

**Howell Creek MSBU  
Report for Fiscal Year 2011-2012  
October 1, 2011 through September 30, 2012  
Lake Meeting Held: July 12, 2012**

County Staff: Gloria Eby, Thomas Calhoun, Carol Watral  
Community Liaison(s): Jeannie Schiff  
Other participants: Rory Trombore

Purpose: To review status of waterbody management and to discuss with the liaison group the recommendations and plans for the next fiscal year.

**Routine updates of inspections/results are provided to the community liaison members via email. To be included in these updates, please notify Gloria Eby, Lake Management Program (LMP) Manager, at [geby@seminolecountyfl.gov](mailto:geby@seminolecountyfl.gov).**

**Annual Meeting Synopsis:**

The current FY budget/expenditures, assessment rate, and the future FY budget were discussed. The annual non-ad valorem MSBU assessment for tax year 2012 has been increased from \$0.25 per foot to \$0.73 per foot to support the increased cost of aquatic maintenance and develop reserve funds for future treatments. The 2012 assessment (\$0.73/ft) is equal to the original assessment assigned in 1992.

The MSBU Program has reviewed the Howell Creek assessment boundary and is pursuing a cost share agreement with the City of Casselberry in regards to the creek-front property located outside the County's unincorporated taxing district. Additionally, the MSBU Program is investigating the option of an Interlocal agreement with the City of Winter Park as there may be a cost advantage gained from coordinating aquatic treatment services with the City – the City currently provides contracted services on behalf of City of Maitland for aquatic weed control in Lake Waumpi). Meetings with the cities are underway.

Liaison, Jeannie Schiff, initiated a discussion regarding removal or “camouflage” of the auto sampler cage near 547 Brookwood Lane. Seminole County (Water Quality) will address this concern and follow-up with the liaison.

Aquatic treatment services have been provided on a quarterly basis through FY 2011-2012. LMP advised that quarterly treatments (which are based upon the available funding) are not sufficient to control the excessive growth within the creek. As funding allows, monthly services will be considered in FY 2012-2013. Nutrient loading and the desire of additional shoreline plantings was discussed. . The liaison noted that some creek-front properties owners prefer a shoreline free of vegetation that yields full access to the creek.

## **County Funding:**

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 all treatments and waterbody assessments. 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.

## **2011-2012 Lake Management Activities:**

Treatment of Howell Creek during fiscal year FY 2011-2012 included quarterly chemical (herbicide) treatments applied by a Seminole County contractor. Seminole County's LMP conducted several on-site inspections of Howell Creek. Additionally, Seminole County Stormwater crews treat floating vegetation in association to the weir as part of functional maintenance.

**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 is advised. If the invasive plants are removed by this method, spraying the area can be eliminated, 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.*

## **Lake Management Recommendations:**

Lake Management Program recommendations for the upcoming fiscal year (FY1213) for Howell Creek:

- 1) Continued monitoring of aquatic plant species,**
- 2) Continued maintenance treatment of emergent non-native vegetation (such as torpedo grass) and floating lilies that may impede access via herbicides,**
- 3) Increase shoreline re-vegetation with beneficial native aquatic plants such as duck potato and pickerelweed where invasives have been treated,**
- 4) 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,**
- 5) 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 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,**

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. Residents should organize planting days creating a beneficial shoreline. 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.

### **Cost of Aquatic Weed Control**

Funding: FY October 2011 – September 2012

1) \$ 389	Assessment Revenue [per early payment discount] + Interest
2) <u>\$ 9,296</u>	Reserve and Contingency (beginning fund balance)
<u>\$ 9,685</u>	Total Revenue

Expenditures were as follows:

1) \$ 1,540	Contracted Services (4 treatments)
2) \$ 250	County Administrative Fee
3) <u>\$ 7,895</u>	Contingency Reserve (carried forward to next year)
<u>\$ 9,685</u>	Total Expenditures

Projected: FY October 2012 – September 2013

Budgeted Revenue:

- 1) \$ 1,255 Assessment Revenue [per early payment discount]
- 2) \$ 7,895 Reserve and Contingency (beginning fund balance)
- \$ 9,150 Total Revenue

Budgeted Expenditures:

- 1) \$ 2,340 Contracted Services (monthly)
- 2) \$ 110 Additional Labor (2 hours)
- 3) \$ 550 County Administrative Fee
- 4) \$ 6,150 Contingency Reserve (carried forward to next year if not required)
- \$ 9,150 Total Expenditures

Note: As applicable, any financial activity from prior years is available upon request.

**MSBU Background**

In 1992, at the request of the community, the Howell Creek Aquatic Weed Control MSBU was created by Ordinance 92-18 to provide assessment funding for lake management and aquatic weed control for Howell Creek. At the same time, an Interlocal Agreement between Seminole County and Orange County was established for to define services to be obtained from Orange County based on efficiencies to be gained by coordinating the aquatic weed control for Howell Creek with the treatments conducted (by Orange County) at Lake Waumpi.

Over time, the 1992 Interlocal Agreement became dormant (and ineffective) as a result of changing jurisdictional boundaries that impact property taxation. Therefore, the 1992 Interlocal Agreement was terminated and the management/aquatic weed control services were continued via contracted services.

