

## **Animal Enhancement Activity – ANM13 – Non-forested riparian zone enhancement for fish and wildlife**



### **Enhancement Description**

Utilizing select conservation measures such as re-locating equipment operations, trails, or livestock; establishing diverse native vegetation and controlling invasive species; fencing; and extending the width of the riparian zone to enhance wildlife habitat adjacent to riparian zones of streams, ponds, lakes, or wetlands.

### **Land Use Applicability**

Cropland, pastureland and rangeland

### **Benefits**

Intact riparian zones with a natural and diverse mix of herbaceous and /or woody vegetation of different ages are important landscape features for sustaining fish and wildlife populations. Maintaining vigorous native or natural riparian vegetation of diverse age classes and species will benefit riparian and aquatic fauna by providing: (a) thermal, nesting/fawning, and hiding cover in riparian zones, stream banks, and shorelines; (b) diverse food sources; (c) a steady source of leaves, brush, small woody material for aquatic food webs at and downstream of the site; (d) root systems to enhance bank stability, and (e) vegetative filters for surface water run-off.

### **Criteria**

1. For streams, rivers, or floodplains adjacent to pastures, cropland, hayland, or rangeland, enhance and maintain a well-vegetated riparian zone that is 2.5 times the width of the stream channel or 35 feet, whichever is greater to a maximum width of 150 feet. Improve the diversity of native or natural shrub and/or herbaceous plant species suitable for the site and appropriate for the riparian and aquatic species that inhabit the area by planting appropriate species. In addition, implement at least one of the management actions from the list below.
2. For ponds, floodplain wetlands, or lakes adjacent to pastures, cropland, hayland or rangeland, enhance and maintain a well-vegetated riparian zone that is 35 feet wide or greater. Improve the diversity of native or natural woody and/or herbaceous plant species suitable for the site and appropriate for the riparian and aquatic species that inhabit the area by planting appropriate species. In addition, implement at least one of the management actions from the list below.

Additional management actions for enhancing non-wooded riparian zones:

1. Control invasive species through a grazing management plan or suitable pest management techniques.
2. Limit livestock use of riparian zone through a prescribed grazing management plan

3. Control access of people, machinery, and livestock to the riparian zone with fencing.
4. Provide off-site watering source(s) for livestock.

**Documentation Requirements**

1. Provide written documentation, including a map, of all riparian zone activities implemented to meet the requirements of this enhancement.
2. List of maintenance activities carried out on riparian acres as prescribed under the practice used, and its specific fish and wildlife considerations.



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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***

**657 – Wetland Restoration**

- ***Biology Jobsheet 11 – Wetland Restoration***

**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  
Little Bluestem  
Sideoats Grama  
Prairie Sandreed  
Canada Wildrye  
Slender Wheatgrass

Western Wheatgrass  
Blue Grama  
Switchgrass  
Canada Bluejoint  
Prairie Cordgrass  
Virginia Wildrye  
Kalms Brome



**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      |                       |