

Quick Start for WEPS 1.0

WEPS is a complicated model with a potential for numerous inputs. However, for simple simulations, WEPS is easy to operate. The following quick start guide will describe how to make a simple simulation run. Double left click on the Weps1.0 icon on the computer screen 'desktop'. Note: the NRCS standard is to start WEPS from the 'Start Menu' (e.g., "Start>Programs>USDA Applications>WEPS>WEPS1.0"). The WEPS1.0 main screen will then appear.

A Simple Simulation

For a simple simulation, only four types of information are entered on the main screen.

1. Describe the simulation field geometry.
 - a. Select the field dimensions geometry in the panel labeled "Simulation Region Information".
 - i. Type in the specific X-Length and Y-Length field dimensions.
 - b. Select field orientation in the panel labeled "Simulation Region Information".
 - i. Enter the specific field orientation ($\pm 45^\circ$ max) relative to true north, in the "Orientation" box.
 - c. Select any barriers if present, in the panel labeled "Wind Barrier Information".
 - i. To place a barrier on the field, click the radio button for the desired side of the field. Then select the type of barrier for that side of the field from the drop down list . Note that WEPS 1.0 only allows barriers on the field borders. The barrier properties can be viewed or edited by clicking the "Edit Selected Barrier" button at the bottom of the barrier panel. To remove a barrier click the radio button on , then select "none" from the drop down list.
2. Select a field location (for weather files).
 - a. In the panel labeled "Location Information", use the mouse to select a State and County from the drop down menus . The closest weather stations to the center of the selected county will be loaded.
3. Select a soil.
 - a. In the bottom panel of the window labeled 'Soil', use the mouse to select a soil from the drop down "Template" menu .
4. Select a management scenario.
 - a. In the bottom panel of the window labeled 'MCREW', use the mouse to select a crop rotation from the drop down "Template" menu .

Once these items are complete, click the 'Run' button  on the tool bar at the top of the screen. You will then see indicators that WEPS1.0 is running. When the simulation run is finished, the "WEPS Project Summary" screen will appear. If WEPS encounters an error during a simulation run, a screen appears ('Send Email to WEPS Support') which allows you to report the error to WERU. The user will be prompted to enter an email address and a short message. If you are connected to the Internet at the time of the error, clicking 'OK' will email the report to WERU along with all files necessary to duplicate the error so that it can be addressed.

WEPS Project Summary

The Project Summary for a simulation run will automatically display at the conclusion of a simulation run. To learn how to obtain more detailed output see the WEPS User Manual.

The Project Summary contains names of the input files as well as other input parameters and basic soil loss information by rotation year and the average annual for the total simulation. Soil loss output in the Project Summary includes: Gross Loss which is the average erosion within the field; Total which is the average total net loss from the field; Creep/Salt which is the average creep plus saltation net loss from the field; Suspension which is the average suspension net loss from the field; and PM10 which is the average PM10 net loss from the field.

Exiting WEPS 1.0

To exit WEPS 1.0, click "Project" on the menu bar at the top of the main screen, then click "Exit". You will be asked if you want to save your project. Clicking 'Yes' will bring up a file save box. You will also be asked to confirm if you really want to exit WEPS 1.0.

Additional Information

WEPS has capability for many simulation run options as well as detailed output. Consult the WEPS 1.0 User Manual for complete details. For further information regarding WEPS contact:

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