10 Minute Supervisor Trainings



March 2023

Riparian Buffers

A riparian buffer, or stream buffer, is a vegetated area near a stream or water body. It is usually forested, which helps both shade the stream ecosystem and partially protect the stream from the impact of adjacent land uses. These buffers play a key role in increasing water quality in streams, rivers, and lakes, thus providing environmental benefits. This practice is also very beneficial for soil erosion issues. It is eligible under multiple state cost share best management practice categories (forestland, cropland, pastureland, and livestock feeding operations) and is often used in conjunction with other practices to establish cover, improve water quality and improve erosion issues.

Benefits of establishing a riparian buffer:

Riparian buffers can deliver a number of benefits including filtering nutrients, pesticides, and animal waste from agricultural land runoff; stabilizing eroding banks; filtering sediment from runoff; providing shade and shelter; and providing wildlife habitat and corridors. Riparian buffers also slow runoff, allowing more water to infiltrate and be absorbed by plants.

Uses for this practice:

This practice is utilized to establish plants, grasses, trees and shrubs along a stream, around a sinkhole, or other water body to solve water quality or soil erosion issues. This practice will likely be used in conjunction with other practices such as: Tree and Shrub Site Preparation (490) and the Tree and Shrub Establishment (612). Kentucky Division of Forestry can help to develop any tree planting plans.

Lifespan:

The lifespan for this practice is 15 years, primarily because of the slow vegetation growth and the increased benefits over time.





To be eligible a landowner must have one of the following:

- Animal feeding operation.
- Livestock on pasture fields (livestock operation must meet grazing/stocking requirements)
- Fields planted in annual crops, abandoned crop fields, hay land acres or meadow areas.
- Newly planted forest areas, natural successional areas, existing forestland, fruit or nut tree plantings, or other sites with trees or shrubs present.
- Streams, springs, sinkholes or other areas that need protection.

Cost share rate:

All state cost share rates are a maximum of 75% of the actual installation cost of the practice not to exceed \$20,000 per year.

Benefits of riparian buffers:

- Protect floodplains and reduce flooding by slowing water and acts as a sponge to increase infiltration.
- Protect streambanks by having a strong root system that holds the soil in place.
- Protect stream ecosystem by providing shade, regulating temperature and attracting birds and other wildlife.
- Provide food, cover and habitat for both aquatic organisms and wildlife.



More information online:

Kentucky Ag Water Quality Authority BMP:

 https://eec.ky.gov/Natural-Resources/Conservation/Pages/Best-Management-Practices.aspx

UK Extension Riparian Buffer Publications

- http://www2.ca.uky.edu/agc/pubs/id/id175/id175.pdf&sa=U&ved=2ahUKEwjVm_nwo_L8
 AhX3l4kEHX7bC_UQFnoECAQQAQ&usg=AOvVaw1r20Rnb5QDaJacAAMEB6ra
- http://www2.ca.uky.edu/agcomm/pubs/aen/aen105/aen105.pdf&sa=U&ved=2ahUKEwjV m nwo L8AhX3l4kEHX7bC UQFnoECAlQAQ&usg=AOvVaw3j7ERmrMrc9lpEM5k B2t K