

COMPLIANCE WITH HIGHLY ERODIBLE LAND (HEL) PROVISIONS OF THE 1985, 1990, AND 1996 FARM BILLS

Policy

Conservation plans for highly erodible land need only to address erosion; however, the goal of NRCS is to assist land users in planning and applying resource management systems. It will continue to be the basis for formulating conservation alternatives to be presented to land users. However, if for Food Security Act purposes, a land user indicated a desire to meet only the minimum requirements of the law, the person may elect to apply only an Alternative Conservation System (ACS) for all highly erodible cropland fields that are or will be used to produce agricultural commodities.

Alternative Conservation Systems (ACS)

Alternative Conservation Systems are based on the typical conservation systems that are socially acceptable and are being practiced by the producers who are recognized by their peers as having made a substantial reduction in erosion. Water disposal systems must be a part of any ACS where concentrated flow erosion is a problem.

Alternative Conservation Systems have been developed by capability class for each Major Land Resource Area (MLRA) by county. These are shown on the ACS guide sheets.

The ACS's listed on the guide sheets are approved for use in North Carolina with the following conditions. All new conservation compliance plans and revisions will be developed using RUSLE factors for soil loss calculations.

- a) HEL fields with cropping history for any year from 1981 to 1985.

ACS's when applied shall not result in erosion greater than 2T for the predominate HEL mapping unit in the field. For soils with a "T" value of 2 or less, erosion shall not exceed 4 "T" for predominate HEL mapping unit in the field.

- b) Sod busted land (land converted from native vegetation, normally forest land) that did not have a cropping history for any year 1981-1985.

ACS's when applied shall not result in erosion greater than "T" for the predominate HEL mapping unit in the highly erodible field.

- c) Conservation plans approved prior to August 3, 1996.

1. The same person continues to use the conservation system or revises the conservation plan at the same soil loss level.
2. The new owner or operator accepts the approved conservation plan and continues to apply it.

State Conservationist must approve individually all ACS's that do not meet the above criteria. Upon request, the State Conservationist in consultation with the State Technical Committee may approve ACS's for substantial soil loss greater than 2T but less than 4T.

Listed on the following pages are the counties by Major Land Resource Areas (MLRA).

The following is a list of counties by Major Land Resource Areas (MLRA's for Alternative Conservation Systems, for implementing the conservation provision of the 1985 and 1990 Farm Bills).

Major Land Resource Area 130 – Blue Ridge		
Ashe	Graham	McDowell
Alleghany	Haywood	Mitchell
Avery	Henderson	Swain
Buncombe	Jackson	Transylvania
Cherokee	Macon	Watauga
Clay	Madison	Yancey
Major Land Resource Area 136 – Southern Piedmont		
Alamance	Forsyth	Rockingham
Alexander	Gaston	Rowan
Anson	Granville	Rutherford
Burke	Guilford	Stanly
Cabarrus	Iredell	Stokes
Caldwell	Lee	Surry
Caswell	Lincoln	Union
Catawba	Mecklenburg	Vance
Chatham	Montgomery	Wake
Cleveland	Orange	Warren
Davidson	Person	Wilkes
Davie	Polk	Yadkin
Durham	Pitt	
Franklin	Randolph	
Major Land Resource Area 133A – Southern Coastal Plain		
Cumberland	Harnett	Robeson
Duplin	Johnston	Sampson
Edgecombe	Lenoir	Scotland
Greene	Nash	Wayne
Halifax	Northampton	Wilson
Major Land Resource Area 137 – Carolina-Georgia Sandhills		
Hoke	Moore	Richmond
Major Land Resource Area 153		
Bertie	Gates	Onslow
Bladen	Hertford	Pender
Brunswick	Jones	Pitt
Columbus	Martin	
Craven	New Hanover	
Major Land Resource Area 153B		
Beaufort	Currituck	Pasquotank
Camden	Dare	Perquimans
Carteret	Hyde	Tyrrell
Chowan	Pamlico	Washington

**Alternative Conservation System (ACS)
Guide Sheet**

**MLRA 130 – Blue Ridge
Predominant Crops – Burley Tobacco and Corn**

See Section II for Highly Erodible Mapping Units

The following are typical alternative conservation systems (ACS) that are acceptable for compliance with the highly erodible land (HEL) provisions of the Food Security Act of 1985.

Capability Subclass IIe

ACS No. 1

Residue Management, Seasonal or Cover Crop
Contour Farming
Grassed Waterway 1/

ACS No. 2

Residue Management, No-Till and Strip Till, or Long Term No-Till
Cover Crop
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IIIe

ACS No. 1

Conservation Crop Rotations (1-tobacco, 2-meadow)
Cover Crop
Contour Farming
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-tobacco, 2-small grain-meadow)
Stripcropping

ACS No. 3

Conservation Crop Rotation (1-sod, 2-sod, 3-corn, 4-cabbage)
Contour Farming

ACS No. 4

Conservation Crop Rotation (Silage corn)
Cover Crop
Residue Management, No-Till and Strip Till, or Long Term No-Till (No-till)

ACS No. 5

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe and Above

Note: Class IVe and above are recommended but not required for conversion to permanent vegetation.

