



# Definition of Conservation Practices in Kentucky

## An Interagency Landowner Assistance Technical Publication, First Edition

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### Introduction

Over 10 federal and state financial assistance programs are available to landowners in Kentucky, encompassing over 50 agriculture, forestry, and wildlife management practices. Each program provides financial assistance for a particular set of practices. In some instances, descriptions and definitions for these practices are presented in program materials. In other instances, practices are not clearly defined or are subject to regional or statewide interpretations.

To effectively use financial assistance programs, it is important to understand all aspects of the practices supported by each program. For example, it is important to understand the difference between a grassland for pasture/hay/wildlife funded by one program—grazing and haying controlled so that these production areas still exhibit wildlife benefits—and a grassland established strictly for wildlife funded by a different program that requires more stringent management, such as mowing outside the nesting season and maintaining minimum grazing or mowing heights.

In some instances, a particular assisted practice will exclude certain activities. A heavy-use area would be defined as allowing activities to reduce soil erosion, degradation, and pollution caused by concentrated livestock and heavy equipment use. However, assistance for maintenance or improvement of roads would not be included as a heavy-use area practice. Misinterpretation or improper implementation of practices can lead to significant problems with allocation of funds.

This publication provides definitions and descriptions for practices qualifying for financial assistance in Kentucky and is provided to assist in cost-share planning. The definitions provided in this publication are specific to financial assistance programs in Kentucky and were developed from both published program descriptions and in consultation with the agencies responsible for technical assistance.



## Definitions and Descriptions

**Animal waste utilization:** Using agricultural waste on land in an environmentally friendly manner while maintaining or improving soil and plant resources.<sup>2</sup> (See also *waste utilization*.)

**Composting facility:** a facility for biological stabilization of waste organic material.<sup>2</sup>

**Conservation easements:** easements placed on lands devoted to specified long-term conservation uses.

**Contour buffer strips:** narrow strips of perennial, herbaceous vegetative cover established across the slope and alternated down the slope with cropped strips.<sup>2</sup>

**Critical area planting:** establishment of vegetation on severely eroded, sediment-producing areas that often require special planting and management techniques to overcome unfavorable soil-site conditions.<sup>1</sup>

**Fence:** a permanent or temporary structure for the exclusion of or the improved management of livestock. Its purpose is to protect a conservation practice from grazing damage or to reduce potential sediment damage and improve water quality.<sup>1,4</sup>

**Field border:** a band or strip of perennial vegetation established on the edge of cropland, hayland, or pastureland.<sup>2</sup>

**Filter strip:** a strip of close-growing, permanent, herbaceous vegetation. It filters from cropland and other sensitive areas the sediment, organic material, organisms, nutrients, and/or chemicals in surface runoff water that constitute a pollution hazard. Includes establishment practices such as minerals, seed, seed-bed preparation, seeding, fencing.<sup>1,3</sup>

**Fire break:** a linear area created by exposing mineral soil or by growing lush green vegetation such as winter wheat. Also, in some instances, cool-season grasses maintained to stop the spread of a fire.<sup>2,4,5</sup>

**Forestland erosion control:** practices such as use of culverts, diversions, fence, filter strip, grade stabilization, water bars, and critical area protection to reduce erosion and sedimentation resulting from silvicultural or other activities.<sup>3</sup>

**Forest site preparation:** preparation of an area to be planted with tree and/or shrub seedlings to eliminate or control competing vegetation and to ensure and enhance seedling survival and growth.<sup>4</sup>

**Grade stabilization structure:** a structure for stabilizing the grade of a gully or other water course, thereby preventing further head cutting or lowering of the channel grade.<sup>1</sup>

**Grassed waterway:** a natural or constructed channel, usually broad and shallow, covered with erosion-resistant grasses. It is used to safely carry surface runoff water from a field, terrace, diversion, or other area to a suitable outlet.<sup>1</sup>

**Grassland-pasture/hay/wildlife:** haylands or pasturelands established and managed to provide to livestock in a controlled manner to ensure wildlife benefits. Harvest dates and heights may apply to provide adequate cover during wildlife nesting and brood-rearing period.<sup>5</sup>

**Grassland-wildlife:** grasslands established and managed solely for wildlife purposes and maintained in order to have highly diverse vegetation and all seral stages of grassland habitats.<sup>5</sup>

**Green tree reservoir:** developing and managing shallow water areas on agricultural or other lands. These areas are planted to trees in a manner that will provide water management capabilities for wetland wildlife habitat. These forested areas are covered with shallow water during the dormant season and are dry during the growing season.<sup>2,5</sup>

