Residue and Tillage Management (329)
No-Till/Strip Till/Direct Seed

The residue and tillage management no-till/strip till/direct seed practice addresses the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round. Crops are planted and grown in narrow slots or tilled strips established in the untlled seedbed of the previous crop.

Practice Information

This practice includes maintaining most of the crop residue on the soil surface throughout the year, commonly referred to as no-till, zero till, slot plant, row till, strip till, or just the generic term, conservation tillage. The common characteristic of this practice is that the only tillage performed is a very narrow strip prepared by coulters, sweeps, or similar devices attached to the front of the planter.

Benefits to soil include increasing organic matter, improving soil tilth, and increasing productivity as the constant supply of organic material left on the soil surface is decomposed by a healthy population of earthworms and other organisms.

Operations and maintenance for this practice includes evaluating the crop-residue cover and orientation for each crop to ensure the planned amounts, orientation, and benefits are being achieved. Weeds and other pests must be monitored to ensure pest populations do not exceed thresholds.

Common Associated Practices

Residue and Tillage Management No-till/Strip Till/Direct Seed Practice (329) is commonly applied with practices such as Conservation Crop Rotation (328), Nutrient Management (590), Pest Management (595), and Irrigation Water Management (449).

For further information, contact your local NRCS field office.