*Vision an overall statement for what you want the waterbody to look like*

Big Blake Lake is free of nuisance plant and algae growth and supports recreational uses and wildlife

Big Blake Lake provides a healthy sustainable environment for people, recreation (??), wildlife, and plants with engaged and informed stakeholders who protect the lake and its watershed

Big Blake Lake is a waterbody, with moderate nutrient levels and diverse fish, wildlife, and plants

 Sustainable Protect the water Information and education

Reduce plant growth Education

Some thing all plants are nuisance

Reduce prevent eliminate invasive species (not just plants)

Nuisance/harmful algae

*Guiding Principle provides guidance on how the lake management plan will be implemented*

Communication regarding lake management highlights a simple take away message and uses personal contact whenever possible

Member engagement and personal connections are important for successfully managing Big Blake Lake

Education will be used to meet plan goals when enforcement is not possible

Future stewards

All generationsare engaged to meet the vision for Big Blake Lake

Lake management decisions are driven by what’s best for the lake according to past, present, and future data somehow combine one below it and highlighted one below

An understanding and analysis of data drives lake management decisions

Lake management decisions are driven by what is best for the resource

Lake management activities are conducted in a manner that will limit unintended environmental impacts according to an analysis of past, present and future data

Communication regarding lake management is easy to understand, concise, accessible, frequent and uses multiple channels

Lake residents and users are provided information to understand the ever evolving nature of lake management, the complexity of issues, the status of projects and activities add in with lake management goal, the costs and benefits of actions, and the opportunity and techniques to reduce or prevent any negative consequences of lake use and lakeside living

 but include in GOA

*Goals broad statements of direction*

*Objectives measurable steps towards goals*

*Actions activities to accomplish objectives*

*Goals and Objectives*

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

**Improve water quality by…**

* Watershed sources
	+ Septic
	+ Farm field runoff
	+ Development
* Internal sources
	+ Sediment (boat traffic)
	+ CLP die off

**Protect, maintain, and enhance fish and wildlife habitat include education

Promote the preservation and restoration of natural vegetation along the shoreline

Restore developed shorelines to more native habitats**

**Maintain and enhance the natural beauty of Big Blake Lake**

* Shoreline restoration program
* Rain gardens
* No mow areas
* Fish sticks
* Not removing trees/branches that fall into lake

**Increase communication and member engagement**

**Increase information and education opportunities

Provide education regarding lake management

Expand education efforts emphasizing the following topics: …provide a list**

**Put education as a goal and under each goal**

**Explore new and innovative methods to provide information and education to stakeholders**

**Education and behavior**

**Recognizing changes or things that are happening with regards to restoration**

**Prevent the spread and introduction of aquatic invasive species**

**Prevent introduction of invasive aquatic organisms and limit the impacts of those introduced to the lake**

**Prevent the introduction of invasive species and eradicate newly introduced AIS**

**Manage curly-leaf pondweed to minimize navigation and prevent it’s spread**

**Maintain navigation for fishing, boating, and access for lake residences**

**Maintain safe and effective navigation**

**Reduce levels of nuisance aquatic plants to allow recreational uses such as swimming, fishing, and boating**

**Maintain native aquatic plant functions**

**Preserve our native aquatic plant community**

**Protect the natural functions of diversity native plants including fish and waterfowl habitat, sediment stabilization, protection against invasion by non-native species, and natural aesthetics**

**Minimize environmental impacts of aquatic plant management**

**STOP**

**Maintain and improve current water quality and in-lake nutrient levels

Reduce nutrient pollution to the flowage

Reduce runoff of nutrients and sediment from the watershed**

Objectives may include:

* Engage residential owners in reducing runoff
* Reduce phosphorus loading from residential sources by X% or X pounds
* Support installation of residential best management practices/practices that reduce runoff to the flowage
* Engage agricultural producers in reducing runoff
* Reduce phosphorus loading from agricultural sources by X% or X pounds
* Support installation of agricultural best management practices/practices that reduce runoff to the flowage

*Actions may include: providing technical assistance for property owners, cost sharing installation of best management practices, considering purchase of highly erodible/ecologically sensitive land if option arises, free evaluation of septic systems, stormwater practices in the City of Amery, education initiative*

**Encourage lake processes that minimize the release of nutrients from within the flowage**

Objectives may include:

* Engage stakeholders in reducing internal loading
* Reduce internal loading by X%
* Support practices that reduce internal loading
* Conduct further studies to better understand internal loading

*Actions may include: study to determine phosphorus release from CLP die off, slow-no wake to minimize disturbance of sediments, continue harvesting, conduct a study on results of harvesting, study to determine feasibility of dredging and drawdown to address sediments, education initiative*

**Protect, maintain, and enhance the fishery

Protect, maintain, and enhance fish and wildlife habitat**

Objectives may include:

* Maintain desirable levels of game fish in the flowage
* Assess and improve fish habitat
* Balance fish populations to encourage zooplankton
* Increase understanding of options for attracting wildlife to property
* Protect existing natural areas with native vegetation
* Enhance shoreline vegetation

*Actions may include: fish stocking, installation of fish sticks, communication with DNR, cost sharing shoreline buffers, purchase of ecologically sensitive land, conservation easements to preserve undeveloped lands, establishment of slow-no wake zones, enforcement of current slow-no wake requirements, education initiative***Maintain and enhance the natural beauty of the flowage**

**Promote the preservation and restoration of natural vegetation along the shoreline**

Objectives may include:

* Maintain undeveloped natural areas where feasible
* Enhance natural beauty of developed areas
* Create areas for public use

*Actions may include: incentives to encourage restoration/maintenance of buffers, conservation easements, installation of public fishing piers, creation of public parks with walking trails*

**Continue to collect in-lake water quality data

Measure lake management progress by collecting in-lake water quality data

Evaluate the progress of lake management efforts through monitoring**

Objectives may include:

* Continue current data collection efforts
* Expand data collection efforts to include…provide a list
* Consider additional studies to quantify/update a nutrient budget

*Actions may include: citizen lake monitoring data collection (secchi, chlorophyll a, total phosphorus), tributary sampling, track installation and effectiveness of watershed practices, quantify internal loading, study on impacts of harvesting, study on CLP die off*

**Increase information and education opportunities

Provide education regarding lake management

Expand education efforts emphasizing the following topics: …provide a list**

*Objectives and actions may include a list of avenues and methods to communicate information*

*For example:*

*Newsletter
Publish x times per year
Seek assistance from agency staff for appropriate articles*

**Manage native and invasive aquatic plants according to the goals, objectives, and actions outlined in the Aquatic Plant Management Plan**

**Implement the goals of the Aquatic Plant Management Plan**

*Improve water quality on the Apple River Flowage and downstream on the Apple**River*

*Prevent the introduction of aquatic invasive species*

*Maintain navigation for fishing, boating, and access to lake residences*

*Maintain native aquatic plant functions*

*Minimize environmental impacts of aquatic plant management*