

# Riparian Buffers



## What:

Riparian buffers are vegetated boundaries composed of perennial grasses or woody plants that physically separate cropland from waterways. They effectively mitigate the movement of sediment, nutrients, and pesticides within farm fields and from farm fields. Not only will riparian buffers help to protect downstream waterways, but when coupled with appropriate upland treatments, including crop residue management, nutrient management, integrated pest management, winter cover crops, and similar management practices and technologies, buffer strips can assist producers to achieve a measure of increased economic and environmental sustainability in their operations.

## The Primary Functions of Buffers:

- Reduce the speed of water running off fields toward waterways
- Trap and filter sediment and chemicals carried by runoff
- Prevent pollution from reaching water resources
- Provide additional habitat for native flora and fauna

## Goal:

FBSR would like to increase awareness of programs that incentivize conservation. We would also like to work with state leaders to expand South Dakota's buffer bill and create new programs that will reward river-responsible landowners.

## Why it Matters:

- Research shows that grassy buffers most effectively trap particulate pollutants such as eroded soils. In fact, the original purpose of buffers was to prevent soil sediment from reaching surface waters, which could diminish channel and pond capacities and smother wildlife habitat. Soil sediment in runoff can also transport animal waste, excess nutrients, pesticides, petroleum products, metals, and other compounds.

Buffers also decrease problems associated with soluble pollutants – ones that dissolve in water, such as nitrogen and phosphorus – moving from cropland to surface waters. Deeper-rooted buffers, such as dense perennial grasses and brushy or woody buffers, can filter pollution moving below the surface toward a river or body of water. This type of buffer can be especially useful in trapping nitrates, which are typically carried in water below the surface.

Riparian buffers also provide food and habitat for an array of wildlife. Contiguous buffers, stretching long distances along waterways, can serve as safe travel corridors for wildlife.

Learn more at [fbsr.org/river-restoration](https://fbsr.org/river-restoration)

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