

Please find the latest update for your creek below. Some of the key highlights from this report will include.

- Herbicide treatment update
- Lilly pads blocking access
- Submersed aquatic vegetation (SAV) and algae present
- Shoreline erosion and native shoreline vegetation
- Lake Waumpi update
- Recommendations for your water body

On **July 3rd, 2012**, 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 21st, and is scheduled to be treated the week of August 20th 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.

Photo: Yellow cow lily blocking access in parts of Howell Creek.



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.

Photo: Algae bloom present in creek as result of submersed vegetation surfacing.



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.

Photo: Example of pickerelweed planted along shoreline.



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.

Recommendations:

1 Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues, especially nutrients/lake management recommendations. SCLMP staff would be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shoreline (such as pickerelweed, duck potato and canna).

2 Increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal 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 waterbody! Contact Seminole County Lake Management Program (407) 665-2439 for free educational programs available.

3-19-2012

Greetings!

Please find our latest assessment for Howell Creek below. Some of the key highlights from this report will include.

- Herbicide treatment updates- recently treated by the MSBU funded contractor and County Stormwater crew.
- Submersed aquatic vegetation (SAV)- good diversity present
- Shoreline erosion observed- suggest native shoreline vegetation planting
- Recommendations for your water body

On **March 19th, 2012**, 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 22nd where 85% of the creek was covered with salvinia then subsequently treated on March 8th 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 5th. 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.

Photo: Area recently treated for salvinia.



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.

Photo: Widgeon-grass.



Photo: Hydrilla



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.

Photo: Example of planted pickerelweed.



Below please find general recommendations to assist you in improving and protecting your waterway. Also, attached you will find helpful guides on aquatic plants/identification and how to properly plant them.



Restoration Examples.pdf



How to Plant Your Lakefront Boats.pdf

Howell Creek Recommendations:

1. Work together or establish an association with other homeowners residing on the creek to control and if possible, eliminate invasive plants and increase native aquatic plantings along shoreline (such as pickerelweed, canna, and duck potato). Have at least one annual waterbody association meeting, invite guest speakers (such as county or state biologists) to discuss waterbody specific issues.
2. Increase educational outreach programs i.e. Shoreline Restoration Workshops, Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of personal

pollution by: decreasing fertilizer usage; only using phosphorous free fertilizers; keeping a functional shoreline with beneficial native aquatic plants; keeping grass clippings out of your storm drains and the creek. All these activities aid in protecting Howell Creek! Contact Seminole County Lake Management Program (407) 665-2439 for free educational programs available.

Greetings!

Please find the most recent assessment of Howell Creek below. Some of the key highlights from this report will include:

- Herbicide treatment updates- November treatment executed
- Submersed aquatic vegetation (SAV)- good diversity found
- Shoreline erosion issues observed- suggest native shoreline vegetation
- Recommendations for your waterbody

On **December 15th, 2011**, 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 29th. The next quarterly treatment is scheduled for mid-march. The water lilies (spatterdock) was well treated and is 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.

Photo: Treated lily pads.



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.

Photo: Widgeon-grass.



Photo: Hydrilla



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.

Photo: Example of planted pickerelweed.



Below please find general recommendations to assist you in improving and protecting your waterway. Also, attached you will find helpful guides on aquatic plants/identification and how to properly plant them.



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Recommendations:

- 1 Work together to establish a waterway association with other homeowners residing on the creek to control and if possible, eliminate invasive plants and increase native aquatic plantings (such as pickerelweed and duck potato) along shoreline. Native aquatic plants can increase wildlife, (especially waterfowl and fish), stabilize the shoreline helping to reduced erosion, and improve the water quality of the waterway.
- 2 Increase educational outreach programs i.e. Florida Yards and Neighborhoods (FYN), Watershed Action Volunteers (WAV), Lake Management Video mail-outs, and reduction of

personal pollution (contact Seminole County Lake Management Program, Gloria Eby at (407) 665-2439 for assistance).

Happy Holidays!