

PUBLIC WORKS DEPARTMENT

ROADS-STORMWATER DIVISION



Tuesday, September 4th, 2007

RE: Mirror Lake: Updated Lake Management Recommendations

Dear Lake Resident,

The Municipal Service Benefit Unit [MSBU] Program provides property owners in unincorporated areas of Seminole County with an opportunity to acquire essential improvements or services for their community and is a special assessment district created to provide funding for such services or improvements that are authorized through the MSBU Program.

At the request of the community of Mirror Lake, an MSBU was implemented in March 2007 to provide aquatic weed control for Mirror Lake.

Several essential activities were identified at a meeting on March 6th, 2007, with the community liaison members representing Mirror Lake and county staff from both Lake Management [LM] Program and MSBU Program. This meeting identified and prioritized several essential activities to be established in the current MSBU fiscal year (October 2006 through October 2007) assessment. Activities identified at this meeting are as follows:

- 1) Treatment of hydrilla
- 2) Aquatic vegetation maintenance for two 20ft corridor (as permitted by FDEP)-
Herbicides
- 3) Reduce biomass of lilies in depths greater than 4ft. (as permitted by FDEP)-
Herbicides
- 4) Continued torpedo grass removal- Herbicides/Volunteers

For the current MSBU fiscal year (October 2006 through October 2007) activities that have been conducted (with associated cost) for Mirror Lake are as follows:

- 1) \$8,363 Successful treatment of hydrilla (20 acres at 160gal on April 10th, 2007)
- 2) \$764 Purchase of grass carp (84 fish @ \$8.50/fish plus \$50 stocking fee on April 13th, 2006)
- 3) \$3,675 Monthly herbicide contract maintaining two 20 foot corridors and reduction of lilies in depths greater than 4ft. per FDEP permit. (7 months @ \$525.00/month, funded through September 30th, 2007)
- 4) \$0 10% County Administrative fee **waived** for 2006/2007 fiscal year only

\$12,802 Total assessed in fiscal year 2006/2007

LM Program has coordinated with several residents to target various problem areas around the lake that are outside of the identified activities established for the MSBU assessment. These areas include the northeast corner of the lake (torpedo grass) and the south portion of the lake (various grass species).

Since extensive permitting would be required to mechanically remove torpedo grass in the northeast corner, community involvement via volunteer events was implemented to control the growth of this exotic plant in this area. LM Program coordinated several events to hand remove torpedo grass (Saturday, July 28th; Saturday, August 18th) and has an additional date scheduled for Saturday, September 22nd, to remove vegetation in the southeast portion of the lake. In addition, The Barrington at Mirror Lake Apartments has also greatly contributed to the efforts of Mirror Lake by providing mowing services and finances specific to these areas.

Due to low water levels, herbicide contractor was unable to treat the corridors for the months of April, May and August. This allowed unused herbicide product to be applied specific to the northeast corner and south portion of the lake gaining further control of the exotic grasses.

As a compliment of great stewardship represented by the community of Mirror Lake (*especially* Huge Meinecke and The Barrington Apartments), LM Program has donated contracted plant installation services and plant material. Plants will be the installed (by a contractor) in the northeast corner totaling $\frac{3}{4}$ acre to further impact the torpedo grass from taking over the lake. In addition, plant material has been provided for the southeast section currently being treated in which residents shall install. Residents are encouraged to assist Hugh Meinecke with plant installation, please coordinate with Hugh on specific needs/date/time. Since this is a transition area from dry to wet, a more diverse community of plants is required. Continued herbicide treatments (currently not budgeted) and management of these areas are needed to insure progression of an exotic dominated plant community to a more diverse native plant community.

Future fiscal year (October 2007 through October 2008) should consider the following LM Program recommendations:

- 1) Continued monitoring of hydrilla (re-growth from tuber production)
- 2) Future grass carp stockings
- 3) Spot treatments of hydrilla
- 4) Treatment of two corridors and lilies at depths greater than 4ft
- 5) Targeted torpedo grass via monthly herbicide contract
- 6) Future volunteer events targeting exotic overgrowth in southeast corner
- 7) Shoreline re-vegetation (lakefront community)

The current monthly aquatic herbicide contract expires on September 30th, 2007, at which a new contract will be negotiated. Items #3-5 listed above should be included in this

herbicide contract (to the extent that the residents can afford) through the established MSBU non-ad valorem taxation with emphasis on monthly herbicide treatments benefiting the residents of Mirror Lake.

LM Program would like to see future resident-based volunteers involving native plantings along the shoreline. The intention of such an event is to transplant existing in-lake plants (pickerel weed, duck potato, bulrush, cordgrass, blue flag iris) to various areas in need along the shoreline. Residents should organize planting days to accomplish recommendations and contact LM Program to assist with outside volunteers aiding the residents in creating a beneficial shoreline for Mirror Lake. The key to success on lake management projects is dependent on strong participation of the Mirror Lake community.

Please feel free to contact me if you have any questions.

Thank you,

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