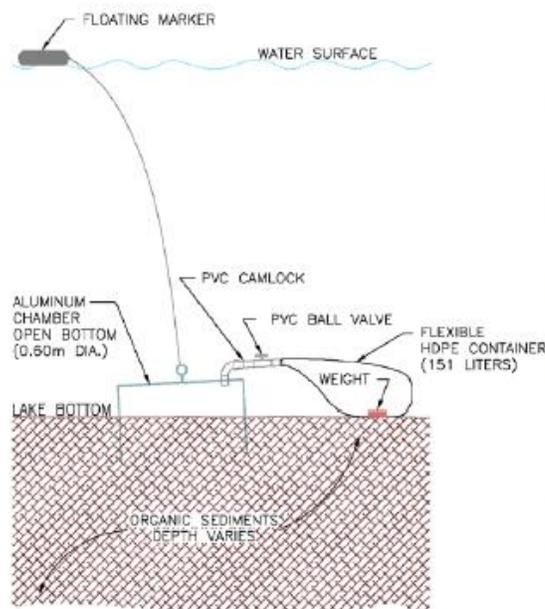


Lake Pickett Study

Environmental Research & Design, Inc. (ERD) is currently conducting a study to develop a water and nutrient budget for Lake Pickett. This study, funded by Seminole County and Orange County, includes a 12 month field monitoring program to assist in quantifying water and nutrient inputs to the lake. One of the inputs under evaluation by ERD is groundwater seepage, which consists of shallow subsurface inflow around the perimeter of the lake. Groundwater seepage has been shown to be a significant input to many lakes in the Central Florida area. This input is evaluated using an aluminum underwater chamber which is placed on the bottom of the lake. A schematic of a typical chamber is shown below. Water which seeps into the lake from groundwater is collected in a plastic bag which is attached to the seepage meter. The bag is retrieved by a diver, and the volume of water is measured and a sample collected for lab analyses. This information is used to estimate the volume and quality of groundwater seepage entering the lake.

A total of 25 seepage meters will be installed in Lake Pickett by ERD during early August 2015. 8 of the meters will be located on the west lobe and 17 will be located on the east lobe. These meters will remain in the lake until August 2016. ERD personnel will collect samples from the meters on a monthly basis. The locations of the seepage meters are indicated by oval orange or white round floats connected to the meter by a steel cable.

Please do not disturb this equipment. If you notice a meter which has been damaged, please call ERD at 407-855-9465.



Schematic of Seepage Meter



Typical Marker Float

Lake Management as a Whole

The ownership and responsibility for Lake Pickett belongs primarily (and collectively) to the owners of the property that surrounds the lake. When you became a resident on your lake, you assumed an obligation to share with other lakefront owners the responsibility of good management of your waterbody. You and your neighbors are the lake stewards, not of just your own waterfront, but collectively the lake as a whole.

One concept of the whole lake management plan is to reduce invasive exotic plants (such as torpedo grass) creating a more beneficial shoreline for Lake Pickett. By removing these invasive plants, you are helping to prevent them from returning, reducing the nutrient loading that invasive plants deposit into the lake (plant biomass), and reducing the overall cost of long term maintenance.

Native aquatic plants are a key factor in reducing nutrients contained in run-off coming from your yard into the lake, preventing erosion of your shoreline, providing habitat for fish and wildlife, and aids in keeping invasive plants (such as torpedo grass and hydrilla) from establishing/re-establishing due to competition for space. The better you keep the invasive plants out of your waterfront, the more your native plants will establish and reduce the time you that you will have to spend managing the site. Seminole County Lake Management Program will be glad to schedule a site visit to help you establish your individual management plan needs in conjunction with the MSBU funded efforts. Additionally, our sponsored weekend workshops have provided residents with guidance in accomplishing these steps resulting in shoreline improvements which have been documented in nearby lakes. A Shoreline Restoration Event is being organized with your liaison for 2016 so be sure you are on the email list to receive event information. The best way to keep informed about your lake is through our bioassessment reports and attending community meetings specifically for your lake. These reports and advertisements are distributed via email. Please contact Carol Watral at cwatral@seminolecountyfl.gov or 407-665-7164 to be added to the email distribution list for Lake Pickett.

Lake Recommendations:

- 1 Work together with other lakefront owners to control invasive plants and increase native aquatic plantings along shoreline (such as 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.
- 2 Take advantage of free educational outreach programs i.e. Shoreline Restoration Workshops (planting days), Florida Yards and Neighborhoods (FYN), Lake Management Video mail-outs, and presentations on decreasing “pointless personal pollution” by reducing overall fertilizer use, use only using phosphorous-free and slow-release nitrogen fertilizers, keeping a functional shoreline with beneficial native aquatic plants, and keeping grass clippings out of your lake and the stormdrains that lead to the lakes. . You can also visit the Water Atlas (<http://www.seminole.wateratlas.usf.edu/>) to read interesting information about your specific waterbody, and our website (http://www.seminolecountyfl.gov/pw/roadstorm/wq_lakemgt.aspx) to watch educational videos and download lake management pamphlets. Please contact Seminole County Lake Management Program, at (407) 665-2439 for further assistance.
- 3 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list in order to share this information with others. Valuable information is contained within these updates.