

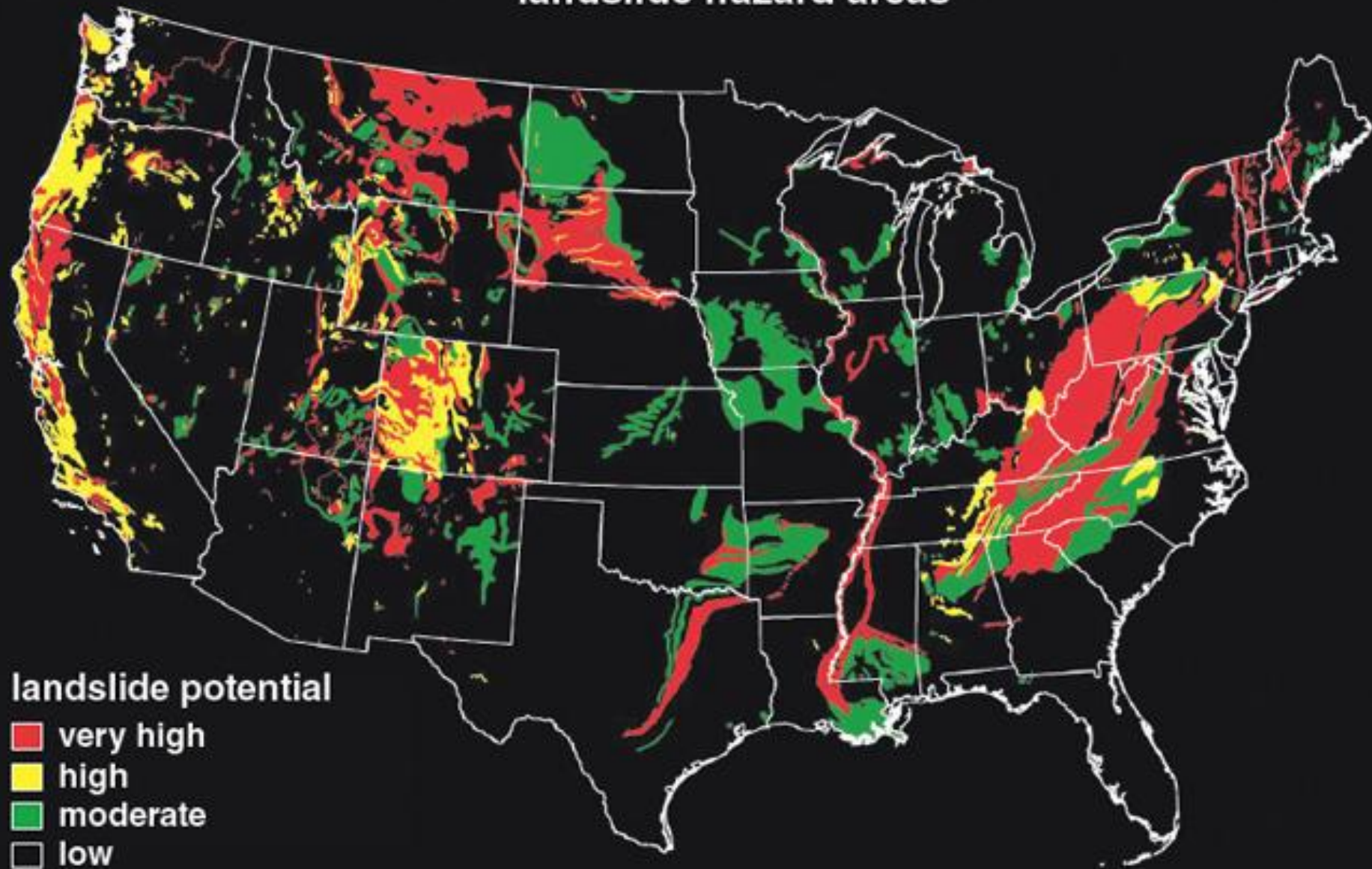
The Landslide Problem in Southwestern Pennsylvania

