

Lake of the Woods MSBU
Annual Meetings and Report
Tuesday, September 1, 2009

List of county participants:

Dean Barber, Gloria Eby and Carol Watral

List of lake resident participants:

Tim Hayes, Patricia Bernard (Lake of the Woods Townhomes)

Purpose:

This meeting was scheduled for the purpose of reviewing project status, communication and direction with the liaison group for the upcoming fiscal year.

Updates of these inspections/results are provided to the community liaison members via the e-mail contact list. If you wish to be included in these updates, please e-mail Gloria Eby, Lake Management Program (LMP) biologist, at geby@seminolecountyfl.gov.

This annual meeting was preceded by an on-water inspection/survey of Lake of the Woods with Lake Management Program (LMP), MSBU (Municipal Services Benefit Unit) and Tim Hayes in attendance.

Annual Meeting Synopsis:

The canal alongside the townhomes is full of hyacinths. Lake Management will ask Applied Aquatic Management (AAM) to spray up to the foot bridge and to contact the townhomes (Patricia Bernard) regarding treating the remainder of the canal through private funding from the townhome association. Some townhome residents have noted weeds, specifically cattails, on the lake by their units. The hotel on the west shoreline has previously cleared cattails from their shoreline. Treatment of the spatterdock will be considered for addition to the AAM contract, as it is beginning to grow heavily at the northeast end of the lake at the Wellington access ramp area.

Clogging of the pump by the townhomes was addressed. It was noted that the area of the lake around the townhomes has a higher organic material due to the wetland and the pump will clog more easily in such an environment.

Test plots for the "recipe" for southern naiad and hydrilla have proven effective.

Clarity has decreased in the lake; this may be due to construction activities along 17-92.

The hydrilla has disappeared except for a very few small sprigs; therefore, the scheduled triploid grass carp stocking was canceled. LMP recommended that the liaisons remove the gate from the barrier, since the carp will not be stocked at this time. The decline in hydrilla may be due to the lack of clarity in the lake. The sprigs are in a manageable state. A treatment may be necessary in March. We are now entering the slow growth time of year for hydrilla.

Some of the areas that were "worked" during the October 14 planting event have done very well.

Lake Management will check with AAM in regard to the possibility of quarterly maintenance treatments vs. monthly maintenance treatments in the late fall – early winter timeframe.

County Funding:

At no cost to the lakefront homeowners, Lake of the Woods is extensively monitored by County biologists [Lake Management Program (LMP)] on a monthly basis. This includes treatment prescription and assessment of the hydrilla population, oversight of the aquatic herbicide contract for the treatment of torpedo grass and emergent nuisance vegetation, continued evaluation of grass carp needs, coordinating any additional treatments and providing community updates on the status of all treatments and lake assessments. Additionally, LMP provided free aquatic plant material and outside community volunteers for shoreline restoration workshops as scheduled.

2008- 2009 Lake Management Activities:

The Lake of the Woods community participated in two shoreline workshops in 2009 (July and October). Each event included several new sites; we anticipate the continuation of this program that relies solely on active participation of the homeowners. Please advise your community liaison members if you are interested in participating in the next workshop.

Test plots for the treatment of southern naiad were conducted in April 2009 on a 1 acre area in the south portion of the lake. At the time, this test plot was very successful at targeting the desired level of control. A larger scale treatment for hydrilla (4 acres) was conducted in May 2009, which also produced desirable results. Of the 51 acres for Lake of the Woods, approximately 15 acres were infested with hydrilla; 4 were successfully treated. Presently, less than 4 acres of hydrilla exists within the lake.

In May 2009, we received what is now referred to as the unnamed storm that brought our region a tremendous amount of rain. Shortly after this event, clarity in Lake of the Woods was reduced to less than one (1) foot visibility. This event may be a contributing factor in the further reduction of hydrilla and southern naiad, as sunlight was greatly reduced to a point that the plant could not survive (a shading effect) causing a crash in the populations.

As mentioned, grass carp fish were not stocked into the lake due to the crash in hydrilla population. There is a strong potential to stock the lake at a conservative rate (less than 1 fish per acre) by spring, as hydrilla is increasing at a minimal rate along the shallows of the lake.

Monthly herbicide treatments continued to control water hyacinth, torpedo grass, burhead sedge and other invasive shoreline species. The native desirable submersed aquatic plant, eelgrass, is continuing to expand around the lake.

