

**2019**

**SWEETWATER COVE LAKE  
LAKE MANAGEMENT PLAN**

Annual Meeting

- Agenda

Lake Management Plan

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

## SWEETWATER COVE LAKE: ANNUAL MEETING

Date/Time/Location	: February 21, 2019 11:00am 200 W. County Home Rd – LMP office
Community Liaisons	: Patrick Flynn [Utilities], Clark Gwinn, Dennis Marra, Dewey Dixon, and Michael Richards
Liaisons Present	: Patrick Flynn [Utilities], Clark Gwinn, Dennis Marra, Dewey Dixon, and Michael Richards
Seminole County	: Thomas Calhoun, Gloria Eby, Kathy Moore (via teleconference) 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
    - Liaison question about big companies involved in process, asking about signage in yard about buffer of 15 feet from water
- Shoreline Protection Ordinance Status
  - FWC Rule change removes permit requirements on lakes smaller than 160 acres
    - Discussed Sweetwater being an outstanding FL waterbody and still requiring FWC permit
  - Currently drafting County Shoreline Ordinance
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
  - Monitor lyngbya and treat accordingly
  - Specialized harvester- 4 to 6 months: April to September
    - Liaison commented harvesting looking really good
- 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
    - Thomas will restock supply
- 2019 Shoreline Planting Event- dates available
  - To be coordinated via Thomas Calhoun
    - April 13, 2019, flyer to be provided to HOA for their e-blast before community meeting
    - Liaison requested flowering/low growing species
- Other
  - Email Address for routine communications and important announcements
  - Fertilizer Outreach efforts
  - Nutrient Study/Nutrient Abatement- Community meeting date
    - Community meeting to be held tentatively March 26, 2019 pending consultant (ERD) schedule.
    - Provided alum costs of \$65,000
      - Provided preliminary data to liaisons
  - Hydrilla coordination
    - LMP continues to monitor and will report to HOA upon presence
  - Water quality buoy
  - Sediment removal
  - Utilities Inc update (provided by liaison- Patrick Flynn) - Refurbishment project complete, they have identified additional assets to improve ability to generate reuse. Est. 1 yr to complete.
  - Budget Discussion
    - MSBU Program proposed to increase assessment to \$170 for 2019 based on budget request submitted by LMP.
    - Liaisons didn't find justification for rate change as presented due to contingencies available and actual costs of routine services (LMP concurred)
    - LMP stated current budget could sustain current assessment rate of \$145
    - Recent harvesting successes can offset future routine services and defer necessitation of an increase for at least 2 years
    - MSBU requested updated financial information to support keeping current rate; LMP will provide

#### MSBU Program

- Financial Status [Refer to Exhibit B]

## **SWEETWATER COVE - 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
- Agreement with Sweetwater Oaks Homeowners Association, Inc.
- FWC Permit

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

- Chemical (herbicides)
- Biological (sterile triploid grass carp fish [TGC])
- Mechanical (harvesting, cutting, sonic, 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 Sweetwater Cove Lake 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 MSBU Program according to County Administrative Code, governing ordinance, and MSBU Program policies and procedures. 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 outcomes, current year working budget and next year budget proposal data will be included in the annual report. Assessment levy is subject to customary Board approval of rate and annual budget and standard procedures associated with non-ad valorem assessment. The financial plans presented at the annual meeting may be altered 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 liaisons for Sweetwater Cove Lake are: Patricia Conn ([manager@sweetwatoaks.org](mailto:manager@sweetwatoaks.org)), Dewey Dixon ([dixond47@yahoo.com](mailto:dixond47@yahoo.com)), Patrick Flynn ([pcflyn@uiwater.com](mailto:pcflyn@uiwater.com)), Clark Gwinn ([wclarkgwinn@cfl.rr.com](mailto:wclarkgwinn@cfl.rr.com)), Dennis Marra ([dpm901@aol.com](mailto:dpm901@aol.com)), and Michael Richards ([michael@michaelerichards.com](mailto:michael@michaelerichards.com)).

## **COMMUNITY-BASED ACTIVITIES & EVENTS**

LMP continues to recommend/encourage future resident-based volunteers involving native plantings along the shoreline. The intention of such an event is to plant beneficial native aquatic plants in key areas along the shoreline. 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 Sweetwater Cove Lake community.

Continued recommendations for community initiatives are as follows:

- 1) Consider review of street sweeping program,
- 2) Implement educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN) presentations, Lake Management Video mail-outs, and reduction of residential pollution by using low fertilizer use; phosphorous free and slow-releasing nitrogen based fertilizers; keeping a functional shoreline with beneficial native aquatic plants; keeping grass clippings out of your storm drains leading to the lake. All these activities aid in protecting your lake! Contact Gloria Eby (407) 665-2439 or Marie Lackey (407) 665-2424 for more information and assistance, and
- 3) Provide content for the Seminole County Water Atlas Lake Management webpage for Sweetwater Cove Lake (such as newsletters, photos, and community updates).

*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**

Sweetwater Cove Lake 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. 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. 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 Sweetwater Cove Lake 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 Sweetwater Cove Lake, as well as current conditions observed at the lake. As with any lake 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 Sweetwater Cove Lake.

