

RUSLE2

GUIDELINES FOR ROCK COVER

Kansas Technical Guide #4

Guidelines for Estimating Rock Cover in the Field

Abstract:

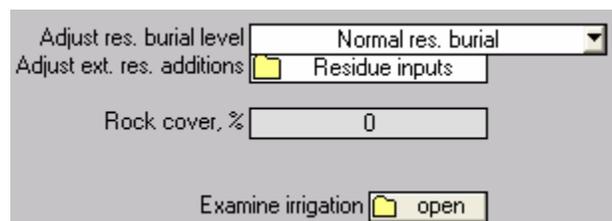
Rock cover on the soil surface acts as ground cover and reduces erosion much like plant litter, crop residue and applied mulch, except the rock does not decompose and add organic matter to the soil. The program takes into account that the rock cover is a stable value that doesn't change throughout the season and also that the vegetative cover overlaps the rock surface, as well as decomposes throughout the season at varying rates. This guidance provides instructions for determining whether to use rock cover as part of a Revised Universal Soil Loss Equation, Version 2 (RUSLE2) site evaluation.

Instructions:

Rock cover will be based on field measurements using the same techniques, such as line transects, to measure other ground cover like crop residue. The rock should be sufficiently large enough to not be effected by raindrop impact or surface runoff. **Do not use the rock cover values or rock content in the soil profile from the NRCS Soil Survey to determine rock cover.** Small, flat, or light weight aggregates may not be effective as cover.

The minimum rock size that is measured should not be less than 10 millimeters (3/8-inch) in diameter and should cover a predominant portion of the site being evaluated.

The appropriate time to measure for rock cover will be after rainfall during the portion of the crop rotation that will be the most susceptible to erosion and during the most erosive period of the year (April-June).



Adjust res. burial level

Adjust ext. res. additions Residue inputs

Rock cover, %

Examine irrigation open

Once the estimated rock cover is determined, enter the percentage of cover in the appropriate box of the Profile view.