Whether it is a creek small enough to jump across or the shore of a major river, America's waterways and the land that surrounds them are valuable, finite resources. Action by individuals and communities is needed now to protect or restore the trees that complete the wholeness of riparian habitat.

**Wildlife Habitat**

Wooded riparian zones are a boon to some species of wildlife as they struggle to survive in an urbanizing land. In New Mexico, for example, the vast majority of rare and endangered species are found in or near riparian ecosystems. In all areas of the country, riparian forests serve as corridors between remaining blocks of fragmented habitat. These corridors are essential lifelines if viable populations of wild birds and mammals are to remain part of our environment.

**Recreation**

In a study near Indianapolis, “the presence of trees and shade, natural areas, wildlife and birds” were attributes selected from a list of 44 possibilities as being most important to riverside park users. Whether it is a meandering creek through a county park in Kansas or San Antonio’s highly developed River Walk (Paseo del Rio), riparian parks are popular. With careful planning, they can serve the needs of wildlife and watershed management while at the same time providing myriad recreational opportunities.

**Stormwater Management**

In some cases, developers can design broad, gentle slopes of lawn or parking areas that direct water toward an adjoining riparian woodland. This spreads runoff and reduces the cost for expensive drain pipe systems. Where stormwater detention ponds are required, instead of cutting trees and scouring out ugly basins to occasionally catch storm runoff, steel sheet piles can be driven perpendicular to a drainage to create a temporary dam during storms. These techniques aside, riparian zones provide natural floodwater storage and an earthen sponge to retain massive quantities of water for slow, steady release.

**Pollution Prevention — Filters, Sinks, and Transformers**

Riparian zones with trees and other vegetation filter excessive chemicals that wash from lawns, gardens, and fields. In some cases, such as phosphates that cling to soil particles and move downslope in runoff water, the soft soil and leaf litter of the riparian zone act as a trap for the particles and associated chemicals. The phosphates stay on-site, absorbed into the soil from which they are taken up by tree roots. Nitrate moves either on the surface or in groundwater. These chemicals, too, can be intercepted and used by tree roots rather than being allowed to enter the waterway as pollution. Even pesticides are transformed into non-toxic compounds in a riparian woodland.

**Water Temperature Control**

Shading creeks and rivers helps keep the water cool. Cool water carries more oxygen and provides a more livable environment for many species of wildlife, including game fish such as trout. The warmer water of denuded creeks also slightly increases the release rate of certain pollutants from sediment particles.