Lake Management Recommendations:

Lake Management Program recommendations for the current fiscal year (FY0910) are:

- 1) Continued monitoring of hydrilla (re-growth from tuber production),
- 2) Spot treatments of hydrilla if required,
- 3) Continued treatment of t invasive aquatic plants – herbicides,
- 4) Monitor/control/replant managed areas – herbicides,
- 5) Future grass carp stockings if required,
- 6) Continue to increase number of shoreline re-vegetation (lakefront community),
- 7) Continue to increase educational outreach programs to include Florida Yards and Neighborhoods (FYN), Lake Management video, and reduce pointless personal pollution and shoreline alterations, and
- 8) Provide content for the Seminole County Water Atlas Lake Management webpage for Lake of the Woods (such as newsletters and community updates).

LMP will continue to closely monitor and gauge hydrilla in Lake of the Woods. Even though there are minimal plants, hydrilla is unpredictable at best therefore close monitoring is key when managing hydrilla.

Hydrilla will deposit bulb like seeds (tubers) into the sediment which can remain viable for up to six years. Tubers are produced in each growing season and are used to perennialize the plant as a means of propagation (re-growth). Since Lake of the Woods was previously infested with hydrilla, many tubers were deposited in the lake bed during this time. Currently, there is a viable seed bank of tubers in the sediments within the lake. The recommendation for the management plan in Lake of the Woods is to integrate use of contact herbicides with grass carp fish, if necessary, to control this hydrilla re-growth from tubers.

LMP continues to recommend/encourage future resident-based volunteers involving native plantings along the shoreline. The intention of such an event is to transplant existing in-lake plants to various key areas in need along the shoreline. Residents should organize planting days coordinated with LMP aiding the residents in creating a beneficial shoreline for Lake of the Woods. It is especially important that as aquatic invasive plants (such as torpedo grass) are being treated, native aquatic plants should be established within these areas. This also provides habitat for fish and wildlife, helps impede invasive exotics from re-establishing and reduces sedimentation into the lake due to erosion of the shoreline. All of these best lake management practices are essential to providing a more environmentally stable lake for generations to come. The key to success in lake management projects is dependent on strong participation of the Lake of the Woods community.

Cost of Aquatic Weed Control

Funding: FY October 2008 – September 2009

- 1) \$18,000 Revenue - Funding Advance (County)
- \$18,000 Total Revenue

Expenditures were as follows:

- 1) \$ 2,900 Herbicide Contract
- 2) \$ 900 Grass Carp Barrier
- 3) \$ 4,688 Additional Herbicide
- 4) \$ 0 Loan and Interest Payment
- 5) \$ 800 Administrative Fee
- 6) \$ 8,712 Contingency Reserve (carried forward to next FY if not required)
- \$ 18,000 Total Expenses

Projected: FY October 2009 – September 2010

Budgeted Revenue:

- 1) \$ 19,334 Assessment Revenue [per early payment discount]
- 2) \$ 8,712 Reserve and Contingency (carry forward)
- 3) \$ 28,046 Total Revenue

Budgeted Expenditures:

1)	\$ 4,200	Herbicide Contract (monthly)
2)	\$ 1,275	Southern Naiad (3 acres)
3)	\$ 3,750	Torpedo Grass (bi-monthly)
4)	\$ 1,350	Algae Control (3 acres)
5)	\$ 550	Application Fee Credit
6)	\$ 4,230	Loan and Interest Payment
7)	\$ 1,000	Administrative Fee
8)	<u>\$ 11,691</u>	Contingency Reserve (carried forward to next year if not required)
	<u>\$ 28,046</u>	Total Expenses

MSBU Background

The Municipal Service Benefit Unit [MSBU] Program has provided Lake of the Woods property owners in unincorporated areas of Seminole County with an opportunity to acquire essential improvements or services for their community. An MSBU is a special assessment district created by the Seminole County Board of County Commissioners to supply funding through non-ad valorem assessments for such services or improvements that are authorized through the MSBU Program. At the request of the community of Lake of the Woods, the Lake of the Woods Aquatic Weed Control MSBU was created by Ordinance 09-14 on April 14, 2009 to provide aquatic weed control for Lake of the Woods.

Each year at the annual lake meeting lake conditions are reviewed. Working together, the community liaison members representing Lake of the Woods and County staff from both Lake Management [LM] Program and MSBU Program select several essential aquatic weed control activities for consideration during the forthcoming year. At this year's meeting, the following activities were identified and prioritized:

- 1) Continued monitoring of hydrilla (re-growth from tuber production),
- 2) Spot treatments of hydrilla,
- 3) Expand treatment of torpedo grass- herbicides,
- 4) Selective control of cattails and water pennywort- herbicides,
- 5) Future grass carp stockings,
- 6) Shoreline re-vegetation (lakefront community),
- 7) Establish lake association documented by the State and obtain lake-wide FWC aquatic plant control permit, and
- 8) Increase educational outreach programs to include Florida Yards and Neighborhoods (FYN), Lake Management video, and reduce pointless personal pollution.