

**Animal Enhancement Activity – ANM32 – Extend existing filter strips or riparian herbaceous cover for water quality protection and wildlife habitat**



**Enhancement Description**

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

**Land Use Applicability**

Cropland, Pastureland, Rangeland

**Benefits**

Widening existing buffers can provide food and cover for native and game species as well as enhancing aquatic habitat. Extended buffers offer more surface area to filter out sediments and agro-chemicals. Buffers can also mitigate pesticide drift during pesticide applications and pollen drift where the mixing of plant varieties is not desired.

Buffer 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. Often buffers are adjacent to riparian areas or are important contributors to clean water, and habitat areas nearby. 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 buffers 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 grasses and/or perennial forbs 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. Any use of the buffer must not compromise its intended purpose. Vegetation from buffers can be harvested for bio-energy as long as the harvesting is done in accordance with a plan that does not compromise the water quality and wildlife benefits of the extended buffer.
5. 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.



6. The extension of buffers can incorporate other buffer types (riparian forest) 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 the existing and enhanced buffer.
2. Documentation of the type and rates of vegetation planted in the new buffer areas.

#### References

Al-Kaisi, M., M. Hanna and M. Licht. 2003. Conservation buffers and water quality. Iowa State University Extension Service Ames, IA. <https://store.extension.iastate.edu/ItemDetail.aspx?ProductID=5502>.

Clark, W.R. and K.F. Reeder. 2005. Continuous Conservation Reserve Program: Factors Influencing the Value of Agricultural Buffers to Wildlife Conservation. Pages 93-113 *in* Fish and wildlife benefits of Farm Bill conservation programs: 2000-2005 update. Haufler, J. B., editor. The Wildlife Society Technical Review 05-2. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs143\\_012882.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs143_012882.pdf).

Davros, N. M. and W.L. Hohman. 2006. Breeding bird use of Minnesota Filter Strips in Relation to width, planting mixture, and surrounding land use. NRCS Technical Note. <http://directives.nrcs.usda.gov/OpenNonWebContent.aspx?content=18521.wba>.

Reeder, K.F., D.M. Debinski, and B.J. Danielson. 2006. Factors affecting butterfly use of filter strips in southwestern Minnesota. NRCS Technical Note. <http://directives.nrcs.usda.gov/OpenNonWebContent.aspx?content=18503.wba>.

USDA-NRCS. 2010. Grassland Bird Population Responses to Upland Habitat Buffer Establishment by L. Wes Burger, Jr., Philip J. Barbour, and Mark D. Smith. Wildlife Insight No. 86. Washington, DC. <http://www.fwrc.msstate.edu/pubs/NRCSWildlifeInsight86.pdf>.