

February 21, 2018

**BUTTONWOOD POND
ANNUAL MEETING & LAKE MANAGEMENT PLAN**

Annual Meeting – 2018

- Agenda

Lake Management Plan

- General Provisions & Scope of Services
- Community-Based Activities & Events
- Current Fiscal Year
 - Planned Treatments & Funding
 - Recommendations
- Next Fiscal Year
 - Projected Treatments & Funding
- Exhibits
 - Agenda & Notes Prior Year
 - Budget & Financial Summary
 - Historic Reports/Data
 - Roles & Responsibilities

BUTTONWOOD POND - ANNUAL MEETING

Date, Time & Location	:	February 21, 2018, 1:00 p.m., 200 W. County Home Rd – LMP office
Community Liaisons	:	Susan Shapiro and Frank Wolff
Liaisons Present	:	Susan Shapiro
Seminole County	:	Thomas Calhoun, Joey Cordell, Gloria Eby, Kathy Moore, Kim Ornberg and Joe Saucer

General Topics & Updates [Meeting Notes]

Lake Management Program

- Welcome
- Fertilizer Ordinance- Passed on February 27, 2017. www.seminolecountyfl.gov/fertilizer.
 - Fertilizer containing nitrogen or phosphorous cannot be applied to turf during the restricted season from June 1st – September 30th. Fertilizers containing Iron, Manganese and other "micronutrients" also referred to as "summer blends" can be applied during the restricted.
 - Fertilizer containing nitrogen that is used during the **non**-restricted season (October 1st – May 31st) must contain *at least* 50% or more slow release nitrogen. This slow release nitrogen content will increase to 65%, three (3) years after adoption of the Fertilizer Ordinance, to allow time for educational outreach to residents and retailers.
 - Fertilizer containing phosphorus cannot be applied to turf or plants unless a state certified soil or tissue test verifies that there is a phosphorus deficiency.
 - Use of deflector shields is required when applying fertilizer with a broadcast or rotary spreader.
 - No fertilizer may be applied within fifteen (15) feet of any pond, lake, stream, canal, or other waterbody, including wetlands.
- Shoreline Protection Ordinance Status
 - Awaiting FWC Rule changes
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
 - Continue to monitor SAV and planting successes
- General recommendations for lake-community consideration [Refer to Lake Management Plan]
 - Increase native aquatic plantings in areas devoid of vegetation
 - Promote "welcome packages" to new lakefront homeowners
- 2018 Shoreline Planting Event- dates available
 - To be coordinated via Thomas Calhoun (March 24th)
 - Continue monitoring hydrology levels
- Other
 - Email Address for routine communications and important announcements
 - Email list to be sent for verification
 - Liaison requested re-powering existing fountain system – needs meter and currently tied to homeowner electric that was once paid by the HOA.
 - LMP will gather quote for the system [*Further consideration, however, will be dependent on BCC approval to offer such services via assessment funding and subsequently by confirmation that governing ordinance provisions provide inclusion of such systems. MSBU Program*]
 - Frank Wolff was added as liaison

MSBU Program

- Budgets – Prior, Current, Proposed and Projected
 - Refer to Exhibit B; Assessment Update
 - Anticipating Administrative Fee increase FY19-20; tax year 2019
- Tentative date for next annual meeting: January 30, 2019 1:00PM

BUTTONWOOD POND

LAKE MANAGEMENT PLAN

GENERAL PROVISIONS

Scope of Public Aquatic Weed/Plant Control [AWC] Services

The scope of public aquatic weed control [AWC] services funded by non-ad-valorem assessment includes those services associated with managing aquatic plant communities as deemed beneficial and/or critical to restoring, developing and/or maintaining conditions that enhance the water quality and over-all health of the waterbody; with emphasis on providing public services for public purposes which by definition of public are limited to the waterbody and respective shoreline when/where noxious and/or invasive exotic vegetation could/would threaten or impede the waterbody.

