

**Animal Enhancement Activity – ANM04- Extend existing filter strips for water quality protection and wildlife habitat**



**Enhancement Description**

Where existing filter strips 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**

Cropland and pastureland.

**Benefits**

Widening existing conservation filter strips that currently meet NRCS conservation practice standard water quality criteria can provide food and cover for native and game species as well as enhancing aquatic habitat. Extended filter strips offer more surface area to filter out sediments and agro-chemicals. Filter strips can also offer buffers to 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. Often times filter strips are adjacent to these riparian areas or are important for contributing clean water, and habitat areas nearby. Extending existing filter strips not only enhances wildlife habitat but it increases the effectiveness of water quality protection they provide to the streams.

**Criteria**

Existing filter strips must meet minimum state water quality requirements for width. Extend the existing filter strip for a total of 60 feet or more to enhance habitat and water quality functions.

The extended filter strip 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.

1. All site preparation and plant establishment shall be accomplished according to the appropriate NRCS conservation practice standard criteria and specifications.
2. Any use of the filter strip must not compromise its intended purpose. Vegetation from filter strips 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 filter strip.
3. To the extent possible the filter strip areas and extended filter strip areas will be vegetated to increase overland flow interception and increase water quality values of the stream or water body.



4. The extension of filter strips can incorporate other buffer types (riparian herbaceous and riparian forest) where applicable to meet specific operator management goals.

#### **Operation and Maintenance**

1. Once established, filter strips must not be mowed, disked, grazed, or otherwise disturbed, until after the primary wildlife ground nesting period has ended.
2. Filter strips will be regularly maintained for its intended purpose through the life of the contract. This includes any removal of vegetation, including grazing.
3. Grazing is allowed if a grazing management plan is used that will maintain the integrity and diversity of vegetation and the filtering function of the vegetation.
4. Filter strips 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.

#### **Documentation Requirements**

1. A map showing the location and size of enhanced filter strips.
2. Documentation of the type and rates of vegetation planted in the new filter strip areas.

## Michigan Supplement

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The minimum existing filter strip width required to qualify for this enhancement is 20 feet. Refer to the NRCS eFOTG Filter Strip (393) standard for seeding rates.

The following plant species are non-noxious and wildlife-friendly and may be included in filter strips:

#### Grasses and Legumes

Introduced Grasses and Legumes
Orchardgrass
Timothy
Alfalfa
Red Clover
Alfalfa
Redtop
Alsike Clover
White Dutch Clover
Prairie Grasses
Intermediate Wheatgrass
Big Bluestem
Eastern Gamagrass
Switchgrass
Indiangrass
Little Bluestem

