Greetings Lakes Martha and Burkett Residents!

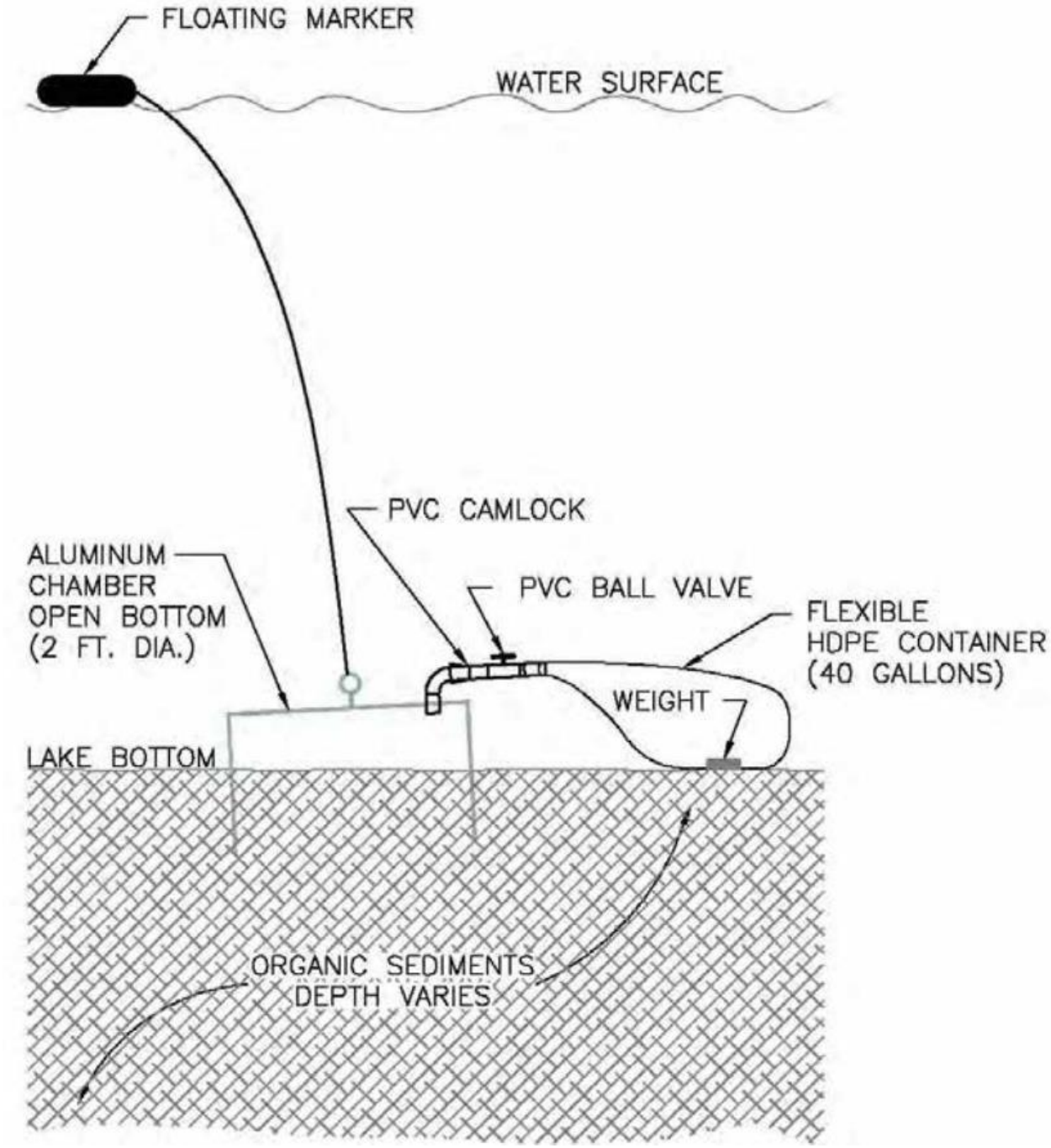
Please find the latest bioassessment of your lake below. The next scheduled inspection for your lake is March 13th. Key highlights of this update include:

- Nutrient study and seepage meters
- Hydrilla update
- Submersed Aquatic Vegetation (SAV)
- Emergent vegetation
- Recommendations for you and your lake

On **December 14th, 2016**, Seminole County Lake Management Program (SCLMP) staff, Thomas Calhoun and Joey Cordell, surveyed the aquatic plants in **Lakes Martha and Burkett**.

Environmental Research and Design has placed seepage meters around both lakes as part of a yearlong nutrient study. These meters consist of a metal structure buried in the sediment, a bag for water collection, and a marking buoy. Please do not disturb these seepage meters.

Photo: Seepage meter illustration.



Hydrilla was observed in Lake Martha but not in Lake Burkett. The one sprig that was found was located on the northeast side of Lake Martha.

Eight species of native submersed aquatic vegetation (SAV) were observed during the inspection including: lemon bacopa to 2 ft, baby's tears to 1 ft, loose water-milfoil to 2 ft, southern naiad to 2 ft, stonewort to 3 ft, eelgrass to 4 ft, and two species of bladderwort to 6 ft. This is a healthy level of diversity for the lakes. Lemon bacopa has increased in the canal.

Photos: Bladderwort.

Photo: Stonewort.

Exotic emergent vegetation observed during the inspection included: wild taro, dwarf papyrus, primrose willow, torpedograss, cuban bur-head sedge, creeping oxeye, and papyrus. Cuban bur-head sedge is spreading on Lake Martha.

Native emergent vegetation included: buttonbush, sawgrass, spikerush, pennywort, hempvine, spatterdock, fragrant water lily, maidencane, pickerelweed, duck potato, carolina willow, bulrush, fire flag, cattail, and climbing aster.

Photo: Fragrant water lily and cattail.

The SERV planting sites were inspected during the assessment. Some sites were found healthy and expanded, but several sites were struggling to establish.

A surface algae bloom was present on the east side of Lake Burkett.

Photo: Swirls of a surface algae.

The secchi reading (measurement for water clarity) was 7.1 feet in a depth of 23.2 feet. One grass carp fish was observed during the inspection. All of this information can be found online at either County's Water Atlas website:
http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7521&wbodyatlas=lake
http://www.orange.wateratlas.usf.edu/lake/?wbodyatlas=lake&wbodyid=7521

Lake Recommendations:

1 Work together or establish a lake association 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 and only using phosphorous-free fertilizers. 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 or Orange County Lake Management Program at (407) 836-1409 for further assistance.