

Greetings Buttonwood Residents,

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

- Example restoration site
- Submersed aquatic vegetation (SAV)
- Native emergent vegetation
- Exotic emergent vegetation
- Recommendations for you and your waterbody

On **January 26<sup>th</sup>, 2016**, SCLMP personnel, Joey Cordell, surveyed the aquatic plants in **Buttonwood Pond**.

At time of inspection the water level was low.

All of the pickerelweed planted at the restoration site died. This was most likely due to low water levels. The amount of canna and duck potato also decreased in this area. However, the cordgrass and soft rush were still very healthy. Pickerelweed will be replanted at a lower level to determine its habitable range.

**Photos: Example restoration site.**



Red ludwigia was the only submersed aquatic vegetation (SAV) observed during the inspection.

**Photo: Red ludwigia.**



Native emergent vegetation observed during the survey included: golden canna, buttonbush, spike rush, pennywort, soft rush, hempvine, pickerelweed, duck potato, cordgrass, and fire flag. Overall, there was less canna and duck potato than at the previous inspection, although there was an increase in young growth of these species.

**Photo: New canna growth.**



Invasive emergent vegetation included: alligatorweed and torpedo grass. There was a reduction of these invasive species since the previous inspection.

The water elevation at the time of inspection was 31.16 feet above sea level. This was a decrease from the elevation at the previous inspection (31.31 ft).

**3/8/2016**

On **March 8<sup>th</sup>, 2016**, SCLMP personnel, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Buttonwood Pond**.

At time of inspection the water level was very low.

**Photo: Example restoration site.**



In the restoration zone, the pickerelweed and duck potato died due to the low water level. These species will be replanted lower on the shoreline.

Submersed aquatic vegetation (SAV) observed during the inspection included: red ludwigia, roadgrass, and baby's tears. All species were found in shallow water.

**Photo: Submersed Red Ludwigia.**



Native emergent vegetation observed during the survey included: spike rush, soft rush, pickerelweed, duck potato, fire flag, and cordgrass.

Invasive emergent vegetation included: alligator weed, and torpedo grass. The amount of torpedo grass was less than at the previous inspection.

A surface algae bloom was observed on the north side of the pond. Similar algae blooms have been noted in past inspections. To reduce the frequency of algae blooms, do not fertilize yards within 25 ft of the shoreline and only use phosphorus-free fertilizers. This will help prevent the excess nutrient run-off that has been feeding the algae.

The water elevation at the time of inspection was 31.35 feet above sea level. This was an increase from the elevation at the previous inspection (31.16 ft).

**4/12/2016**

On **April 12<sup>th</sup>, 2016**, SCLMP personnel, Thomas Calhoun and Marie Lackey, surveyed the aquatic plants in **Buttonwood Pond**.

The restoration example site has been extended and replanted with duck potato, pickerelweed, canna, blue-flag iris, soft rush and cord grass. Low water elevation has made it difficult for plantings to survive. We will continue to monitor to see which species will survive best.

**Photo: Restoration site.**



Submersed aquatic vegetation (SAV) observed during the inspection included: roadgrass, and baby's tears. Both species were found in shallow water.

Native emergent vegetation found during the survey included: spike rush, soft rush, pickerelweed, duck potato, fire flag, canna, blue-flag iris and cordgrass.

**Photo: Spike rush.**



Invasive emergent vegetation included: alligator weed, and torpedo grass.

**Photo: Example of the invasive exotic alligator weed.**



The water elevation at the time of inspection was 30.87 feet above sea level. This is a decrease from the elevation at the previous inspection (31.35 ft).

**Photo: Leaves in storm drain. Consider increasing street sweeping services during times of peak leaf fall.**



**Recommendations for your waterbody:**

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 will be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shorelines (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 waterways. Leaf debris contains high levels of phosphorous that can negatively impact your lakes.
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 so that these reports can be shared with everyone. Valuable information is contained within these assessments.