

Riparian Buffers: Functions and Values

A riparian area is the land adjacent to a stream or water body. Riparian buffers are important for good water quality. Riparian zones help to prevent sediment, nitrogen, phosphorus, pesticides and other pollutants from reaching a stream. Riparian buffers are most effective at improving water quality when they include a native grass or herbaceous filter strip along with deep-rooted trees and shrubs along the stream. Riparian vegetation is a major source of energy and nutrients for stream communities. They are especially important in small, headwater streams where up to 99% of the energy input may be from woody debris and leaf litter.

Riparian buffers provide valuable habitat for wildlife. In addition to providing food and cover they are an important corridor or travel way for a variety of wildlife. Forested streambanks benefit game species such as deer, rabbit, quail and nongame species like migratory songbirds. Riparian vegetation slows floodwaters, thereby helping to maintain stable streambanks and protect downstream property. By slowing down floodwaters and rainwater runoff, the riparian vegetation allows water to soak into the ground and recharge groundwater. Slowing floodwaters allows the riparian zone to function as a site of sediment deposition, trapping sediments that build stream banks and would otherwise degrade our streams and rivers.

