



CONSERVATION ENHANCEMENT ACTIVITY

E328F

CONSERVATION STEWARDSHIP PROGRAM

Modifications to improve soil health and increase soil organic matter

Conservation Practice 328: Conservation Crop Rotation

APPLICABLE LAND USE: Crop (Annual & Mixed)

RESOURCE CONCERN: Soil

ENHANCEMENT LIFE SPAN: 1 Year

Enhancement Description

Use of soil health assessment to evaluate impact of current conservation crop rotation in addressing soil organic matter depletion (primary assessment made in Year 1). Modifications to the crop rotation and/or crop management will be made as a result of the assessment results (adding a new crop and/or cover crop to the rotation; making changes to planting and/or tillage system, harvest timing of crops, or termination timing of cover crops). During Year 3 a follow up assessment will be completed to allow time for the modifications to show increased soil organic matter. Modified system must produce a positive trend in the Organic Matter (OM) sub factor value over the life of the rotation, as determined by the Soil Conditioning Index (SCI). The current NRCS wind and water erosion prediction technologies must be used to document the rotation and SCI calculations.

Criteria

- Crops must be grown in a planned sequence as outlined in plan. The crop rotation must include a minimum of four different crops. For purposes of these criteria a cover crop is considered a different crop.
- Where applicable, plan suitable crop substitutions when the planned crop cannot be planted due to weather, soil conditions, or other local situations.

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- Evaluation of the modified cropping system must produce a soil conditioning index (SCI) of zero or higher and results in a positive trend in the Organic Matter (OM) subfactor value over the life of the rotation. (management SCI value)
- Soil health assessment will be used to evaluate impact of current conservation crop rotation in addressing soil organic matter depletion, as well as additional soil health objectives of the individual grower (primary assessment made in Year 1). During Year 3, a follow up assessment will be completed to allow time for changes to crop rotation and management activities to have an impact on soil health. No specific soil health assessment type is required or recommended by NRCS, but at a minimum the assessment must account for soil organic matter. The specific assessment selected should provide the grower information based on their soil health objectives.
- Modifications to the crop rotation and/or crop management will be made as a result of the assessment results (adding a new crop and/or cover crop to the rotation; making changes to planting and/or tillage system, harvest timing of crops, or termination timing of cover crops).



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Documentation and Implementation Requirements

Participant will:

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

Current/Planned Management – Crop Rotation

Field	Acres	Planned Crops (in sequence)	Length of Crop Rotation (years)

Current/Planned Management – Field Operations

Field	Crop	Field Operation	Timing of Field Operation (month/year)

- Prior to implementation, select an assessment based on your soil health objectives.

Soil Health Assessment

Producer Objective	Year 1 Assessment (Value)	Year 3 Assessment (Value)
Soil Organic Matter (Required)		



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- During implementation, adjust crops, crop rotation, or field operations to improve the system after receiving the results of the soil health assessment. Complete in Year 1 and Year 3 at a minimum. Document adjustments below:

Adjusted Management – Crop Rotation

Field	Acres	Planned Crops (in sequence)	Length of Crop Rotation (years)

Adjusted Management – Field Operations

Field	Crop	Field Operation	Timing of Field Operation (month/year)

NRCS will:

- As needed, provide technical assistance in selecting crop rotations or substitute crops that would meet the criteria of the enhancement.
- Prior to implementation, verify the planned crop rotation includes at least four different crops.
- Prior to implementation, use information provided from the participant to calculate the management Soil Conditioning Index (SCI) value for each field using current NRCS wind and water erosion prediction technologies. Crop rotation must produce a positive trend in the Organic Matter (OM) subfactor value. **Management SCI Value = _____**
OM subfactor value = _____



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- During implementation, evaluate planned adjustments in crops, crop rotation, or field operations to verify the new system meets the enhancement criteria.
- After implementation, evaluate the applied crop rotation or management using information provided from the participant to calculate SCI values to document that the applied rotation met the enhancement criteria.

Management SCI Value = _____ OM subfactor value = _____

NRCS Documentation Review

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

Design Approvals & Acknowledgements:

Design Approval	Date	Job Approval Authority
Designed by:		
Approved by:		

Client's Acknowledgement Statement:

The client acknowledges:

- I have received a copy of the specification and understand the contents and requirements.
- It is my responsibility to obtain all necessary permits and/or rights and to comply with all ordinances and laws pertaining to the application of this practice.
- I will not begin installation of this practice until I have received appropriate approval to do so. I understand NRCS also has Federal and state laws to comply with that may take some time to address (e.g. cultural resources).

Client's	Date
Signature	

Certification Documentation:

	Field Evaluation: Post-treatment inventory, measurements, notes, as-built, and supporting documentation (document completion in conservation plan), as required.
	Map(s): Including field numbers, fields treated, and units treated (may document on conservation plan map), as required.
	Photos or other supporting documentation (e.g., seed tags, soil tests, receipts, invoices, spray records, fertilizer records, etc.)
Brief Description of Work Accomplished (types of equipment used, date of application, extents and quantities installed, etc.)	

Certification Statement:

The employee certifies the implementation of this conservation practice:

- Meets the purpose, general criteria, and any required additional criteria as documented in the conservation practice standard and/or enhancement sheet.
- Meets the specifications contained herein and is complete.
- Conforms to my existing Job Approval Authority controlling factors and levels.

Name	Date	Job Approval Authority

Field Level Certification – For multiple applications of this design.				
Land Unit/ Contract Item Number	Date	Unit(s)	Amount Installed	Certifier