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Monroeville, Pennsylvania

landslide hazard areas



U. S. Geological Survey Landslide Susceptibility Map

Every year in Southwestern Pennsylvania

Landslides cause millions of dollars of damage

Displace people from their homes

Occasionally injure and kill people



Southwestern Pennsylvania - long noted for Landslides

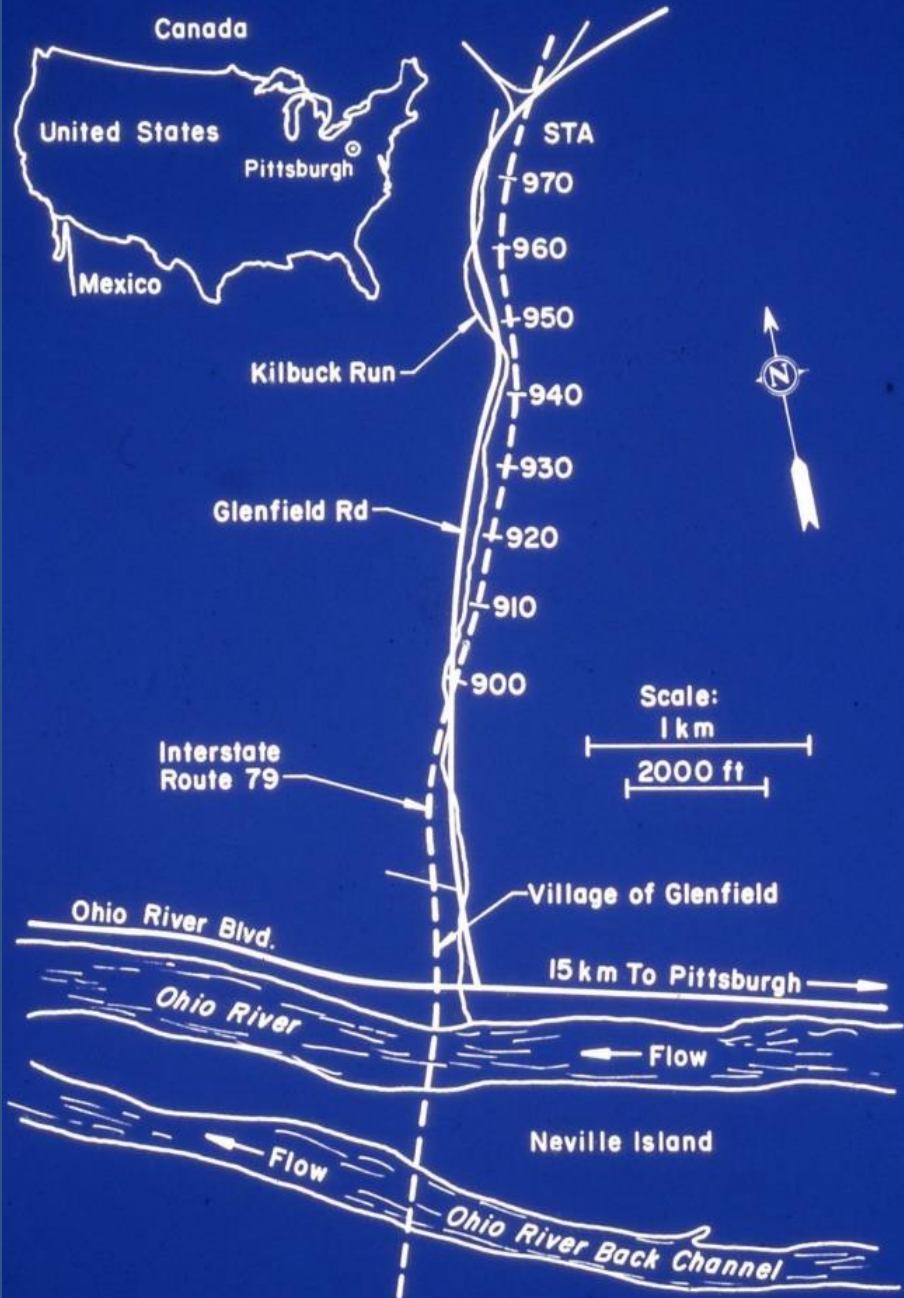
Results from Geology, Topography, Climate, History

