

Visual Observation and Monitoring of Landslides

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Many landslide problems in Southwestern Pennsylvania and elsewhere involve re-activation of old, marginally stable landslides. Landslide re-activation, like initiation of new landslides, is always accompanied by indications, e.g., ground cracks, ground bulges, ground depressions, loosening, spalling, raveling, water discharge, which can be visually observed and monitored. This is particularly important in the early stages of slide re-activation (or new slide development) in order to (1) characterize the type, extent, and velocity of slide movement; (2) assess risk to structures, utilities, and people; and (3) plan slide response, including risk reduction measures - before subsurface exploration and instrumentation might commence. Peck (1972) stated "An instrument too often overlooked in our technical world is a human eye connected to the brain of an intelligent human being. It can detect most of what we need to know about subsurface construction. Only when the eye cannot directly obtain the necessary data is there a need to supplement it by more specialized instruments."

Guidance on visual observation and monitoring of landslides in Southwestern Pennsylvania will be presented along with examples of applications.

