

2023

**SWEETWATER COVE LAKE
LAKE MANAGEMENT PLAN**

Annual Meeting

- Agenda

Lake Management Plan

- General Provisions
- Community-Based Activities & Events
- County Services
 - Lake Management & Supplemental Programs
- 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

SWEETWATER COVE LAKE: ANNUAL MEETING

Date /Time/ Location:	Monday, January 30, 2023 /2:00 pm – 3:00 pm/ ZOOM-Virtual
Community Liaisons:	Dewey Dixon, Bryan Gongre [Utilities], Clark Gwinn, Dennis Marra, Tony Violante
Sweetwater Oaks HOA Board:	Bill Haas, Stuart Hodes, Mike Jirout, Michael Richards, Chuck Scales
Liaisons Present:	Michael Richards, Dennis Marra, Bryan Gongre (Sunshine),
Seminole County:	Thomas Calhoun, Tony Cintron, Daniel Barber, Chad Day, Michael Eason, Tameka Morton, Michelle Rosa-Munger, Lynda Reaves

General Topics & Updates

Lake Management Program

- Welcome
- Shoreline Protection Ordinance Status
 - County Shoreline Ordinance approved in April 2021
 - Still permitted by FWC because of discharge to OFW
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
 - Contractor (AAM) visits twice a month treating invasive plants and lyngbya from April - September. After this time, resumes normal schedule of once-a-month spot treatments.
- Algae Level
 - Tends to be lower until April/May when algae levels typically get worse
 - Monitor lyngbya and treat accordingly
 - 14-day intervals in peak season
 - Specialized harvester
 - 7 harvesting events April-October
- General recommendations for Lake Community Consideration [Refer to Lake Management Plan]
 - Increase native aquatic plantings in areas devoid of vegetation
 - Hold community meeting
 - Promote “welcome packages” to new lakefront homeowners
- 2023 Shoreline Planting Event – Tentative Dates – **liaisons to pick date for event**
 - To be coordinated via Tony Cintron
 - Plants to be funded by MSBU
- Other
 - Email addresses for routine communications and important announcements
- FL Sunshine Water Services – Repaired their overflow tank and headworks Dec 2021
- Hydrilla Coordination – Early Detection and Rapid Response
- **Get quotes on dredging in key areas**
- **Sunshine Water Services replaced force mains**

MSBU Program & Resource Management Department

- Financial Summary [Refer to Exhibit B]
- **Michael Richards proposed assessment to \$160**

SWEETWATER COVE - LAKE MANAGEMENT PLAN

GENERAL PROVISIONS

Scope of Public Lake Management Services

The scope of public lake management 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 Aquatic Plant Management 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.)
- Physical (hand removal)

Targeted Invasive/Exotic Aquatic Vegetation

- Alligator weed, pennywort, torpedo grass, cattail, elderberry, bog hemp, spatterdock, lyngbya, water lettuce, water hyacinth, duckweed, salvinia, algae, wild taro, primrose willow, carex, flat sedge, pickerelweed, duck potato, canna lily, fire flag, hemp vine, cogon grass, and spike rush (hydrilla is excluded).

Frequency of Aquatic Vegetation Management Treatment (herbicides)

Treatment 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.

Seminole County Employees

Information for contacting the employees of Lake Management and the MSBU program:

Lake Management – Thomas Calhoun (tcalhoun@seminolecountyfl.gov), Tony Cintron (acintron@seminolecountyfl.gov), Daniel Barber (dbarber02@seminolecountyfl.gov), Chad Day (cday02@seminolecountyfl.gov)

MSBU – Michael Eason (meason@seminolecountyfl.gov), Tameka Morton (tmorton@seminolecountyfl.gov), Michelle Rosa-Munger (mrosamunger@seminolecountyfl.gov)

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 (dixond903@gmail.com), Bryan Gongre (bryan.gongre@sunshinewater.com) Clark Gwinn (wclarkgwinn@cfl.rr.com), Dennis Marra (dpm901@aol.com), Michael Richards michael@michaelerichards.com; and Tony Violante (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) Plant a healthy shoreline with native emergent plants;
- 2) Establishing a formal Lake Association holding at least one annual meeting with topics relevant to your lake;
- 3) Establish a backyard berm and swale system where applicable;
- 4) 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 such as grass clippings, Contact us at 407-665-5542 for assistance;
- 5) Fertilize wisely by using phosphorous free and slow-release nitrogen based fertilizers only. Visit www.seminolecountyfl.gov/fertilizer for more information; and

Provide content for the Seminole County Water Atlas Lake Management Webpage for your lake (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

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. 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 and harvesting 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 and harvesting 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 - Agenda & Notes from Prior Year Meeting

Sweetwater Cove

Date /Time/ Location:	Wednesday, March 23, 2022 /10:00am – 10:40am/ ZOOM-Virtual
Community Liaisons:	Dewey Dixon, Bryan Gongre [Utilities], Clark Gwinn, Dennis Marra, Tony Violante
Sweetwater Oaks HOA Board:	Bill Haas, Stuart Hodes, Mike Jirout, Michael Richards, Chuck Scales
Liaisons Present:	Dennis Marra, Bryan Gongre [Sunshine Water]
Seminole County:	Daniel Barber, Thomas Calhoun, Tony Cintron, Michael Eason, Tameka Morton & Lynda Reaves

