YOU CAN Stabilize a Streambank

RIPARIAN STREAMSIDE BUFFER

DESCRIPTION: Allowing native plants to grow along streams and planting native trees and shrubs can restore the stream side, protect the streambanks from eroding, provide wildlife habitat, and filter pollutants from stormwater runoff to improve the quality of the stream.

TIME/COMPLEXITY: 4 hours, easy

COST: variable, $0 to $1000, depending on size of area, plant choices, and plant sizes.

TOOLS/MATERIALS: shovel, select trees/shrubs/perennials, soil additives, protective tree tubes (optional), mulch (optional)

STEPS:

1. LOCATION: Any waterway can benefit from a riparian stream-side buffer. Select a length of waterway to be maintained as a riparian buffer. The longer the section, the greater the benefit.

Start with a NO-MOW zone along the bank of the waterway. An ideal width is 35 to 75 feet, but make it as wide as possible. Where there is lawn, set the mower height to 3 inches, because taller grass slows runoff and shades the soil so it can soak in more runoff. An added benefit is that taller grass deters weeds from growing.

Add some perennials or shrubs for a quick fill in the buffer, then add trees for long-lasting benefits.

2. PLANT SELECTION: Select plants to fit the location, whether it is wet, dry, windy, steep, sunny, or shady.

3. SIZE: Trees smaller than the width of a finger should be protected from deer browsing by a tree tube. Tubes should be removed in a few years when the tree has become large enough. Plant more plants if using smaller sizes to compensate for losses in the first few years.

4. PLANTING: Plant the new plant at the same depth it was in the pot or nursery. Larger plants require holes 2 to 3 times the width of the root ball to allow room for the roots to grow. Refer to the 'You CAN Plant a Tree' for directions. Some plants, like willows, can be planted as a single branch, called a live stake, and once stuck in the ground a few inches will start roots and grow.

*811 Know what's below. Call before you dig.

Buffers Control Pollution!

Most stream pollution comes from road salts, oil, sediment, poorly stored trash and debris, manure, fertilizers and other chemicals. This is called non-point source pollution because it comes from the entire watershed rather than any one point. Limiting use of pesticides, herbicides and fertilizers, composting yard waste and not storing waste, debris and other materials near a stream, helps to reduce this pollution.

Streamside buffers do more than protect the stream. A meadow, or buffer with trees and shrubs is home to birds, butterflies and other fascinating creatures that make up a thriving ecosystem.

5. STABILIZE A STREAMBANK: Establishing a riparian buffer is the first step to stabilizing a streambank, but when banks are near vertical, or overhanging and eroding, specific measures should be taken to correct the problem. Work with your local County Conservation District to create a plan for stabilizing an eroding streambank. **Permits are required** for work within a stream channel including along the stream banks.

6. FINISHING TOUCHES: Soak the root balls of trees with water. Check the tree planting once a week for the first month and water as necessary.

7. MAINTENANCE: For small trees, use a tree tube to protect the young stems from animals. For larger trees, establish a mulch ring to protect the trunk from weed trimmers and mowers. Remove volunteer weeds and re-mulch every year. Tree tubes should be removed once the trees reach 1-1/2 inch in diameter. Prune broken or dead branches as needed to maintain an attractive shape.

Appropriate size rock at the waterline and willow stakes protect this stream.

To Learn More:

http://extension.psu.edu/natural-resources/water/news/2011/controlling-erosion-damage-on-streambanks

http://extension.psu.edu/natural-resources/wildlife/habitat-management/pa-wildlife-16-riparian-buffers-for-wildlife/extension_publication_file

http://extension.psu.edu/natural-resources/water/watershed-education/watershed-publications/live-staking

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