Lake of the Woods Assessments 2010-2011

Greetings Lake of the Woods!

Please find the latest assessment update below. We will be re-inspecting on June 14th, weather permitting.

The recent treatment of hydrilla (using Aquathol and Reward) and filamentous algae (using Reward) was very successful in significantly reducing both species in and adjacent to the treatment areas. This treatment, coupled with the additional stocking of 2 triploid grass carp fish per acre, will impact the hydrilla in both the short term (herbicide treatment) and the long term (grass carp) management plan. Hydrilla treatments were concentrated along the west shoreline and we continue to monitor the east shoreline hydrilla growth for treatment needs based upon impact and additional grass carp fish introduced. Algae treatments were conducted along both east and west shoreline.

< Photo of impacted hydrilla

Additionally, we have received several concerns related to eelgrass. Please note eelgrass management is not financed through the MSBU assessment nor listed on our aquatic weed control permit issued by FWC. Eelgrass treatments (which we do manage in other lakes for recreational access only) are very costly. In order to add eelgrass management, the annual MSBU assessment would require a significant increase. Please contact your lake liaison representatives to discuss if interested in adding/financing this service.

Should an individual wish to reduce this native aquatic plant, for individual recreation access only, you would need to contact your new FWC regional biologist, Ed Harris, at Ed.Harris@myfwc.com or 407.858.6170 to obtain a permit. Permit is free.

Observations:

On 10 May 2011, Seminole County Lake Management Program (SCLMP) personnel, Gloria Eby, Thomas Calhoun, and Dean G Barber surveyed the aquatic plants of Lake of the Woods. Seven species of submersed aquatic vegetation (SAV) were observed included 6 natives: coontail to a depth of 6 feet, road grass to 10 feet, filamentous algae, southern naiad to 10 feet, stonewort to 7 feet and eelgrass to 6

feet with one invasive exotic hydrilla to 7 feet. All of these native SAV, observed from shallow to 10 feet are continuing to compete with hydrilla for space; especially in the deep water.

The dominant species of SAV continues to be both eelgrass and southern naiad. Eelgrass is the most prevalent SAV in the inshore area with thick populations to a depth of 4 feet, still reaching the surface from 5 feet, but continuing to be present to a depth of 6 feet. Further offshore (4-6 feet), the plant is cleaner with less algae growth on the leaf blade.

< Photo of eelgrass inshore

Southern naiad is more prevalent offshore reaching a depth of 10 feet, however staying below the water's surface although the population is thick, sometimes coming up 2-3 feet from the bottom. Southern naiad at this deep depth is a key factor in making it difficult for hydrilla to establish in deeper water and then move back inshore killing the native SAV, reducing plant diversity and taking over the lake. Some of the southern naiad has been impacted by the herbicide treatment.

Photo of southern naiad competing with hydrilla >

Above: Photo of established shoreline from planting event

The native emergent aquatic plant populations throughout the lake are well established and expanding, especially in the areas that were planted by both waterfront owners and SERV participants during planting events. However, some plant populations will need to be treated by Seminole County contractor to control the torpedo grass, especially in the maidencane grass sites. No water hyacinths were observed.

Secchi (water clarity) was 6.4 feet in a depth of 11.9 feet compared to 4.7 feet on the last survey. Lake gauge was 74.62 feet above sea level compared 74.81 previously. One triploid grass carp was observed during survey.

On 14 June 2011, Seminole County Lake Management Program (SCLMP) personnel Gloria Eby, Thomas Calhoun and Natalae Almeter surveyed the aquatic plants of Lake of the Woods.

The April 27th treatments of hydrilla and filamentous continues to be successful in reducing both species in and adjacent to the treatment areas. Filamentous algae was treated along the east and west shoreline of the lake which is showing a secondary impact on hydrilla. Hydrilla treatment along the west shoreline continues to be healthy in waters greater than 5 ft. We will continue to monitor hydrilla growth (with emphasis on the east shoreline) for future treatment needs based upon current herbicide impact and additional grass carp fish introduced.

This recent treatment, coupled with the additional stocking of 2 triploid grass carp fish per acre on May 27th, will impact the hydrilla in both the short term (herbicide treatment) and the long term (grass carp fish) management plan.

Photo: Impacted hydrilla sampled from west shoreline.

Photo: Triploid grass carp being stocked on May 27th

Photo: Healthy hydrilla found during inspection.

