



Highly Erodible Land

General

The basis for identifying highly erodible land is the erodibility index of a soil survey map unit. The erodibility index of a soil is determined by dividing the potential erodibility for each soil survey map unit by the soil loss tolerance (T) value established for the soil. The potential erodibility for a map unit differs according to the erosion type (water or wind erosion). The T value represents the maximum annual rate of soil erosion that could take place without causing a decline in long-term productivity. A soil map unit with an erodibility index of 8 or more is a highly erodible soil map unit.

Water Erosion

Potential erodibility for sheet and rill erosion is estimated by multiplying the following factors of the Universal Soil Loss Equation (USLE):

1. Rainfall and runoff factor (R)
2. Susceptibility of the soil to water erosion (K)
3. Combined effects of slope length and steepness (LS)

The erodibility index for sheet and rill erosion is represented by the formula $RKLS/T$. A soil survey map unit is highly erodible if the LS factor for the shortest slope length and minimum slope percent is used and the $RKLS/T$ value equals or exceeds 8.

A soil survey map unit is potentially highly erodible if: (1) the $RKLS/T$ value using the minimum LS factor is less than 8 and (2) the $RKLS/T$ value using the maximum LS factor is equal to or greater than 8.

A soil survey map unit is neither potentially highly erodible nor highly erodible if: the $RKLS/T$ value using the maximum LS factor is less than 8.

Wind Erosion

Potential erodibility from wind erosion is estimated by multiplying the following factors of the Wind Erosion Equation (WEQ).

1. Climatic characterization of windspeed and surface soil moisture (C)
2. The susceptibility of the soil to wind erosion (I)

The erodibility index for wind erosion is represented by the formula CI/T . A soil survey map unit is highly erodible if the CI/T value equals or exceeds 8.

A soil survey map unit is not highly erodible if the CI/T value is less than 8.

Soil survey map units that are Highly Erodible or Potentially Highly Erodible are indicated in Section II of this FOTG. Additional information concerning erosion prediction and control is contained in Agriculture Handbook 537 (Predicting Rainfall Erosion Losses; A Guide to Conservation Planning) and the Florida Erosion Control Handbook.

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