Water Erosion Prediction Project (WEPP)

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FS WEPP is a set of interfaces designed to allow users to quickly evaluate erosion and sediment delivery potential from forest roads. The erosion rates and sediment delivery are predicted by the Water Erosion Prediction Project (WEPP) model, using input values for forest conditions.

Overview and Applicability

WEPP is a computer simulation that predicts soil erosion, replacing the Universal Soil Loss Equation (USLE). The WEPP model is a complex computer program that describes the processes that lead to erosion. These processes include infiltration and runoff; soil detachment, transport, and deposition; and plant growth, senescence, and residue decomposition. For each day of simulation, WEPP calculates he soil water content in multiple layers and plant growth/decomposition. The effects of tillage processes and soil consolidation are also modeled. The WEPP model is applicable at the field scale.

Inputs

- Climate, including rainfall amounts, intensity, temperature
- Management, including practices accomplished in the field, e.g., crops grown, soil disturbance operations
- Soil, including soil properties
- Topography, including slope description, e.g., length, steepness of different sections, width, orientation

Outputs

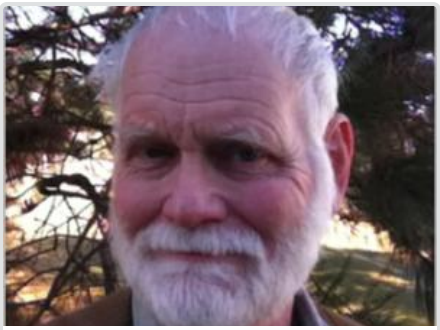
A calculated prediction of soil erosion

Requirements

WEPP can be run from an MS DOS set of input screens or from a Windows interface currently under development. In both variations, a set of file builders assists the user in building or altering input files which can include more than 400 input variables for a single run.

Go to WEPP Interfaces **Go to WEPP Resources**

People



William J. Elliot
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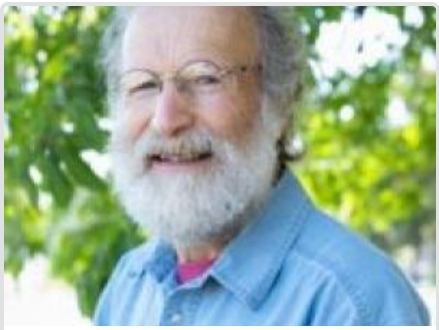

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