

345 - Residue and Tillage Management, Mulch Till Implementation Requirements

The Practice Purpose(s): (check all that apply)

Reduce sheet and rill erosion.

Reduce wind erosion and particulate matter less than 10 micrometers in diameter - PM 10.

Maintain or improve soil quality.

Increase plant-available moisture.

Reduce energy use.

Attach a RUSLE2 Profile printout or a WEPS printout that displays:

1. Planned crop(s).
 2. Specify the type of equipment for each crop.
 3. At a minimum specifies the planned residue amounts for: (1) after harvest of the prior crop and (2) the planned residue cover after seeding the planned crop.
 4. The Soil Tillage Intensity Rating (STIR) and Soil Condition Index (SCI).
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Additional Specifications to Increase Plant-Available Moisture (check all that are appropriate)

Reducing Evaporation from the Soil Surface. Maintain a minimum 60 percent surface residue cover throughout the year.

Trapping Snow. Fall tillage operation shall leave the crop stubble in an upright position. Maintain a crop stubble height during the time significant snowfall is expected to occur to:

At least 10 inches for crops with a row spacing of less than 15 inches;

At least 15 inches for crops with a row spacing of 15 inches or greater

Maintain these heights over at least 50% of the field.

Conduct fall tillage operations as close as possible to perpendicular to the direction of prevailing winds during the time that significant snowfall is expected to occur.

Operation and Maintenance:

Evaluate/measure the crop residues cover and orientation for each crop to ensure the planned amounts and orientation are being achieved. Adjust management as needed to either plan a new residue amount or orientation; or adjust the planting, tillage, or harvesting equipment.

ATTACHMENTS:

RUSLE2 and/or WEPS Printouts