United States Department of Agriculture
Natural Resources Conservation Service

2013 Ranking Period 1

Animal Enhancement Activity – ANM05 - Extending riparian forest buffers for water quality protection and wildlife habitat

Enhancement Description
Where existing riparian forest buffers (i.e., buffers) are utilized, extend them to gain more efficiency in intercepting overland flow, reducing the transport of nutrients, pesticides and agro-chemicals, and for wildlife habitat.

Land Use Applicability
Cropland, Pastureland, Rangeland

Benefits
Widening existing riparian forest buffers 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. Extended buffers offer more surface area to filter out sediments and agro-chemicals. Riparian forest buffers can also mitigate pesticide drift during pesticide applications and pollen drift where the mixing of plant varieties is not desired.

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.

Conditions Where Enhancement Applies
This enhancement only applies to acres of **existing** riparian forest buffer(s) on crop, pasture or range land uses.

Criteria
1. Extend the existing buffer for a total of 60 feet or more to enhance habitat and water quality functions.
2. The extended buffers must be composed of at least 5 species of non-noxious, wildlife friendly trees and shrubs best suited to site conditions. Include species that provide pollinator food and habitat where possible.
3. All site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice standard criteria and specifications.

4. Forest riparian buffers shall consist of a diversity of tree and shrub species of which the majority is capable of producing fruit or nuts and trees, when mature, will achieve heights of at least 60 feet and 60% canopy closure.
5. Any use of the buffer must not compromise its intended purpose.
6. To the extent possible the buffer areas and extended buffer areas will be shaped and vegetated to increase overland flow interception and increase water quality values of the stream or water body.
7. The extension of buffers can incorporate other buffer types (filter strips or riparian herbaceous cover) where applicable to meet specific operator management goals.

Operation and Maintenance

1. Once established, buffers must not be mowed, disked, grazed, or otherwise disturbed during the primary wildlife ground nesting period.
2. Buffers will be regularly maintained for the intended purpose through the life of the contract. This includes any removal of vegetation, including grazing.

a. Grazing is not permitted unless a grazing management plan is in effect.
b. The grazing management plan must protect the integrity, diversity and function of the riparian area.

3. 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.
4. The grazing management plan and the wildlife management plan shall complement each other.

Adoption Requirements

This enhancement is considered adopted when the buffer has a total width of 60 feet or more for the selected land use.

Documentation Requirements

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

References

Bentrup, G. 2008. Conservation buffers: design guidelines for buffers, corridors, and greenways. Gen. Tech. Rep. SRS-109. Asheville, NC: Department of Agriculture, Forest Service, Southern Research Station. pp110. http://nac.unl.edu/bufferguidelines/index.html

Wenger, S. 1999. A review of the scientific literature on riparian buffer width, extent, and vegetation. Athens, GA: University of Georgia, Institute of Ecology, Office of Public Service and Outreach. pp 59. http://www.rivercenter.uga.edu/service/tools/buffers/buffer_lit_review.pdf

Palone, R.S., and A.H. Todd. 1997. Chesapeake Bay riparian handbook: a guide for establishing and maintaining riparian forest buffers. NA-TP-02-97. Randor, PA: U.S. Department of Agriculture, Forest Service, Northeastern State and Private Forestry. http://www.na.fs.fed.us/pubs/misc/riparian_handbook/chesapeake_bay_riparian_handbook.pdf

CSP 2013-1

Mississippi Supplement
ANM05

Guidance On Vegetative Cover For Riparian Forest Buffers

Refer to MS-ECS-391-01(JS/SS), Riparian Forest Buffer, for planting and management guidelines.

CSP requires Riparian Forest Buffers must be composed of at least 5 species of non-noxious, wildlife friendly trees and shrubs best suited to site conditions as follows: (Include species that provide pollinator food and habitat where possible.)

1. **Trees and/or shrubs best suited for wildlife (must have at least 1 hard mast producing species), and**
2. **May have a 30-foot transition zone of grasses, legumes, and/or forbs best suited for wildlife.**

Refer to Appendix 2 of the Wildlife Habitat Incentive Program Manual or consult a NRCS biologist for acceptable species, planting rates, dates and planting guidance.
Noxious weeds and other undesirable plants, insects, and pests shall be controlled during establishment.

JANUARY 2012