

## Preventing Erosion

A good riparian zone has undisturbed land with trees, shrubs and vegetation to stabilize the soil. Ideally, the vegetation is comprised of native species with strong root systems.

Preventing erosion and protecting your property from further soil loss is simple.

- Establish a no-mow buffer zone along the edge of the waterway.
- Create a vegetated buffer by planting shrubs that prevent soil erosion.

## Shrubs to Plant for Bank Protection

- Streamco or Bankers Willow
- Red Osier Dogwood
- Smooth Alder
- Virginia Creeper
- Buttonbush

## Shrubs to Plant for Wildlife Habitat

- American Elderberry
- Common Spicebush
- Winterberry Holly
- Ninebark
- Red Chokeberry

**Town of Grand Island**  
Conservation Advisory Board  
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**DON'T LOSE**  
**YOUR EDGE**



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## The Riparian Zone

In their natural state, riparian zones are vegetated areas along water bodies that typically consist of trees, shrubs and grasses. Riparian zones are ecologically diverse and provide habitat for a variety of animals and birds.

Too often, riparian property owners remove the natural, vegetated buffer in favor of domesticated grass. Although their intentions are such that they believe they are improving their property, with a nice view, stream access, a tidy yard, they will soon find themselves “losing ground” to erosion. Property owners that preserve the buffer protect water quality and habitat as well as the wildlife that depend on it.

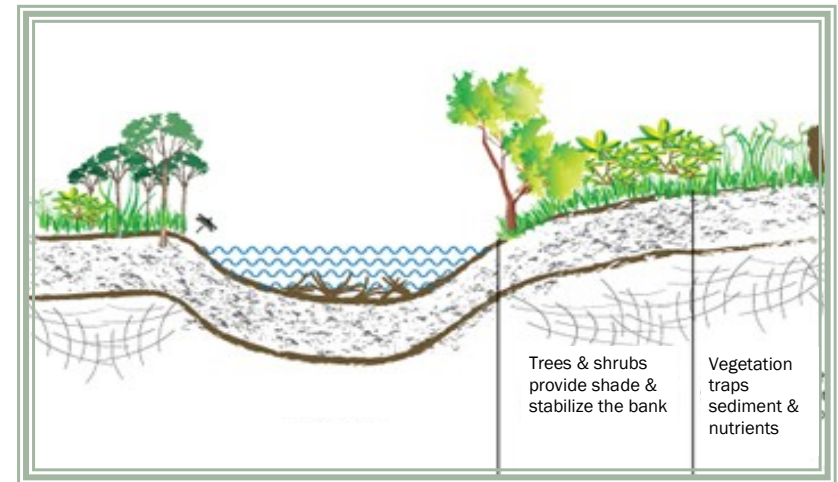
## Benefits of Established Riparian Zones

**Stabilize banks.** Trees and plants along waterways can reduce soil erosion because their roots hold the soil in place. Plants also reduce the impact of raindrops on exposed soil, further decreasing erosion.

**Filter sediment and nutrients from runoff.** Vegetation traps sediment and nutrients that are carried in runoff and prevent it from reaching the waterway. The trapped nutrients soak into the soil for plant uptake instead of flowing into lakes and streams with runoff. This helps prevent excessive algae growth in waterways.

**Allow water to soak into the ground.** Trees and plants slow surface runoff, allowing the water to soak into the soil. This helps to reduce peak flow levels in streams and replenishes groundwater.

**Shade streams.** In most cases, plants and trees along waterways shade streams, keeping the water from becoming too warm for aquatic life in the summer.



**Streamside Landowners** often replace stream buffers with manicured lawns mowed right to the edge. The shallow root systems of lawn grasses do not sufficiently protect the bank from erosion and are ineffective in trapping pollutants. Eroding banks result in muddy water which clogs fish gills, blocks sunlight for plants, reduces oxygen in the water and buries benthic (bottom dwelling) habitat.



## Are You “Losing Ground”? Signs of Soil Erosion

- Widening or deepening of the waterway
- Undercut bank; trees falling in to waterway
- Gullies in riparian zone
- Bare sole on steep banks; slope failure
- Muddy water following a rain fall