Greetings Twin Lake,

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

- Aquatic plant and lake observations
- Continued encouragement of planting native aquatic plants along your shoreline
- Recommendations for you and your lake

On 23 August 2011, Seminole County Lake Management Program (SCLMP) staff Thomas Calhoun and Gloria Eby surveyed the aquatic plants in Twin Lake.

There were four species of submersed aquatic vegetation (SAV) observed, of which, filamentous algae was the most abundant. Other SAV included: road grass (*Eleocharis baldwinii*), pondweed (*Potamogeton pusillus*) and eelgrass (*Vallisneria americana*). Deeper than 12 feet, the bottom was covered with leaves. Also present was floating algae in many areas of the lake.

Photo: Filamentous algae found during inspection.

With the planting events' continued success, the dominant emergent aquatic plant species (canna, duck potato and pickerelweed) soon will have a greater presence than the invasive exotic torpedo grass. Torpedo grass should continue to be treated. To further help the expansion of native vegetation, treated torpedo grass should be removed once it dies.

Photo: Beneficial native plants planted during restoration event.

Other native emergent aquatic plants observed included: pennywort, rush (Juncus effuses), creeping primrose willow (Ludwigia repens), spatterdock lily, and maidencane grass. The secchi reading (measurement for water clarity) was 6.1 feet in a depth of 10.6 feet.

Water quality parameter continues to be collected for Twin Lake on a quarterly basis. We do recommend a resident becoming a LAKEWATCH volunteer for the lake. This is a free monthly water quality program offered by the University of Florida. What is required from you? Sampling the lake for about 45 minutes to 1 hour per month. The only equipment you will need is some kind of boat (jon boat, canoe, etc.). A LAKEWATCH limnologist (lake scientist) from the University of Florida will come and train you (and others around your lake that would be interested in being backup samplers) how to take samples and provide you with the necessary equipment. This is excellent information that provides important water quality data for your lake and will be placed on our watershed atlas site.

Recommendations:

1. Work together or establish a lake association with other lakefront owners to control and if possible, eliminate your lake's invasive plants. Do continue to increase native aquatic plantings along shoreline (such as canna, pickerelweed and duck potato). Have at least one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues, especially lake management recommendations. Seminole County Lake Management staff would be glad to

present our findings from this survey and possibly additional data. Contact Gloria Eby, (407) 665-2439.

2. Increase educational outreach programs i.e. Shoreline Restoration Workshops (planting days with free aquatic plant material), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and reduction of resident pollution (contact Seminole County Lake Management Program, Gloria Eby, (407) 665-2439 for assistance).
3. Leaf litter- a major contributor to the lake- Pursue education to inform importance of keeping yard debris off the street and out of the lake. We recommend frequent mechanical street sweeping services especially during peak foliage fall and installation of leaf traps at the inflow locations. Work with county to see if services or funds can be assisted for these recommendations (already requested) or if an MSBU can be pursued for such activities in funding is not available.
4. Although you have a triploid grass carp permit per FWC you do not have fish remaining on the permit and you would need to amend your permit (which is free) to add more fish to the existing permit in case you get an invasive plant, like hydrilla, that you will need to possibly add more fish. However, we do not recommend any fish for this lake at this time. As is there is little/no vegetation for the fish to feed upon.
5. Treat invasive (torpedo grass and wild taro): Either do it yourself obtain the required herbicide (we can provide some sources) or have your hired aquatic herbicide application company treat. Approximate monthly costs would be $150 per treatment.
6. These recommendations could be managed by Seminole County by establishing a Municipal Service Benefit Unit (MSBU); a funding format for aquatic weed control via special assessment. For additional information contact Carol Watral at (407) 665-7164 or cwatral@seminolecountyfl.gov or http://www.seminolecountyfl.gov/fs/msbu/.