Cover Crop

Definition/Purpose

A crop or mixture of crops grown primarily for seasonal protection, erosion control and soil improvement. It usually is grown for one year or less. The major purpose is water and wind erosion control, to cycle plant nutrients, add organic matter to the soil, improve infiltration, aeration and tilth, improve soil quality, reduce soil crusting, and sequester carbon/nutrients. Benefits may include reduction of soil erosion, sedimentation and pollution from dissolved and sediment-attached substances. (DIP)

Policies

For a cover crop to improve water quality, it must become quickly established, grow vigorously, and accumulate significant biomass. See NRCS Cover Crop code 340 Specifications table 1 for crops and required planting dates.

1. Selection and establishment of cover crops must be planned well in advance to achieve a good stand and maintain 85 percent or greater cover until a minimum of 30 days prior to planting. Seedbed preparation may be done by any suitable implement or method. Seedbed preparation may be eliminated when cover crops are seeded by broadcasting into a standing crop, into residues of a previous crop by conservation tillage methods or when the harvesting procedure or residue shredding will cover seeds. No-till methods are preferred.

2. Drill or broadcast methods of seeding may be used. Broadcast methods of seeding should be completed prior to harvest for cotton, soybeans and peanuts. For cotton or soybeans, it is highly recommended that cover be broadcast during the defoliation pass or before leaf drop. Subsequent leaf drop and harvest operations will cover seeds and help ensure good germination.

3. No payment for this cost-shared practice shall be made until the cover crop is established.

4. Field offices unwilling to assist operators in achieving success and monitor cover crop establishment and stand quality should not offer this incentive to cooperators in their district.

5. Allow the cover crop to grow until a minimum of 30 days before planting the succeeding crop. Terminate cover crop as late as possible to maximize plant biomass production considering the time needed to prepare the field for the next crop. Disking or plowing destroys the majority of the soil quality gains associated with cover crop management. Therefore, while disking or plowing may be allowed by this practice, conservation tillage is encouraged. Small grains should grow until at least early boot stage. Legumes should grow until at least early flower.

6. Either certified seed or bin seed may be used for this cost share practice in order to receive payment. The maximum payment for planting shall be $20.00 per acre. **Cooperators using bin seed must be careful to adhere to the restrictions imposed by the federal Plant Variety Protection Act, the NC seed rules and statutes, and laws governing the use of seed from patented plants.**

7. Practice has a $15,000 lifetime limit per applicant and is limited to 3 annual contracts per applicant.

8. BMP soil and phosphorus impacts are required on the contract. Include the planted acreage as well. Refer to the Minimum NCACSP Effects Requirements table later in this section for the correct methods of calculation.

9. Cover crop is an annual practice. Request for payment must be annually.

10. Animal waste or fertilizer may be applied to these cover crops when needed to improve the vigor of the crop.

    This practice precludes the planting of cover crop for harvest. The fields must not be grazed or the crop removed. No burning by fire of crop residue will be permitted.

11. An applicant may not simultaneously receive the cover crop incentive and either the 3-year conservation tillage incentive, the long-term no-till incentive, or the nutrient scavenger cover crop incentive.

12. On occasion it may be unavoidable for the cooperator to need to access the field when the traffic will result in ruts in the field (e.g., harvest operations). <u>With documented approval from field staff</u>, the cooperator can spot disk/level ruts to smooth out the surface. The field staff will work with the cooperator to stay in compliance with his/her conservation tillage contract. If field staff determines adequate cover can be established prior to next crop being planted, a cover crop should be planted immediately. The field staff can provide a recommendation on what might be best to plant as a quick cover. Cooperators must contact their district office for assistance.

    a. Field staff needs to determine the level of need for isolated disking. If smoothing the ruts will allow for the cooperator to stay in compliance, no contract extension will be required.

    b. If extensive disking and leveling occurs, contract must be extended by one year or cooperator must refund <u>entire</u> amount of incentive payment.

<u>Specifications</u>

NC NRCS Technical Guide, Section IV, Specification #340 (Cover Crop), # 328 (Conservation Cropping Rotation), #329 (Residue and Tillage Management, No-Till/Strip Till/Direct Seed).

(Revised July 2009; Policy #13 added March 2010, revised July 2013)