

Appendix G

Bass Lake Site Monitoring Sheet

General Information

Date: _____

Time: _____

Location: _____

Lot Size: _____

Neighboring Land Use Activities: _____

Total Points: _____

Weather Conditions:

Temperature: _____

Sky Conditions:

- Clear
- Cloudy
- Rain
- Other _____

Land Use:

- Home
- Agriculture
- Forested
- Open

Water Appearance:

- | | | |
|--------------------------------------|--------------------------------|---------------------------------------|
| <input type="checkbox"/> Scum | <input type="checkbox"/> Foam | <input type="checkbox"/> Muddy |
| <input type="checkbox"/> Milky | <input type="checkbox"/> Clear | <input type="checkbox"/> Brownish |
| <input type="checkbox"/> Oily | <input type="checkbox"/> Green | <input type="checkbox"/> Reds/Purples |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Grey | <input type="checkbox"/> Blues/Black |

Percentage of Alien Plant Species Along Shoreline: (buckthorn, garlic mustard, spotted knapweed, boxelder, wild parsnip, honeysuckle, reed canary grass, purple loosestrife, black locust, western goldenrod, Canada thistle, sumac, prickly ash, autumn olive, amur maple, crown vetch, Japanese knotweed, leafy spurge)

- None
- 1%-15%
- 16%-30%
- 31%-45%
- 46%- over

A list of native plant species can be found at:

<http://www.dnr.state.wi.us/org/water/wm/nps/rg/plants/PlantListing.htm>

Shoreline Inventory

Percentage of Impervious Surface: _____%

Critical Site: _____

Shoreline Vegetation:

Snags (downed trees)

Yes- how many? _____

No

Trees

Density:

None Low Moderate High

Shrubs

Density:

None Low Moderate High

Tall Grass

Density:

None Low Moderate High

Lawns

Density:

None Low Moderate High

Exposed soil/sand

Density:

None Low Moderate High

Rocks

Density:

None Low Moderate High

Aquatic Shoreline Vegetation:

Emergent (rooted in bottom sediments, emerging from surface)

None Discrete Beds Continuous Beds

Density:

Low Moderate High

Floating-leaved (rooted plants with floating leaves)

None Discrete Beds Continuous Beds

Density:

Low Moderate High

Submergent (rooted plants that remain below the water surface)

None Discrete Beds Continuous Beds

Density:

Low Moderate High

Shoreline Buffer Zone:

Depth:

- 36'- over 1'-5'
- 26'-35' 0'
- 16'-25'
- 6'-15'

Stormwater Management

- Detention ponds
- Rain gardens
- Rain barrels

Viewing Corridor:

- Less used _____%
- 30' used

Structures in Water:

- None
- Slip/Dock
- Floating dock
- Floating trampoline
- Other _____

Non-conforming Structures below Ordinary High Water Mark:

- None
- Boat house
- Winter storage
- Cement flats
- Other _____

Noticeable Erosion:

- No
- Yes

Type: _____

Point Awarding System for Bass Lake Site Monitoring

The Bass Lake Rehabilitation District and the St. Croix Land and Water Conservation Department conducted a visual and physical study to see how each individual land owner is contributing to the strategic plan of Bass Lake. This study allows each person to know if they need to improve on their best management practices (BMP) or if they are presently using best management practices. This score is given to let each person know what categories can be improved on. Awarding points in each category goes as follows:

Percentage of Impermeable Surface: Having a very low percentage of impermeable surfaces on your land is a key factor. When the percent gets close or up to 10%, we see a lot more harmful pollutants and major runoff. Allowing this number to stay low keeps your lawns/gardens happy and the lake healthier for you and your family.

- 10 points for no impermeable surfaces
- 7 points for 1%-3%
- 4 points for 4%-6%
- 2 points for 7%-9%
- 0 points for 10% or more

Critical Site: Having something on your land that makes it a critical site means that you are adversely affecting the quality of Bass Lake. This problem can usually very easy to take care of and will quickly show an improvement to the lake's well being.