Primary expectations are as follows:

- 1) Monitor aquatic vegetation growth
- 2) Conduct spot treatments as required
- 3) Scheduled treatment of the invasive aquatic plants – herbicides
- 4) Increase number of shoreline re-vegetation sites (lakefront community)
- 5) Monitor/control/replant managed areas

### **Funding Expectations**

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

## **NEXT FISCAL YEAR – Projected Treatment & Funding**

### **Primary Aquatic Plant Management Expectations**

The projected treatment plans for the next fiscal year remain consistent with the plans and expectations noted for the current fiscal year. Primary expectations are as follows:

- 1) Continued close monitoring of aquatic vegetation growth
- 2) Conduct spot treatments as required
- 3) Continued treatment of the invasive aquatic plants – herbicides
- 4) Continue to increase number of shoreline re-vegetation sites (lakefront community)
- 5) Monitor/control/replant managed areas

### **Funding Expectations**

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

### **Exhibits**

**A** – Agenda & Meeting Notes (Prior Year)

**B** – Financial Summary

**C** – Historic Reports/Data

**D** – Roles & Responsibilities

## Exhibit A - Meeting Notes (Prior Year)

Date, Time & Location	: February 23, 2018, 1:00 p.m., 200 W. County Home Rd – LMP office
Community Liaisons	: Patrick Flynn [Utilities], Clark Gwinn, Dennis Marra, and Michael Richards
Liaisons Present	: Patrick Flynn [Utilities], Clark Gwinn, Dennis Marra, and Michael Richards
Seminole County	: Edward Bass, Thomas Calhoun, Gloria Eby, Kim Ornberg, Kathy Moore and Joe Saucer

### General Topics & Updates [Meeting Notes provided by respective County Programs]

#### 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]
  - Monitor lyngbya and treat accordingly
  - Specialized harvester- limited months for peak summer
- 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 - planting event 4/20/2018
  - To be coordinated via Thomas Calhoun
- Other
  - Email Address for routine communications and important announcements
  - Fertilizer Outreach efforts (survey, education) and proposed study
  - Nutrient Abatement - (ALUM COSTS WILL BE AVAIL WEEK OF FEB 12th)
  - Hydrilla coordination
  - Welcome packets updated with fertilizer fliers
  - Discussed nutrient report and alum, harvesting and tiger cat (trial month in 2018 planned and 4 trial months in 2019 planned), deploying water quality buoy/location, Sanlando Springs water treatment facility discharge and construction status, fertilizer outreach study, distributing Welcome to Your Lake Packets to the Sweetwater HOA office

#### MSBU Program

- Financial Summary [Refer to Exhibit B]
  - Anticipating Administrative Fee increase FY19-20; tax year 2019
  - Nutrient abatement not an authorized assessment-funded service at this time. Reviewed change process.
- Tentative date for next annual meeting: February 1, 2019 1:00PM

Exhibit B - Financial Summary

March 2019

Tax Year	2017	2018	2019
Assessment	\$145.00	\$145.00	\$145.00
Fiscal Year	FY17-18	FY18-19	FY19-20
<b>REVENUE</b>			
	<b>Actual</b>	<b>Working Budget</b>	<b>Proposed Budget</b>
Beginning Fund Balance	\$ 30,913	\$ 39,110	\$ 25,928
Assessments	\$ 33,494	\$ 33,443	\$ 33,443
Other	\$ 829	\$ 700	\$ 700
MSBU Program Fund Advance	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 65,236</b>	<b>\$ 73,253</b>	<b>\$ 60,070</b>
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 65,236</b>	<b>\$ 73,253</b>	<b>\$ 60,070</b>
<b>EXPENDITURE</b>			
	<b>Actual</b>	<b>Working Budget</b>	<b>Proposed Budget</b>
County Administrative Fee	\$ 1,500	\$ 1,725	\$ 1,725
Application Fee	\$ -	\$ -	\$ -
Fund Advance Repayment	\$ -	\$ -	\$ -
Contracted Services	\$ 24,626	\$ 45,600	\$ 35,000*
<i>Routine Services</i>	\$ 12,812	\$ 21,600	\$ 14,000
Hydrilla - NA	\$ -	\$ -	\$ -
TGC Fish - NA	\$ -	\$ -	\$ -
Fish Barrier Service - NA	\$ -	\$ -	\$ -
Fish Barrier Replacement - NA	\$ -	\$ -	\$ -
Nutrient Abatement (NAV)	\$ -	\$ -	\$ -
Harvesting	\$ 11,814	\$ 24,000	\$ 21,000
Other	\$ -	\$ -	\$ -
<b>Reserve/Contingency</b>	<b>\$ 39,110</b>	<b>\$ 25,928</b>	<b>\$ 23,345</b>
<i>Operating Contingency</i>	\$ 39,110	\$ 25,928	\$ 23,345
<i>Reserve: Hydrilla (Whole Lake)</i>	\$ -	\$ -	\$ -
<i>Reserve: Barrier Replace/Repair</i>	\$ -	\$ -	\$ -
<i>Reserve: Admin Code &amp; Ord Amnd</i>	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 65,236</b>	<b>\$ 73,253</b>	<b>\$ 60,070</b>
Cost Sharing	\$ -	\$ -	\$ -
Lake Management Program	\$ -	\$ -	\$ -
<b>TOTAL</b>	<b>\$ 65,236</b>	<b>\$ 73,253</b>	<b>\$ 60,070</b>
*Cost restraint required to \$145 assessment revenue stream.			
Fund Advance BB	\$ -	\$ -	\$ -
Payment (Principal)	\$ -	\$ -	\$ -
Fund Advance EB	\$ -	\$ -	\$ -
MSBU Program Administration Cost	\$ 1,445	\$ 21,245	
LM Program Administration Cost	\$ 14,700		
Restoration Event Cost	\$ 5,100		



## Exhibit C - Historic Reports/Data

Additional information for Sweetwater Cove Lake can be found on the County's Water Atlas website at:

<http://www.seminole.wateratlas.usf.edu/resourceprogram.aspx?aid=15&wbodyid=7713>

## Exhibit D – Roles & Responsibilities

### 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 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 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