

Riparian areas are vital to life along water.

What do they do?

Protect water quality.

Riparian areas filter sediments and pollutants that otherwise wash into streams, lakes and groundwater.

Stabilize stream banks and reduce erosion.

Roots help stabilize soil. Plants protect banks by deflecting waves, ice, and storm runoff.

Reduce flooding and recharge groundwater.

Riparian plants slow stream velocity. This helps reduce flooding and recharge the groundwater.

Increase property value and provide recreational opportunities.

Riparian areas are perfect places for hiking, camping and bird watching. They also provide privacy and add value to property.

Provide habitat for fish and other wildlife.

Riparian areas are home to a multitude of fish, wildlife and bird species. Connected riparian corridors make ideal travel corridors for wildlife.



Removal of shoreline vegetation can result in serious erosion of stream banks.

Assistance for Protecting Your Riparian Area



Riparian areas benefit everyone by filtering pollutants, enhancing stream flows, and protecting stream banks from erosion. The results are superior water quality, and improved fish and wildlife habitat.

For more information about what you can do to improve the health of Montana's valuable riparian areas, contact the Flathead Conservation District.

Funding for this brochure was made possible by a Montana Community Foundation and Department of Environmental Quality Grant.

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LIVING BY WATER



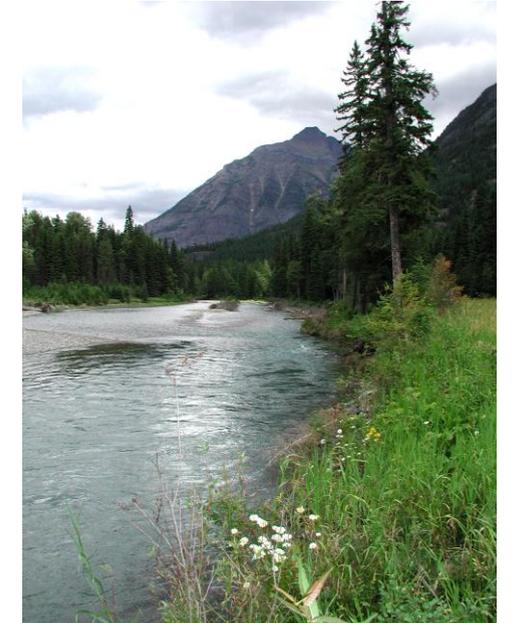
A guide to protecting and enhancing riparian areas

Riparian beauty is more than scenic.

Riparian areas are places where land meets water - corridors of shrubs, grasses, trees and aquatic plants that protect and enhance streams, rivers, lakes and wetlands.

They are nearly as vital to the health and beauty of a waterway as water itself.

As population grows, it is important that we become aware of riparian corridors and how to protect them.



Signs of a degraded riparian area

- Degraded water quality
- Little shade and high water temperatures
- Overgrazed plants, poor plant growth and compacted soils
- Reduced water flow in the stream
- Little vegetation and roots to protect and stabilize banks
- Excessive erosion of the stream bank
- Few birds using the riparian area

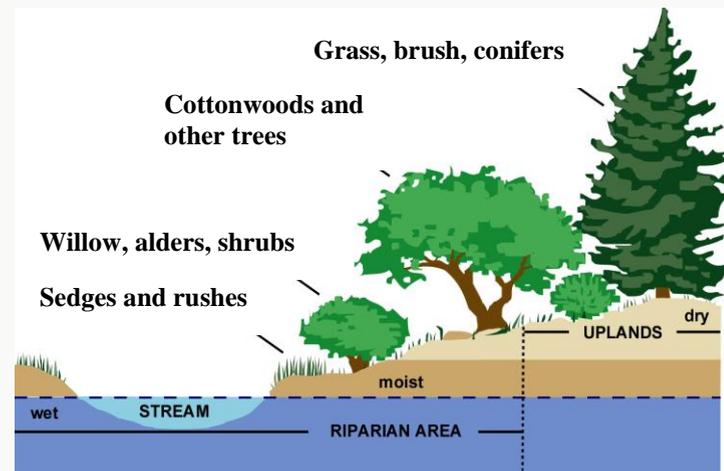
Tips to prevent water pollution:



Fencing livestock away from the stream helps protect water quality.

