

# Residue and Tillage Management

The **USDA Partnership for Climate Smart Commodities Grant** was developed to help a diverse set of farmers and ranchers expand markets for agricultural commodities. Growers will get to choose from one of the six Climate Smart Practices below to trial in their operation with the support of the USDA so these practices can be observed across a variety of settings.

**USDA Climate-Smart Practices:  
Climate Smart Commodities Grant**

1. **Residue and Tillage Management**
2. Short Season Cover Crops
3. Nutrient Management
4. Alley Cropping
5. Water Management
6. Soil Amendments

The "**A Vibrant Future**" pilot project is intended to incentivize growers of specialty crops to adopt climate-smart production practices in order to establish a consumer-driven, climate-smart market for fruits and vegetables. The project is funded by the USDA Partnerships for Climate-Smart Commodities Grant.

This informational fact sheet provides a brief overview of the Climate Smart Practice **Residue and Tillage Management**. These practices aim to reduce Greenhouse Gas emissions (GHGs) associated with agricultural operations and promote Carbon sequestration.

## **NRCS Description and code (required by USDA)**

**Residue and Tillage Management, No till (Ac. 329)**- Limiting soil disturbance to manage the amount, orientation and distribution of crop and plant residue on the soil surface year around.

[For more information view the Conservation Practice Standard](#)

**Residue and Tillage Management, Reduced till (Ac. 345)**- Managing the amount, orientation, and distribution of crop and other plant residue on the soil surface year-round while limiting soil-disturbing activities used to grow and harvest crops in systems where the field surface is tilled prior to planting.

[For more information view the Conservation Practice Standard](#)

## **Incentives for Growers:**

**Funding** - Negotiated prior to enrollment and customized based on growers chosen practice and trial acreage

Up to 90% reimbursement for the direct cost of implementing climate-smart production practices (Materials, labor, testing, equipment, rentals, etc.) not to exceed \$10,000 per grower per year

Remaining 10% of direct costs associated with practice implementation will be treated as cost share with grower

Each grower will receive a modest cash incentive for the adoption of practices and the value of the incentive will depend on the acreage committed, market value of the crop and the complexity of the practice

**Technical support** - provided by and through a network of partners and resources available to accommodate producer inquiries and needs  
 International Fresh Produce Association (IFPA) conducting field days, fostering communities of practice, demonstration projects, virtual town halls, case studies, podcasts, peer-peer information sharing  
 Measure to Improve (MTI) providing grower support, one on one meetings, site visits, access and networking with Agronomists, PCAs, Crop Advisors, USDA researchers  
 Vibrant Future Grant Partners- International Fresh Produce Association, University of Florida, Data Services Provider, Measure to Improve, and Alcorn State University  
 Vendors provide technical support as required under program participation rules

**Criteria For Participation:**

**Commitment** - grower must commit to carry out climate smart practice during 4 year trial period and commit 50 work hours/year

**Eligibility** - grower must complete all required forms and establish farm records with USDA Farm Service Agency

**Data Collection/Sharing**- must allow access to sites for data collection and be willing to document and share practices and \*data outcomes for modeling purposes

*\*Data will remain anonymous and aggregated without personal identifiable information*

**New Practice** - demonstrate that the practice is new to the operation and/or site

**Conservation Practice Benefits**

**Residue and Tillage Management**- Reduce sheet, rill, and wind erosion and excessive sediment in surface waters, reduce tillage-induced particulate emissions, improve air quality impact, improve soil health and maintain or increase organic matter content, reduce energy use, increase plant-available moisture, provide food and escape cover for wildlife

**Academic Resources:**

- a. No tillage seeding in Conservation Agriculture: [View resource here](#)
- b. Potential benefits of no-till operation: [View resource here](#)
- c. Crop yield and soil fertility response to reduced tillage under organic management: [View resource here](#)
- d. Benefits of Tillage reduction: [View resource here](#)
- e. Greenhouse gas emissions and crop yield in no-till systems: [View resource here](#)

**Informational Links:**

IFPA Opportunities to Participate Climate Smart Practices Pilot Program [here](#)

IFPA Grower Participation Form Webpage [here](#)

USDA Partnerships for Climate Smart Commodities webpage [here](#)

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