USDA NRCS

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Common Conservation Practices
For Productive Cropland

Developing a conservation plan for healthier, productive cropland can lead to long-term economic and environmental sustainability. Conservation practices can be combined to address specific resource concerns.

The Environmental Quality Incentives Program (EQIP) is a principal program of the United States Department of Agriculture Natural Resources Conservation Service (NRCS) for delivering financial assistance to private landowners. Please contact your local NRCS office for free technical assistance to develop a conservation plan.

Conservation Practice Name, Description and Practice Standard Number

Conservation Crop Rotation (328)
Conservation crop rotation is applied as part of a conservation system to accomplish one or more of the following:
- Improve or maintain soil health and organic matter content,
- Reduce sheet, rill and wind erosion,
- Maintain or improve water quality and soil moisture efficiency,
- Reduce plant pest pressures, and
- Provide feed for domestic livestock and food and cover habitat for wildlife.

Residue and Tillage Management, No Till (329)
No-till residue management is a practice in which all residues are uniformly distributed over the entire field. No full-width tillage is performed.The Soil Tillage Intensity Rating (STIR) shall include all field operations performed and shall be no greater than 20. This management provides:
- Reduced sheet, rill and wind erosion,
- Improved soil health by increasing organic matter accumulation and carbon sequestration,
- Reduced total energy consumption associated with field operations, and
- Increased plant-available moisture.

Residue and Tillage Management, Reduced Till (345)
Reduced Till, commonly referred to as mulch tillage is a practice in which the entire soil surface may be disturbed by tillage and shall have a STIR value no greater than 80. It also includes tillage systems with few tillage operations but do not meet the STIR criteria for No-Till. This management provides:
- Reduced sheet, rill and wind erosion, and
- Improvements in soil health can be achieved when used in combination with diverse crop rotations (328) and cover crop mixes (340).

Cover Crop (340)
Cover crops, also known as green manure crops include grasses, legumes and forbs grown primarily for seasonal protection and soil improvement. This conservation practice:
- Maintains or increases soil health and organic matter content,
- Reduces water quality degradation by utilizing excessive soil nutrients,
- Interupts pest cycles and suppresses weeds,
- Minimizes soil compaction,
- Improves soil moisture use efficiency,
- Reduces erosion from wind and water.

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Integrated Pest Management (595)

Pest management utilizes environmentally sensitive prevention, avoidance, monitoring, and suppression strategies to manage weeds, insects, diseases, animals, and other organisms (including invasive and noninvasive species,) that directly or indirectly cause damage or annoyance. This management provides:

- Enhanced quality and quantity of plant communities, and
- Minimize negative impacts of pest control on soil resources, water resources, air resources, plant resources, animal resources, and/or humans.

Nutrient Management (590)

Nutrient management utilizes proper rate, timing, placement, and source of manure and /or commercial fertilizer to promote good soil health. This management:

- Minimizes agricultural nonpoint source pollution of surface and groundwater resources,
- Develops a nutrient budget that considers all potential sources of nutrients for plant production and,
- Maintains or improves the physical, chemical, and biological condtion of soil.

Windbreak/Shelterbelt Establishment (380) or Renovation (650)

Windbreaks or Shelterbelts are single or multiple rows of trees or shrubs established upwind of the areas needing protection. Renovating a windbreak may involve removing, releasing, or replacing selected trees and shrubs or rows. These plantings:

- Reduce soil erosion from wind,
- Enhance wildlife habitat,
- Provide visual screens and reduce odor, and
- Manage snow deposition.

Forage and Biomass Planting (512)

Forage and Biomass plantings are native or introduced forages planted for production and/or conservation. These plantings:

- Improve or maintain livestock nutrition and/or health,
- Balance forage supply and demand during periods of low forage production,
- Reduce soil erosion and improve water quality, and
- Increase carbon sequestration.

Salinity and Sodic Soil Management (610)

Salinity and Sodic Soil Management is utilized to manage land, water and plants to reduce the accumulations of salts and/or sodium on the soil surface and in the crop rooting zone to improve soil health. This management practice reduces:

- Salt concentrations in the root zone,
- Problems of crusting, permeability, or soil structure on sodium affected soils, and
- Soil salinization and/or discharge of saline water tables at or near the soil surface downslope from saline seep recharge areas.

Grassed Waterway (412)

A grassed waterway is a shaped or graded channel that is established with suitable vegetation to convey surface water at a non-erosive velocity using a broad and shallow cross section to a stable outlet. This practice can:

- Protect and improve water quality, and
- Provide vegetative protection to areas succeptable to erosion, flooding or gully formation resulting from concentrated surface flow.