

Using Native Vegetation



To Protect Streambanks and Shorelines in the Tennessee Valley

Anyone who lives close to a reservoir, river, or stream knows there's a special kind of beauty in the place where land and water meet. The same quality that makes the waterfront environment unique also makes it vulnerable. Streambanks and shorelines are ecologically sensitive areas, and—as such—are easily damaged and slow to recover.

There's a name for this biologically distinctive area—the interface between land and water. It's called the "riparian zone." The vegetation that grows there serves as a buffer to protect both the land (by helping to hold soils in place and prevent erosion) and the water (by helping to filter pollutants).

Are you interested in ways to reduce erosion, improve water quality, provide habitat for wildlife, and enhance aesthetics? If so, you need look no further than the hardy and attractive trees, shrubs, and grasses that are native to our region and well-suited to life at the water's edge.

Once native plants are established, they require little or no maintenance, saving time and expense. Native shrubs, trees, and grasses produce berries, nuts, or seeds used by wildlife. Additionally, it's refreshing to think that native varieties help provide regional context—they just "look right" in this part of the country—and help to preserve the

botanical heritage of the Tennessee Valley.





In a Nutshell

- If you have healthy native vegetation growing close to your streambank or shoreline, do everything you can to preserve it. It's your best insurance against property loss from erosion.
- If you have trees or shrubs that are dead or are dying, consider replacing them with native species.
- If you have a lawn that is mowed down to the water's edge, you may already be experiencing erosion. Planting native trees and shrubs is often an effective way to prevent future damage.

Riparian Restoration

The Tennessee Valley Authority (TVA) has long recognized the need to promote protection and restoration of riparian zones. TVA encourages streambank and reservoir shoreline property owners to:

- Protect and enhance riparian zones
- Restore native vegetation

TVA Watershed Teams are available to assist you. Each team has a great deal of technical and scientific expertise. Team members can share information about improving, protecting, and managing streambank and shoreline property. They can also give you advice about whether or not you need a permit. TVA has developed a series of fact sheets to help you protect and restore your streambank or shoreline. Topics covered include:

- 1. Using Native Vegetation—this fact sheet introduces the series and decribes how native plants can be used to protect streambanks and shorelines.
- 2. Benefits of Riparian Zones—offers details about riparian zones and their benefit to both property owners and the environment; includes discussion on exotic and invasive species and problems associated with establishing lawns to the water's edge.

3. Assessing Your Property—describes how to develop a base map for documenting your existing site conditions.

4. Designing Your Landscape—uses the base map you developed while assessing your property to determine your objectives and develop a riparian restoration plan.

5. Native Plants of the

Tennessee Valley—
provides information
about site requirements,
wildlife benefits, and aesthetic values of riparian plant species.



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- 6. Landscaping Alternatives—shows three restoration options for one site to illustrate flexibility in meeting property owner objectives.
- 7. Understanding Erosion—explains causes and effects of erosion along streams, rivers, and reservoirs.
- 8. Using Stabilization Techniques—includes an overview of options available to stabilize erosion problems.
- 9. Preparing the Site—describes three possible existing site conditions and options on how to create a riparian zone.
- 10. Planting and Maintaining Your Native Landscape—describes planting methods for different types of plants and maintenance that will be needed to ensure plant survival.
- 11. Contacts and References—identifies which TVA Watershed Team to call for information and provides a list of related web site references.