

# Streamside Buffers

Taking good care of a stream involves taking care of the land around it. A streamside buffer (or riparian buffer) is a planted area along the edge of the stream.

A well-planted streamside buffer:

- absorbs nutrients and pollutants
- stabilizes the bank and prevents erosion
- reduces floodwater damage
- filters out sediment
- helps control the temperature of the stream

## Creating a Streamside Buffer

Begin with a "no mow" or "no graze zone" along your stream banks. A buffer of any width is more beneficial than grass. Make yours as wide as possible.

Plant trees and shrubs in your buffer area. They provide many long-lasting benefits and can be quite inexpensive to establish and maintain.

Using shrubs will give your buffer a quick start; many reach full size in just a few years. Where you do have lawn, set your mower blades at least three inches high. Taller grass slows runoff, resists drought and needs less fertilizer.

## Stabilizing Your Streambank

It is best to work with professionals when looking for the causes of and solutions to erosion problems. Where buffers alone aren't enough, there are many new and innovative techniques to help solve the problem. Contact your regional office of the Pennsylvania Department of Environmental Protection (DEP) before making plans to alter a streambank. Permits are likely to be required.

- don't overuse fertilizers - more is not better - and don't use fertilizer near streams.
- limit your overall use of pesticides and herbicides, and use extreme caution when using them near streams.
- compost, don't bag, yard waste. Leave lawn trimmings in place for effective recycling of nutrients.
- don't burn refuse near streambanks.
- don't store or dump manure, garden waste, or grass clippings near streams.
- store firewood, trash, or other materials away from streams.
- never dump trash or chemicals into streams, storm drains or sewers.
- keep farm animals out of and away from the stream. Contact the county conservation office to find out about farm fencing programs.

## To protect a stream from pollution:

Most stream pollution comes from manure, fertilizers, road salts, oil and other chemicals. Called *non-point source pollution*, these come from the entire watershed rather than from any one point. Together, these pollutants add up in the streams and become a big problem. Other accumulated pollution includes trash and yard debris that washes into the streams.

## Reduce Pollution

## Prevent Excess Sediment

Every stream carries with it, fine particles of soil. But too much soil can clog the streambed, covering rocks and gravel where fish lay their eggs. Excess sediment can choke out the life of a stream. A major source of silt and sediment is construction or any project that disturbs the soil. Farming activities can also cause soil runoff.

## To protect the stream from silt:

- use hay bales or a special silt fence to prevent soil from washing off a work site.
- never store loose piles of soil near a stream
- cover piles of soil with tarps to protect them from rain
- use good farm practices like no-till cropping and planting winter cover crops to conserve soil.
- contact your local county conservation office if you see soil run-off from a construction site.

## Ticks are an unpleasant and potentially dangerous reality in this area of Pennsylvania.

- Deer ticks can carry Lyme disease and are often found in areas of high grass and shrubs. Fear of ticks, however, should not be a reason to mow your streambank to the edge. Some basic precautions will minimize this danger:
- consider mowing a path through the buffer to access the stream without having to walk through high grass.
- Learn to recognize and check yourself and your pet thoroughly if you have been walking through the woods or fields.

## Top Reasons Not to Mow

### Promotes bank stability

Deep rooted native plants hold soil in place and keep banks stable. Turf grass has roots only an inch or two deep - not very effective at preventing erosion!

### Flood flow reduction

Fully grown vegetation slows the velocity of overland flows by providing enough resistance to allow some of the water to infiltrate the soil. This helps to recharge groundwater and reduces flood damage downstream.

### Water quality

Natural vegetation removes pollutants and fine sediment from the waterway, leaving water cleaner and clearer.

### Reduction of mosquito habitat

Turf grass does not absorb water as well as full-height vegetation, consequently, ponding occurs which makes ideal habitat for mosquito breeding. Higher vegetation may absorb more water and decrease the opportunity for mosquitoes to breed.

### Wildlife habitat

Stream banks in a natural state provide habitat for a diversity of reptiles, amphibians, birds, and small mammals. Fish and aquatic insects are also protected by the purifying function of a buffer.

## Prevent Excess Sediment



## The Benefits of a Native Landscape

Native plants and animals sustain the environment on which we ourselves depend. By planting native species in your streamside buffer, you are providing an excellent opportunity for our native birds, insects and other wildlife to thrive in the habitat they need. Seeds from your native species can travel throughout the watershed, promoting a healthier community environment.

Furthermore, native plants are much better adapted to our specific environment — the climate and conditions of this area. Natives are therefore easier to grow and require far less maintenance than their non-native counterparts.

Native plants can provide year-round color and texture in your streamside area or garden. Vibrant flowers in the spring, colorful berries in the summer, deep colors in the fall, and contrasting bark and branch patterns in the winter are just some of the diverse characteristics of the many native plants available.

Use the chart of plants inside as a guide to select ferns, flowers, grasses, shrubs and trees native to Pennsylvania. They are beautiful, easy to maintain, and they attract wildlife. Important local resources for native plants are listed on the back of this brochure.

For more information contact:



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### Useful reference/reading material:

*The Plants of Pennsylvania: An Illustrated Manual*  
Ann Fowler Rhoads and Timothy Block; Illustrations by Anna Anisko  
University of Pennsylvania Press, Philadelphia 2000.  
ISBN 0-8122-3535-5

### Bringing Nature Home

Douglas W. Tallamy, Timber Press,  
Portland • London, 2007. ISBN -13:978-0-88192-854-9

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East Branch of Saucon Creek. Property preserved by Heritage Conservancy.

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## Caring for your Streamside Property

There's more to a stream than the stream itself.