Governing documents

- Seminole County Ordinance 2014-15

Methods for Aquatic Weed Control as authorized via County Ordinance/Resolution

- Chemical (herbicides)
- Biological (sterile triploid grass carp fish [TGC])
- Mechanical (harvesting, cutting, etc.)

Targeted Invasive/Exotic Aquatic Vegetation

- Water hyacinth, torpedo grass, paragrass, cattail, primrose willow, alligator weed, Cuban bulrush, exotic water lily, wild taro, water fern, algae, spatterdock, southern naiad, coontail, and willow. (Note: Hydrilla treatment is excluded by governing ordinance).

Frequency of AWC Treatment

AWC services are performed at the direction of the Seminole County LMP as per the Buttonwood Pond Management Plan reviewed at the annual planning session with the expectation that the Seminole County LMP may alter anticipated treatments as merited per changing/evolving conditions noted during site inspections.

Herbicide Treatments - Service Provider

- As determined by Seminole County

Funding

Assessment rate may vary annually based on financial demands of changing conditions, such as cost of herbicide treatments, frequency of treatments, and other factors impacting assessment calculations. The governing ordinance does not include assessment restrictions specific to annual adjustment amounts and/or assessment cap.

Lake Liaisons

Designated property owners (or their designated representatives) provide community representation at annual planning sessions with the County and serve voluntarily as the key point of contact for community inquiries and concerns. The current liaisons for Buttonwood Pond are: Frank Wolff (frankwolff@gmail.com) and Susan Shapiro (susanjshapiro@aol.com 407-234-8099).

COMMUNITY-BASED ACTIVITIES & EVENTS

LMP recommends/encourages homeowners to coordinate a resident-based volunteer event involving native plantings creating a beneficial shoreline for Buttonwood Pond. 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 Buttonwood Pond community.

Continued recommendations for community initiatives are as follows:

- 1) Shoreline re-vegetation with native emergent plants (by the lakefront community and potentially volunteers),
- 2) Establishing a formal Lake Association holding at least one annual meeting with topics relevant to Buttonwood Pond,
- 3) Continue to increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of residential pollution (use phosphorous free and slow-release nitrogen based fertilizers only). Contact Seminole County LMP, 665-2439, for more information and assistance,
- 4) Provide content for the Seminole County Water Atlas Lake Management Webpage for Buttonwood Pond (such as newsletters and photos).

Important to Note: When herbicides are applied along the shoreline to invasive plants (such as torpedo grass), overspray onto adjacent desirable vegetation may occur. In order to avoid damage to desired vegetation, manual (by hand) removal (by property owner) of the undesirable species from among the desirable species along the shoreline is advised. If the invasive plants are removed by this method, spraying the area can be reduced, thereby offering greater protection to the desirable species. The physical removal of dead/decaying aquatic plant material will reduce the volume of decomposing vegetation on the lake bottom (muck layer) and will increase the success of the efforts to limit the re-growth of the invasive plants. The presence of submerged aquatic vegetation ("SAV" such as hydrilla) should be communicated to your lake liaison for their reporting to the County so appropriate treatment of SAV can be provided.

COUNTY SERVICES – Lake Management & Supplemental Programs

While the MSBU assessment includes a nominal charge for administering the MSBU, the amount charged does not cover all the expenses incurred by the County on behalf of the waterfront property owners. Buttonwood Pond is monitored by LMP to assess the aquatic plant growth. LMP provides continued evaluation of the aquatic plant species and provides community updates on the status of treatments and waterbody bioassessments. In addition, LMP offers free aquatic plant material (as available) for sponsored restoration events and local community volunteers coordinated through the county's Seminole Education and Restoration Volunteer (SERV) Program. Many of the services provided by the LMP are made available to support community riparian stewardship without additional charges being assigned to the MSBU budget.

