CONSERVATION ENHANCEMENT ACTIVITY

E329A



No till to reduce soil erosion

Conservation Practice 329: Residue & Tillage Management, No Till

APPLICABLE LAND USE: Crop (Annual & Mixed)

RESOURCE CONCERN: Soil

ENHANCEMENT LIFE SPAN: 1 Year

Enhancement Description

Establish no till system to reduce sheet and rill and wind erosion 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 10 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

- Residue shall not be burned.
- All residues shall be uniformly distributed over the entire field. Removing residue from the row area prior to or as part of the planting operation is acceptable.
- Field(s) must have a soil loss at or below the soil tolerance (T) level for water and wind erosion for the crop rotation (average annual soil loss).
- No full-width tillage may be performed from the time of harvest or termination of one cash crop to the time of harvest or termination of the next cash crop in the rotation regardless of the depth of the tillage operation.
- The Soil Tillage Intensity Rating value must include all field operations that are performed during the crop interval between harvest or termination of the previous cash crop and harvest or termination of the current cash crop (includes fallow

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periods). Each crop must have a Soil Tillage Intensity Rating value of no greater than 10.



- Use the current approved water and wind erosion prediction technology to determine the:
 - o amount of randomly distributed surface residue needed;
 - o time of year the residue needs to be present in the field, and
 - amount of surface soil disturbance allowed to reduce erosion to the desired level.
- Calculations must account for the effects of other practices in the management system.

North Dakota Sideboards:

Must be making a change in management. ie going from a hoe opener to a single disc opener, strip till to single disc. With each crop will have a STIR of less than 10.

Payments will be made on the acres of the system.

Once enhancement is planned/applied to a field it must be maintained for the remainder of the contract.



Documentation and Implementation Requirements

CONSERVATION STEWARDSHIP PROGRAM

Participant wil	

Prior to implementation, provide NRCS with the planned crop rotation and tillage operation(s) used for each crop.

Fie	eld	Acres		Planned Crops (in sequence)	Length of Crop Rotation (years)		
					_		
	ı						
Fi	Field		Crop Field Operation		Timing of Field Operation		
' '	ciu	Стор		rield Operation	(month/year)		
-							
				is NBCC to the time	C: 1		
				n, notify NRCS of any planned changes in crops, <mark>cr</mark> e planned system meets the e <mark>nhanceme</mark> nt crit <mark>eria</mark>			
	☐ 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 full-width tillage may be performed from the time of harvest or termination of one cash crop to the time of harvest or termination of the next cash crop in the rotation regardless of the depth of the tillage operation.						
	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.						
NR	CS w	vill:					
			provide tec	hnical assistance to meet the criteria of the enha	ncement.		
	Prior to implementation, use information provided from the participant to calculate the						
	soil loss and the Soil Tillage Intensity Rating values using current NRCS wind and water erosion prediction technologies. Verify the enrolled field(s) will have a soil loss at or						

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NRCS Technical Adequacy Signature

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	below the soil tolerance (T) level for water and wire erosion for the crop rotation and a Soil Tillage Intensity Rating value of no greater than 10 for each crop in the planned rotation. "T" =t/ac/year Soil erosion =t/	STE PROC	SERV/ WAR GRAM values = _	DS)N HII	
	During implementation, evaluate planned changes in crops, crop rotation, or field operations to verify the planned system meets the enhancement criteria.					
NRCS I	After implementation, if the applied crops, crop rodifferent than the planned crops, crop rotation, or provided from the participant to calculate soil loss values to document that the applied rotation met Soil erosion =t/ac/year and STIR values =	field operation and the Soil Ti the enhancem	ns, use inf llage Inter ent criteri	ormationsity Ra		
has im	reviewed all required participant documentation ar plemented the enhancement and met all criteria ar	id requirement	ts.	particip	ant	
Par	rticipant Name	_ Contract Nun	nber			
Tot	tal Amount Applied	Fiscal Year Co	mpl <mark>eted </mark>			

Date