

February 28, 2018

**HOWELL CREEK
MANAGEMENT PLAN**

Annual Meeting – 2018

- Agenda

Lake Management Plan

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

HOWELL CREEK ANNUAL MEETING

Date, Time & Location	:	February 28, 2018, 11:00 AM, 200 W. County Home Rd – LMP office
Formal Liaisons	:	Mary Munster; Jeannie Schiff
Liaisons Present	:	Mary Munster
Seminole County	:	Thomas Calhoun, Joey Cordell, Gloria Eby, and Joe Saucer
City of Casselberry	:	Marissa Williams

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]
 - Monitor hydrilla and treat as necessary (early detection-rapid response)
 - Hydrilla was tested to be genetically tolerant to certain herbicides (resistant strands)
 - Increases in hydrilla have been observed
- General recommendations for lake-community [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
- Other
 - Hydrilla- upstream sources and communications
 - Email Address for routine communications and important announcements

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 31, 2019 10:00AM

HOWELL CREEK 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 92-18
- Casselberry Interlocal Agreement (February 2013)

Methods for Aquatic Weed Control as authorized via County Ordinance

- Chemical (herbicides)

Targeted Invasive/Exotic Aquatic Vegetation

- Hydrilla, torpedo grass, water hyacinth, alligator weed, wild taro, lily pads, salvinia, and duckweed

Frequency of AWC Treatment

AWC services are performed at the direction of the Seminole County LMP as per the Howell Creek Management Plan reviewed at the annual planning session with the expectation that the Seminole County LMP may alter anticipated treatments on an as merited basis 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 liaisons for Howell Creek are: Mary Munster (mmunster@cfl.rr.com) and Jeannie Schiff (jschiff@cfl.rr.com).

COMMUNITY-BASED ACTIVITIES & EVENTS

LMP recommends/encourages homeowners to coordinate a resident-based volunteer event involving native plantings along the shoreline of Howell Creek. The intention of such an event is to plant beneficial native aquatic plants to key areas in need along the bank. It is especially important that as the aquatic invasive plants (such as torpedo grass) are being treated, native aquatic plants should be established within these areas.

The presence of the recommended native plant species along the shoreline provides habitat for fish and wildlife, helps impede invasive exotics from re-establishing and reduces erosion of the shoreline. All of these best management practices are essential to providing the conditions that promote an environmentally stable habitat to be enjoyed by generations to come. The key to success is dependent on strong participation of the Howell Creek community.

Continued recommendations for community initiatives are as follows:

- 1) Increase shoreline re-vegetation with beneficial native aquatic plants such as duck potato and pickerelweed where invasive plants have been treated to prevent shoreline erosion,
- 2) Continue to work together with other waterfront homeowners. Have *at least* one annual waterfront association meeting. Invite guest speakers (such as county or state biologists) and discuss creek specific issues, especially these management recommendations. LMP professional staff would be glad to present our findings from this and other surveys, and
- 3) 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-release 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 creek! Contact Gloria Eby (407) 665-2439 or Marie Lackey (407) 665-2424 for more information and assistance.

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. Howell Creek is monitored by LMP to assess the aquatic plant growth. LMP provides continued evaluation of the aquatic plant species, such as hydrilla, and provides community updates on the status of treatments and waterbody bioassessment. 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

Monthly aquatic maintenance treatments continue to yield an improved outcome for invasive plant management in Howell Creek. Species that continue to be targeted include wild taro, alligator weed, hydrilla, water hyacinth, road grass, and torpedo grass. While wild taro exists on several banks, these areas are left untreated as this is the sole vegetation that is retaining the shoreline/bank with the established root system. Removal of these plants will result in greater shoreline/bank erosion. Hydrilla has been observed on several occasions and through routing monitoring by the county LMP, rapid response treatment to newly establish hydrilla assists in minimizing the management cost of this highly invasive species. While extensive growth of hydrilla is possible at any point in time; it is anticipated that routine spot treatments of hydrilla with herbicides will be sufficient to manage hydrilla re-growth during the current fiscal year.

Funding Expectations

Refer to current fiscal year budget 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 monitoring of aquatic plant species, and
- 2) Continued maintenance treatment of emergent non-native vegetation (such as torpedo grass) and floating lilies that may impede access via herbicides.

