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

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

United States Department of Agriculture
Natural Resources Conservation Service

IDAHO ADDENDUM 2013

Animal Enhancement Activity – ANM32 – *Extend Existing Filter Strips or Riparian Herbaceous Cover for Water Quality Protection and Wildlife Habitat*

Additional guidance for extending existing filter strips and riparian herbaceous cover:

Existing filter strips must meet NRCS Practice Standard 393 minimum width requirement, which is **20 feet**, and will be extended to at least 60 feet wide. Existing riparian herbaceous buffers must meet NRCS Practice Standard 390 minimum width requirement per side, which includes the first bench of the floodplain, or be at least 2½ times the stream width (for water quality concerns) or 35 feet for water bodies. The herbaceous cover will be extended to at least 60 feet wide.

Wildlife Friendly Species

Wildlife friendly grass and forb species include all native perennial plant species typically represented by a diverse mixture as described in the representative ecological site description. Native grass species typically include bluebunch wheatgrass, Idaho fescue, Sandberg bluegrass, big bluegrass, Thurber needlegrass, slender wheatgrass, thickspike wheatgrass, western wheatgrass, and basin wildrye. On sandy sites, consider sand dropseed and Indian ricegrass. Consider native forbs and legumes such as western yarrow, arrowleaf balsamroot, buckwheat, flax, milkvetch, lupine, American vetch, penstemon and tapertip hawksbeard. Introduced grass species could include redtop, orchardgrass, meadow brome, creeping foxtail, meadow foxtail, intermediate wheatgrass, pubescent wheatgrass, tall wheatgrass, and Russian wildrye. Introduced forbs and legumes include alfalfa, small burnet, clover (multiple species), sainfoin, cicer mikvetch and yellow sweetclover. **Any use of the filter strip or riparian herbaceous buffer must not compromise its original intended purpose.**

For additional information, refer to the following documents:

Idaho NRCS Plant Materials Technical Note 2A, Plants for Pollinators in the Intermountain West. *ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn2a_pollinators_1011.pdf*

Idaho NRCS Plant Materials Technical Note 2B, Plants for Pollinators in the Inland Northwest. *ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn2b_pollinators_1011.pdf*

Idaho NRCS Agronomy Technical Note 9, *Vegetative Filter or Buffer Strips*. http://efotg.nrcs.usda.gov/references/public/ID/Agron_TN09.doc

Idaho NRCS Plant Materials Technical Note 24, *Conservation Plant Species for the Intermountain West. ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn24_seed_species_1011.pdf*

Idaho NRCS Plant Material Technical Note 24 Supplement: *Intermountain Planting Guide*, USDA-ARS Forage and Range Research Lab/Utah State Extension, AG 510. *ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn24supplement.pdf*

Idaho NRCS Plant Materials Technical Note 38, *Wetland Species and Grasses for Riparian Areas*. *ftp://ftp-fc.sc.egov.usda.gov/ID/programs/technotes/tn38_wetland_species.pdf*

USDA Forest Service, Rocky Mountain Research Station. *Riparian Buffer Design Guidelines for Water Quality and Wildlife Habitat Functions on Agricultural Landscapes in the Intermountain west*. General Technical Report GTR-203. *www.fs.fed.us/rm/pubs/rmrs_gtr203.pdf*

USDA Forest Service, Southern Research Station. *Conservation Buffers: Design Guidelines for Buffers, Corridors and Greenways.* General Technical Report SRS-109. *http://efotg.sc.egov.usda.gov//references/public/NE/Nebraska_Forestry_Tech_Note_74(Conservation_Buffers).pdf*

Site preparation and plant establishment must meet NRCS Practice Standard 393 and/or 390 requirements. Note, however, that the extension of filter strips can incorporate other buffer types (riparian forest) where applicable to meet specific operator management goals.

This activity may NOT be used with the following enhancements: AIR08, ANM05, ANM07, ENR01, PLT15, PLT18, WQL05, WQL09

Potential duplicate practices:
393 – Filter strip, 390 – Riparian herbaceous cover, 391 – Riparian forest buffer, 327 – Conservation cover, 528 – Prescribed grazing