Vision *an overall statement for what you want Big Blake Lake to look like*

Big Blake Lake is a sustainable, healthy environment for people, recreation, wildlife, and native plants. Engaged and informed stakeholders protect the lake and its watershed

Guiding Principles *provide guidance on how the lake management plan will be implemented*

Member education, engagement, and neighbor-to-neighbor communications for all generations are important to meet the vision of and manage the future of Big Blake Lake

Lake management decisions are data driven and evidence-based to incorporate an analysis of past, present, and future data and implemented in a manner that will limit unintended negative environmental impacts

Clear and concise multi-channel communications to members express the ever evolving nature of lake management and the complexity of issues

**Goal X: Reduce nuisance algae and plant growth by reducing watershed and internal sources of phosphorus**

Install shoreline native plantings, diversion practices, rock infiltrations practices or rain gardens on X shoreline properties

* *Provide an educational message regarding the importance of native vegetation, diversion practices, and rock infiltration practices to reduce watershed sources of phosphorus*
* *Organize an educational session highlighting simple changes to properties that will improve Big Blake Lake*
* *Offer free annual Healthy Lakes property audits to identify property owners interested in installing practices*
* *Prepare a Healthy Lakes Grant application to provide technical assistance and cost sharing to fund practices by 75%*
* *Determine a 25% match for the Healthy Lakes Grant (District on behalf of individual property owners or individual property owners)*
* *Recognize shoreline property owners who have installed practices*
* *Organize a tour of properties where successful practices have been installed*

Support harvesting of curly leaf pondweed to remove nutrients from Big Blake Lake

* *Develop and deliver an educational message to explain the relationship between harvesting and phosphorus removal from Big Blake Lake*
* *Review and update the Big Blake Lake harvesting plan on an annual basis*

Consider the purchase of highly erodible/ecologically sensitive land if option arises

* *Research and explore the formation of a conservancy*
* *Research and explore grant opportunities for acquiring land*
* *Consider forming a committee to oversee the purchase of high erodible/ecologically sensitive land*
* *Consider the opportunity to provide recreational uses if land is purchased*

Engage the agricultural community as a partner in reducing watershed runoff

* *Work with the Polk County Land and Water Resources Department to identify agricultural producers in the Big Blake Lake watershed*
* *Develop a program to incentivize the installation of farmland best management practices*
* *Develop and deliver an educational message to explain the need and purpose of the program*
* *Recognize agricultural producers who have participated in the program*
* *Prepare a Lake Planning Grant application to fund soil sampling on agricultural fields in the watershed*
* *Determine a match for a Lake Planning Grant*

Ensure that stakeholders understand the relationship between boat traffic and phosphorus release from the sediment

* *Develop and deliver an educational message to members of the District*
* *Develop and deliver an educational message to anglers in fishing tournaments*

Upgrade non-compliant septic systems by engaging and educating X shoreline property owners  
Upgrade X non- compliant septic systems by engaging and educating shoreline property owners

* *Develop and deliver an educational message regarding the relationship between failing septic systems and increased watershed sources of phosphorus*
* *Identify shoreline property owners willing to upgrade their septic system*
* *Prepare a Lake Protection Grant to fund upgrades to septic systems*
* *Determine a match for a Lake Protection Grant (District or individual property owners)*
* *Recognize shoreline property owners who have participated in the program*

**Goal X: Protect, maintain, and enhance fish and wildlife habitat**

Maintain and enhance desirable populations of game fish in Big Blake Lake

* *Work with fisheries biologist to determine locations for fish sticks and other habitat improvements*
* *Identify property owners interested in installing fish sticks and other habitat improvements*
* *Prepare a Healthy Lakes Grant application to fund the installation of fish sticks*
* *Recognize shoreline property owners who have installed fish sticks*
* *Develop and deliver an educational message regarding the importance of leaving trees and branches that fall into the lake for the habitat they provide to fish*
* *Promote the growth of native aquatic plants*

Restore developed shorelines to more native habitats

* *Provide an educational message regarding the importance of native vegetation for fish and wildlife habitat*
* *Conduct a shoreline inventory to document areas of natural vegetation and lawn along the shoreline of Big Blake Lake*
* *Develop a program to provide incentives to property owners who quit mowing a portion of their shoreline*
* *See actions under Goal X, Objective X*

**Goal X: Provide information and education with the intent of changing stakeholder behaviors to protect Big Blake Lake**

Use existing channels to deliver at least one focused educational message per year to meet the goals of this plan

* *Articles in the Big Blake Lake Bugle*
* *Webpages on the Big Blake Lake website*
* *Emails to the Big Blake Lake list serve*
* *Presentations and brochures at the Big Blake Lake Spring and Annual Meeting*
* *Press releases in local newspapers*
* *Special educational sessions such as pontoon classrooms, Healthy Lakes workshops, and CBCW trainings*
* *Posts on the Big Blake Lake Facebook page*