## Howell Creek Inspections FY 2011-2012

**Summary of the July 3, 2012 inspection/report:** Thomas Calhoun (Seminole County Lake Management Program) and Stan McCreary (Seminole County Intern) surveyed the aquatic plants of Howell Creek and Lake Waumpi. Howell Creek was treated the week of May 21<sup>st</sup>, and is scheduled to be treated the week of August 20<sup>th</sup> as part of the routine quarterly treatments funded by the MSBU. Treatment will target the yellow cow lily (spatterdock) and salvinia that is blocking access in many areas along the creek as well as torpedo grass, primrose, and alligator weed. With the treatment and rising water elevation, the creek should become more navigable. Submersed aquatic vegetation (SAV) found during the inspection included; roadgrass, filamentous algae (in large presence), eelgrass, southern naiad, stonewort, coontail and widgeon-grass. Coontail is the most abundant species found in the creek system. Hydrilla was the only invasive exotic found during the inspection and was observed in isolated locations throughout the creek. Some shorelines along the north bank of the creek have erosion issues. It is recommended that native shoreline vegetation be planted to help reduce and stabilize further shoreline erosion. The types of plants recommended include (but are not limited to), pickerelweed, duck potato, canna, thalia, and cord grass. Lake Waumpi was also surveyed during this inspection. No SAV was found in Lake Waumpi, only detritus (organic sediment) was found along the lake bottom. Most of Lake Waumpi's shoreline is dominated by invasive species. These species include: burhead sedge, primrose willow, Carolina willow, cattails, alligator weed, and salvinia. The yellow cow lily was found around the edge of the lake to a depth of 3 feet. Secchi reading (measurement for water clarity) was 2.4 feet in a depth of 3.2 feet.

**Summary of the May 21, 2012 inspection/report:** Thomas Calhoun (Seminole County Lake Management Program) and Stan McCreary (Seminole County intern) surveyed the aquatic plants of **Howell Creek and Lake Waumpi**. Howell Creek is scheduled to be treated this week as part of the routine quarterly treatments funded by the MSBU. Treatment will target alligator weed, torpedo grass, wild taro, primrose, and water lilies. Submersed aquatic vegetation (SAV) found during the inspection included; roadgrass, filamentous algae, eelgrass, southern naiad, stonewort, coontail, and widgeon-grass. Coontail is the most abundant species found in the creek system. Hydrilla was the only invasive exotic found during the inspection and was observed in a few locations throughout the creek. There was a large amount of floating algae in the creek present during the inspection. Low/no flow conditions (currently no flow) promote greater algae growth especially in warmer months. Some shorelines along the north bank of the creek have erosion issues. It is recommended that native shoreline vegetation be planted to help reduce and stabilize the shoreline. The types of plants suggested include (but are not limited to) pickerelweed, duck potato, canna, thalia and cord grass. Lake Waumpi was also surveyed during this inspection. No SAV was found in Lake Waumpi; only detritus (organic sediment) was found along the lake bottom. Most of Lake Waumpi's shoreline is dominated by invasive species. These species include: burhead sedge, primrose willow, Carolina willow, cattails, alligator weed and salvinia. The yellow cow lily was found around the edge of the lake to a depth of 3 ft. Secchi reading (water clarity) was 2.5 ft in a depth of 3 ft.

**Summary of the March 19, 2012 inspection/report:** Thomas Calhoun (Seminole County Lake Management Program) and Shannon Wetzel (Seminole County Environmental Scientist)

surveyed the aquatic plants of Howell Creek. The Seminole County MSBU funded herbicide contractor treated the creek on February 22 where 85% of the creek was covered with salvinia then subsequently treated on March 8 for the salvinia at the weir and upstream ~200 feet. Additionally, Seminole County Stormwater crews treated in association to the weir (as functional maintenance) on March 5. Since these treatments, the salvinia has died but is still within the creek. We anticipate that the salvinia will remain within the creek until water begins to flow over the weir again or it decomposes off the surface of the creek. For the next scheduled MSBU funded treatment (conducted quarterly), alligator weed, torpedo grass, wild taro, primrose, and water lilies will be targeted. Native submersed aquatic vegetation (SAV) found during this inspection included; roadgrass, filamentous algae, eelgrass and widgeon-grass. Hydrilla was the only invasive exotic found during the inspection and was only observed in one location in the creek. Some shorelines along the north bank of the creek have noticeable erosion issues. It is recommended that native shoreline vegetation be planted to help reduce and stabilize shoreline erosion. The types of plants that are recommended (but are not limited to) are pickerelweed, duck potato, canna, thalia, and cord grass.

**Summary of December 15, 2011 inspection/report:** Gloria Eby (Seminole County Lake Management Program) and Thomas Calhoun (Seminole County [SC] Contracted Scientist) surveyed the aquatic plants of Howell Creek via canoe. The purpose of assessment is to observe the aquatic plant community within the creek and to provide feedback or recommendations based upon these observations related to the aquatic weed control MSBU resolution. The Seminole County MSBU herbicide contractor last treated the creek on November 29<sup>th</sup>. The next quarterly treatment is scheduled for mid-march. The water lilies (spatterdock) were well treated and are showing some signs of new growth. Alligator weed and torpedo grass (both exotic/invasive plants) also appeared to be impacted from the recent herbicide treatment. Other exotic/invasive shoreline vegetation observed included: wild taro, water primrose, and water sprite. Submersed aquatic vegetation (SAV) found during the inspection included: coontail, roadgrass, filamentous algae, southern naiad, bladderwort, eelgrass, and widgeon-grass. These species are all natives providing good diversity for the creek. Hydrilla was the only exotic/invasive SAV found during the inspection and was observed in one location located mid-way by an inflow pipe. Some shorelines along the north bank of the creek have erosion issues. It is recommended that native aquatic vegetation be planted to help reduce and stabilize the shoreline erosion occurring. The some plant examples that would be suitable for this area are: pickerelweed, duck potato, canna, thalia, and cord grass. Helpful guides on aquatic plants/identification and how to properly plant them are available. We would be glad to forward these to you upon your request.