

**2019**

**BUTTONWOOD POND  
LAKE MANAGEMENT PLAN**

Annual Meeting

- 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
  - Financial Summary
  - Historic Reports/Data
  - Roles & Responsibilities

## BUTTONWOOD POND: ANNUAL MEETING

Date/Time/Location	:	February 14, 2019 1:00pm 200 W. County Home Rd – LMP office
Community Liaisons	:	Susan Shapiro and Frank Wolff
Liaisons Present	:	Michael Richards, Susan Shapiro
Seminole County	:	Thomas Calhoun, Joey Cordell, Gloria Eby, Kathy Moore, and Joe Saucer

### General Topics & Updates

#### Lake Management Program

- Welcome
- Fertilizer Ordinance- Passed on February 27, 2017. [www.seminolecountyfl.gov/fertilizer](http://www.seminolecountyfl.gov/fertilizer).
  - Restricted Months: no fertilizing June 1<sup>st</sup>- September 30<sup>th</sup>
  - Slow Release Nitrogen: at least 50%
  - Know How Much: [www.seminolecountyfl.gov/calculator](http://www.seminolecountyfl.gov/calculator)
  - Buffer Zone: 15 feet from all waterbodies
    - Pulling water from the lake for irrigation is no longer in practice per liaison
- Shoreline Protection Ordinance Status
  - FWC Rule change removes permit requirements on lakes smaller than 160 acres
    - Sweetwater permit requirement per outstanding FL waterway was discussed
  - Currently drafting County Shoreline Ordinance
    - Looking to liaisons for input and support
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
  - Continue to monitor emergent and SAV for potential treatments
    - Liaison feedback from Susan there is algae sometimes but big improvements overall
  - Monitor 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
    - Liaison still has some packets available
- 2019 Shoreline Planting Event- dates available
  - To be coordinated via Thomas Calhoun [March 30<sup>th</sup>, 2019 selected]
    - Tony Violente (SWO HOA staff; 407-862-5606) - Coordination of event needs (food and beverages)
  - Continue monitoring hydrology levels
- Other
  - Email Addresses for routine communications and important announcements
    - Use newsletter distribution to get updated email addresses
  - Quote for fountain system (\$5,914.00)
    - Michael Richards proposing to add fund cost of fountain system through HOA meeting on Monday, 2/18; Quote and justification to be provided to Michael Richards by LMP; Property owner and location was identified
  - Ordinance addressing SAV treatment
    - Scope currently prohibits hydrilla, LMP recommends revision of ordinance to include these services

#### MSBU Program

- Financial Summary [Refer to Exhibit B]
  - *Treatment of hydrilla is excluded from the service scope per the governing ordinance (Exhibit A). An ordinance amendment is required to enable assessment funding for hydrilla treatment.*
  - *A multi-year funding request related to acquisition, installation and operation of an aeration system (fountain) with the initial investment proposed for next fiscal year was submitted by LMP December 2018. Inclusion of this funding request in the operating budget is pending (1) Board action deeming these systems essential to public health, safety and welfare and subsequently confirming eligibility for funding via non-ad valorem assessment, (2) Petition outcome confirming community support to increase assessment above max allowed percentage and/or a one-time levy of capital assessment for acquisition & install expenses, and (3) Board confirmation granting petitioned request (Consent or Public Hearing agenda item – dependent upon specific Board action required.)*

# 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 (hydrilla is excluded).

### **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**

Financial management of the MSBU fund is provided by the Seminole County MSBU Program. Financial plans developed by the MSBU Program include eligible expense funding requests submitted by the Lake Management Program and other cost and revenue components typical to MSBU funds. Financial information inclusive of prior year actual outcome, current year working budget and next year budget proposal data is reported annually. Assessment levy is subject to Board approval and the standard procedures associated with non-ad valorem assessment. The financial plans may be adjusted by the County as merited per changing/evolving essential services as directed by the County and per financial planning considerations. 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](mailto:frankwolff@gmail.com)) and Susan Shapiro ([susanjshapiro@aol.com](mailto: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 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).

