DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH
THE APPALACHIAN REGIONAL COMMISSION

MISCELLANEOUS FIELD STUDIES
MAP MF-844
NEWELL—SLOPE STABILITY,
BEATTYVILLE QUAD., KRADD, KY.

Base from U.S. Geological Survey, 1961

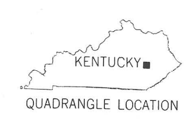
10,000-foot grid based on Kentucky coordinate system, south zone

1000-meter Universal Transverse Mercator grid ticks, zone 17, shown in black

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1961

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL



QUADRANGLE LOCATION

Compiled by W. L. Newell, 1974

EXPLANATION

This map is one of several produced in cooperation with the Appalachian Regional Commission. A bulletin (Newell, in press) was prepared to accompany the maps to give a comprehensive treatment of geologic, hydrologic, and topographic information integrated for land-use planning in the Kentucky River Area Development District. This map is derived from the surficial geologic map of this area by Newell (1977).

SLOPE STABILITY

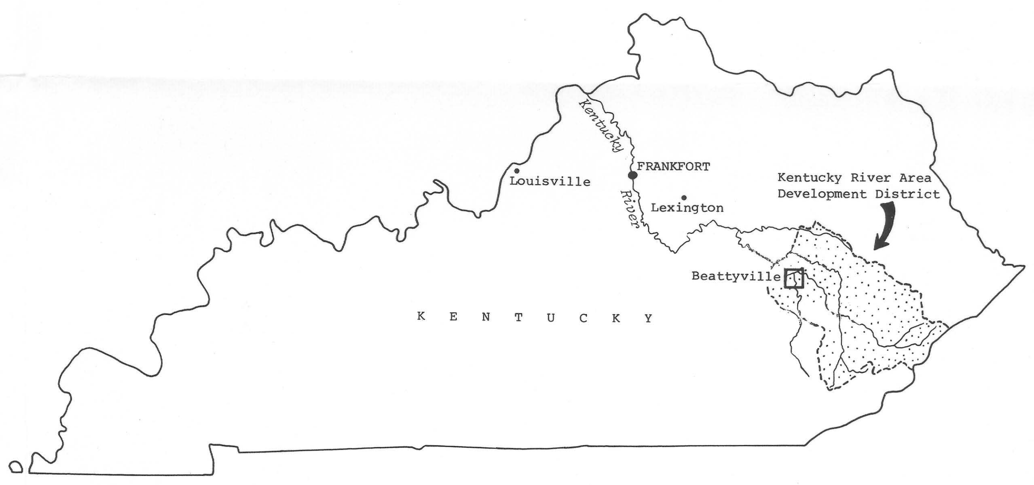
U	Unstable--Areas of extensive, currently active, naturally occurring mass movement. Includes thin discontinuous colluvium (c_1) and modern channel alluvium (a_1) on surficial geologic map (Newell, 1977)
P	Potentially unstable--Areas where naturally occurring mass movement is of limited extent and areas where extensive mass movement has formerly occurred. In both areas, extensive mass movement can be stimulated by manmade modifications. Includes thin continuous colluvium (c_2), thick colluvium (c_3), and thin residuum (r_2) on surficial geologic map (Newell, 1977)
S	Stable--Areas where naturally occurring, extensive mass movement is unlikely. Manmade modifications unlikely to cause extensive instability. Includes flood-plain alluvium (a_1), low-level terrace alluvium (a_2), high-level terrace alluvium (a_3, a_{3C}), and thick residuum (r_1)

————----UNIT BOUNDARY--Dashed where approximately located

REFERENCES

Newell, W.L., 1977, Surficial geologic maps of the Beattyville, Campton, and Hazard North quadrangles, Kentucky River Area Development District, eastern Kentucky: U.S. Geol. Survey Misc. Field Studies Map MF-843.

______in press, Understanding natural systems--a perspective for land-use planning in Appalachian Kentucky: U.S. Geol. Survey Bull. 1438.



Map showing location of Kentucky River Area Development District

MAP SHOWING SLOPE STABILITY IN THE BEATTYVILLE QUADRANGLE, KENTUCKY RIVER AREA DEVELOPMENT DISTRICT, EASTERN KENTUCKY

By
Wayne L. Newell
1977

Interior—Geological Survey, Reston, Virginia—1977

For sale by Branch of Distribution, U.S. Geological Survey, 1200 South Eads Street, Arlington, VA 22202