

DEVELOPMENT OF THE WIND EROSION EQUATION (WEQ)

Drought and soil erosion by wind during the 19th century caused wind erosion to be recognized as an important geological phenomenon. By the late 1930's, systematic and scientific research into wind erosion was being pioneered in several states including California, South Dakota, and Texas. Additional investigations also were conducted in England and Canada. The products of these efforts included information on the mechanics of soil transport by wind, the influence of cultural treatment on rates of soil movement, and the influence of windbreaks on windflow patterns. One of the first publications, **The Physics of Blown Sand and Desert Dunes**, authored by R. A. Bagnold was published in 1941.

The current form of the WEQ was first released in 1963. Other enhancements were added in 1965, and 1968 to account for preponderance and monthly climatic factors. The management period technique for computing soil erosion by periods using wind energy distributions was introduced in 1981.