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 – Agenda & Notes from Prior Year Planning Session

Date, Time & Location	:	January 19, 2017, 2:30 PM, 200 W. County Home Rd – LMP office
Formal Liaisons	:	Mary Munster; Jeannie Schiff
Liaisons Present	:	Rory Trumborn, Mary Munster, Jeannie Schiff
Seminole County	:	Thomas Calhoun, Joey Cordell, Gloria Eby, and Joe Saucer
City of Casselberry	:	Marissa Williams – City of Casselberry

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.
- Ultra Vista HOA parcel that cleared vegetation within the conservation easement (City of Casselberry said their Code Enforcement filed violation.) Marissa Williams communicated that there have been no new issues or concerns in over 9 months and the reported event no longer requires follow-up.

General Topics & Updates [Meeting Notes]

- Plans for current fiscal year - refer to Page 6 - Continue with monthly schedule of inspections and treatment
 - Hydrilla – An herbicide resistant variety of Hydrilla has established in Lake Waumpi and the inflow creek north of the lake. These waterbodies are managed jointly by the cities of Winter Park and Maitland. Seminole County requested inclusion in discussion and decisions respective to treatment of Hydrilla upstream, as these efforts impact Howell Creek and potentially Lake Howell, but inclusion was denied by the City of Winter Park. LMP will continue to pursue information and best prepare for future treatments should the resistant variety be problematic to Howell Creek and beyond.
 - Marissa William reported that the biomass of hydrilla at the head of Lake Waumpi is breaking down; Thomas Calhoun confirmed the same per his most recent inspection of the creek.
- Projections for next fiscal year - refer to Page 6
- Financial and Budget Projections
 - Refer to Exhibit B; no change in assessment rate (remain at \$0.85/ft.)
 - Monitoring treatments costs for potential impact on future assessment. The contingency fund provides a source for funding treatment cost respective to the Seminole County cost share; City of Casselberry will fund as needed on annual basis.
- General recommendations for community consideration - refer to Page 5
 - Increase native aquatic plants in shoreline areas devoid of vegetation
 - Report hydrilla observations to LMP for rapid response

Exhibit B - Budget/Financial Overview

MSBU: HOWELL CREEK

Date: January 1, 2018

Tax Year Assessment		2016 \$ 0.85	2017 \$ 0.85	2018 \$ 0.85
Fiscal Year		FY16-17	FY17-18	FY18-19
REVENUE		Actual	Working Budget	Proposed Budget
Beginning Fund Balance	\$	8,662	\$ 9,545	\$ 9,377
Assessments	\$	1,469	\$ 1,464	\$ 1,464
Casselberry	\$	695	\$ 1,688	\$ 1,688
Other	\$	75	\$ 55	\$ 55
MSBU Program Fund Advance	\$	-	\$ -	\$ -
TOTAL	\$	10,901	\$ 12,752	\$ 12,583
Cost Sharing Lake Management Program				
TOTAL	\$	10,901	\$ 12,752	\$ 12,583
EXPENDITURE		Actual	Working Budget	Proposed Budget
County Administrative Fee	\$	875	\$ 875	\$ 875
Fund Advance Repayment	\$	-	\$ -	\$ -
Contracted Services	\$	481	\$ 2,500	\$ 2,500
Routine Services	\$	381	\$ 1,000	\$ 1,000
Hydrilla/Other SAV	\$	100	\$ 1,500	\$ 1,500
Carp	\$	-	\$ -	\$ -
Barrier Maintenance	\$	-	\$ -	\$ -
Barrier Replacement	\$	-	\$ -	\$ -
Nutrient Abatement (Alum)	\$	-	\$ -	\$ -
Harvesting	\$	-	\$ -	\$ -
Other	\$	-	\$ -	\$ -
Contingency Reserve	\$	9,545	\$ 9,377	\$ 9,208
TOTAL	\$	10,901	\$ 12,752	\$ 12,583
Cost Sharing Lake Management Program	\$	-	\$ -	\$ -
TOTAL	\$	10,901	\$ 12,752	\$ 12,583
Note: Contingency Reserve only needs to be 50% of targeted amount; Casselberry is paying 50% as costs are incurred				
Fund Advance BB Payment (Principal)	\$	-	\$ -	\$ -
Fund Advance EB	\$	-	\$ -	\$ -

Exhibit C - Historic Reports/Data

Additional information for Howell Creek can be found on the Seminole County Water Atlas website at:

<http://www.seminole.wateratlas.usf.edu/river/?wbodyatlas=river&wbodyid=1009>
<http://www.seminole.wateratlas.usf.edu/resourceprogram.aspx?aid=15&wbodyid=1009>

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 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