**Heavy use area:** Area where soil erosion, soil degradation, and pollution caused by concentrated livestock traffic or other agricultural use could pollute ground or surface waters. Specifically, where erosion is greater than soil loss and/or current conditions prevent the proper storage or management of livestock waste. Includes critical areas, diversions, filter strips, grassed waterways, and permanent fences, but not maintenance or improvement of existing roads or providing access roads.<sup>3</sup>

**Integrated crop management and nutrient pest management:** a system of applying pesticides and nutrients in an environmentally sound manner. Pest management activities include biological pest control services, crop rotation, field scouting, planting host crops, ridge till. Fertilizer management techniques include cover and green manure crops, grasses, legume rotation, leaf tissue analysis, manure testing, and soil testing, but they do not include fencing and purchase of equipment.<sup>3</sup>

**Limited stream access for livestock:** an area that is stabilized to prevent erosion and functions as an integral component of a planned system for providing livestock water at designated points along a stream bank.<sup>2</sup>

**Livestock stream crossing:** a structure to provide a single crossing point for livestock, including entrance/exit ramps of filter fabric, rock, anchoring pins, and culverts as well as seeding of disturbed areas impacted by this structure practice.<sup>3</sup> (See also *limited stream access for livestock*, and *stream crossing*.)

**Livestock water:** includes the construction of earthen ponds, development of hillside seeps or springs by cleaning or excavating, installation of groundwater collection and storage facilities for livestock use and/or irrigation, and installation of pipelines and tanks.<sup>1</sup>

**Moist soil units/shallow water for wildlife:** developed and managed shallow water areas for the development of wetland herbaceous species to provide food and cover for wetland wildlife.<sup>2</sup>

**Nesting structures:** artificial nest boxes or other nest structures most often used in areas where woodlands are too young to supply adequate cavities for cavity-nesting species, including birds, bats, butterflies, squirrels, raccoons, and other wildlife.<sup>5</sup>

**Pesticide containment facilities:** practices and structures to protect water, land, and air from pesticides where 100 pounds of active ingredients per person or farm is being used. Includes diversions, fences, formed concrete, rebar, sealant, land shaping, liners, soil sealant, and bentonite; permanent pumps and accessories; and seed and seeding on critical areas. Does not include construction of walls, disposal of rinsate or spillage, or remedial action to correct soil, water, or other resources affected by pesticide spillage.<sup>3</sup>

**Prescribed burning:** the use of fire as a vegetation management tool to control plant succession. Must be implemented with a written “burn plan” detailing the weather condition, type of fire to be used, objectives of the burn, and safety precautions.<sup>5</sup>

**Residue management, no-till tobacco, and vegetables:** management of previous crop or plant residue for the protection and/or improvement of the soil.<sup>1</sup>

**Riparian area protection:** planting and/or maintenance of zones of vegetation adjacent to perennial and intermittent streams, lakes, ponds, and intermittent or permanently flooded wetland, sinkholes, karst areas, and other groundwater recharge areas. Purpose is to remove nutrients, sediment, organic matter, and pesticides from surface runoff and subsurface flow by deposition, absorption, plant uptake, denitrification, and other processes. Adjacent contributing land must be cropland, pastureland, hayland, or woodland.<sup>3</sup>

**Riparian forest buffer:** an area of trees, shrubs, and grasses located adjacent to and up-gradient (up-slope) from streams and other bodies of water.<sup>2</sup>

**Rotational prescribed grazing:** practices to protect grazing land and vegetative cover and encourage plant diversity by moving livestock from one pasture to another so that forage is used without overgrazing pastures. Includes construction and deepening of wells; installing of well casings; development of springs or seeps; installation of livestock ramps; dugouts such as dams; installing of pipelines and tanks, pits, and ponds; fencing to protect water supplies; reseeding cool-season grasses and legumes (endophyte-free fescue only); and the application of N-P-K, micronutrients, and lime.<sup>3</sup>

**Sinkhole protection:** practices used to reduce direct pollution of groundwater from sediment, animal waste, pesticides, or other agricultural pollutants in karst areas where open sinkholes exist. Includes critical planting with trees and shrubs, diversion, fence, filter strip, grassed waterway, grade stabilization, obstruction removal, and vertical drain (Vertical drains require EPA notification).<sup>3</sup>

**Site preparation for natural regeneration:** site treatment using physical and/or chemical means to provide for regeneration of a new forest from seed, releasing existing seedlings, and/or coppicing of existing stems (cutting or felling saplings or trees) to produce stump sprouts.<sup>4</sup>

**Stream crossing:** an area stabilized in order to prevent erosion, functioning as an integral component of a planned system and providing livestock movement across designated points along a stream.<sup>2</sup> (See also *livestock stream crossing* and *limited stream access for livestock*.)