### **Funding Expectations**

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

## **Exhibits**

**A** – Agenda & Notes from Prior Year Meeting

**B** – Financial Summary

**C** – Historic Reports/Data

**D** – Roles & Responsibilities

## Exhibit A - Notes from Prior Year 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](http://www.seminolecountyfl.gov/fertilizer).
  - Fertilizer containing nitrogen or phosphorous cannot be applied to turf during the restricted season from June 1<sup>st</sup> – September 30<sup>th</sup>. 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 1<sup>st</sup> – May 31<sup>st</sup>) 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 24<sup>th</sup>)
  - Continue monitoring hydrology levels
- Other
  - Email Address for routine communications and important announcements
  - Quote to turn on existing fountain system – needs meter
  - Email list to be sent for verification
  - Jim Grodin will no longer be a liaison
  - Planting event set for 3/24/2018
  - Discussed adding Frank Wolff as liaison
  - Liaisons wished to keep assessment same to increase contingency for future use

#### MSBU Program

- Financial Summary - 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

Exhibit B - Financial Summary

January 2019

Tax Year Assessment	2017	2018	2019
	\$ 265.00	\$ 255.00	\$ 255.00
Fiscal Year	FY17-18	FY18-19	FY19-20
REVENUE	Actual	Working Budget	Proposed Budget
Beginning Fund Balance	\$ 5,023	\$ 7,129	\$ 7,061
Assessments	\$ 3,333	\$ 3,427	\$ 3,427
Other	\$ 105	\$ 40	\$ 40
MSBU Program Fund Advance	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 8,461</b>	<b>\$ 10,596</b>	<b>\$ 10,528</b>
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 8,461</b>	<b>\$ 10,596</b>	<b>\$ 10,528</b>
EXPENDITURE	Actual	Working Budget	Proposed Budget
County Administrative Fee*	\$ 900	\$ 1,035	\$ 1,035
Fund Advance Repayment	\$ -	\$ -	\$ -
Contracted Services	\$ 432	\$ 2,500	\$ 2,500
<i>Routine Services</i>	\$ 432	\$ 2,500	\$ 2,500
<i>SAV (Hydrilla is excluded)</i>	\$ -	\$ -	\$ -
<i>TGC Fish</i>	\$ -	\$ -	\$ -
<i>Fish Barrier Service - NA</i>	\$ -	\$ -	\$ -
<i>Fish Barrier Replacement - NA</i>	\$ -	\$ -	\$ -
<i>Nutrient Abatement (NAV)</i>	\$ -	\$ -	\$ -
<i>Harvesting</i>	\$ -	\$ -	\$ -
<i>Other</i>	\$ -	\$ -	\$ -
Reserve/Contingency	\$ 7,129	\$ 7,061	\$ 6,993
<i>Operating Contingency</i>	\$ 7,129	\$ 2,061	\$ 1,993
<i>Reserve: Hydrilla (Whole Lake)</i>	\$ -	\$ 2,000	\$ 2,000
<i>Reserve: Barrier Replace/Repair</i>	\$ -	\$ -	\$ -
<i>Reserve: Admin Code &amp; Ord Amnd</i>	\$ -	\$ 3,000	\$ 3,000
<b>TOTAL</b>	<b>\$ 8,461</b>	<b>\$ 10,596</b>	<b>\$ 10,528</b>
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 8,461</b>	<b>\$ 10,596</b>	<b>\$ 10,528</b>
Fund Advance BB Payment (Principal)	\$ -	\$ -	\$ -
Fund Advance EB	\$ -	\$ -	\$ -
MSBU Program Administration Cost	\$ 983	\$ 10,483	
LM Program Administration Cost	\$ 5,500		
Restoration Event Cost	\$ 4,000		

## 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 and assessment levy
- ✓ 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 public services 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