

# Shoreline Buffers

## Naturally Protecting Lake Wallenpaupack

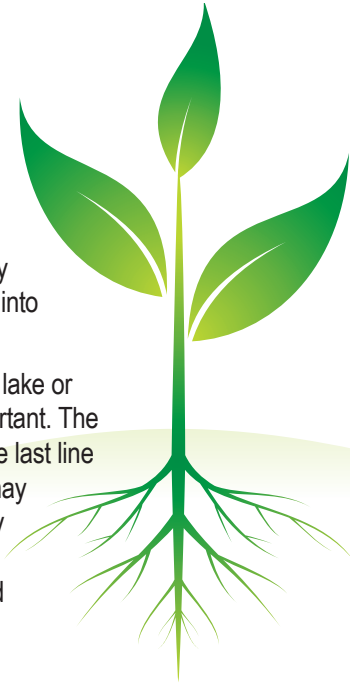
Picture an idyllic lake or streamside setting. The sun glimmering on clear, clean water. Children wading along the shore. A fisherman casting for elusive bass. A lushly vegetated shoreline that blends into the surrounding landscape.

The interrelationship between a lake or stream and its shoreline is important. The shoreline, or riparian zone, is the last line of defense against forces that may otherwise pollute a healthy body of water. A naturally vegetated shoreline filters runoff generated by surrounding land uses in the watershed, removing harmful chemicals and nutrients. At the same time, plant roots bind to the soil helping to keep it in place and prevent soil erosion. The riparian zone also provides a critical habitat for aquatic insects, microorganisms, fish and other animals. As you can see, riparian zones are unique areas, linking the land with the water.

Unfortunately, as landscapes are developed, natural shorelines are often damaged. In urban and rural environments, for instance, unrestricted cutting, mowing or removing of vegetation can lead to soil erosion, water pollution, degraded aquatic habitat, impaired aesthetics, and a reduction in property values.

Maintaining good water quality in the waters of a hydroelectric project such as Lake Wallenpaupack is essential for meeting certain project purposes, like environmental protection and public recreation.

Our primary management objective for the land around Lake Wallenpaupack is to preserve the natural vegetated buffer. This buffer is achieved by having policies restricting the cutting of live trees and other vegetation around the lake. Restrictions on the removal of shoreline vegetation has resulted in the area maintaining a rural aesthetic that is often not accomplished on such developed lakes. In addition to the shoreline buffer, we also manage 380 acres of natural areas along the buffer of Lake Wallenpaupack, which adds to the overall natural aesthetic of the lake while providing wildlife habitat and recreation opportunities.



### Benefits of Shoreline Buffers

**Runoff filtering** As runoff from adjacent lands flow through a buffer, pollutants and sediment are filtered and removed. Less runoff, less algae blooms.

**Bank stabilization** Natural buffers that extend down to the water's edge can be very effective in stabilizing banks and preventing erosion.

**Preservation of fish and wildlife habitat** Many aquatic organisms, particularly insects, spend substantial portions of their life cycles in upland environments. Buffers provide a critical transition zone between upland and lowland aquatic/wetland areas. Buffer plants also can shade shorelines providing necessary habitat for fish and other wildlife.

**Screening noise** Beyond protecting wildlife uses, buffers can also preserve the quality of lake recreational uses by filtering noise.

**Preservation of aesthetic values** Lake and streamside property owners often have varying opinions about what constitutes "appropriate" shoreline landscaping. However, most will agree that "natural" is better than "artificial". Even a narrow buffer can enhance the view and increase property values.



### How Can You Help?

Use the natural landscape as your guide. Let trees form a canopy, with shrubs, flowers and ground cover underneath, creating multiple layers - just like in nature. Plant native grasses, shrubs or trees with deep roots to stabilize the soil. Do what works for you - any native plantings are better than grass all the way down to the lake.