

# 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 bank stability, 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 that have deep root structures 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 requires extensive root structures that prevent the loss of soil. Deep roots and diverse native vegetation 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 of the extent of bank erosion and failure around the shoreline of the pond are scored in this parameter.











# Buffer Zone Vegetation Quality

**Optimal:** Buffer Zone vegetation includes native trees, shrubs, bunch grasses, native ground cover, or other native emergent plants excluding turfgrass; most plants grow to a natural height; not mowed.

**Sub-optimal:** Native bunch grasses and ground cover are the dominant plant types within the buffer zone; not mowed.

**Marginal:** Turfgrass is the dominant plant type in the buffer zone and is allowed to grow to height of 8 - 12 inches; not mowed.

**Poor:** Turfgrass is the dominant plant type in the buffer zone, is mowed to a stubble height no more than surrounding land

Amount of Vegetation	Poor		Marginal		Sub-optimal		Optimal	
	Score	1	1.5	2	2.5	3	3.5	4
								
Vegetative Quality of Buffer Zone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Bank Stability and Erosion









**Optimal:** Evidence of erosion or bank failure absent or minimal (less than 10% of bank affected); bank gently slopes to littoral zone.

**Sub-optimal:** Infrequent, small areas of erosion with drops to water no greater than 6-12 inches.

**Marginal:** Shoreline has areas of erosion; drops to water average 1-2 feet.

**Poor:** "Raw" areas frequent; drop to water greater than 2 feet.

## Examine slope of bank and amount of exposed soil and roots.

Slope of Bank	> 2 feet		1-2 feet		6-12 inches		> 10%	
	Score	1	1.5	2	2.5	3	3.5	4
								
Bank Stability/Erosion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Total score \_\_\_\_\_

**Poor condition (< or = 6 points)** suggests the need to enhance your buffer zone by installing a variety of Florida native plants.

**Marginal condition (6.5 - 9.5 points)** suggests there are many opportunities for improvement by installing a variety of Florida native plants in between homes and in other areas around the pond.

**Suboptimal condition (10 - 13 points)** suggests fair condition and modest improvements would likely enrich the pond ecosystem and enhance the production of environmental benefits.

**Optimal condition (13.5 - 16)** suggests that the pond is producing peak environmental benefits that lend to healthy and abundant wildlife, shoreline stabilization, and the removal of stormwater pollutants.