

Greetings Myrtle Lake!

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

- Lake level conditions and effects: from drought to recent water elevation
- Herbicide treatment cost increase reducing total number of annual treatments
- FWC Aquatic plant permit renewal in progress
- City of Longwood parcel
- Island apple snail
- Recommendations for you and your lake

As you well know, Myrtle Lake has experienced extremely low water levels and sandy conditions during the summer months that have made management in an "aquatic system" very difficult. The Seminole County herbicide contractor has serviced the lake on a bi-monthly basis where the lake was treated as far as the airboat can reach and then followed- up on a subsequent day with a truck/spray rig to reach additional areas to the extent afforded. Several invasive species (such as dog fennel and barnyard grass) has propagated within the canal area and lake perimeter that was successfully treated. For reference, the "canal area" is the exiting portion of the southern lobe heading north.

Photo of canal's overgrowth due to drought/dry conditions:



For the past 2 months, we have had numerous meetings with your liaisons to discuss the lake's condition and management plan.

The MSBU contracted services is on a bi-monthly basis, with the month of September being the last service month for the fiscal year. Continuing fluctuating lake levels present treatment challenges and prohibit airboat access in certain areas for purpose of application of the herbicide. Therefore, for FY 2011-2012, applications costs of aquatic treatments are increasing. Current level of funding for aquatic treatments will allow for a total of **five** treatments (rather than the **six**

treatments completed in FY 2010-2011) and will be scheduled by LMP based on assessment of lake needs.

The most recent treatment has yielded great impact especially to the primrose that has established during the drought. With the recent rise in water elevation, one of five treatments will be executed within the next couple of weeks. We are awaiting renewal of your FWC aquatic plant permit (which is currently in progress) to execute this treatment.

Using the lake elevation at its current condition will give opportunity to be able to access a greater amount of primrose. Thereafter, **the next schedule treatment would not be scheduled until April 2012** due to funding limitations. It is highly encouraged that the community organizes and conducts work parties to impact the growth that will establish during this time frame. The months of April-June-July-August are the remaining months targeted for treatments in 2012.

Effective treatment of invasives:



Effective treatments within wildlife islands and the primrose that has establish during drought:



In September 2011, an additional herbicide treatment was performed and cordgrass was subsequently installed in the wildlife area off Twin Lakes Road in an effort to reduce ongoing costs associated with mowing this area. The cordgrass plantings were funded by the LMP.

Photo of cordgrass newly planted on wildlife island:



The southwest portion of the lake was inaccessible due to the water level; much of where the barn yard grass is establishing. The City of Longwood parcel continues to be unmaintained unlike the rest of the Myrtle Lake- Southern Lobe community. Your liaisons have submitted a letter to the city requesting for services on behalf of the Friends of Myrtle Lake.

Photo depicting City of Longwood's parcel overgrowth encroaching on restoration efforts:



The exotic Island Apple Snail's egg clusters were observed on the emergent plant with numerous empty adult shells exposed from low water conditions. We continue to encourage crush these

egg clusters. Be sure they are the bright pink eggs as to not destroy the native apple snail eggs which are white.

Photo of island apple snail egg cluster (bright pink):



Our next inspection date is November 22nd (weather permitting). During this inspection, herbicide treatment effects will be evaluated.

Recommendations:

1. Schedule a work party to remove/mow the invasives and plant natives within the lake.
2. Monitor southern naiad in south pool.
3. Continue to expand native plantings in Highland Drive canal.
4. Continue work with City of Longwood on maintenance of their parcel.
5. Continue maintenance of wildlife islands in south pool.
6. Continue efforts to control of the island apple snail.
7. Residents encouraged to mow invasive, upland vegetation in applicable areas.

Further recommendations for waterbodies:

1. Continue to 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. **Do** increase native aquatic plantings along shoreline (such as pickerelweed, duck potato and canna).

2. Increase educational outreach programs, i.e., Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN) education, and Lake Management video mail-outs. Reduce pointless personal pollution by increasing street sweeping services during high leaf fall season, use low quantities of fertilizer, use phosphorous free fertilizers, keep a functional shoreline with beneficial native aquatic plants and keep grass clippings out of your storm drains leading to the lake. All of these activities aid in protecting your lake! Contact Seminole County Lake Management Program (407) 665-2439 or geby@seminolecountyfl.gov for free educational programs available.