10 Minute Supervisor Trainings



May 2023

Grassed Waterway

This practice is considered a high priority practice for the Kentucky Soil Erosion and Water Quality Cost Share program (KY State Cost Share), based on criteria outlined in 401 KAR 1:010. A grassed waterway is a shaped or graded channel that is established with suitable vegetation to convey surface water at a non-erosive velocity using a broad and shallow cross section to a stable outlet.

Purpose

The purpose of this practice is to convey runoff from terraces, diversions, or other water concentrations without causing erosion or flooding; to prevent gully formation; and to protect/improve water quality.

Grassed Waterways are eligible practices under each of the four AWQP BMPs; Livestock, Pastureland, Cropland, or Forestland. Listed below are reasons why this practice would be requested under each BMP.



In the State Cost Share Livestock AFO BMP Category – this practice is utilized to prevent or control gully erosion from concentrated flow areas occurring as a result of an animal feeding operation. Critical Area Planting, Mulching, Fence, Filter Strip, Grade Stabilization Structure, Subsurface Drain, or Underground Outlet may be needed along with this practice.

In the State Cost Share Pastureland BMP Category – this practice is utilized to prevent or control gully erosion from concentrated flow areas occurring in pastureland. Critical Area Planting, Mulching, Fence, Filter Strip, Grade Stabilization Structure, Subsurface Drain, or Underground Outlet may be needed along with this practice.

In the State Cost Share Cropland BMP Category – this practice is utilized to prevent or control gully erosion from concentrated flow areas occurring in cropland areas. Critical Area Planting, Mulching, Filter Strip, Grade Stabilization Structure, Subsurface Drain, or Underground Outlet may be needed along with this practice.

In the State Cost Share Forestland BMP Category – this practice is utilized to prevent or control gully erosion from concentrated flow areas occurring in forestland areas. Critical Area Planting, Mulching, Grade Stabilization Structure, or Underground Outlet may be needed along with this practice.



Operation and Maintenance

The land user is responsible for proper operation and maintenance throughout the minimum 10-year design life of the practice and as may be required by federal, state, or local laws or regulations. This practice is designed to provide a stable, non-eroding surface for areas frequently used by equipment and animals.

- After vegetation is established, remove any temporary measures such as diversions or silt fences that were installed, to not interfere with design flow.
- Minimize damage to vegetation by excluding livestock whenever possible, especially during wet periods. Permit grazing in the waterway only when a controlled grazing system is being implemented.
- Inspect grassed waterways regularly, especially following heavy rains. Fill, compact, and reseed damaged areas immediately. Remove sediment deposits to maintain capacity of the grassed waterway.
- Avoid use of herbicides or pesticides that would be harmful to the vegetation or pollinating insects in and adjacent to the waterway area. Take care when applying herbicides to the surrounding field to avoid the waterway with direct spray contact and/or drift.
- Avoid using waterways as turn rows during tillage and cultivation operations.
- Mow or periodically graze vegetation to maintain capacity, reduce sediment deposition, and maintain suitable plant composition and vigor. Mowing may be appropriate to enhance wildlife values, but must be conducted to avoid peak nesting seasons and reduced winter cover.
- Where possible, defer management activities of pollinator habitat areas until the non-growing season (November –March) to avoid disturbance of pollinators or their habitat or food source.
- Apply supplemental nutrients as needed to maintain the desired species composition and stand density of the waterway.
- Control noxious weeds.
- Do not use waterways as a field road. Avoid crossing with heavy equipment when wet.
- Lift tillage equipment and turn off chemical application equipment when crossing the waterway.

Producers Who Might Be Interested

Those producers with areas within the previously mentioned practice category land uses, where added water conveyance capacity and vegetative protection are needed to prevent erosion and improve runoff water quality resulting from concentrated surface flow. Approved applicants will receive 75% cost share, up to the \$20,000 limit per application/funding cycle, which is based on actual receipts.

Outreach

There are many ways to reach producers in your county. Distributing flyers to local businesses, radio advertisements, social media posts, newsletters, producer meetings and field days are a few ways to provide outreach to those who might be interested in incorporating grassed waterways into their operation.

More information online

All BMPs the Kentucky Ag Water Quality Authority has approved: <u>https://eec.ky.gov/Natural-Resources/Conservation/Pages/Best-Management-Practices.aspx</u> Kentucky Cooperative Extension's Agriculture and Natural Resources publications:

https://anr.ca.uky.edu/anr-publications

NRCS's Field Office Technical Guide: https://efotg.sc.egov.usda.gov/#/



How to Reach Producers:

Consider using flyers and advertising at agriculture buildings, stockyards, and farm supply stores. The district could also advertise on radio and in the newspaper. Extension and producer meetings are a great way to reach the people who might be interested in establishing filter strips in their current operations.

Social media is another way to reach producers in your area. If your district does not already have a Facebook page, consider starting one. You can advertise your events and programs and can use pictures and video to show how the district can help with a producer's problems.

More information online:

List of all Kentucky Ag Water Quality Authority BMPs: <u>https://eec.ky.gov/Natural-Resources/Conservation/Pages/Best-Management-Practices.aspx</u> BMP 5: <u>Manure Management Systems</u> BMP 11: <u>Nutrient Management</u> Kentucky Cooperative Extension's Agriculture and Natural Resources publications: <u>https://anr.ca.uky.edu/anr-publications</u> On Farm Composting of Animal Mortalities: <u>http://www2.ca.uky.edu/agcomm/pubs/id/id166/id166.pdf</u> NRCS's Field Office Technical Guide: <u>https://efotg.sc.egov.usda.gov/#/</u>



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