

Greetings Mirror Lake Residents,

Please find the latest bioassessment report for your lake below. Key highlights of this update include:

- Seminole County Fertilizer Ordinance
- Hydrilla status
- Submersed aquatic vegetation (SAV)
- Native emergent vegetation
- Herbicide treatment for lily pads
- Invasive emergent vegetation
- Recommendations for you and your waterbody

Seminole County recently passed a Fertilizer Ordinance in an effort to reduce nutrient loading of waterbodies like Mirror Lake. The new ordinance places restrictions on the type of fertilizers used, time of fertilization, and placement of fertilizers. For more information about Seminole County's Fertilizer Ordinance please visit [Seminolecountyfl.gov/fertilizer](http://seminolecountyfl.gov/fertilizer)

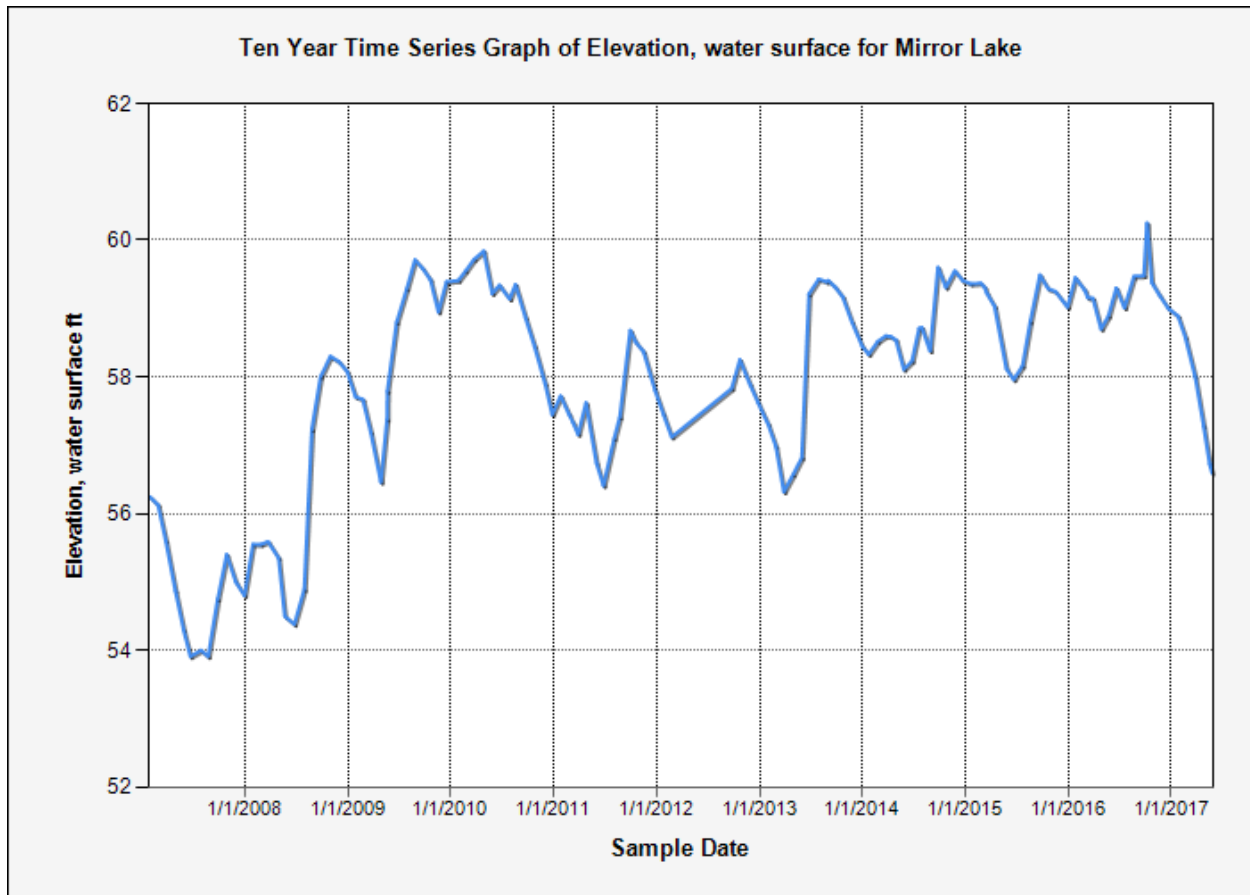
On **June 2<sup>nd</sup>, 2017**, Seminole County Lake Management staff, Thomas Calhoun and Gloria Eby, surveyed the aquatic plants in **Mirror Lake**.

No hydrilla was found during the inspection.

Water elevation was very low at the time of inspection (see below Figure) causing much of the submersed aquatic vegetation (SAV) to reach the surface. More information about Mirror Lake's water elevation can be found on the Seminole County Water Atlas at:

<http://www.seminole.wateratlas.usf.edu/lake/?wbodyid=7616&wbodyatlas=lake>

**Figure: Water surface elevation for Mirror Lake.**



Seven species of native submersed aquatic vegetation (SAV) were found during the inspection. These native species included: lemon bacopa, stonewort, eelgrass, southern naiad and three species of bladderwort. Lemon bacopa was found expanding around the lake. A surface algae was noted in areas where SAV was reaching the surface.

**Photo: Low water elevation.**



Native emergent vegetation found during the survey included: golden canna, spikerush, pennywort, duck weed, hempvine, american lotus, spatterdock, fragrant water lily, banana lily, maidencane, pickerelweed, duck potato, carolina willow, cordgrass, and cattail. American lotus was noted as expanding in a few areas of the lake. This species will be targeted in a future herbicide application.

**Photo: American lotus expanding along the shoreline.**



Invasive emergent vegetation included: alligator weed, wild taro, primrose willow, torpedograss, and cuban bur-head sedge. Many areas were showing signs of the recent herbicide treatment for emergent vegetation. Cuban bur-head sedge was expanding in the southern lobe of the lake and will be targeted during the next herbicide application.

The Secchi measurement (water clarity) was not taken during this inspection. The water elevation at the time of inspection was 56.86 feet above sea level. No grass carp were observed during this inspection.

### **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 will be glad to present our findings from this and other surveys. Continue to increase native aquatic plantings along shorelines (such as pickerelweed, duck potato, and canna).

2 Consider increasing street sweeping services during times of peak leaf fall to ensure that this debris does not enter waterways. Leaf debris contains high levels of phosphorous that can negatively impact your lake.

3 Increase outreach programs, i.e. Shoreline Restoration Workshops, Florida Friendly Landscaping (FFL), Lake Management Video mail outs, and reduction of personal pollution by: decreasing fertilizer usage and following the “New” Seminole Country Fertilizer Ordinance guidelines ([www.seminolecountyfl.gov/fertilizer](http://www.seminolecountyfl.gov/fertilizer)), by using only phosphorous free fertilizer, at least 50% or more slow release nitrogen, no nitrogen or phosphorous during June 1<sup>st</sup> – September 30<sup>th</sup>, and utilizing no fertilizer within 15 feet of any waterbody, including wetlands. Also, keeping a functional shoreline with beneficial native aquatic plants along with keeping grass clippings out the stormdrains and your lake will help aid in protecting your lake. Contact Seminole County Lake Management Program at 407-665-2439 for more information about the free educational programs available.

4 Help spread the word! Obtain email addresses from neighbors not currently on the distribution list so that these reports can be shared with everyone. Valuable information is contained within these assessments.