

## What we can do to help?

Once a riparian area has been disturbed, a landowner can take steps to restore it to a naturally vegetated condition. Restoration is the return of an area to conditions similar to those present prior to disturbance. Such restoration can partially or completely prevent nonpoint source inputs of sediment, organic material, nutrients and pesticides and help to mitigate pollution levels in the river itself. See the next pages for lists of appropriate native plants for restoring a riparian buffer.

The cost of protecting and maintaining a riparian buffer zone will vary depending on the scale of the project. Some general costs include:

- Plant material: use cuttings or bare root plants from a native source; nursery grown plants are more expensive but more reliable and require less disturbance to plant
- Mulch: pine needles can be gathered, and highway crews can supply chips for free
- Conservation commission permit fees (if applicable)
- Labor for planting

**Maintenance** When restoring a riparian buffer area, potential maintenance activities include watering for the first year of replanting or in drought conditions, selective cutting, and weed control. Existing riparian areas need little or no maintenance; the use of fertilizers and herbicides should be avoided. It is important that maintenance activities do not cause soil compaction or excessive disturbance.

### Practices to Avoid

- Straightening or reshaping sections of streams
- Removing streamside shrubs, trees, and other plants
- Farming up to the edge of a stream
- Allowing livestock access to riparian zone
- Operating heavy equipment in riparian zone

## Tips for Designing a Riparian Landscape

The purpose or goal of the riparian buffer planting will have a direct relationship with the design and vegetation selected for the planting. Trees, shrubs and grasses vary in the kinds of benefits they provide to the buffer. The table below shows the relative effectiveness of these different vegetation types in providing a variety of benefits

Benefit	Vegetation Type		
	Grass	Shrub	Tree
Stabilize bank erosion*	Low	High	High
Filter sediment	High	Low	Low
Solubility	Medium	Low	Medium
Aquatic habitat	Low	Medium	High
Forest wildlife	Low	Medium	High
Economic products	Low	Medium	High
Flood protection	Low	Medium	High

\*Additional management practices may be required to repair eroded areas, reduce undercutting of the stream bank or slow water movement. Please contact your local conservation commission for questions specific to your property.