



# No Till/Strip Till/Direct Seed (329)

## Residue and Tillage Management

### Conservation Practice Job Sheet

ID- 329, JS - 09

Revised February 2010



### What is No-Till/Strip Till/Direct Seed?

No till, strip till, and direct seed are similar systems that manage the amount, orientation, and distribution of crop and other residue on the soil surface year round, while growing crops in narrow slots or residue-free strips in soil previously untilled by full-width implements. Residue management is used in conjunction with crop rotation, and other practices needed on a site-specific basis, to address soil quality, erosion and water quality concerns while meeting the landowner's objective.

### Purpose

The no-till/strip till/direct seed system is designed to accomplish the following conservation purposes:

- Reduce water, wind, and/or irrigation-induced erosion
- Increase soil organic matter and soil tilth
- Improve water quality

### Practice Specifications

This practice applies to cropland. Residue shall be uniformly distributed over the entire field and residue shall not be burned. There will be NO full width tillage performed during the crop rotation, regardless of the depth of the tillage operation. Full width tillage operations are implements with 100% disturbance, as defined by RUSLE2. The annual Soil Tillage Intensity Rating (STIR) shall include all field operations performed during the crop interval between harvest of the previous crop and harvest or termination of the current crop (includes fallow periods). The STIR value shall be no greater than 30.

The amount of randomly distributed surface residue needed and the amount of surface soil disturbance allowed to reduce erosion to the planned soil loss objective (at or below "T") shall be determined using RUSLE2 (sheet and rill erosion), SISL (surface irrigation induced erosion) or WEQ (wind erosion). Sprinkler-induced erosion will be determined through visual assessment. Calculations shall account for the effects of other practices in the management system.

The planned crop rotation and tillage must result in a positive trend in the soil-conditioning index. Production of adequate amounts of crop residue necessary for the proper functioning of this practice can be enhanced by crop selection.

No till shall be practiced continuously throughout the crop sequence.

### EQIP Requirements

The minimum contracted period for this practice is three years. Producers eligible for this practice have an identified surface water quality and/or soil erosion concern. The appropriate NRCS tools will be used to assure that the planned crop rotation and tillage results in a positive trend in the soil-conditioning index compared to the benchmark condition. The average annual soil loss for the planned rotation must be at or below "T".

Producers must keep annual records of all tillage and crops grown, and will provide to NRCS annually. Rotations shall provide for acceptable substitute crops for weather related or economic reasons. Acceptable substitutes are crops having similar properties that meet the criteria for all the resource concerns identified for the field or treatment unit, and provide for an annual STIR rating equal to or less than the planned tillage for that year. RUSLE2/SCI updates will be required to verify that the producer is still in compliance. **Any changes to the planned rotation and tillage must be approved prior to any site preparation or planting for the year of the deviation.**

Recommended companion practices include grassed waterways, filter strips, riparian buffers, or other

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appropriate practices to fully address the water quality concerns.

The attached worksheet will document the planned rotation and tillage. The producer may use blank copies of the worksheet to keep annual records, or may use any format for record keeping that provides the required information.

Documentation will include the rotation, erosion rates, annual STIR, and rotational SCI values for both the benchmark and contracted crop rotation. The planner will attach copies of the RUSLE2/SCI evaluations.

### CLIENT'S ACKNOWLEDGEMENT STATEMENT

The Client acknowledges that:

- a. The planned rotation and tillage must provide an improvement in the SCI, and result in average annual erosion at or below "T". The producer must maintain the no-till/strip till/direct seed practice for the entire rotation.
- b. The producer must receive approval of any changes to the planned rotation and tillage prior to any site preparation or planting for the year of the change.
- c. The producer must keep annual records of crop and tillage and provide copies to NRCS annually.
- d. The producer has received a copy of this practice specification and understands the contents and requirements.

Accepted by: /s/ \_\_\_\_\_ Date: \_\_\_\_\_

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Tract & Field #s	Acres	Crop for Each Year in the Planned Rotation						
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7