Current Fiscal Year – Planned Treatment & Funding

Primary Aquatic Plant Management Expectations

Invasive aquatic growth in Buttonwood Pond has likelihood to continue, however, the timing and re-growth is affected by multiple natural and environmental factors that cannot be controlled or predicted with certainty. While extensive growth is possible at any point in time, it is anticipated that routine spot treatments with herbicides will be sufficient to manage re-growth during the current fiscal year. The anticipation of spot treatments for the current fiscal year takes into consideration the historic trend of management required at Buttonwood Pond, as well as current conditions observed at the pond. As with any waterbody with a history of invasive aquatic growth, long-term planning to include financial preparation for whole lake treatment is advised. LMP will continue to closely monitor Buttonwood Pond.

Funding Expectations

Refer to current fiscal year budget data provided in Exhibit B.

Next Fiscal Year – Projected Treatment & Funding

Primary Aquatic Plant Management Expectations

Primary expectations are as follows:

- 1) Continued close monitoring of aquatic growth,
- 2) Conduct spot treatments as required,
- 3) Continued treatment of the invasive aquatic plants – herbicides,
- 4) Monitor/control/replant managed areas,
- 5) Consider shoreline re-vegetation sites (lakefront community),
- 6) Consider implementation of fountain system.

Funding Expectations

Refer to next fiscal year budget data provided in Exhibit B.

Exhibits

A – Agenda & Notes from Prior Year Planning Session

B – Budget/Financial Summaries

C – Historic Reports/Data

D – Roles & Responsibilities

Exhibit A - Notes from Prior Year Planning Session

Date, Time & Location :	January 18, 2017, 1:30 p.m., 200 W. County Home Rd – LMP office
Community Liaisons :	James Grodin and Susan Shapiro
Liaisons Present :	James Grodin
Seminole County :	Thomas Calhoun, Joey Cordell, and Joe Saucer

Topics carried forward from prior fiscal year activity [Meeting Notes]

- Fertilizer Ordinance & Shoreline Protection Ordinance
- Both ordinances contain commitments and directives that will contribute to environmental improvement and protection long-term for lakes and other waterbodies. The Fertilizer Ordinance focuses primarily on fertilizer selection (phosphate free, slow release nitrogen) and application (location, volume and timing). The Shoreline Protection Ordinance mirrors the State's guidelines for shoreline vegetation and development as historically communicated by the LMP and demonstrated by the best lake management practices followed by MSBU funded services. The Fertilizer Ordinance is tentatively scheduled for BCC review/approval consideration on February 28; while the Shoreline Protection Ordinance development continues with final presentation anticipated later in 2017. [Note: The Shoreline Protection Ordinance approval process involves several levels of approval as the directives need to be included in the County's Land Development Code.] Educational materials are readily available to further promote awareness, understanding and compliance.
- FWC is proposing a change to their permitting responsibilities respective to aquatic plant management. The proposed (and likely to be adopted rule changes) will have impact on the permits associated with lakes less than 160 acres in size. The importance of Seminole County enacting the Shoreline Protection Ordinance is heightened by this change. In association with the ordinance, the County will be confirming delegated enforcement authority from FWC to provide ongoing compliance efforts respective to adopted protective measures. When presentation dates are confirmed, LMP will provide email updates so interested property owners and residents are aware of these activities. Supportive participation is encouraged.
- Shoreline Re-Vegetation (prior year)
- Monitoring outcome, impact of water elevation and various species, developing trends to determine which plant species will have best opportunity to thrive in changing conditions
- Liaison indicated that the re-vegetation process appeared to be doing well

General Topics & Updates [Meeting Notes]

- Restoration event 2017 (plant native species and remove invasive torpedo grass)
- To be coordinated via Thomas Calhoun
- Spring time recommended based on water levels. James Grodin to select date.
- Plans for current fiscal year
- Refer to Page 6
- Continue to monitor SAV and planting successes
- Projections for next fiscal year
- Refer to Page 6
- Financial Status & Budget – Prior, Current and Proposed
- Refer to Exhibit B; Assessment to remain at \$265 as prior year
- General recommendations for community consideration
- Refer to Page 5
- Increase native aquatic plants in areas devoid of vegetation

