



Common Conservation Practices 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 Crop Rotation (328) *Climate-Smart Conservation Practice*

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,
- Provide feed for domestic livestock and food and cover habitat for wildlife, and
- Reduce the concentration of salts and other chemicals from saline seeps.



Residue and Tillage Management, No Till (329) *Climate-Smart Conservation Practice*

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,
- Reduced energy use and particulate emissions associated with tillage operations, and
- Increased plant-available moisture.



Residue and Tillage Management, Reduced Till (345) *Climate-Smart Conservation Practice*

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) *Climate-Smart Conservation Practice*

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,
- Interrupts pest cycles and suppresses weeds,
- Minimizes soil compaction,
- Improves soil moisture use efficiency, and
- Reduces erosion from wind and water.

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Pest Management Conservation System (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, water, air, plants, beneficial organisms, and/or humans.



Nutrient Management (590) *Climate-Smart Conservation Practice*

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 condition of soil.



Windbreak-Shelterbelt Establishment and Renovation (380)

Windbreaks or Shelterbelts are a 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 of rows. These plantings:

- Enhance plant health by reducing wind erosion and protecting plants from wind-related damage,
- Provide shelter and protection to animals, structures, and humans resulting in lower energy use,
- Manage snow deposition, and
- Improve air quality by intercepting particulates and odors.



Pasture and Hay Planting (512) *Climate-Smart Conservation Practice*

Perennial vegetation which is suitable for pasture or hay production is 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
- Improve soil health



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) *Climate-Smart Conservation Practice*

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 susceptible to erosion, flooding or gully formation resulting from concentrated surface flow.

