

## § 12.21

committees, for the purposes of this part.

### § 12.21 Identification of highly erodible lands criteria.

(a) *Basis for identification as highly erodible.* Soil map units and an erodibility index will be used as the basis for identifying highly erodible land. The erodibility index for a soil is determined by dividing the potential average annual rate of erosion for each soil by its predetermined soil loss tolerance (T) value. The T value represents the maximum annual rate of soil erosion that could occur without causing a decline in long-term productivity. The equation for measuring erosion is described below.

(1) The potential average annual rate of sheet and rill erosion is estimated by multiplying the following factors of the Universal Soil Loss Equation (USLE):

- (i) Rainfall and runoff (R);
- (ii) The degree to which the soil resists water erosion (K); and
- (iii) The function (LS), which includes the effects of slope length (L) and steepness (S).

(2) The potential average annual rate of wind erosion is estimated by multiplying the following factors of the Wind Erosion Equation (WEQ): Climatic characterization of windspeed and surface soil moisture (C) and the degree to which soil resists wind erosion (I).

(3) The USLE is explained in the U.S. Department of Agriculture Handbook 537, "Predicting Rainfall Erosion Losses." The WEQ is explained in the paper by Woodruff, N.P., and F. H. Siddaway, 1965, "A Wind Erosion Equation," Soil Science Society of America Proceedings, Vol. 29, No. 5, pages 602-608. Values for all the factors used in these equations are contained in the NRCS field office technical guide and the references which are a part of the guide. The Universal Soil Loss Equation, the Revised Universal Soil Loss Equation, and the Wind Erosion Equation and the rules under which NRCS uses the equations are published at §§ 610.11 through 610.15 of this title.

(b) *Highly erodible.* A soil map unit shall be determined to be highly erodible if either the RKLS/T or the CI/T

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value for the map unit equals or exceeds 8.

(c) *Potentially highly erodible.* Whenever a soil map unit description contains a range of a slope length and steepness characteristics that produce a range of LS values which result in RKLS/T quotients both above and below 8, the soil map unit will be entered on the list of highly erodible soil map units as "potentially highly erodible." The final determination of erodibility for an individual field containing these soil map unit delineations will be made by an on-site investigation.

[61 FR 47025, Sept. 6, 1996; 61 FR 53491, Oct. 11, 1996]

### § 12.22 Highly erodible field determination criteria.

(a) *Predominance.* Highly erodible land shall be considered to be predominant on a field if either:

- (1) 33.33 percent or more of the total field acreage is identified as soil map units which are highly erodible; or
- (2) 50 or more acres in such field are identified as soil map units which are highly erodible.

(b) *Modification of field boundaries.* A person may request the modification of field boundaries for the purpose of excluding highly erodible land from a field. Such a request must be submitted to, and is subject to the approval of, FSA. FSA shall use the technical determination of NRCS in approving this request.

(c) *Impact of changing field boundaries.* When field boundaries are changed to include areas of land that were included in a field that was previously determined to be predominately highly erodible according to paragraph (a) of this section, such areas shall continue to be subject to the requirements for predominately highly erodible fields, except as provided in paragraph (b) of this section.

(d) *Small area of noncropland.* Small areas of noncropland within or adjacent to the boundaries of existing highly erodible crop fields such as abandoned farmsteads, areas around filled or capped wells, rock piles, trees, or brush which are converted to cropland are considered to meet the requirement of § 12.5(a)(2) if they are included in an