

CONSERVATION ENHANCEMENT ACTIVITY

CONSERVATION STEWARDSHIP PROGRAM

E512C

<u>Cropland conversion to grass for soil organic matter</u> <u>improvement</u>

Conservation Practice 512 - Forage and Biomass Planting

APPLICABLE LAND USE: Crop (Annual & Mixed); Crop (Perennial)

RESOURCE CONCERN: Soil

ENHANCEMENT LIFE SPAN: 5 years

Enhancement Description

Conversion of cropped land to grass-based agriculture. Mixtures of perennial grasses, forbs, and/or legume species are established on cropland where annually-seeded cash crops have been grown.

Criteria

- The current NRCS wind and water erosion prediction technologies must be used to document the average annual soil erosion estimates and soil conditioning index improvements.
- Establish perennial grassland mixture on cropland. Select deep-rooted perennial species that provide adequate kinds and amount of plant materials needed to increase soil organic matter. Mixtures shall be selected based on:
 - o Minimum of 50% grass species.
 - Must contain at least one legume.
 - Climatic conditions, such as annual precipitation and its distribution, growing season length, temperature extremes and the USDA Plant Hardiness Zone.
 - Soil condition and landscape position attributes such as; pH, available water holding capacity, aspect, slope, drainage class, fertility level, salinity, depth, flooding and ponding, and levels of phytotoxic elements that may be present.

E512C - Cropland conversion to grass for soil	July 2019	Page 1
organic matter improvement		



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 Resistance to disease and insects common to the site or location.



- Intended use, level of management, realistic yield estimates, maturity stage, and compatibility with other species. Verify plant adaptation to the area prior to planting.
- Follow state specific recommendations for planting rates, methods and dates.
 Seeding rates will be calculated on a pure live seed (PLS) basis. Plant at a depth appropriate for the seed size or plant material, while assuring uniform contact with soil.
- Prepare the site to provide a medium that does not restrict plant emergence.
- Plant when soil moisture is adequate for germination and establishment.
- All seed and planting materials must meet state quality standards.
- Do not plant federal, state, or local noxious species.
- Apply all plant nutrients and/or soil amendments for establishment purposes according to a current soil test and developed specifications.
- When planting legumes, use pre-inoculated seed or inoculate with the proper viable strain of Rhizobia immediately before planting.
- Exclude livestock until the plants are well established.

Additional criteria when livestock are included in the system:

- Grazing plan must be developed to keep grazing period(s) sufficiently short to allow for plants to recover before re-grazing occurs.
- No more than 20% of the mixture may be alfalfa. Other legumes (especially nonbloating species) may be used in place of or in addition to alfalfa up to a maximum legume percentage of 50%.
- In areas where animals congregate, establish persistent species than can tolerate close grazing and trampling.

E512C - Cropland conversion to grass for soil	July 2019	Page 2
organic matter improvement		



Documentation and Implementation Requirements

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Partici	pant	WII	ı:

	Prior to implementation, select a perennial grassl mixture for establishment. Verify the mixture	and PROGRAM
	contains at least one legume. If livestock are inclu of the mixture may be alfalfa. (NRCS will provide	
	livestock are included in the system, in areas whe	re animals congregate, establish
_	persistent species than can tolerate close grazing	, ,
	Species	Species type (grass, legume, broadleaf)

Prior to impleme	intation, select planting technique, seeding rates, and tim	ning /	
appropriate for t needed.)	he site and soil conditions. (NRCS will provide technical a	ıssista	nce, as
necaca.,			
Planting Date			

Planting Date		
Planting Technique		7
Seeding rates		

- ☐ <u>If livestock are included in the system</u>, during implementation following establishment, a grazing plan must be developed to keep grazing periods sufficiently short to allow for plants to recover before re-grazing occurs.
- ☐ During implementation, keep the following documentation:
 - Records and photographs of planting preparation and any materials purchased or materials on hand used for the implementation of the enhancement.
 - o Documentation of seed (Pure Live Seed) and any fertilizer or soil amendments used for the implementation of the enhancement.
 - If livestock are included in the system, keep documentation and photographs of turn in/turn out grazing records for each field.
- ☐ After implementation, make documentation and records available for review by NRCS to verify implementation of the enhancement.

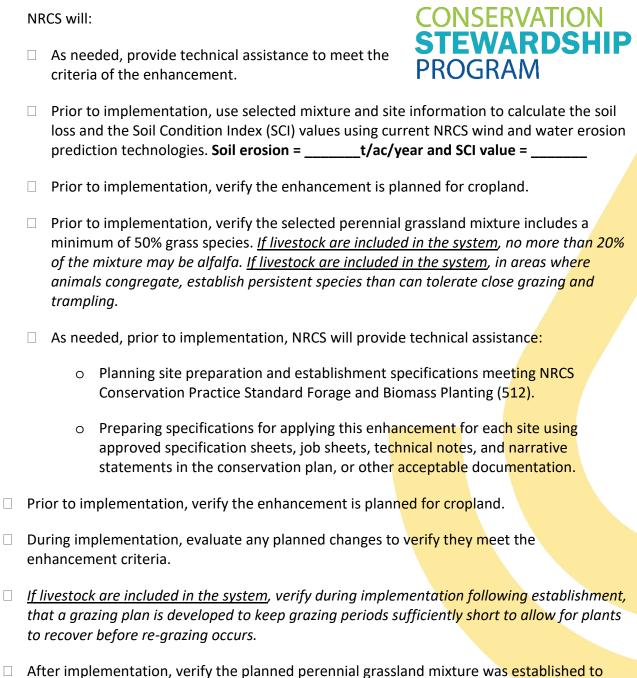
E512C - Cropland conversion to grass for soil	July 2019	Page 3
organic matter improvement		



specifications developed for the site.

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E512C - Cropland conversion to grass for soil	July 2019	Page 4
organic matter improvement		



NRCS Documentation Review:

CONSERVATION STEWARDSHIP PROGRAM

I have reviewed all required participant documentation and have determined the participant has implemented the enhancement and met all criteria and requirements.

Participant Name	Contract Number
Total Amount Applied	Fiscal Year Completed
NRCS Technical Adequacy Signature	Date

E512C - Cropland conversion to grass for soil	July 2019	Page 5
organic matter improvement		