ASC No. 1

Contour Farming
Cover Crop
Conservation Crop Rotation (1-sod, 2-sod, 3-tobacco, 4-tobacco)
Grassed Waterway 1/

ASC No. 2

Conservation Crop Rotation (1-no-till corn, 2-sod, 3-sod)
Residue Management, No-Till and Strip Till, or Long Term No-Till (no-till)
Grassed Waterway 1/

ASC No. 4

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

For burley tobacco only, continuous burley tobacco may be grown on the flatter portion of a field if the area of tobacco does not exceed one acre. A cover crop will be planted as soon as the tobacco is harvested and will remain on the field until at least March 15. The remainder of the field will remain in sod.

1/ Grassed waterways required only where concentrated flow erosion is a problem or where needed for outlets for contour farming or terraces.

Crops are considered to be conventionally tilled in the Conservation Crop Rotation unless designated as no-till.

NOTE: Cross Slope Farming (Code 330A) was added to Section IV of the Field Office Technical Guide as an interim conservation practice standard after the Alternative Conservation Systems were approved. Cross Slope Farming should be used when appropriate.

**Alternative Conservation System (ACS)
Guide Sheet**

**MLRA 136 – Southern Piedmont
Predominant Crops – Flue Cured Tobacco, Corn, Soybeans**

See Section II for Highly Erodible Mapping Units

The following are typical alternative conservation systems (ACS) that are acceptable for compliance with the highly erodible land (HEL) provisions of the Food Security Act of 1985.

Capability Subclass IIe

ACS No. 1

Residue Management, Seasonal or Cover Crop
Contour Farming
Terraces
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IIIe

ACS No. 1

Conservation Crop Rotations (1-tobacco-cover crop, 2-no-till corn)
Residue Management, Seasonal or Cover Crop
Terraces
Contour Farming
Grassed Waterway 1/

ACS No. 2 (Eroded phases on 2-8 percent slopes)

Conservation Crop Rotation (1-corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Conservation Crop Rotation (1-no-till corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 4

Conservation Crop Rotation (1-tobacco, 2-small grain-fescue)
Stripcropping
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 5

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe and Above

Note: Class IVe and above are recommended but not required for conversion to permanent vegetation.

ACS No. 1

Stripcropping
Conservation Crop Rotation (1-sod, 3-tobacco, 4-tobacco)
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-no-till corn, 2-small grain no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till (no-till)
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

This ACS will be used when the NRCS Technician determines that it is impracticable to stripcrop a field.

Conservation Crop Rotation (1-sod, 2-sod, 3-tobacco, 4-tobacco)
Grassed Waterway 1/

ACS No. 4

Conservation Crop Rotation (1-tobacco, 2-small grain –fescue)
Stripcropping
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 5

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe and Above

Note: Class VIe and above are recommended but not required for conversion to permanent vegetation.

ACS No. 1

Stripcropping
Conservation Crop Rotation (1-sod, 2-sod, 3-tobacco, 4-tobacco)
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-no-till corn, 2-small grain no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till (no-till)
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

This ACS will be used only when the NRCS Technician determines that it is impracticable to stripcrop a field.

Conservation Crop Rotation (1-sod, 2-sod, 3-tobacco, 4-tobacco)
Grassed Waterway 1/

ACS No. 4

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

1/ Grassed waterways required only where concentrated flow erosion is a problem or where needed for outlets for contour farming or terraces.

Crops are considered to be conventionally tilled in the Conservation Crop Rotation unless designated as no-till.

**Alternative Conservation System (ACS)
Guide Sheet**

**MLRA 133A – Southern Coastal Plain
Predominant Crops – Flue Cured Tobacco, Corn, Soybeans, Peanuts, and Cotton**

See Section II for Highly Erodible Mapping Units

The following are typical Alternative Conservation Systems (ACS) that are acceptable for compliance with the Highly Erodible Land (HEL) provisions of the Food Security Act of 1985.

Capability Subclass IIe

ACS No. 1

Residue Management, Seasonal or Cover Crop
Contour Farming
Terraces
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-row crop, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IIIe & Subclass IIIs

ACS No. 1

Conservation Crop Rotations (tobacco, peanuts, corn or corn, peanuts, cotton or tobacco, soybeans, corn)
Sweet potatoes may be substituted for tobacco.

Residue Management, Seasonal or Cover Crop
Terraces
Contour Farming
Grassed Waterway 1/

ACS No. 2 (For eroded phases on 2-8 percent slopes only)

Conservation Crop Rotation (1-row crop, 2-small grain - no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Conservation Crop Rotation (1-no-till corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 4

Conservation Crop Rotation (1-row crop, 2-small grain – sod)
Stripcropping
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 5

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe – IVs and Above

Note: Classes VIe and VI and above are recommended but not required for conversion to permanent vegetation.

ACS No. 1

Stripcropping
Conservation Crop Rotation (2 years sod, 2 years tobacco)
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-no-till corn, 2-small grain – no-till soybeans)
Residue Management, Seasonal
Residue Management, No-Till and Strip Till, or Long Term No-Till
Stripcropping
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this suitability subclass.

