

CONSERVATION ENHANCEMENT ACTIVITY

CONSERVATION STEWARDSHIP PROGRAM

E345A

Reduced tillage to reduce soil erosion

Conservation Practice 345: Residue and Tillage Management, Reduced Till

APPLICABLE LAND USE: Crop (Annual & Mixed)

RESOURCE CONCERN: Soil

ENHANCEMENT LIFE SPAN: 1 year

Enhancement Description:

Establish a reduced tillage system to reduce soil loss. Field(s) must have a soil loss at or below the soil tolerance (T) level for water and wind erosion for the crop rotation and a Soil Tillage Intensity Rating (STIR) of no greater than 40 for each crop in the planned rotation. The current NRCS wind and water erosion prediction technologies must be used to calculate soil loss and STIR.

Criteria:

- Uniformly distribute residues over the entire field. Removing residue from the row area prior to or as part of the planting operation is acceptable.
- Do not burn crop residues.
- The Soil Tillage Intensity Rating (STIR) value shall include all field operations that are performed during the crop interval between harvest of the previous cash crop and harvest or termination of the current cash crop (includes fallow periods). The crop STIR value ratings shall be no greater than 40, and no primary inversion tillage implements (e.g. moldboard plow) shall be used.
- Use the current approved soil erosion prediction technology for water and wind erosion to determine the:

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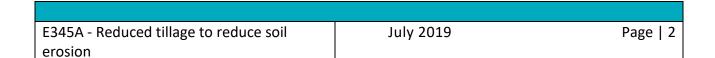


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o Amount of randomly distributed surface residue needed.



- o Time of year the residue needs to be present in the field.
- o Amount of surface soil disturbance allowed to reduce erosion to the desired level of average annual soil loss.
- o Calculations must account for the effects of other practices in the management system.
- In ridge-till systems, plan ridge height and ridge orientation to manage runoff and minimize erosion, with a maximum row grade of 4%.





Documentation and Implementation Requirements



			PROGRA	IVI
Part	ticipant v	vill:		
		•	n, provide NRCS with the planned crop rotation a	nd tillage
	operatio	n(s) used for e	each crop.	_
Fie	eld Acre	25	Planned Crops (in sequence)	Length of Crop Rotation (years)
			T	T
Fie	eld	Crop	Field Operation	Timing of Field Operation (month/year)
 During implementation, notify NRCS of any planned changes in crops, crop rotation, or field operations to verify the planned system meets the enhancement criteria. During implementation, no residue will be burned. 				
During implementation, all residues will be uniformly distributed over the entire field. Removing residue from the row area prior to or as part of the planting operation is acceptable.				
	During implementation, no primary inversion tillage implements (e.g. moldboard plow) will be used.			
	After implementation, if changes to the rotation were made, complete the tables above to document the applied Conservation Crop Rotation for the contract period and provide to NRCS.			

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NR	CS will:			CONSERVATION)N
	· •	ovide technical assistance to enhancement.	meet the	STEWARDS PROGRAM	HIP
	provided from Rating values Verify the enr water and wir	mentation, use the informatenthe participant to calculate using current NRCS wind and olled field(s) will have a soil and erosion for the crop rotation 40 for each crop in the plant	the soil loss a d water erosid loss at or beld ion and a Soil	and the Soil Tillage Intension prediction technologies ow the soil tolerance (T) le Tillage Intensity Rating va	s. evel for
	"T" =	t/ac/year Soil erosion =	t/ac,	/year STIR values =	
	 During implementation, evaluate planned changes in crops, crop rotation, or field operations to verify the planned system meets the enhancement criteria. 				d
NRCS I	different than provided from values to docu	entation, if the applied crops the planned crops, crop rot the participant to calculate ument that the applied rotatt/ac/year and STIR	ation, or field soil loss and ion met the e	l operations, use infor <mark>mat</mark> the Soil Tillage Inten <mark>sity R</mark> enhancement crite <mark>ria.</mark>	
ITTICS I	Jocumentatio	in neview.			
		equired participant documen e enhancement and met all c			pant
Par	rticipant Name		C <mark>or</mark>	ntract Number	
Tot	tal Amount Ap _l	plied	Fisc	cal Year Completed	
NR	CS Technical A	dequacy Signature	Date		

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