

**Animal Enhancement Activity – ANM06 - Extending existing riparian herbaceous cover for water quality protection and wildlife habitat**



**Enhancement Description**

Where existing buffers 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, pastureland and rangeland.

**Benefits**

Widening existing herbaceous buffers 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 by providing shade, input of carbon to the stream, and stabilizing streambank conditions. Extended buffers offer more surface area to filter out sediments and agro-chemicals. Riparian herbaceous buffers can also offer buffers to mitigate pesticide drift during pesticide applications and pollen drift where the mixing of plant varieties is not desired.

Riparian herbaceous 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.

**Criteria**

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

The extended buffer 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. Herbaceous riparian buffers shall consist of a diversity of plant species of which the majority are capable of producing nutritious food sources to wildlife.
3. Any use of the herbaceous buffer must not compromise its intended purpose. Vegetation from riparian herbaceous 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 strip.



4. The extension of riparian herbaceous buffers can incorporate other buffer types (filter strips and riparian forest) where applicable to meet specific operator management goals.
5. To the extent possible the buffer areas and extended buffer areas will be vegetated to increase overland flow interception and increase water quality values of the stream or water body.

#### **Operation and Maintenance**

1. Once established, buffers must not be mowed, disked, grazed, or otherwise disturbed, until after the primary wildlife ground nesting period has ended.
2. Buffers will be regularly maintained for its intended purpose through the life of the contract. This includes any removal of vegetation, including grazing. Grazing is not permitted unless a grazing management plan is in effect.
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. Grazing is not permitted unless a grazing management plan is in effect that maintains the buffer's intended purpose.

#### **Documentation Requirements**

1. A map showing the location and size of enhanced riparian herbaceous buffers.
2. Documentation of the type and rates of vegetation planted in the new riparian herbaceous buffers.



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**Reference:**

**645 – Upland Wildlife Habitat Management**

- **Biology Jobsheet 9 – Establishment of Native Grasses and Forbs**

**643 – Restoration and Management of Declining Habitats**

- **Biology Jobsheet 12 – Tall Grass Prairie**

**393 – Filter Strip**

**390 – Riparian Herbaceous Cover**

The extended filter strips must be composed of at least 5 species of non-noxious, wildlife friendly grasses and/or perennial forbs best suited to site conditions.

**NATIVE GRASSES, FORBS AND LEGUMES**

Native grass seed origin shall be within a 200 mile radius of the project site, unless otherwise identified as an acceptable cultivar.

The following are native grasses that are considered wildlife friendly:

|                    |                    |
|--------------------|--------------------|
| Big Bluestem       |                    |
| Indiangrass        |                    |
| Green Needlegrass  | Western Wheatgrass |
| Little Bluestem    | Blue Grama         |
| Sideoats Grama     | Switchgrass        |
| Prairie Sandreed   | Canada Bluejoint   |
| Canada Wildrye     | Prairie Cordgrass  |
| Slender Wheatgrass | Virginia Wildrye   |
|                    | Kalms Brome        |

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## FORBS AND LEGUMES

Forbs and legumes with origins native to Minnesota are preferred. When local Minnesota seed sources are not available, native forbs and legume seed shall originate from Wisconsin, northern Nebraska, North Dakota, South Dakota, northern Iowa, and the Canadian provinces of southern Manitoba and Ontario. If the true origin of the seed can be certified as one of the accepted states or provinces, then there would be no restriction on where the seed is grown. Certification must be provided by the grower, and responsibility for obtaining certification rests with the producer.

The following list identifies native forbs and wildflowers beneficial to upland wildlife and native habitat restoration. The list is not inclusive, and identifies those species, which are readily available through private vendor seed supplies.

| <b>DRY</b>          | <b>MESIC to WET</b> | <b>DRY to WET</b>     |
|---------------------|---------------------|-----------------------|
| Bush Clover         | Canada Tick Trefoil | Black-eyed Susan      |
| Dotted Blazingstar  | Common Ox-eye       | Illinois Bundleflower |
| Purple Coneflower   | Giant Sunflower     | Purple Prairie Clover |
| Showy Penstemon     | Golden Alexanders   | Maximillian Sunflower |
| Silky Aster         | Partridge Pea       | Stiff Goldenrod       |
| <b>DRY to MESIC</b> | Rattlesnake Master  | Yarrow                |
| Butterfly Weed      | Tall Blazingstar    |                       |
| Compass Plant       | Wild Bergamot       |                       |
| Hoary Vervain       | Yellow Coneflower   |                       |
| Leadplant           | <b>WET</b>          |                       |
| Prairie Smoke       | Blue Vervain        |                       |
| Rough Blazingstar   | Boneset             |                       |
| Showy Goldenrod     | Joe-pye Weed        |                       |
| Smooth Aster        | New England Aster   |                       |
| Stiff Tickseed      | Panicled Aster      |                       |
|                     | Swamp Milkweed      |                       |

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