



Bank Stabilization Methods

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Methods of Lake Side Bank Stabilization

(Ranked in highest to lowest cost)

Layered stone wall examples Wilkerson and Gorrell

Gabions (box of rocks) example Savings

Treated timbers examples Fritch and Doerr

White rip rap examples Keyser, Blickenstaff, and Kennedy

Natural buffer strip example Bevard and Gallager

Benefits of Buffer Strips

Depending on width and characteristics as much as 70 to 95% in coming sediment and 25 to 60% of nutrients can be removed before run off enters the lake. It can also reduce the impact from a failing septic system adjacent to the lake. Native plants such as prairie vegetation have a much denser and deeper root structure than conventional turf grass which greatly improves the filtration of surface run off into the ground.

How to Create a Buffer Strip

Remove turf grass or undesirable vegetation. Recommended that a buffer strip be a continuous strip of at least 25'. If you need to access paths in your design, such as to a dock or between buffer strips, keep them narrow. Plants should begin at or below the normal water elevation with wetland species and should proceed up the shoreline with water tolerant, then upland species.

Examples of good buffer strip candidates native to Illinois:

Shrub and Brush	For Lower Banks & Slopes	Cover Crops	Wild Flowers
Button bush	Arrowhead	Black eyed Susan	Blue phlox
Red dogwood	Common cattail	Cone flower	Columbine
Choke cherry	Head stem bulrush	Smart weed	Spiderwort
Pussy willow	Switch grass	Perennial rye grass	May apple
Elderberry	Blue Vervain		Swamp milkweed

Other Lake Side Do's and Don'ts

Do not use railroad ties to for bank stabilization or old concrete pieces (many better materials available today)

Do not use lawn fertilizer on lakeside lots, except Phosphorus free or low Phosphorus fertilizer.

Do not spray pesticides near waters edge

Do not create a sand beach area without a retention wall. (your sand will end up in the lake)

Do maintain your septic systems. When replacement is necessary, consider an evaporation bed system.

Do remember to get all shoreline structures approved by the Architectural Committee before beginning your project.