You can make a big difference in water quality and the value of your land by applying best management practices:

Riparian Buffer Basics



Trees and plants in the riparian area slow down runoff. Healthy roots absorb the runoff and much of the pollutants it carries before it reaches the stream, river or lake.

The best buffers are ones that have a high diversity of plants and are fairly wide. The steeper the slope, the wider the buffer should be. A buffer strip of 200 to 250 feet wide is most effective at filtering nutrients. If space is limited, a 10 to 20 feet buffer will still help trap nutrients and other pollutants.

Living near a stream, river, lake or wetland

- Maintain or restore a buffer strip of native plants along stream and river banks, lakeshores and wetlands. Buffer strips help keep water clean, temperatures cool, and decrease erosion.
- Build on upland areas, away from riparian areas and wetlands.
- Divert rooftop runoff onto grass so water can be absorbed gradually.
- Avoid extensive paved areas near water – they can channel polluted water into streams.
- Use wood decking, bricks or interlocking stones for walk-ways so the ground can absorb water.
- Avoid draining or filling wetlands. They help filter pollutants, recharge groundwater, and provide important habitat for birds and other wildlife.
- Maintain your septic system with annual checks, and pump your tank as needed.

Landscaping

- Revegetate bare ground near streams, rivers, lakes and wetlands.
- Use stream-friendly bank stabilizing methods to control eroding slopes, such as revegetating with native plants and reshaping stream banks where needed. Avoid activities that destabilize stream banks and harm riparian plants, such as clearing vegetation.
- Don't dispose of yard clippings in streams.
- Maintain native vegetation next to streams and lakes. A green lawn stretching to the water's edge may look nice, but a grassy stream bank does not provide erosion protection during high flows.
- Apply fertilizers and pesticides sparingly. When use is necessary do not exceed the recommended amounts.
- Keep hazardous chemicals and trash away from streams and wetlands.

Farming and Ranching

- Fence horses and livestock away from stream and river banks and provide them a water source away from waterbodies, or use water gaps.
- Do not mix, apply or dispose of weed control chemicals near streams.
- Prevent over irrigation.
- Use farming practices that reduce soil erosion and increase water filtration, such as minimum tillage, contour farming, and vegetated stream and river banks.
- Rotate animal grazing to prevent soil erosion in fields.
- Avoid introducing noxious weeds to prevent weeds from spreading and keep riparian areas and wetlands weed-free. Feed weed-free forage to livestock and keep clothing and equipment weed-free.
- Apply fertilizers and pesticides according to label instructions to save money and minimize pollution. Avoid applying pesticides and herbicides near streams and wetlands or before a rain.

Disposing of toxic materials and waste

- Dispose of household products such as paints, thinners, insecticides, pesticides, solvents, and used motor oil and other auto fluids at a collection facility. Don't pour them onto the ground or into storm drains - these often flow directly into streams.
- For small spills, sprinkle with sawdust or kitty litter, seal in a trash bag and put in the trash. Do not wash into the gutter. For large spills, call Flathead County Emergency Services or 911.
- Wash your vehicles at a car wash that treats or recycles its wastewater, or in an area where the water will run off into grass.
- Don't dispose of your household hazardous waste in sinks or toilets.

Enjoy!

- Enjoy your stream or riparian area. It provides excellent bird-watching, fishing and learning opportunities.

Native plants for revegetating riparian areas

Deciduous Trees

Black cottonwood
Quaking aspen
Green ash
Black cherry
Water birch
Bur oak
Sitka alder

Evergreens

Douglas-fir
Grand-fir
Western red cedar
Ponderosa pine
Engelman spruce
Western larch

Shrubs

Chokecherry
Sandbar & coyote willow
American plum
Snowberry
Silverberry
Skunkbush sumac
Red osier dogwood
Blue elderberry
Red alder
Wood's rose
Black hawthorn

Grasses & grass-like plants

Bluebunch wheatgrass
Hard-stem bulrush
Slender wheatgrass
Streambank wheatgrass