Explore new and innovative methods to provide information and education

* *For each focused educational message develop at least one new method to communicate information* 
  + *Example: Tour of properties that have installed shoreline buffers and rain gardens*
  + *Example: Stickers or signs to symbolize participation in a program as a way to start a conversation with neighbors*

**Goal X: Evaluate the progress of lake management efforts and needs through monitoring**

Continue current data collection efforts to evaluate progress

* *Ensure that Citizen Lake Monitoring Volunteer is in place for each year to collect phosphorus, chlorophyll, and secchi data*
* *Conduct yearly spring and fall aquatic plant point intercept surveys*

Expand data collection efforts depending on needs

* *Monitor culverts to determine phosphorus loads and identify the need for sediment basins*
* *Conduct a shoreline inventory to document areas of natural vegetation and lawn along the shoreline of Big Blake Lake*
* *Repeat the 2013-15 water quality study in five or ten years*
* *Consider a sediment core in the south basin*
* *Consider the implementation of a turion study to document effectiveness of harvesting*

**Goal X: Prevent the introduction of new invasive species and eradicate newly introduced invasive species**

**Ensure that lake users understand the steps necessary to prevent invasive species**

* *Continue a successful Clean Boats, Clean Water monitoring and education program at each boat landing using volunteers*
* *Participate in additional WDNR statewide programs including the Landing Blitz and Drain Campaign*
* *Ensure that signage at the boat landings is in place each year and updated as necessary*
* *Distribute brochures and the waterproof Big Blake Lake map with aquatic invasive species information*
* *Work with the Polk County Sheriff’s Department to encourage enforcement of the Do Not Transport Ordinance*

**Implement a monitoring program to quickly identify the introduction of new invasive species**

* *Attend the countywide Citizen Lake Monitoring Network for invasive species which trains volunteers to identify and monitor for aquatic invasive species*
* *Form a committee of volunteers to monitor for invasive species over the course of the growing season with a focus on boat landings and other areas with high potential for introduction*
* *Contract with professionals to implement a monitoring program for aquatic invasive species*
* *Develop and implement a rapid response plan so that new populations are addressed quickly and efficiently*

**Goal X: Manage the spread of curly-leaf pondweed and other nuisance plants (coontail) to allow for uninhibited navigation of the lake for recreational purposes.**

**Reduce the density of curly leaf pondweed and coontail to allow navigation through existing beds**

**Maintain navigation to homes and public boat landings**

**Goal X: Decrease curly-leaf pondweed frequency and density and promote substantial recovery of the native aquatic plant community**

Reduce curly-leaf pondweed average density rating to 1

Reduce lake-wide curly-leaf pondweed sample site frequency of occurrence by 60% in harvested areas (98% of sample sites in 2004)

Increase FQI to 20

The District will harvest nuisance mid-summer native plant coverage, primarily coontail

Harvesting occurs before turion formation and deposition

Harvesting begins based on visual observation and includes areas within 100 feet of shore. After June 15 harvesting may occur in water as shallow as 30 inches but not within 100 feet of shore

Harvesting does not include sensitive areas and areas 100 feet from shore

Individual riparian landowners may contract with a private chemical treatment company if they are not within the sensitive areas

* Must be approved by DNR and follow NR 107 permit requirements
* District will monitor requests for compliance with plan
* Company will provide GPS locations to individuals who receive service to Ford Elliott who will not these locations on a map which will be made available to citizen upon request and onboard the harvester
* More bullets page 5

Monitoring to indicate goals are being met

If goals aren’t being met, committee will reconvene and adapt goals and objectives as necessary

**Goal X: Preserve and enhance the diverse native aquatic plant community in Big Blake Lake**

Implement harvesting according to the harvesting plan to limit unintended negative impacts to native plants

Limit the removal of native plants to areas with severe navigation problems or nuisance conditions

Allow only limited plant control in designated sensitive areas

Develop and deliver an educational message regarding the importance of native plants for fish and wildlife habitat, sediment stabilization, water quality, and protection against invasive species

**Goal X: Protect sensitive areas from disturbances caused by harvesting or herbicide applications**

No active management occurs in sensitive area A

Navigation areas in sensitive area B will be limited to 25 feet wide and cut the week before Memorial Day (mainstem that breaks off for individual properties)

A navigational channel that parallels the shoreline may be implemented provided wild rice is not impacted and GLIFWC and WDNR have no concerns

Individual herbicide applications will not be allowed in sensitive areas

Harvesting will not take place within 100 feet of the shoreline to prevent harm to important fish spawning and nursery habitat