

**2020**

**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 // Location	Monday, March 2, 2020 /11:00am – 12:25pm/ 200 W. County Home Rd – LMP office
Community Liaisons	Dewey Dixon, Patrick Flynn [Utilities], Clark Gwinn, Dennis Marra, Tony Violante Sweetwater Oaks HOA Board: Michael Richards
Liaisons Present	Dewey Dixon, Bryan Gongre [Utilities], Clark Gwinn, Dennis Marra Sweetwater Oaks HOA Board: Michael Richards, Chuck Scales, Stuart Hodes, Mike Jirout
Seminole County	Lorie Bailey Brown, Thomas Calhoun, Tony Cintron, Joey Cordell, Gloria Eby, Kathy Moore, Kim Ornberg

### General Topics & Updates

#### Lake Management Program

- Welcome

#### MSBU Program & Resource Management Department

- Financial Summary [Refer to Exhibit B]
- BCC Resolution - MSBU Program Administrative Fee – 7% of Budgeted Assessment Revenue
- County Service Cost (WMDiv) allocation for “enhanced” service level cost
- Status Update - Administrative Code [22.10] and Consolidated Ordinance development

#### Lake Management Program

- Shoreline Protection Ordinance Status
  - FWC Rule change removes permit requirements on lakes smaller than 160 acres
    - Discussed Sweetwater discharges to an Outstanding FL Waterbody still requiring FWC permit
    - Majority of Seminole County lakes are under 160 acres
  - Currently drafting County Shoreline Ordinance
    - No updates from last year, still pending
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
  - Status quo, algae level tends to be lower until April/May
  - Monitor lyngbya and treat accordingly
    - Requires arsenal to control and rotation of products, algae at surface level looked reduced during last inspection but is still present
  - Specialized harvester- 6 events budgeted from April to September
    - New technology of a small foot harvester implemented to rake out lyngbya, soon east and west corners may need to be completely dredged out again to knock down lyngbya and organic buildup from treatments. Goal is to push current harvesting efforts deeper, water depth wise, as far as the equipment boom will reach.
- General recommendations for lake-community consideration [Refer to Lake Management Plan]
  - Increase native aquatic plantings in areas devoid of vegetation
    - We would like to focus on middle lake and some of the common areas
  - Promote “welcome packages” to new lakefront homeowners
    - We have dropped off new packages in the past to Tony V., added Lawn Care Service check-off list to help with grass clippings problem that is problematic
- 2020 Shoreline Planting Event- dates available
  - To be coordinated via Thomas Calhoun
    - Holding 5/16/20 for the planting event
- Other
  - Email Address for routine communications and important announcements
    - Add Chuck Scales, Stuart Hodes and Mike Jirout
  - Fertilizer Outreach efforts
    - Schedule Sweetwater Cove community workshop / outreach event of some sort on how homeowner activity impacts the waterway
    - We can provide digital media of some material
  - Nutrient Study/Nutrient Abatement- Community meeting date

- Nutrient Abatement – Discussed alum treatment to sequester phosphorus, including from groundwater, to slow the speed of lyngbya growth, grass clippings, action items for community meetings.
- Hydrilla coordination
  - Doing excellent job in working together with Applied Aquatics. Early detection, rapid response.
- Water quality buoy
  - Located in middle section. Real time data on water chemistry available on water atlas, helps us drive herbicide treatments or call them off based on data to avoid fish kill, etc
  - [https://seminole.wateratlas.usf.edu/datamapper/station.aspx?ds=SEMCO\\_PWWQYSI&s=SWEET\\_YSI](https://seminole.wateratlas.usf.edu/datamapper/station.aspx?ds=SEMCO_PWWQYSI&s=SWEET_YSI)
  - Part of Nutrient Study for monitoring groundwater seepage; there is a correlation with amount of groundwater, nutrients and amount of lyngbya growing in an area
- Suggestion of combo fountain for aeration would not help if put in middle of the lower lobe due to shallow, sandy soil bottom, it should be placed at dead end areas where stagnation exists to push into the flow and provide circulation/oxygenation.
- Sediment removal
  - At some point will need to re-excavate lower lobes of east and west, as well upper lake system on other side of Wekiva Springs Blvd has had excavations after major storm events. Starting to fill in again. This is the only dredging or sediment removal that would be part of MSBU.
- Utilities Inc update provided by Bryan Gongre, Regional Manager (in absence of Patrick Flynn)
  - Multiple improvements / enhancements have been made with the goal of zero discharge. Timeline of current improvements is they will be completed by end of 2020.