Exhibit B - Budget/Financial Overview

MSBU: Buttonwood Pond

Date: January 1, 2018

TAX YEAR ASSESSMENT	2016	2017	2018
FISCAL YEAR	FY16-17	FY17-18	FY18-19
REVENUE	Actual	Working Budget	Proposed Budget
Beginning Fund Balance	\$ 2,689	\$ 5,023	\$ 5,228
Assessments	\$ 3,568	\$ 3,565	\$ 3,427
Other	\$ 42	\$ 40	\$ 40
MSBU Program Fund Advance	\$ -	\$ -	\$ -
TOTAL	\$ 6,299	\$ 8,628	\$ 8,695
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
TOTAL	\$ 6,299	\$ 8,628	\$ 8,695
EXPENDITURE	Actual	Working Budget	Proposed Budget
County Administrative Fee*	\$ 900	\$ 900	\$ 900
Fund Advance Repayment	\$ -	\$ -	\$ -
Contracted Services	\$ 376	\$ 2,500	\$ 2,500
<i>Routine Services</i>	\$ 376	\$ 2,500	\$ 2,500
<i>Hydrilla (excluded by ordinance)</i>	\$ -	\$ -	\$ -
<i>Carp</i>	\$ -	\$ -	\$ -
<i>Barrier Maintenance - NA</i>	\$ -	\$ -	\$ -
<i>Barrier Replacement - NA</i>	\$ -	\$ -	\$ -
<i>Nutrient Abatement (Alum)</i>	\$ -	\$ -	\$ -
<i>Harvesting</i>	\$ -	\$ -	\$ -
<i>Other</i>	\$ -	\$ -	\$ -
Contingency Reserve	\$ 5,023	\$ 5,228	\$ 5,295
TOTAL	\$ 6,299	\$ 8,628	\$ 8,695
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
TOTAL	\$ 6,299	\$ 8,628	\$ 8,695
Fund Advance BB Payment (Principal)	\$ -	\$ -	\$ -
Fund Advance EB	\$ -	\$ -	\$ -

Exhibit C - Historic Reports/Data

Additional information for Buttonwood Pond can be found on the County's Water Atlas website after it is added to the website.

Exhibit D - ROLES & RESPONSIBILITY

General Outline

COUNTY

Seminole County will

- ✓ Govern the MSBU
- ✓ Provide financial management of MSBU fund
- ✓ Ensure activities conducted with assessment funding align with the scope of services documented in the governing ordinance
- ✓ Ensure the lake is monitored and services are appropriately rendered
- ✓ Maintain decision-making authority relative to lake management activities and aquatic vegetation management and will defer to best lake management practices when making such decisions
- ✓ Provide an ongoing lake management plan based on the defined service scope, permitting, conditions at the lake, funding parameters, and best lake management practices. The Lake Management Plan will be developed and maintained by the Lake Management Program with liaison participation
- ✓ Initiate and manage service contracts, monitor results, and communicate updates on a routine basis
- ✓ Conduct annual meetings that offer opportunity for liaison discussion as to prior, current, and future action plans
- ✓ Encourage liaisons and assist with educational outreach efforts to protect the health and water quality of the managed waterbody

LIAISONS

Liaisons will

- ✓ Encourage communitywide awareness and participation relative to environmental stewardship recommendations and opportunities
- ✓ Provide communitywide communication and assist the County in the distribution of relevant lake information
- ✓ Attend annual lake management and budget planning sessions conducted by the County
- ✓ Serve as representatives of the community on lake issues; representing the respective lake community as a whole
- ✓ Monitor lake conditions and provide feedback to the County as to observations