

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.



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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>



Utah State Supplement 2015 for ANM32

This enhancement only applies to **existing** filter strips or riparian herbaceous cover

Enhancement Name	Enhancement Code	Practices (code)	Incompatible Enhancements
Extend existing filter strips or riparian herbaceous cover for water quality protection and wildlife habitat	ANM32	na393 - Filter Strip (practice should already exist) 390 - Riparian Herbaceous Cover (practice should already exist) 391 - Riparian Forest Cover 327 - Conservation Cover 528 - Prescribed Grazing	AIR08 ANM05 ANM07 ENR01 PLT15 PLT18 WQL05 WQL09

See Plants for Pollinators – Utah in FOTG Section 1, References and Tools, Pollinators for pollinator plant recommendations. Non-noxious and also non-invasive (See NRCS UT Invasive Species List) plant species must be used in filter strip. The “primary wildlife ground nesting period” is Apr 1 – July 15. Disturbance to the filter strip shall not occur Apr 1 – July 15.

Pollinator Species for ANM 32

Common Name	Scientific Name	MLRA
Common (Western) Yarrow	<i>Achillea millefolium occidentale</i>	All
Indian Ricegrass	<i>Achnatherum hymenoides</i>	All
Douglas Dustymaidens	<i>Chaenactis douglasii</i>	All, except D30, D35, and D36
Yellow Beeplant	<i>Cleome lutea</i>	All
Rocky Mtn. Beeplant	<i>Cleome serrulata</i>	All, except D30
Bottlebrush Squirreltail	<i>Elymus elymoides</i>	All
Sulfur Flower Buckwheat	<i>Eriogonum umbellatum</i>	All
Utah Sweetvetch	<i>Hedysarum boreale</i>	All, except D30
Common Annual Sunflower	<i>Helianthus annuus</i>	All
Scarlet Gilia	<i>Ipomopsis aggregata</i>	All
Lewis Flax	<i>Linum lewisii</i>	All, except D30
Alfalfa (Ladak)	<i>Medicago sativa</i>	All
Yellow Alfalfa (Falcata)	<i>Medicago sativa spp. falcata</i>	All
Firecracker Penstemon	<i>Penstemon eatonii</i>	All
Palmer Penstemon	<i>Penstemon palmeri</i>	D29, D30, D35, and southern D28
Rocky Mountain Penstemon	<i>Penstemon strictus</i>	D36, E47, E48
Scorpionweed	<i>Phacelia crenulata</i>	D30, D34, D35, D26, and southern D28
Bluebunch Wheatgrass	<i>Pseudoroegneria spicata</i>	All
Gooseberryleaf Globemallow	<i>Sphaeralcea grossulariifolia</i>	All, except E47 and E48A
Western Aster	<i>Symphotrichum ascendens</i>	All

Notes: Species are suitable for areas with 10-18 inches of precipitation. Ensure a seed mix has early, mid, and late flowering species. Additional native species should be considered on a site by site basis (See Plants for Pollinators - Utah). A pollinator seed mix should not contain more the 15% PLS per ft2 of grasses (total for all species) and 15% PLS per ft2 of alfalfa, yarrow, flax, and sunflower combined. Mix with more grasses for herbaceous buffer enhancements. See State Biologist for a Mojave (MLRA D30) list or for assistance on areas with less than 10 inches or more than 18 inches of precipitation.

The following conservation measures are required to be planned & implemented with this enhancement in all sage grouse habitat:

Enhancement Name	Enhancement Code 2015 (Old Code^)	Associated SGI Practices (Code)	Conservation Measures*
Extend Existing Filter Strips or Riparian Herbaceous Cover for Water Quality Enhancement and Wildlife Habitat	ANM32	314, 315, 327, 342, 390, 500, 528, 645	1, 2, 3, 4, 5, 10

See full table complete list of conservation measures in FOTG for more information.

Sage Grouse Initiative Supplement 2015 for ANM32

For the Sage Grouse Initiative this enhancement applies to creating new filter strips and riparian herbaceous cover as well as extending existing filter strips or herbaceous cover. New filter strips (CPS 393) and riparian herbaceous cover (CPS 390) must be planned concurrent with this enhancement.

Operations & Maintenance, Conservation Measures, and Client Acknowledgement

Operation and Maintenance	
Operation:	
Maintenance:	
Conservation Measures	
Actions that must be implemented by the landowner/manager during practice implementation:	
Client's Acknowledgement Statement	
<p>The Client acknowledges that:</p> <ul style="list-style-type: none"> a. They have received a copy of the enhancement and understand the contents and requirements. b. It shall be the responsibility of the client to obtain all necessary permits and/or rights, and to comply with all ordinances and laws pertaining to the application of this practice. 	
Cooperator:	_____ Date: _____
Planner:	_____ Date: _____