### Wildflowers

COMMON NAME	SCIENTIFIC NAME	COMMON NAME	SCIENTIFIC NAME
Black-eyed Susan	<i>Rudbeckia hirta</i>	Panicled Aster	<i>Aster lanceolatus</i>
Blazingstar	<i>Liatris spp.</i>	Partridge Pea	<i>Cassia chamaecrista</i>
Blue Vervain	<i>Verbena hastata</i>	Prairie cinquefoil	<i>Potentilla arguta</i>
Boneset	<i>Eupatorium perfoliatum</i>	Prairie Milkweed	<i>Asclepias sullivanti</i>
Bushy Aster	<i>Aster dumosus</i>	Prairie Phlox	<i>Phlox pilosa</i>
Butterflyweed	<i>Asclepias tuberosa</i>	Prairie Smoke	<i>Geum triflorum</i>
Canada Tick Trefoil	<i>Desmodium canadense</i>	Purple Coneflower	<i>Echinacea angustifolia</i>
Cardinal Flower	<i>Lobelia cardinalis</i>	Purple Coneflower	<i>Echinacea pupurea</i>
Common Beggar-Ticks	<i>Bidens frondosus</i>	Purple Prairie Clover	<i>Dalea purpurea</i>
Common milkweed	<i>Asclepias syriaca</i>	Rattlesnake Master	<i>Eryngium yuccifolium</i>
Compass Plant	<i>Silphium laciniatum</i>	Rosin Weed	<i>Silphium integrifolium</i>
Culver's Root	<i>Veronicastrum virginicum</i>	Rough Blazingstar	<i>Liatris aspera</i>
Cup Plant	<i>Silphium perfoliatum</i>	Round Headed Bush-Clover	<i>Lespedeza capitata</i>
Dotted Blazingstar	<i>Liatris punctata</i>	Sawtooth Sunflower	<i>Helianthus grosseserratus</i>
Evening Primrose	<i>Oenothera biennis</i>	Showy Goldenrod	<i>Solidago speciosa</i>
False Bonset	<i>Kuhnia eupatorioides</i>	Showy Penstemon	<i>Penstemon grandifloris</i>
False Solomon's seal	<i>Smilacina racemosa</i>	Silky Aster	<i>Aster sericeus</i>
Fireweed	<i>Epilobium angustifolium</i>	Slender Bush-Clover	<i>Lespedeza virginica</i>
Flowering Spurge	<i>Euphorbia corollata</i>	Smooth Aster	<i>Aster laevis</i>
Foxglove Beard-Tongue	<i>Penstemon digitalis</i>	Sneezeweed	<i>Helenium autumnale</i>
Giant / Tall Sunflower	<i>Helianthus giganteus</i>	Solomon's Seal	<i>Polygonatum biflorum</i>
Golden Alexanders	<i>Zizia aurea</i>	Spiderwort	<i>Tradescantia ohiensis</i>
Great Blue Lobelia	<i>Lobelia siphilitica</i>	Spotted Touch-Me-Not	<i>Impatiens biflora</i>
Hairy Beardstongue	<i>Penstemon hirsutus</i>	Stiff / Prairie Coreopsis	<i>Coreopsis palmata</i>
Heath Aster	<i>Aster ericoides</i>	Stiff Goldenrod	<i>Solidage rigida</i>
Hoary Vervain	<i>Verbena stricta</i>	Stiff Tickseed	<i>Coreopsis palmata</i>
Indian Paintbrush	<i>Castilleja coccinea</i>	Swamp Milkweed	<i>Asclepias incarnata</i>
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	Tall Bellflower	<i>Campanula americana</i>
Joe-Pye Weed	<i>Eupatorium maculatum</i>	Tall Blazingstar	<i>Liatris pycnostachya</i>
Lance-leaved / Sand Coreopsis	<i>Coreopsis lanceolata</i>	Turk's-cap Lily	<i>Lillium michiganense</i>
Large-Flowered Trillium	<i>Trillium grandiflorum</i>	Violet Bush-Clover	<i>Lespedeza violacea</i>
Leadplant	<i>Amorpha canescens</i>	White False Indigo	<i>Baptisia lactea</i>

Marsh Blazingstar	<i>Liatrix spicata</i>	Wild Bergamot	<i>Monarda fistulosa</i>
Marsh Marigold	<i>Caltha palustris</i>	Wild Columbine	<i>Aquilega canadensis</i>
Maximillian Sunflower	<i>Helianthus maximiliani</i>	Wild Geranium	<i>Geranium maculatum</i>
New England Aster	<i>Aster novae-angliae</i>	Wild Iris	<i>Iris shrevei</i>
New England Aster	<i>Virgulus novae-angliae</i>	Wild Lupine	<i>Lupinus perennis</i>
New Jersey Tea	<i>Ceanothus americanus</i>	Wild Senna	<i>Cassia hebecarpa</i>
Obedient plant	<i>Physostegia virginiana</i>	Woodland Sunflower	<i>Helianthus divaricatus</i>
Ox-eye Sunflower	<i>Heliopsis helianthoides</i>	Yarrow	<i>Achillea millefolium</i>
Pale Spiked Lobelia	<i>Lobelia spicata</i>	Yellow / Gray-head coneflower	<i>Ratibida pinnata</i>