There is an abundant amount of native submersed aquatic vegetation (SAV) in Lake of the Woods with eelgrass continuing to be the dominant species followed by southern naiad. Eelgrass found to a depth of 5 ft is restricting boat access in some areas and topped out in depths less than 3 ft. Other SAV observed during the survey included: southern naiad to a depth of 7.5 ft, stonewort to a depth of 6 ft, road grass to a depth of 7.5 ft, coontail to a depth of 6ft and Hydrilla to a depth of 7.5 ft. All species where found intermixed within the eelgrass.

Photo of dominant eelgrass topped out and intermixed with hydrilla:

Please note eelgrass management is not financed through the MSBU assessment nor listed on our aquatic weed control permit issued by FWC. Eelgrass treatments (which we do manage in other lakes for recreational access only) are very costly. In order to add eelgrass management, the annual MSBU assessment would require a significant increase. Please contact your lake liaison representatives to discuss if interested in adding/financing this service.

Should an individual wish to reduce this native aquatic plant, for individual recreation access only, you would need to contact your new FWC regional biologist, Ed Harris, at Ed.Harris@myfwc.com or 407.858.6170 to obtain a permit. Permit is free.

Most of the planted native emergent aquatic plant populations, especially pickerelweed and duck potato, are showing excellent new growth, associated to spring activity. These desirable plant communities along with the Seminole County herbicide contractor treatments have significantly reduced the amount of invasive torpedo grass from previous years. No water hyacinths were observed.

Secchi (water clarity) was 4.5 feet in a depth of 8.9 feet compared to 6 feet last month. Lake gauge was 74.79 feet above sea level. No triploid grass carp fish were observed.

Greetings Lake of the Woods!

Below please find the latest lake assessments for your lake. Key highlights of this update will include:

- Eelgrass updates
- Hydrilla update & Grass Carp Stocking
- Monthly herbicide treatment status
- Continued encouragement of planting native aquatic plants along your shoreline
- Recommendations for you and your lake

On September 7th 2011, Seminole County Lake Management Program (SCLMP) Thomas Calhoun and Michelle Shelton surveyed the aquatic plants on Lake of the Woods.

There is an abundant amount of native submersed aquatic vegetation (SAV) in Lake of the Woods with eelgrass continuing to be the dominant species. Eelgrass is found to a depth of 5 ft and is restricting boat access in some areas and topped out in depths less than 3 ft. If you are having access issues due to eelgrass, you can apply for an aquatic plant removal permit through the Florida Wildlife Conservation Commission (FWC) at http://www.myfwc.com/license/aquatic-plants.

Please note eelgrass management is not financed through the MSBU assessment nor listed on our aquatic weed control permit issued by FWC. Eelgrass treatments (which we do manage in other lakes for recreational access only) are very costly. In order to add eelgrass management to the current MSBU, the annual MSBU assessment would require a significant increase. Please contact your lake liaison representatives to discuss if interested in adding/financing this service. Otherwise, should an individual wish to manage this native aquatic plant, for individual recreation access only, you would need to contact your FWC regional biologist, CJ Greene, at Carl.Greene@myfwc.com or 407.858.6170 to obtain a permit. Permit is free. We can meet with you and assist in providing you technical information related to eelgrass management (what chemicals/product, where to purchase, contractors, etc) and help you with filling out your own FWC permit for eelgrass management. We have met with several individuals assisting in this manner already.

Photo: Eelgrass blocking access.

Other SAV observed during the survey included: southern naiad to a depth of 6 ft, road grass to a depth of 6 ft, coon tail to a depth of 5ft and Hydrilla to a depth of 7 ft. All species where found intermixed within the eelgrass and also intermixed on the deep side of the eelgrass. Hydrilla was found very healthy and expanding along the perimeter of the lake. We will evaluate hydrilla herbicide treatment needs in October and advise accordingly.

Photo: Healthy hydrilla found during inspection.

Photo: Southern Naiad found during inspection.

Most planted native emergent aquatic plant populations, especially pickerelweed and duck potato, are showing excellent new growth. These desirable plant communities along with the Seminole County herbicide contracted treatments have significantly reduced the amount of invasive torpedo grass from previous years. No water hyacinths were observed.

Photo: Native emergent plants from past restoration events expanding.

Secchi (water clarity) was 4.1 feet in a depth of 10 feet compared to 6 feet last month. Lake gauge was 74.75 feet above sea level. No triploid grass carp fish were observed. Lake of the Woods was stocked with 150 fish on May 6th, 2011, of which their effects are continually being evaluated within our integrated lake management plan.

Recommendations for your waterbody:

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 pointless 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. Control of aquatic and wetland plants could require a Florida Fish and Wildlife Conservation Commission (FWC) aquatic plant control permit (such as eelgrass). Contact CJ Greene at (407) 858-6170 or Carl.Greene@myfwc.com for a permit and recommendations especially for eelgrass management.