Title of the Practice: Hedgerow Planting (NRCS Conservation Practice 422)

Definition: Establishment of dense vegetation in a linear design to achieve a natural resource conservation purpose.

Purposes: Hedgerows provide the following conservation functions: habitat (including food and cover for wildlife, pollen, nectar and nesting habitat for pollinators), food, cover and shade for aquatic organisms, substrate for predaceous and beneficial invertebrates for pest control, interception of airborne particulate matter, reduction of chemical drift and odor movement, screens and barriers to noise and dust, carbon storage, living fences and boundary delineation and contour guidelines.

General Expectations: Hedgerows shall be established using woody plants or perennial bunch grasses producing erect stems attaining average heights of at least three feet persisting over winter. Plants selected must be suitable and adapted for local soils, site, climate and conservation purpose. Species selected shall not be listed as “noxious” by the state and shall not host pests or diseases that could pose a risk to nearby crops. Hedgerows will be protected from livestock grazing and trampling, and competing vegetation shall be controlled until establishment. A minimum of two rows is required. For some suitable hedgerow species see <http://efotg.sc.egov.usda.gov/references/public/NC/NC422Hedgerow_10.2011.pdf>.

Additional management considerations:

* Planting a hedgerow larger than the required length and minimum width will increase the amount of carbon stored in the soil and biomass, and generally enhance most other resource values.
* Hedgerows following land contours create meandering lines on the landscape, produce a natural appearance and increase the availability of “edge” wildlife habitats.
* Diverse hedgerows containing a mixture of native shrubs and small trees provide greatest environmental benefits; in particular, wildlife food and habitat.
* Consider shading consequences at hedgerow maturity.
* Limit renovation events to one-third of a hedgerow’s length or width at any one time.
* Root prune and/or choose non-root suckering species to reduce rooting impacts on adjacent cropland.
* Evergreen species provide multiple conservation benefits.

Additional management considerations for specific resource concerns:

* For pollinator habitat all plants must be native and a minimum of 75% of plants established must include the following Genus based on regional adaptation: *Amelanchier, Prunus, Rhododendron, Rhus, Rubus, Salix, Sambucus, Vaccinum or Magnolia*.
* For pollinator and beneficial habitat, consider multiple species with different blooming periods to provide abundant pollen and nectar resources.
* Selected species for living fences shall attain a size and density adequate to create a barrier to contain livestock or humans, as needed.
* To reduce particulate matter, odor or chemical drift movement, the hedgerow should be oriented as close to perpendicular as possible to the prevailing wind direction and between the source and the sensitive area. Hedgerows shall be located upwind of odor producing and chemical application areas. Tree and shrub species used shall have foliar and structural characteristics that optimize interception, adsorption and absorption of airborne chemicals or odors.
* If particulate matter is associated with exhaust fans, selected plants will be perennial bunch grasses persisting over winter and producing erect stems and attaining average heights of at least three feet.
* Wildlife habitat is promoted by evergreen species and establishment of herbaceous vegetation along hedgerow edges.

Operation and Maintenance: Maintain and protect vegetation from unwanted fire and grazing. Monitor and control pests. Renovation activities shall be scheduled to prevent disturbance during the wildlife nesting season. Perennial grasses should be one foot in diameter in the second season after planting. Replanting is not necessary if 75% of woody species have survived the first growing season.

Practice financing (2014):

|  |  |  |  |
| --- | --- | --- | --- |
| Practice | Component | Unit | Practice Rate NC/SC |
| Hedgerow Planting\*\* | Wildlife Cool Season  | Foot | $0.57 |
| Hedgerow Planting\*\* | Wildlife Cool Season HU\* | Foot | $0.69 |
| Hedgerow Planting | Wildlife machine plant HU | Foot | $0.92/0.49 |
| Hedgerow Planting\*\* | Wildlife, warm season grass  | Foot | $0.55 |
| Hedgerow Planting\*\* | Wildlife, warm season grass HU | Foot | $0.66 |
| Hedgerow Planting\*\*\* | Pollinator Habitat | Foot | $0.95 |
| Hedgerow Planting\*\*\* | Pollinator Habitat HU | Foot | $1.15 |

\*HU = Historically Underserved and Beginning Farmer Rates

\*\*NC only

\*\*\*SC only