1/ Grassed waterways required only where concentrated flow erosion is a problem or where needed for outlets for contour farming or terraces.

Crops are considered to be conventionally tilled in the Conservation Crop Rotation unless designated as no-till.

**Alternative Conservation System (ACS)
Guide Sheet**

**MLRA 137– Carolina-Georgia Sandhills
Predominant Crops – Tobacco, Soybeans, Corn, Cotton**

See Section II for Highly Erodible Mapping Units

The following are typical alternative conservation systems (ACS) that are acceptable for compliance with the Highly Erodible Land (HEL) provisions of the Food Security Act of 1985.

Capability Subclass IIe

ACS No. 1

Residue Management, Seasonal or Cover Crop
Contour Farming
Terraces
Grassed Waterways 1/

ACS No. 2

Conservation Crop Rotation (1-corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass Iii and Subclass IIIs

ACS No. 1

Conservation Crop Rotation (1-row crops, 2-small grain)
Residue Management, Seasonal or Cover Crop
Terraces
Contour Farming
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1- no-till corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 3

Conservation Crop Rotation (1-tobacco, 2-small grain – fescue)
Stripcropping
Residue Management, Seasonal

ACS No. 4

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe, IVs and Above

Note: Classes IVe, VIs and above are recommended but not required for conversion to permanent vegetation.

ACS No. 1

Stripcropping
Conservation Crop Rotation (2 years sod, 2 years tobacco)
Grassed Waterway 1/

ACS No. 2

Conservation Crop Rotation (1-no-till corn, 2-small grain)
Residue Management, Seasonal
Residue Management, No-Till and Strip Till, or Long Term No-Till (no-till)
Stripcropping
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

^{1/} Grassed waterways required only where concentrated flow erosion is a problem or where needed for outlets for contour farming or terraces.

Crops are considered to be conventionally tilled in the Conservation Crop Rotation unless designated as no-till.

Note: Cross slopes farming (Code 330A) was added to Section IV of the Field Office Technical Guide as an interim conservation practice standard after the Alternative Conservation Systems were approved. Cross slope farming should be used when appropriate.

**Alternative Conservation System (ACS)
Guide Sheet**

**MLRA 153– Atlantic Coast Flatwoods
MLRA 153B – Tidewater Area
Predominant Crops – Flue-Cured Tobacco, Corn, Soybeans, Peanuts, and Cotton**

See Section II for Highly Erodible Mapping Units

The following are typical Alternative Conservation Systems (ACS) that are acceptable for compliance with the Highly Erodible Land (HEL) provisions of the Food Security Act of 1985.

Capability Subclass IIe

ACS No. 1

Conservation Crop Rotation (corn-peanut-cotton)
Residue Management, Seasonal or Cover Crop
Contour Farming
Terraces
Grassed Waterways 1/

ACS No. 2

Conservation Crop Rotation (1-row crop, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterways 1/
Cover Crop if Row Crop is Tobacco

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IIIe & Subclass IIIs

ACS No. 1

Conservation Crop Rotations
(1-tobacco, 2-peanuts, 3-corn or 1-corn, 2-peanuts, 3-cotton or 1-tobacco, 2-soybeans, 3-corn)
Residue Management, Seasonal or Cover Crop
Terraces
Contour Farming
Grassed Waterway 1/

ACS No. 2 (For eroded phases on 2 – 8 percent slopes only)

Conservation Crop Rotation (1-row crops, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/
Contour Farming
Cover Crop if Row Crop is Tobacco

ACS No. 3

Conservation Crop Rotation (1-no-till corn, 2-small grain – no-till soybeans)
Residue Management, No-Till and Strip Till, or Long Term No-Till
Residue Management, Seasonal
Grassed Waterway 1/

ACS No. 4

Conservation Crop Rotation (1-row crop, 2-small grain – sod)
Stripcropping
Residue Management, Seasonal
Grassed Waterway 1/
Grasses & Legumes in Rotation

ACS No. 5

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

Capability Subclass IVe & IVs and Above

Note: Classes VIe & VIs and above are recommended but not required for conversion to permanent vegetation.

ACS No. 1

Stripcropping
Conservation Crop Rotation (2 years sod, 1 year tobacco)
Grassed Waterway 1/
Contour Farming

ACS No. 2

Conservation Crop Rotation (1-no-till corn, 2-small grain – no-till soybeans)
Residue Management, Seasonal
Residue Management, No-Till and Strip Till, or Long Term No-Till
Grassed Waterway 1/

ACS No. 3

Any combination of practices in Section IV of the Technical Guide that reduces annual erosion rates to a comparable level of protection as provided by any of the above ACS for this capability subclass.

^{1/} Grassed waterways required only where concentrated flow erosion is a problem or where needed for outlets for contour farming or terraces.

Crops are considered to be conventionally tilled in the Conservation Crop Rotation unless designated as no-till.

Note: Cross Slope Farming (Code 330A) was added to Section IV of the Field Office Technical Guide as an interim conservation practices standard after the Alternative Conservation Systems were approved. Cross Slope Farming should be used when appropriate.