Recommendations for you and your lake

On **November 1<sup>st</sup>, 2012**, Seminole County Lake Management Program (SCLMP) staff Gloria Eby, Marianne Pluchino, and Thomas Calhoun surveyed the aquatic plants in **Buck Lake** and conducted a Lake Vegetation Index (LVI).

There were three native submersed aquatic vegetation (SAV) were observed during this inspection which included road grass (*Eleocharis baldwini*) to a depth 2 feet, southern naiad (*Najas guadlupensis.*) to 2 feet, and eel grass (*Vallisneria americana*) to 3 feet. The native SAV has increased from recent years. This is a good sign. Native SAV plays an important role in the aquatic ecosystem by providing habitat and reducing nutrients within the lake.

**Photo: Southern naiad and eelgrass found during the inspection.**



Two invasive plants species were observed during this inspection which included: water hyacinth (*Eichornia crassipes*), bur-head sedge (*Scirpus cubensis*). Bur-head sedge out competes other plants by creating a floating mat that shades out native vegetation. Also, as this floating mat creeps further into the lake it reduces the acreage of open navigatable water.

**Photo: Bur-head sedge.**



The Secchi reading (a measurement for water clarity) was 9.3 feet in a depth of 9.3 feet compared to 5.8 feet on the previous survey. Historic readings have been 1.6 to 10.6 feet. The water elevation at the end of October was 23.52 feet above sea level. This information and much more is available on the Seminole County Wateratlas website at:

<http://www.seminole.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7520>

### **Lake Recommendations:**

- 1 Work together or establish a lake association 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 grass, 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. Contact Gloria Eby at (407) 665-2439 for assistance.

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