



CONSERVATION ENHANCEMENT ACTIVITY

E328106Z2

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 ADDRESSED: Soil Quality Degradation

PRACTICE 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) subfactor 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 shall be grown in a planned sequence as outlined in Plans and Specifications. The crop rotation shall include a minimum of four different crop types. 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.



CONSERVATION STEWARDSHIP PROGRAM

- 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).

Documentation Requirements

- Conservation Crop Rotation, 328, Implementation Requirements document must be completed per the Plans and Specifications for the planned purpose.
- Soil health assessment results for Year 1 and Year 3 must be provided as documentation.
- The current NRCS wind and water erosion prediction technologies must be used to document:
 - Before and after modification management files to document benchmark and planned crop rotation/management to show increase in SCI and Organic Matter (OM) subfactor.