

CONSERVATION SYSTEMS FOR COMPLIANCE WITH HIGHLY ERODIBLE LAND PROVISIONS OF THE FOOD SECURITY ACT OF 1985 (AS AMENDED)

The goal of the Natural Resource Conservation Service is to assist land users with planning and applying Resource Management Systems. However, the 1985 Food Security Act (as amended) requires USDA program participants to use a Conservation System that would achieve a substantial reduction or permit no substantial increase in soil erosion on highly erodible land. These conservation systems must be technically and economically feasible, based on local resource conditions and available conservation technology, and be cost effective. These conservation system requirements were reaffirmed in the 1990, 1996 and 2002 Farm Bills.

Items I-III shown below are the requirements of a conservation system for highly erodible land (HEL) in Illinois. Soil loss calculations for sheet and rill erosion will utilize the most current version of the Revised Universal Soil Loss Equation (currently RUSLE2) technology.

- I. Areas subject to ephemeral gully erosion must be treated.
- II. Sheet and rill erosion control must result in a substantial reduction in soil erosion using current crop yields or University of Illinois Bulletin 810 according to the following:
 - A. The benchmark Alternative Conservation System (ACS) in Illinois is a continuous no-till Corn-Soybean rotation. This system is based on the following:

Anhydrous ammonia is injected on 30 inch centers in the fall following soybeans (use spring application of ammonia in areas of the state where fall applications are not recommended). Corn is planted on 30 inch row spacing with a no-till planter with double disk openers and fluted coulter. Soybeans are planted with a no-till drill with double disk openers and fluted coulters. The minimum percent residue after planting corn is 40%. The minimum percent residue after planting soybeans is 70%.

Any conservation system that has been applied and maintained with a RUSLE2 soil loss equivalent to or less than the above system meets the requirements of this section.

OR

- B. Applied conservation systems that comply with the attached “Approved Alternative Conservation Systems” for the appropriate Crop Management Zone OR any Alternative Conservation System in the archived Illinois Field Office Technical Guide Section III.

OR

- C. Control soil loss to the tolerable soil limits (T) for the predominate highly erodible soil map unit in the Highly Erodible field. (In no case will a person be required to reduce erosion below T.)

Note: Producers with no plan prior to July 3, 1996 may develop a plan according to options A, B, or C above except soil loss shall not exceed 2 X the tolerable soil loss (2T) for any HEL field.

- III. **SODBUSTING** - Conservation systems for highly erodible fields brought into agricultural commodity production after December 23, 1985 from native vegetation (sodbuster) can not allow a substantial increase in erosion. The conservation system must reduce soil loss to the tolerable soil loss limit (T) for the predominant highly erodible soil map unit in the conservation treatment area. Native vegetation includes, but is not limited to, trees and/or other woody vegetation and/or native grasses. Land that is brought into commodity production which was converted from non-native vegetation, must meet treatment levels from I and II above.

REVISING AND EVALUATING CONSERVATION SYSTEMS

The current soil erosion prediction technology (RUSLE2) is to be used to determine soil erosion levels when evaluating conservation systems and assisting producers to revise their conservation plans. In situations where something other than RUSLE2 was used to develop the conservation system, RUSLE2 will be used to calculate the new soil loss levels required when a plan is revised or when a system other than the system documented in a conservation plan has been applied and is being evaluated for Highly Erodible Land Conservation compliance.

If a conservation system that has been documented in an approved conservation plan is no longer being applied and maintained, the conservation system requirements for soil erosion control is soil loss equal to or less than the soil loss level of the conservation system described in paragraph IIA, B, OR C. If the system applied does not match any of the approved systems identified in the FOTG, soil loss must be equal to or less than the soil loss level of the conservation system described in paragraph IIA (C-SB, No-Till).

Any plan revisions which are the result of correcting “Highly Erodible Land compliance deficiencies found while providing technical assistance”, (Sec.520.11 [online version] of the National Food Security Act Manual, NFSAM) or are the result of a “good faith exemption” (Section 520.12 of NFSAM) must meet the requirements of Section IIA, B, OR C.

Conservation systems on expired Conservation Reserve Program acres are to meet the requirements in Section IIA, B, OR C.