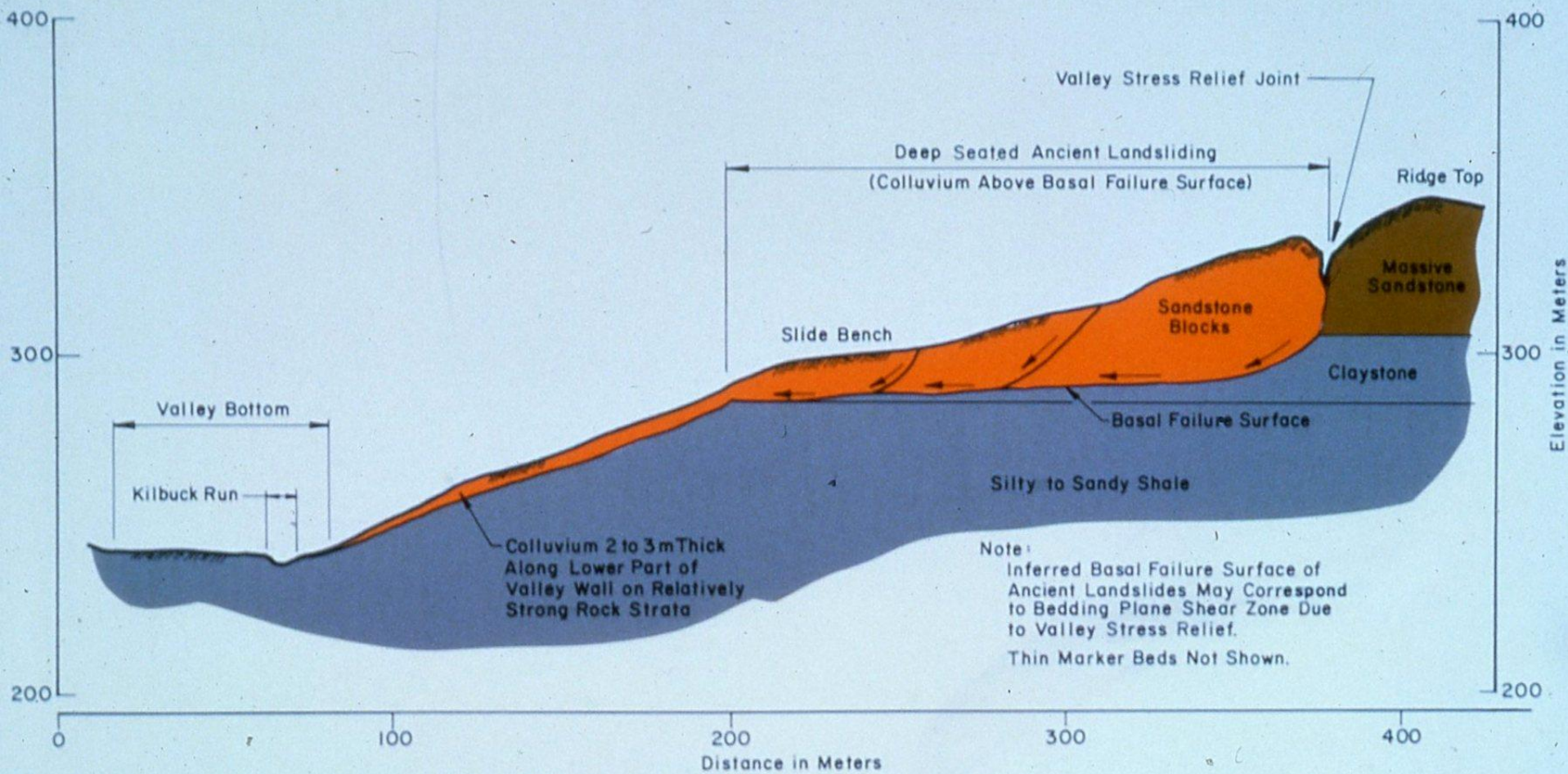
Flat-lying, interbedded, strong and weak sedimentary rocks have been acted upon by Erosion, Stress Relief, Weathering, Creep, and Sliding to produce masses of

