



**CONSERVATION ENHANCEMENT ACTIVITY**

**E345144Z**

**CONSERVATION STEWARDSHIP PROGRAM**

Reduced tillage to reduce energy use

**Conservation Practice 345: Residue and Tillage Management, Reduced Till**

**APPLICABLE LAND USE: Crop (Annual & Mixed)**

**RESOURCE CONCERN ADDRESSED: Inefficient Energy Use**

**PRACTICE LIFE SPAN: 1 year**

**Enhancement Description:**

Establish a reduced tillage system which reduces total energy consumption associated with field operations by at least 25% compared to conventional tillage systems (benchmark). Each crop in the crop rotation shall have a Soil Tillage Intensity Rating (STIR) of no greater than 80. The current NRCS wind and water erosion prediction technologies must be used to document STIR calculations and energy consumption.

**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 rating shall be no greater than 80, and no primary inversion tillage implements (e.g. moldboard plow) shall be used.
- Reduce the total energy consumption associated with field operations by at least 25% compared to the benchmark condition. The current NRCS wind and water erosion prediction technologies must be used for determining energy use document energy use reductions.



## CONSERVATION STEWARDSHIP PROGRAM

### Documentation Requirements

- Residue and Tillage Management, Reduced till, 345, Implementation Requirements document must be completed per the Plans and Specifications for the planned purpose.
- The current NRCS wind and water erosion prediction technologies must be used to calculate STIR value and energy consumption.