SECTION I – EROSION PREDICTION

Table of Contents

SECTION I - EROSION PREDICTION

Introduction

This section contains information relative to various types of erosion prediction.

Sheet and rill erosion prediction is calculated using the Revised Universal Soil Loss Equation (RUSLE). A basic description of the use of RUSLE for sheet and rill erosion prediction can be found in the following RUSLE section. Refer to the Utah "Revised Universal Soil Loss Equation" Handbook dated December 1998 for detailed information, maps, and instructions for the use of this equation. Refer also to the National Agronomy Handbook and Agriculture Handbook Number 703 "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)."

Wind erosion is calculated using the Wind Erosion Equation (WEQ). A basic description of the use of the wind erosion equation can be found in the following WEQ section. Refer to the "Utah Wind Erosion Guide" dated January 1998 for detailed information, maps, and instruction for the use of this equation. Refer also to the National Agronomy Handbook. The management period method is the preferred method that is to be used in Utah except when making NRI inventories. The annual method may be used when the predicted erosion rates are known to be below the soil loss tolerance. The management period method should be used for the development of highly erodible (HEL) plans and for all HEL compliance determinations. It should also be used when developing conservation plans for wind erosion control where vegetables and other low wind tolerant plants are grown in the rotation.

Information on measuring rill erosion, ephemeral gully erosion and irrigation induced erosion can be found in the Agronomy Tech. Notes section labeled "Erosion". The NRCS State Agronomist or Geologist should be contacted for additional information on the measurement of wind, sheet and rill, classic gully, irrigation induced, streambank, mass movement, roadbank, and construction site erosion.