**Stream bank and shoreline protection:** structural and/or vegetative practices to control or prevent stream banks and shorelines from scouring, caving, or sloughing. Can be used on unprotected banks of streams between high and low water marks, ditches, channels, or lakes and areas around stream crossings that may be damaged by vehicular traffic or livestock use.<sup>1</sup>

**Strip cropping:** growing crops in a systematic arrangement of strips or bands on the contour or across the slope in order to reduce erosion. The crops are arranged so that a strip of grass or a close-growing crop is alternated with a clean-tilled crop or fallow.<sup>2</sup>

**Strip disking:** a method of field maintenance in which approximately one-third of the field is lightly disked each year to maintain the early successional grassland component many wildlife species depend upon.<sup>5</sup>

**Strip mowing:** method of field maintenance in which approximately one-third of the field is mowed each year to control woody encroachment and annually provide young, green, succulent vegetation for forage.<sup>5</sup>

**Subsurface drain:** a perforated conduit such as pipe, tubing, or tile installed beneath the ground to intercept and convey groundwater.<sup>6</sup>

**Terrace:** an earth embankment or a combination of an embankment and channel constructed across a slope. Terraces divert or temporarily store surface runoff water instead of allowing its rapid downslope flow.<sup>1</sup>

**Tree/shrub planting:** planting of tree and/or shrub seedlings for timber production or wildlife food or cover, erosion control, or other conservation purposes.<sup>4</sup>

**Timber stand improvement (TSI):** to improve immature forests or recently harvested stands by precommercial thinning, release of desirable understory, cull tree removal, cutting of vines, and/or pruning of crop trees.<sup>4</sup>

**Underground outlet:** a conduit installed beneath the surface of the ground to collect surface water and convey it to a suitable outlet.<sup>2</sup>

**Waste management system:** a reservoir, pit, pond, holding tank, stack pad, or treatment lagoon designed specifically to treat or hold, prior to land application, liquid and solid livestock wastes, waste water, and/or polluted runoff.<sup>1</sup> (See also *waste storage structure*.)

**Waste storage structure:** a facility constructed to provide temporary storage of animal manure, waste water, and runoff associated with an agricultural waste management system.<sup>3</sup> (See also *waste management system*.)

**Waste treatment lagoon:** an impoundment made by excavating or earth fill to biologically treat livestock or other agricultural waste, reduce pollution, and protect the environment.<sup>1</sup>

**Waste utilization:** soil tests and manure analysis necessary to determine application rates for the safe use of wastes for fertilization of crop, forage, or fiber production while improving or maintaining soil structure, preventing erosion, and safeguarding water resources. Approved waste storage facility must be in place and a comprehensive nutrient management plan developed.<sup>3</sup> (See also *animal waste utilization*.)

**Water and sediment control basin:** a basin or depressional area for temporarily retaining storm water on site, providing for infiltration, pollution reduction, and downstream water quality improvement.<sup>6</sup>

**Water diversion:** an earth channel constructed across a slope with a berm or supporting ridge on the lower side to divert water from one area to another area.<sup>1</sup>

**Water well protection:** practices to protect the quality of groundwater and well water supplies from agricultural nonpoint source pollution. Includes use of diversion channels, fencing, land shaping, seed, and seeding on critical areas around active or abandoned wells; waterways; water testing; and the use of formed concrete, rebar, and sealant for prevention of contaminants from entering a well. Does not include construction of wells, casing, pumps, pipelines, well houses, or other storage areas.<sup>3</sup>

**Wetland restoration:** a rehabilitation of a drained or degraded wetland in which the soils, hydrology, vegetative community, and biological habitat are to the extent possible returned to the natural condition.<sup>2</sup>

**Wildlife food plots:** annual grain or perennial legume plots grown to attract wildlife for viewing or hunting purposes.<sup>5</sup>

**Wildlife water hole:** to develop or improve an area that provides access to water for wildlife.<sup>2</sup>

### Source of Definitions

<sup>1</sup> *Kentucky Best Management Practices for Agriculture*, 1993. Kentucky Natural Resources Environmental Protection Cabinet, Division of Conservation and Division of Water: 138 pp.

<sup>2</sup> Natural Resources Conservation Service, United States Department of Agriculture.

<sup>3</sup> *The Kentucky Soil Erosion and Water Quality Cost-Share Program Manual*, 1999. Kentucky Natural Resources Environmental Protection Cabinet, Division of Conservation: 58 pp.

<sup>4</sup> Kentucky Division of Forestry, Kentucky Natural Resources Environmental Protection Cabinet.

<sup>5</sup> Kentucky Department of Fish and Wildlife Resources.

<sup>6</sup> *Kentucky Best Management Practices for Construction Activities*, 1994. Kentucky Natural Resources Environmental Protection Cabinet, Division of Conservation, Division of Water: 259 pp.

### A Cooperative Interagency Publication

