OPEN FILE REPORT 74-283

Prepared in cooperation with the
APPALACHIAN REGIONAL COMMISSION

NEW KENSINGTON EAST QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SW/4 FREEPORT 15 QUADRANGLE


## EXPLANATION

Additional information is contained in a leaflet accompanying this map.

**RECENT LANDSLIDES**
Dominantly earth slumps and earth flows; historically recorded or characterized by fresh scars. Small landslides enclosed by triangles.

**PREHISTORIC LANDSLIDES**
Dominantly earth slumps and earth flows characterized by hummocky topography and slump benches; relatively stable in natural state but can be reactivated by excavation, loading and changes in ground and surface water conditions. Includes some probable recent landslides not covered by records examined.

**SLOPES WITH CONSPICUOUS SOIL CREEP**
Clayey soils, generally less than 5 ft. thick, commonly underlain by weathered shale; characterized by shallow, slow but distinct, downslope movement that can be greatly accelerated by overloading from fills or structures.

**OUTCROP AREA OF THICK "RED BEDS" AND ASSOCIATED ROCKS**
Rock weathers rapidly on exposure; weathered rock and related soil commonly result in soil creep and landslides; cuts and fills in "red beds" generally not stable.

**RELATIVELY STABLE GROUND**
Most slopes have little susceptibility to landsliding unless extensively modified by man; slight soil creep common on undisturbed slope.

**STEEP SLOPES SUSCEPTIBLE TO ROCKFALL**
Dominantly thick-bedded sandstone and limestone, 1 to over 10 ft thick; subordinate flaggy sandy shale and interbedded shale; highly fractured and locally undercut by weathering of shale; in steep natural and cut slopes and cliffs, 15 to over 150 ft high.

**MAN-MADE FILL**
Heterogeneous soil and rock material; variable susceptibility to slope failure depending on nature of materials, foundation conditions, design and construction. Fills in older urbanized areas mapped only where associated with recent landslides. Fills too small to be shown by pattern identified by letter "F".

HIGHLY SENSITIVE TO DISTURBANCE BY MAN

**NOTE**
Variations in slope sensitivity may occur at any specific point within a unit. Boundaries largely are inferred and information given is intended as a general guide and should not be construed as applicable to all localities within the area shown. This map cannot be used as a substitute for detailed engineering investigations of specific sites.

Base by U.S. Geological Survey, 1969: Research spansored by the Appalachian Regional Commission under contract no. 74-31.

Map based on 1973 aerial photographs, field reconnaissance, 1973-74; soil surveys by U.S. Dept. Agriculture Soil Conservation Service, and existing geologic data. This map has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.

# LANDSLIDE SUSCEPTIBILITY MAP OF THE NEW KENSINGTON EAST 7 1/2' QUADRANGLE, ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA

by

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U.S. Geological Survey
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