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:
- Water
- Wind

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:
- Water
- Wind