## **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: Dewey Dixon ([dixond47@yahoo.com](mailto:dixond47@yahoo.com)), Patrick Flynn ([pcflynn@uiwater.com](mailto:pcflynn@uiwater.com)), Clark Gwinn ([wclarkgwinn@cfl.rr.com](mailto:wclarkgwinn@cfl.rr.com)), Dennis Marra ([dpm901@aol.com](mailto:dpm901@aol.com)), Michael Richards ([michael@michaelerichards.com](mailto:michael@michaelerichards.com)); and Tony Violante ([manager@sweetwateroaks.org](mailto:manager@sweetwateroaks.org)),

## **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 (407) 665-5542 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) 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]



MSBU FUND: SWEETWATER COVE (LAKE)

	2018	2019	2020
<b>Tax Year</b>			
<b>Assessment</b>	\$ 145	\$ 145	\$ 145
<b>Fiscal Year</b>	<b>FY18-19</b>	<b>FY19-20</b>	<b>FY20-21</b>

  

Revenue	Actual	Working	Proposed
Beginning Fund Balance	\$ 39,188	\$ 38,592	\$ 33,381
Assessment Revenue	\$ 33,502	\$ 33,443	\$ 33,443
Other (Interest)	\$ 1,304	\$ 700	\$ 700
Other - Per Ordinance Cost Share	\$ -		
Other - Per Interlocal Agreement	\$ -		
Other	\$ 997		
MSBU Program Fund Advance			
<b>TOTAL Revenue</b>	<b>\$ 74,991</b>	<b>\$ 72,734</b>	<b>\$ 67,524</b>

  

Expenditure & Reserves	Actual	Working	Proposed
Application Fee Recoupment	\$ -	\$ -	\$ -
MSBU Program Administrative Fee [7% Rev FY20-21]	\$ 1,725	\$ 1,725	\$ 2,341
Other County Services (Service Entity)	\$ -	\$ -	\$ -
Contracted Services	\$ 34,674	\$ 37,628	\$ 35,628
<i>AWC Services (via AAM)</i>	\$ 11,046	\$ 14,000	\$ 12,000
<i>Harvesting (and/or Cattails/Eelgrass)</i>	\$ 23,628	\$ 23,628	\$ 23,628
<i>Other</i>			
<i>Other</i>			
Reserve/Contingency <sup>1</sup>	\$ 38,592	\$ 33,381	\$ 29,555
<b>TOTAL Expenditures &amp; Reserves</b>	<b>\$ 74,991</b>	<b>\$ 72,734</b>	<b>\$ 67,524</b>

  

<sup>1</sup> Note: These funds are secured (1) for maintaining rate stability as annual cost are known to fluctuate, (2) in preparation of planned or anticipated future expenses, (3) to provide response to emergency and/or urgent needs for which planning was not feasible. These funds are not intended for expenditures that could be planned and included in annual budget planning processes.

LM Program Enhanced Services Cost	Pending development & confirmation
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## **Reserve/Contingency Funds**

The financial summary [Exhibit B] of the Annual Report was updated in 2019 to include additional information about contingency fund status. The MSBU Program has provided this additional information to improve transparency respective to the reason and intended purpose for these funds.

The primary purpose for establishing operating contingency funding is twofold – (1) To have funding on hand to accommodate unexpected essential aquatic weed control emergencies that cannot be reasonably foreseen, planned or identified in routine budget planning & forecasting and (2) To provide rate stability as costs for ongoing services often vary from year to year. By establishing contingency and reserve funds, such funding may be allocated temporarily from these funds to operating expenditures to avoid periodic spikes in assessment.

Contingency funds are developed by financial management planning decisions and by default when actual expenditures are less than budgeted expenses. Although reserve/contingency funds are not expected to be expended in any given year, these values are included under expenditures because they are “on hold” for future needs and are classified by accounting practices as expenditures.

In the financial summary (Exhibit B) the total dollars in reserve/contingency are identified in the expenditure section on a single line (darker shading). The total dollars in contingency are calculated by subtracting the other expenditures (typically “contracted services” and “administrative fee”) from the total revenue. Contingency funds may be used as deemed essential to meeting emergency needs of the waterbody; however, the overall intention of use is as per the noted sub-categories.

When a negative value is displayed in the sub-category labeled “operating contingency”, it is an indication that the other subcategories reflect targeted sub-category values that have not been fully developed. For the other sub-categories to be fully developed, the “operating contingency” sub-category must be zero or a positive value.

The sub-category labeled “Reserve: Other” is included for improved transparency as use of these funds is on hold for purposes that are subject to Board confirmation and subsequent evaluation of ordinance provisions (potentially ordinance amendment) before these funds can be budgeted and utilized for the proposed purposes.

## 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