General Topics & Updates

Lake Management Program

- Welcome
- Shoreline Protection Ordinance Status
 - County Shoreline Ordinance approved in April 2021
 - Still permitted by FWC because of discharge to OFW
- Treatment Plans - Current & Proposed [Refer to Lake Management Plan]
 - Contractor (AAM) visits twice a month treating invasive plants and lyngbya from April - September. After this time, resumes normal schedule of once-a-month spot treatments.
- Algae Level - Status Quo
 - Tends to be lower until April/May, when algae levels typically get worse
 - Monitor lyngbya and treat accordingly
 - 14-day intervals in peak season
 - Specialized harvester
 - 7 harvesting events April-October
- General recommendations for Lake Community Consideration [Refer to Lake Management Plan]
 - Increase native aquatic plantings in areas devoid of vegetation
 - Educate the Sweetwater Community on the Shoreline Protection Ordinance
 - Lake Management is available for a community education meeting. Contact us if interested.
 - Promote “welcome packages” to new lakefront homeowners
- 2022 Shoreline Planting Event – Tentative Dates Available
 - To be coordinated via Tony Cintron – Tony to send date of planting events
 - Tony to send informative brochures on SERV plants
 - Plants to be funded by MSBU
 - Future planting events to use smaller height plants
- Other
 - Email addresses for routine communications and important announcements
 - Fertilizer Outreach efforts
- FL Sunshine Water Services – Repaired their overflow tank and headworks Dec 2021
- Hydrilla Coordination – Early Detection and Rapid Response
- Sediment Removal
 - County maintained structure on the south side of Wekiva Springs Road – completed January 2022
 - Acquire quotes on sediment removal for Sweetwater MSBU

MSBU Program & Resource Management Department

- Financial Summary [Refer to Exhibit B]

Exhibit B - Financial Summary

MSBU FUND: SWEETWATER COVE (LAKE)

	2021	2022	2023
Tax Year			
Assessment	\$ 145	\$ 145	\$ 145
Fiscal Year	FY21-22	FY22-23	FY23-24
Revenue	Actual	Working	Proposed
Beginning Fund Balance	\$ 35,747	\$ 22,801	\$ 18,521
Assessment Revenue	\$ 33,944	\$ 33,440	\$ 33,440
Other (Interest)	\$ 293	\$ 250	\$ 250
Other - Per Ordinance Cost Share	\$ -	\$ -	\$ -
Other - Per Interlocal Agreement	\$ -	\$ -	\$ -
Other	\$ -	\$ -	\$ -
MSBU Program Fund Advance	\$ -	\$ -	\$ -
TOTAL Revenue	\$ 69,984	\$ 56,491	\$ 52,211
Expenditure & Reserves	Actual	Working	Proposed
Application Fee Recoupment	\$ -	\$ -	\$ -
MSBU Program Administrative Fee [7% Rev FY21-22]	\$ 2,340	\$ 2,340	\$ 2,340
Other County Services (Service Entity)	\$ -	\$ -	\$ -
Contracted Services	\$ 44,843	\$ 35,630	\$ 40,566
<i>AWC Services (via AAM)</i>	\$ 29,091	\$ 12,002	\$ 13,000
<i>Harvesting (and/or Cattails/Eelgrass)</i>	\$ 15,752	\$ 23,628	\$ 27,566
<i>Other</i>			
<i>Other</i>			
Total Expenditure & Reserves	\$ 47,183	\$ 37,970	\$ 42,906
Reserve/Contingency¹	\$ 22,801	\$ 18,521	\$ 9,305
<p>¹ 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.</p>			
LM Program Enhanced Services Cost	<i>Pending development & confirmation</i>		

Reserve/Contingency Funds

The primary purpose for establishing contingency/reserve 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.

Exhibit C - Historic Reports/Data

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

[Sweetwater Cove | Lake Details - Seminole.WaterAtlas.org \(usf.edu\)](http://www.seminole.wateratlas.usf.edu/resourceprogram.aspx?aid=15&wbodyid=7713)
<http://www.seminole.wateratlas.usf.edu/resourceprogram.aspx?aid=15&wbodyid=7713>

Sweetwater Water Quality Report: How Does My Lake Rank?

39 GOOD

The Trophic State Index (TSI) is a classification system designed to "rate" individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is by its assigned TSI number. A "Good" quality lake is one that meets all lake use criteria (swimmable, fishable, and supports healthy habitat).

A TSI score of 60 or above is considered impaired (or polluted) lake. Continued reduction of TP sources (personal pollution, run-off, landscaping practices, shoreline erosion) can help reduce phosphorous in your lake that is abundantly available, potentially creating algae blooms.

