



Guidance Note: Soil Management Practices to Reduce Soil Erosion

Reduced Tillage

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure

Use against erosion caused by:



Water



Wind



Tillage

Adding organic materials

Effect:

- leaves residue on the soil surface, effectively controlling erosion
- loosens less soil
- prevents soil from being moved down slope by tillage implements

Other Benefits:

- improved water infiltration
- reduced organic matter loss
- improved soil structure

Use against erosion caused by:



Water



Wind



Crop rotation

Effect:

- protects the soil by keeping the soil surface covered year round (grass and legume forage crops)
- helps hold soil in place with the extensive root systems (perennial crops)
- helps protect the soil from fall through to harvest (fall-planted annual crops such as winter wheat)

Other Benefits:

- improved soil structure and less soil compaction because of root systems
- improved water infiltration
- higher yields
- reduction in insect and disease build-up

Use against erosion caused by:



Cover crops

Effect:

- protect the soil by covering it when it might otherwise be left bare
- help improve soil structure to resist erosion and improve infiltration, less runoff due to added organic matter
- soil held in place by the roots

Other Benefits:

- increase organic matter levels
- help hold onto nutrients from recently applied manure
- provide forage
- weed and nematode suppression

Use against erosion caused by:

