



Riparian Areas



What is a riparian area?

A riparian area is the land adjacent to a river or stream. It acts as the transition

area between the river and the uplands, and can also be referred to as a riparian buffer or a riparian zone. Plants located in these areas function as natural buffers between the land and water environments by reducing the flow of pollutants, soil, and other things from the land into the water. The roots of the plants also help to stabilize the river bank, reducing erosion. Riparian areas also support both land and water animal species, as well as, insects and plants. The width of a riparian area can vary depending on the landscape, and they can introduce more nature into urbanized environments.

Why are riparian areas important?

Riparian areas provide a lot of services for their surrounding communities at no cost:

Reduce Water Pollution

The vegetation found in riparian areas trap and filter out pollutants and excess nutrients, preventing the majority of them from entering into the waterway. Up to 80 percent of excess nutrients can be removed before they enter the water by a high quality riparian area.



Reduce Erosion

The roots of the plants and trees in the riparian area help to strengthen and stabilize the banks by holding the soil in place.

Reduce Floods and Droughts

During a flood, the riparian area helps absorb water, and slows the velocity of the water as it spreads across the floodplain. These areas also help keep a base flow during dry seasons by storing groundwater, and releasing it slowly into the waterway.

Fish Habitat

The riparian area provides shaded areas over the water that give fish cooler places to hang out in during hot days. Dead and decaying plant matter that falls into the waterway provides hiding and breeding places for the fish. The plants of the riparian area also provide food for aquatic insects, which fish eat.



Provide Nutrients

Riparian areas provide about 90 percent of the nutrients for aquatic animals, in the form of dropped leaves and fallen insects.

Animal Habitat and Migration

95 percent of all terrestrial species in North America utilize riparian areas for food, shelter, and migration paths. They are also necessary for breeding and nesting cycles for many species, and provide many animals with safe access to water. They are the favored eating areas of deer, elk, and moose. Riparian areas are also used as stop over places for migrating birds. Plus, they are habitat for amphibians and reptiles.



Bring Nature Closer

Riparian areas can bring a touch of nature to urbanized areas with beautiful scenic views. It also provides opportunities for people to fish, bird watch,

picnic, and enjoy other activities.

Plus, residential areas next to green spaces have been shown to

create neighborhoods with lower crime rates.



Why are Riparian Areas in Trouble?

Withdrawing too much water for agriculture and other public uses can lower the water table, which reduces stream flow, compromising the health of the riparian vegetation.

Invasive plant species introduced into the riparian area can wipe out the native species, and do not provide food or useful shelter for native birds and wildlife. Purple loosestrife, glossy buckthorn, and common buckthorn are just a few examples of invasive species impacting riparian areas.

People remove trees and other vegetation from the riparian area to make room for housing, farming, and other such things.



Damage to these areas decreases the health of the river by causing erosion of the river banks, increases amounts of silt and pollutants in the

waterway, damage to recreation areas, loss of species diversity, and reduction of scenic value.

What Can You Do?

Riparian areas can repair themselves when we allow natural processes to take place and if we alter or minimize damaging activities.

You can:

- Leave No Trace when enjoying activities in riparian areas.
- Participate in Reforest the Red events organized by River Keepers.
- Don't mow your lawn all the way to the river.
- Plant native plants in your yard and along the river.

The state of Minnesota is also working on implementing a new buffer initiative. This new legislation aims to set up about 110,000 acres of riparian areas statewide along rivers, streams, and ditches, in order to reduce the amount of pollutant that enter into the Minnesota water ways. Learn how you can do your part with the implementation of this initiative by visiting <http://www.dnr.state.mn.us/buffers/index.html>

Information taken from American Rivers: <http://www.americanrivers.org/> and River Voices · Spring 1998

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