Sweetwater Cove

Trend Report

2022



TSI Score: 39

(Trophic State Index)

Good

FDEP Status

(Florida Dept of Environmental Protection)

Impaired for Nutrients

TMDL Status

(Total Maximum Daily Load)

No TMDL

BMAP

(Basin Management Action Plan)

Wekiva

Spring Priority Focus Area

Yes

Big Wekiva Watershed

17 acres

Lat 28° 42' 36" N

Lon 81° 26' 17" W

WBID 2956

For more information please visit:

seminole.wateratlas.usf.edu/

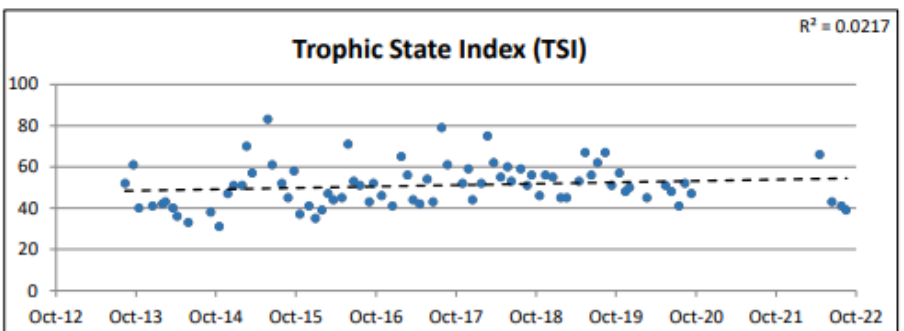
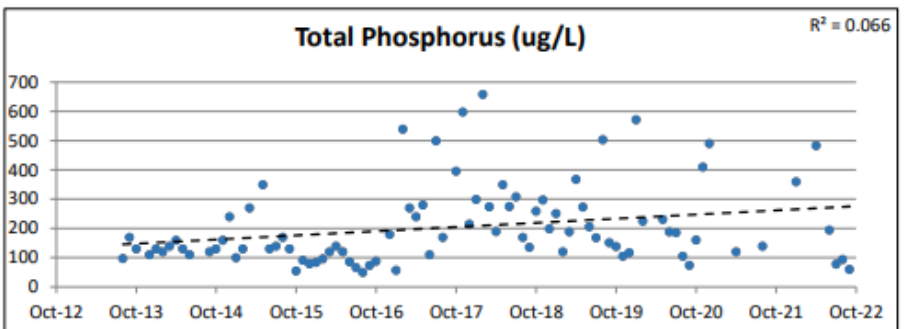
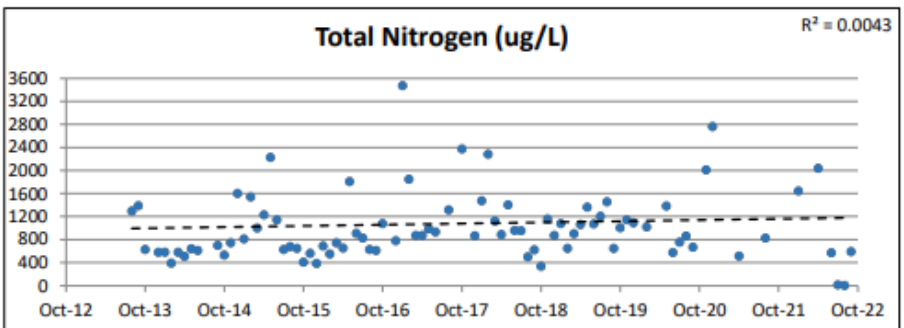
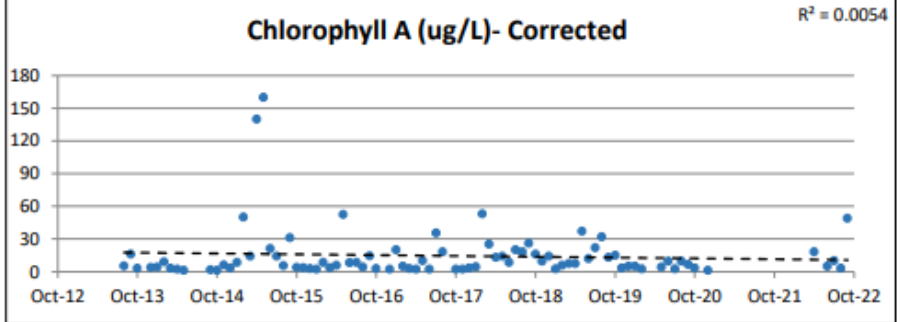


Exhibit D

Roles & Responsibilities

General Outlines

COUNTY

Seminole County will

- 1) Govern the MSBU
- 2) Provide financial management of MSBU fund and assessment levy
- 3) Ensure activities conducted with assessment funding align with the scope of services documented in the governing ordinance
- 4) Ensure the lake is monitored and services are appropriately rendered
- 5) 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
- 6) 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
- 7) Initiate and manage service contracts, monitor results, and communicate updates on a routine basis
- 8) Conduct annual meetings that offer opportunity for liaison discussion as to prior, current, and future action plans
- 9) 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