Bog moss, a beneficial native submerged aquatic plant that is often misidentified as hydrilla, is present in dense mats along the perimeter of Lake Pickett. It is the dominant submerged aquatic vegetation (SAV) species to a depth of 8 feet and remains in competition with other SAV to a total depth of 13 feet. The presence of this native SAV is very good for Lake Pickett since it makes it more difficult for hydrilla to expand due to natural competition for sunlight and space. Additionally, native SAV play a very important factor in the health and water quality of your lake as these plants aid in absorbing nutrients from the local watershed keeping Lake Pickett clean and healthy. Bog moss is not a part of the treatment plan for the aquatic weed control MSBU/MSTU as it plays a significant role in providing a healthy ecosystem for Lake Pickett.

The Trophic State Index (TSI) is a classification system designed to “rate” individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is by its assigned TSI score. A “Good” quality lake is one that meets all lake use criteria (swimmable, fishable and supports healthy habitat). The current TSI score for Lake Pickett is 34, which classifies it as “Good.” A TSI score of 60 or above is considered impaired (or polluted) lake. The two graphs to the right indicate nutrient levels (TSI and Total Phosphorous [TP]) for your lake over time. Continued reduction of TP sources (personal pollution, run-off, landscaping practices, shoreline erosion) and beneficial SAV presence can help reduce phosphorous in your lake. If TP sources are not reduced, then the potential for algae blooms is increased.

As the level of nutrients entering a lake is a significant factor to its water quality and plant life, and these nutrients enter from the land abutting the lake, the lakefront residents are viewed as key influencers on the successes of lake management and water quality. Bog moss has provided Lake Pickett with excellent fisheries habitat and nutrient uptake capabilities leading to greatly improved water quality and water clarity scores over time.
That’s Great, But Have You Seen the Shoreline?

Undoubtedly, there are some disadvantages to bog moss especially during the peak growing season of summer. Piles of plant fragments, and if it’s windy enough - uprooted plants may wash ashore and require disposal. Unfortunately this is the proverbial “catch 22” with bog moss. As a Florida beneficial native aquatic plant, this species is protected by the State's aquatic plant management statutes regulated by the Florida Fish and Wildlife Conservation Commission (FWC). Because FWC’s mission is to maintain natives for the protection of habitat, as lake managers and property owners, we are limited in the amount of bog moss removal/maintenance that can occur within a given lake. Bog moss is sensitive to cold weather and will naturally experience a “winter dieback” during which time the plant biomass becomes greatly reduced.

Suggestions for Lakeside Living with Bog Moss… a Balanced Approach

As previously suggested to several property owners, what you can do is apply for or amend (if you already have one) your free FWC aquatic plant permit to allow for bog moss removal for direct lakeshore access. You are allowed this access corridor by state statute for swimming/recreation purposes of up to 50 feet or 50% of your lake frontage, whichever is less. In most cases, for Lake Pickett, it is limited to 50 feet. Below is an example of a typical 100 foot lakeshore parcel illustrating a permitted access corridor for recreation. By retaining some portion of your shoreline with native aquatic plants, and permitted portions that are managed (cleared), this provides a balanced approach for lakeside living. Within Orange County, a property owner is entitled to vegetation free access corridor of 20% or 30 feet of total linear shoreline, whichever is greater, without a permit. If you want to remove vegetation outside of the access corridor, then a Lakeshore Protection Permit (LSP) is required.

Please note that Seminole County is neither the permitting agency nor the funding source (via MSBU) for this type of activity. This would have to be individually achieved through your free aquatic plant permit by contacting your FWC regional biologist at 407-858-6170 or by e-mail at carl.greene@myfwc.com.

Shoreline 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 or an owner of property with deeded lake access rights, 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 property, but collectively of 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. By routinely removing the invasive plants from your waterfront, you are providing greater opportunity for the desired native plants to establish, which over time will reduce the time and cost invested in managing the waterfront. Seminole County Lake Management Program (SCLMP) 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 provide residents with guidance in accomplishing these steps resulting in shoreline improvements which have been documented in nearby lakes.

If you have additional questions/concerns, please contact the following:

**ORANGE COUNTY:** Ryan Patrick, Orange County Environmental Protection Division, 407-836-1400, Ryan.Patrick@ocfl.net

**SEMINOLE COUNTY:** Gloria Eby, Seminole County Lake Management Program, 407-665-2439, geby@seminolecountyfl.gov; Carol Watral, Seminole County MSBU Program, 407-665-7164, cwwatral@seminolecountyfl.gov; or Jay Zembower, Lake Pickett Liaison, cardoctor1@hotmail.com

**FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION:** CJ Greene, Free Aquatic Plant Permit, 407-858-6170, carl.greene@myfwc.com