

Within the Red River of the North watershed, landowners can protect their property by protecting the “riparian” areas so critical to watershed health. Riparian areas consist of abundantly vegetated lands bordering rivers, lakes, streams, and wetlands. They extend from the water’s edge to the uplands and occupy the floodplain.

What Does Riparian Vegetation Do?

- Slows the flow of water, reducing soil erosion and flooding.
- Increases the soil’s capacity to hold water.
- Serves as a “living filter” of surface and subsurface water runoff, improving water quality.
- Provides habitat for birds and other wildlife.
- Shelters waterways, regulating water temperature and providing food for aquatic life.



To learn more about protecting your property— as well as your watershed, contact the following:

Red River Basin Riparian Project

(701) 352-3550

North Dakota State University Extension Service

(701) 231-7971

Fargo Forestry

(701) 241-1465

Natural Resources Conservation Service

Fargo Field Office

(701) 282-2157

Energy & Environmental Research Center

(701) 777-5144

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Protect your property... and your watershed

Whether your home sits on a waterfront slice of the Red River of the North, along a small creek or coulee, or in the middle of a residential neighborhood, your actions affect the stability of your property—and the well-being of the environment in which you live.

Residential Protection

Residential neighborhoods can be a major source of pollution carried through storm drains along city streets. Water flowing over roads and lawns carries sediments, pesticides, herbicides, heavy metals, pet manure, and other pollutants to our waterways. The fertilizers that make your lawn lush and green also feed aquatic plants and organisms, causing unsightly algae blooms that turn your river green.

Property owners can protect the watershed in a number of ways:

- Avoid overwatering lawns.
- Minimize the use of fertilizers and pesticides.
- Pick up and properly dispose of pet wastes.
- Compost and recycle grass clippings, leaves, and other yard wastes.
- Properly dispose of motor oils, oil-based paints, cleaning products, and other hazardous household wastes.

Waterfront Protection

For waterfront landowners, responsible riparian management is critical to the stability of their own property. A river's bank must stand up to scouring currents, fluctuating water levels, moving ice, flooding, surface runoff and, on a larger river, boat wakes and wind-driven waves.

Soils near the Red River of the North and its tributaries are inherently weak, and natural forces are always moving river channels. These soils display weak engineering properties, and when exposed to slopes, such as riverbanks, bank slumping frequently and naturally occurs.

Because riverbank slumping is often inevitable, attempts to stop it have not proven successful, including lime stabilization; homeowner-constructed retaining walls; placing riprap, concrete, or other material on the slope; and even professionally engineered and costly strategies such as riprap or sheet piling. The action of homeowners can often increase the rate and impact of this naturally occurring process.

What Accelerates Slumping?

- Removing trees and brush (rainwater can run off trimmed lawns twice as fast as from treed areas).
- Replacing deep-rooted native grasses with shallow-rooted grasses like Kentucky bluegrass, which further destabilizes the soils.
- Mass loading of property with structures, retaining walls, riprap, soil and fill, and extensive landscaping features.
 - Installing irrigation systems and drain fields, which both add weight and further reduce soil structural strength.

While slumping is a very difficult problem to mitigate and cannot always be prevented, slowed, or reversed, following responsible riparian practices may help protect your property and the Red River of the North watershed.

To potentially slow riverbank slumping:

- Do not clear-cut the land.
- Maintain deep-rooted native vegetation.
- Do not plant shallow-rooted grasses.
- Plant freshly cut stakes or branches of willow, dogwood, or cottonwood along water banks.
- Do not saturate soils by overwatering or adding drain fields.
- Do not place septic systems too close to the water's edge.
- Do not add additional weight adjacent to the riverbank, such as structures, retaining walls, riprap, soil and fill, and extensive landscaping features.

