

Buffer Zone Scorecard

The Buffer Zone scorecard enables users to rank the health of their pond's shoreline and prioritize enhancement efforts. By examining the pond's structure, users will get a better idea of the pond's

ability to provide essential functions such as improving water quality and providing the physical habitat necessary for wildlife.

Description of the Selected Parameters

The parameters of this scorecard will guide users through a series of observations to determine whether pond best practices have been implemented and to what degree. It is recommended that you complete the scorecard in teams of two or more for discussion, consensus, and to limit subjectivity. A pond with an "optimal"

condition for both the buffer and littoral zones is likely the best one could expect. A diverse fish assemblage, a vibrant bird community, and the water quality necessary for reducing chemical inputs and protecting downstream waters would be expected in these ponds.

Scorecard Parameters

Buffer Zone Coverage (Width and Extent)

The vegetated margins of the pond serve to buffer the waterbody from chemicals, landscape debris, and pet waste while providing habitat and protecting the shoreline from erosion. Ideally, a buffer zone is created around the entire perimeter of the pond. The keys to these two parameters are the extent (percentage of the perimeter) and width of the buffer zone, which are directly related to the level of protection provided. Incorporating a buffer zone around all residential ponds is an important aspect of establishing a healthy ecosystem.

Buffer Zone Vegetative Quality and Density

Buffer zone protection of the pond and shoreline is directly related to the density and quality of the plants contained within. A grass buffer that is not mowed provides a marginal level of service. Adding native vegetation to the zone will increase the level of service. Percent vegetated coverage and type of vegetation are scored in these two parameters. Benefits of native vegetation in this zone include stabilizing the shoreline and providing cover for birds. Certain types of vegetation will also attract pollinators and butterflies.

Bank Stability

Bank stabilization and prevention of soil loss are important for the protection of the land around the pond and for overall pond water quality. Bank failure and soil loss are indicators of pond degradation. A visual assessment scores the extent of bank erosion and failure around the shoreline of the pond.

Buffer Zone Width









Optimal: Width of Buffer Zone is greater than or equal to 10 feet.

Suboptimal: Width of Buffer Zone if greater than or equal to 6 feet.

Marginal: Width of the Buffer Zone is greater or equal to 3 feet.

Poor: Width of the Buffer Zone is less than 3 feet.

Examine the width of the buffer zone.

Width of perimeter	< 3 feet		≥ 3 feet		≥ 6 feet		≥ 10 feet	
	1	1.5	2	2.5	3	3.5	4	
								
Shoreline Buffer Zone Extent	○	○	○	○	○	○	○	

Buffer Zone Vegetative Density









Optimal: More than 50% of the Buffer Zone is covered by vegetation other than turfgrass, including trees, shrubs.

Sub-optimal: Between 30-50% of the Buffer Zone is covered by vegetation other than turfgrass, including trees, shrubs, and plants.

Marginal: Between 10 - 29% of the Buffer Zone is covered by vegetation other than turfgrass.

Poor: Buffer Zone vegetation other than turfgrass is essentially absent with less than 10% of the area including plants other than turfgrass.

Look at the amount of vegetation relative to turf grass in the buffer zone.

Amount of Vegetation	< 10%		10-29%		30-50%		51-100%	
	1	1.5	2	2.5	3	3.5	4	
								
Vegetative Density of Buffer Zone	○	○	○	○	○	○	○	