- -5 points if your land is a critical site

Shoreline Vegetation: Allowing for the growth of shoreline vegetation provides a natural buffer for runoff. Leave dead trees to provide shelter, nesting sites, and food for woodpeckers, wood ducks, and other species. Having a mixture of trees, shrubs, and tall grasses will support a variety of wildlife and birds for your family's enjoyment.

- 10 points for high density of trees, shrubs, and tall grass
- 7 points for moderate or low density of trees, shrubs, and tall grass
- 5 points for snags
- 3 points for no or low density of lawns
- 2 points for moderate or high density of lawns
- 0 points for any density of exposed soil or rock

Aquatic Shoreline Vegetation: Having a lot of aquatic vegetation provides food and habitat for fish and other organisms living in the water. Trying to stay away from fertilizer and pesticides greatly improves on vegetation diversity and density.

- 6 points for each mark of high density
- 3 points for each mark of moderate density
- 1 point for each mark of low density

Shoreline Buffer Zone: The recommended space for a shoreline buffer is 35 feet. Consider clearing vegetation only near your house to reduce moisture and insect problems. If you must have a better view of the water, a funnel-shaped tapered view corridor or meandering pathway help preserve a natural shoreline view and allow for a scenic walk to the lake.

- 10 points for 36' or more
- 8 points for 26'-35'
- 6 points for 16'-25'
- 4 point for 6'-15'
- 2 points for 1'-5'
- 0 points for 0'

Viewing Corridor: Each landowner is allowed up to 30 feet of viewing corridor. When all 30' is cut down this causes runoff problems into the lake. Leaving more vegetation and less open space allows for water to percolate into the soil and recharge your groundwater, giving you more and cleaner drinking water.

- 8 points for no open space
- 6 points for 1%-30%
- 4 points for 31%-60%
- 2 points for 61%-90%
- 0 points for 91% or more

Structures in Water: The least amount of structures that are in the water is best. This allows habitats to grow for great fishing.

- 4 points for having no structures
- 2 points for having the DNR limit
- 0 points for having over the DNR limit

Non-conforming Structures: Having non-conforming structures below the highest water mark allows for pollutants to get into the lake easier. If the water level were to rise to this mark anything could float away and become a pollutant. The least amount of these structures on your property makes Bass Lake a cleaner place your family to swim and play.

- 4 points for having no non-conforming structures below highest water mark
- 0 points for each non-conforming structure below highest water mark

Noticeable Erosion: Having a lot of erosion on your land makes it easy for sedimentation, eutrophication, and contamination to happen on Bass Lake. These three things are detrimental to your day to day activities on the lake. Trying to repair these problems through reducing the amount of erosion will allow you and your family to have safe and fun filled summer days.

- 6 points for no noticeable erosion
- 0 points for having noticeable erosion

Extra points awarded for:

Stormwater Management: Planting rain gardens help prevent the pollutants in stormwater runoff from getting into Bass Lake. They add to the beauty of your yard and are a fun project for the whole family. Rain barrels allow for the use of water in dry periods and can give your inside plants a drink of naturally soft water. (This category was graded from a visual standpoint and from information provided by landowners. If you have any of these and it was not marked, please add to your score.)

- 8 points for detention ponds
- 8 points for rain gardens
- 8 points for rain barrels

Definitions:

Best Management Practice- A method, activity, maintenance procedure, or other management practice for reducing the amount of pollution entering a water body.

Impermeable Surface- Any surface or material that does not permit fluids to pass through it.

Critical Site- those sites that are significant sources of nonpoint source pollution which cause poor lake water quality. Best management practices should be implemented/installed on these sites to help improve the lake water quality.

Percolate- The downward flow of water through the pores or spaces of unsaturated rock or soil.

Non-conforming- A structure which does not meet any one or more of the following dimensional requirements: setback, height or lot coverage, but which is allowed to remain solely because it was in lawful existence at the time this Ordinance or subsequent amendments took effect.

Sedimentation- The accumulation of earthy matter (soil and mineral particles) washed into a river or other water body, normally by erosion, which settles on the bottom.

Eutrophication- The over-enrichment of a water body with nutrients, resulting in excessive growth of organisms and depletion of oxygen concentration.