



## Riparian Buffers

Developed by: Lauren Taneyhill and Kristen Kyler

### Conewago Creek Initiative Partners:

Dauphin, Lancaster,  
and Lebanon County  
Conservation Districts

Tri-County Conewago  
Creek Association

South Londonderry  
Township

Elizabethtown College

Penn State

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Environmental  
Protection

PA Department of  
Conservation and  
Natural Resources

PA Fish and Boat  
Commission

National & PA Natural  
Resources  
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Inc.

A riparian buffer is a vegetated area alongside a stream. A buffer can consist of trees, shrubs, or grasses. It is best if the buffer is composed of native plants. While a permanent forested buffer is the optimal approach, even tall grasses are better for stream health than no buffer at all. Riparian buffers are considered one of the best ways to improve the health of a stream.

### The Benefits of Buffers

Riparian buffers are natural streamside water filters for rainwater flowing over land surrounding a stream. The vegetation along the stream reduces runoff of sediment and pollutants from the land and increases nutrient uptake so that excessive nutrients such as nitrogen or phosphorus are less likely to pollute the water. The wider the buffer area, the more efficient it will be in protecting the stream. A stream with a buffer will process nutrients and pollutants faster than a stream without a buffer, with forested buffers outperforming grass buffers.

Riparian buffers also stabilize stream banks to reduce erosion. Matured trees can help shade the stream, cooling water temperatures making the stream healthier for fish.

Where livestock have access to the stream, a riparian buffer coupled with stream bank fencing is the best approach. Livestock directly contribute nitrogen and phosphorus to the stream as well as bacteria and other pathogens. Not only does restricting cattle access improve water quality, but it is also safer for the cattle and improves herd health.

### Maintenance

After planting shrubs and trees to create a riparian buffer, it is very important to perform regular maintenance. Maintenance includes mowing, herbicide application, and re-staking and removing tree tubes. Without this minimal maintenance it is very likely the trees will not survive to create a healthy riparian buffer.

### Web Resources

[Landowner Guide to Buffer Success](#)

[Summary Guide from the Tri-County Conewago Creek Association](#)



### Programs

#### USDA NRCS

USDA NRCS administers a variety of cost share programs to implement conservation practices such as riparian buffers. The Conewago is USDA's "Showcase Watershed" meaning the watershed is targeted for resources and funding.

#### 319 Funding

Farms in priority areas of the watershed may also be eligible for funding through the County Conservation Districts' 319 funding.

### Interested in implementing this practice? Contact:

Ashley Spotts, PA Chesapeake Bay Foundation  
717-234-5550, [aspotts@cbf.org](mailto:aspotts@cbf.org)

Stephanie Eisenbise, PA Chesapeake Bay  
Foundation  
717-234-5550, [seisenbise@cbf.org](mailto:seisenbise@cbf.org)



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