United States Department of Agriculture
Natural Resources Conservation Service

Water Quality and Wildlife Enhancement Activity – *ANM05- Extending Riparian Forest Buffers for Water Quality Protection and Wildlife Habitat*

Extend existing buffers
Where existing buffers are utilized, extend them to gain more efficiency in intercepting overland flow and reducing the transport of nutrients, pesticides and agro-chemicals.

Land Use Applicability
This enhancement is applicable on cropland and pasture land.

Benefits
Widening existing conservation buffers (e.g., filter strips, riparian buffers, grassed waterways, field borders) that currently meet NRCS conservation practice standard criteria can provide food and cover for native and game species as well as enhancing aquatic habitat by providing shade, input of wood or carbon to the stream, and stabilizing streambank conditions. Additionally, these extended buffers offer more surface area to filter out sediments and agro-chemicals.

Riparian habitats are important transition zones between terrestrial landscapes and aquatic zones. Wildlife species utilize these transition zones because they provide a unique combination of cover, access to water and often provide important travel corridors. Extending existing buffers not only enhances wildlife habitat but it increases the effectiveness of water quality protection they provide to the streams.

Criteria for Extending Existing Buffers
Existing buffers must meet minimum state requirements for width. Extend the existing buffer for a total of 60 feet or more to enhance habitat and water quality functions.

The extended buffer must be composed of at least 5 species of non-noxious, wildlife friendly grasses, perennial forbs, shrubs, and\or trees best suited to site conditions. Include species that provide pollinator food and habitat where possible.

- All site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice standard criteria and specifications.
- Forested riparian buffers shall consist of a diversity of tree and shrub species of which the majority are capable of producing fruit or nuts and trees which, when mature, will achieve heights of at least 60 feet and 60% canopy closure.
- Any use of the buffer must not compromise its intended purpose.
- To the extent possible the buffer areas and extended buffer areas will be vegetated to increase overland flow interception and increase water quality values of the stream or water body.

For full implementation of this enhancement, continuous buffers must be used on all lands adjacent to streams, lakes and ponds where annual crops are produced.

Operation and Maintenance:

- Once established, buffers must not be mowed, disked, grazed, or otherwise disturbed, until after the primary wildlife ground nesting period has ended.
- Buffers will be regularly maintained for its intended purpose through the life of the contract. This includes any removal of vegetation, including grazing.
- Grazing is allowed if a grazing management plan is used that protects the integrity, diversity and function of the riparian area.
- Buffers will have a wildlife management plan to maintain established plant communities through the life of the contract. The wildlife plan will maintain the plant community and its structural diversity and provide habitat for intended species, remove duff, and control woody vegetation.

Documentation Requirements

1. A map showing the location and size of enhanced riparian forest buffers.
2. Documentation of the type and rates of vegetation planted in the new riparian forest buffers.

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EXISTING RIPARIAN ZONE

Minimum required width of existing forested riparian buffer – 35 feet.

APPROVED MIXTURES

1. Big Bluestem – 1.0 lbs. PLS
   Indiangrass – 1.0 lbs. PLS
   Little bluestem – 1.0 lbs. PLS
   Sideoats grama – 1.0 lbs. PLS
   Switchgrass – 0.5 lbs. PLS
   PLUS
   Kobe/Korean lespedeza – 5.0 lbs.
   OR
   Single or Mix of: – 1.0 lb.
   Illinois bundleflower
   Partridge pea

2. Little Bluestem - 3.0 lbs. PLS
   Indiangrass - 0.5 lbs. PLS
   Sideoats grama - 1.0 lb. PLS
   Illinois bundleflower - 1.0 lbs.
   Partridge pea - 1.0 lb.

3. Little bluestem - 3.0 lbs. PLS
   Sideoats grama - 1.0 lb. PLS
   Switchgrass - 0.5 lbs. PLS
   Native forb from list - 1.0 lb.
   Native forb from list - 1.0 lb.
   (blackeyed susan, lanceleaf coreopsis, purple prairie clover, or purple coneflower)

4. Little bluestem - 2.0 lbs. PLS
   Sideoats grama - 2.0 lbs. PLS
   Indiangrass - 0.5 lbs. PLS
   Native forb from list - 1.0 lb.
   Native forb from list - 1.0 lb.
   (blackeyed susan, lancelef coreopsis, purple prairie clover, or purple coneflower)

5. Combination of one above grass/forb mixture and at least 5 trees and/or shrubs from the following list. Trees planted on 12 ft. by 12 ft. spacing (302/acre). Shrubs on 8 ft. by 8 ft. spacing (680/acre).

6. Combination of at least 5 trees and/or shrubs from the following list. Trees will be planted on a 12 ft. by 12 ft. spacing (302/acre). Shrubs will be planted on an 8 ft. by 8 ft. spacing (680/acre).

List of approved trees

Ash, green	Ash, white	Blackgum	Cherry, black
Dogwood, flowering	Hickory, shagbark	Hickory, pignut	Oak, black
Oak, cherrybark	Oak, northern red	Oak, nuttall	Oak, pin
Oak, post	Oak, shingle	Oak, shumard	Oak, southern red
Oak, swamp chestnut	Oak, swamp white	Oak, water	Oak, willow
Persimmon	Poplar, yellow	Sycamore, American	Walnut, black

List of approved shrubs

Crabapple, southern	Dogwood, silky	Elderberry	Indigobush
Plum, Chickasaw	Spicebush	Sumac	Viburnum, mapleleaf

PRIMARY NESTING SEASON

April 15 - August 15

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Producer Name:				Date:				
Tract Number:				County:				
Field Number	Existing Riparian Average Width (ft)	Existing Riparian Length (ft)	Riparian Additional Average Width (ft)	Riparian Additional Acres	Planned Mixture (no.)	Planned Tree Species	Grazing Plan Required?	
							YES	NO