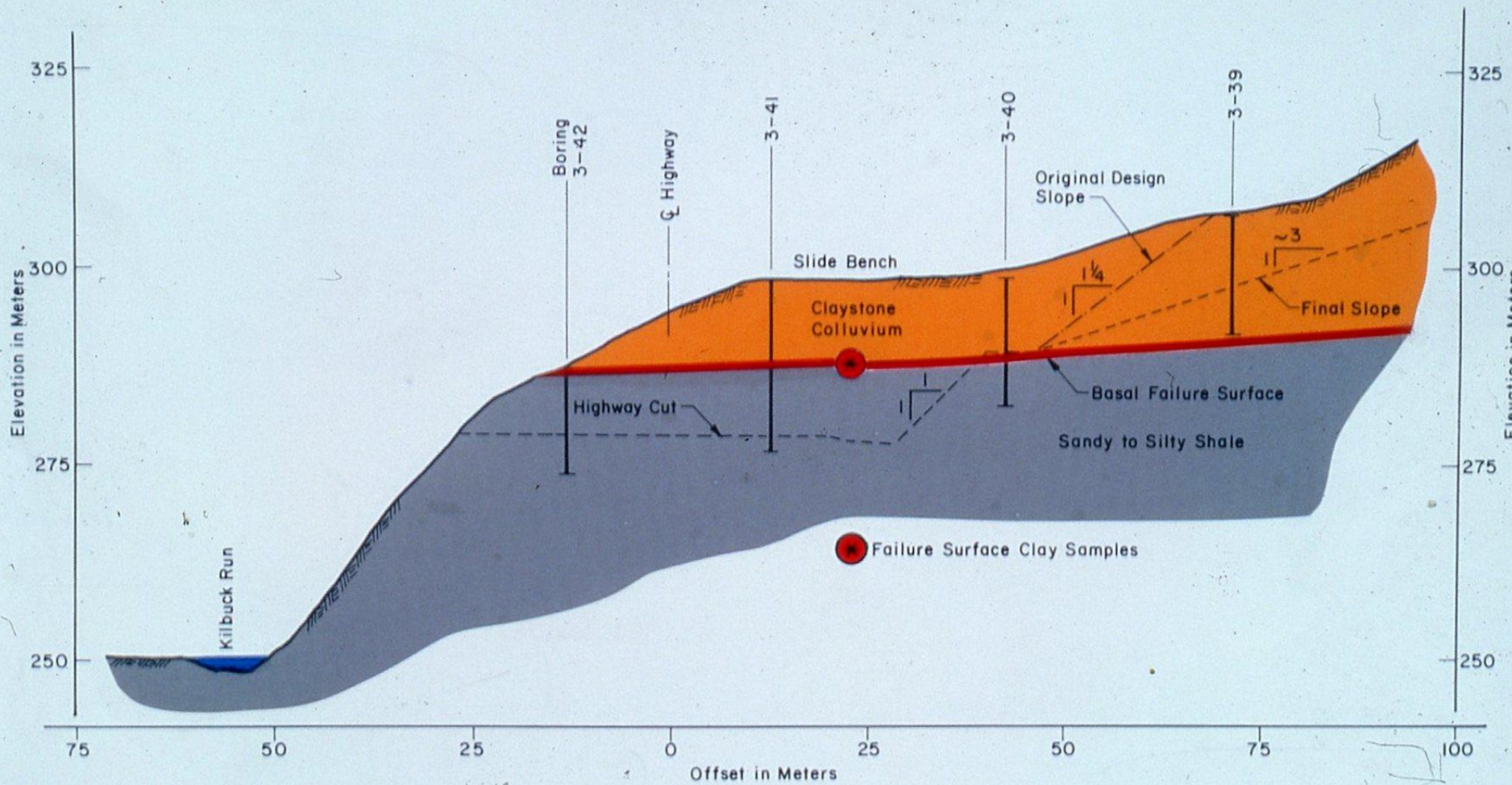
Marginally Stable Colluvium

These are often reactivated by heavy precipitation and by human activity, e.g., fill loading, toe excavation, surface and subsurface drainage changes

Also have Appalachian heritage of **Fill on Slopes**

















April 14, 1978

Untitled Map

Write a description for your map.

Legend

-  Aleppo Municipal Bldg
-  Distance from Kilbuck to Glenfield Landslides
-  Fairfield Inn & Suites Pittsburgh Neville Island
-  Feature 1
-  Glenfield
-  Glenfield
-  St Mary's Church
-  SUBWAY® Restaurants



Google Earth

Google Earth



4000 ft

I-79 Slide Area



September 26, 2006 - Kilbuck (Walmart) Landslide

September 19, 2006





DEERE
450LC

CATERPILLAR
CAT
740GC

7 23 '06

The Kilbuck Slide should never have occurred.

What caused this slide?

Ignorance, Incompetence, Stupidity, Greed

- These Human Factors in Landslides
- Another Potential Research Area

As George Santayana said:

Those who cannot remember the past
are condemned to repeat it.

Questions?

