

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

Reconnaissance maps showing landslides in the Avella, Burgettstown, Claysville, Clinton, Midway, Prosperity, West Middletown, and Washington West quadrangle, western

Washington County, Pennsylvania

by J. S. Pomeroy

This map suite, and a companion suite (Pomeroy, 1976) depict landslides in Washington County. Intensive interpretation of 1975 aerial photographs (scale 1:24,000) was supplemented by one to three days of field reconnaissance for each quadrangle in early 1976. The soil survey of Washington County (U. S. Soil Conservation Service, 1974 a, b) was also used as a source of data.

The purpose of these maps is to identify areas with potential slope-stability problems significant to development; they are a guide to areas of past and present landslide activity. These maps are not designed to replace detailed geological and engineering studies of specific sites by competent technical personnel, but rather, they delineate areas where such detailed studies would be most vital to the safety and welfare of the general public. In these areas, site examinations are necessary in order to determine the degree of difficulty that slope instability may pose to a contemplated land use, and so to define whether costs of hazard prevention are commensurate with the value of the contemplated use.

Because the present investigation was strictly reconnaissance in nature and because most slides are too small to be discerned from the aerial photography, these maps do not purport to show all recent landslides. Furthermore, many slopes not designated as containing older landslides undoubtedly include older landslides, the geomorphic evidence for which has been obliterated by erosion or modified by man. Finally, these maps do not indicate possible or highly questionable older landslides.

For more information regarding landslide map features, diagrams, recommendations, and advice for the non-technical reader the user of this map is urged to refer to Briggs, Pomeroy, and Davies (1975) and Pomeroy and Davies (1975). Additional information concerning sliding in portions of Washington County is available in Kent, Schweinfurth, and Roen (1969) and Berryhill, Schweinfurth, and Kent (1971). Landslides are shown on geologic quadrangle maps by Berryhill and Swanson (1964), Kent (1972), Roen (1973), Schweinfurth (1976 a, b).

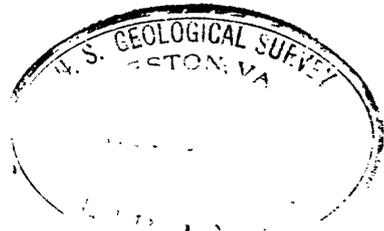
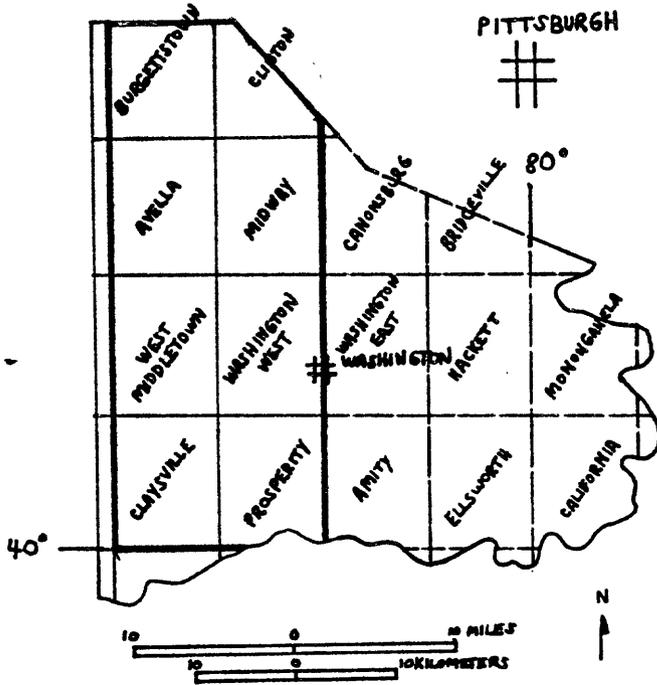
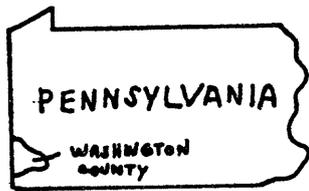
References cited

- Berryhill, H. L., Jr., and Swanson, V. E., 1964, Geology of the Washington West quadrangle, Pennsylvania: U. S. Geol. Survey Geol. Quad Map GQ-283
- Berryhill, H. L., Jr., Schweinfurth, S. P., and Kent, B. H., 1971, Coal-bearing Upper Pennsylvanian and Lower Permian rocks, Washington area, Pennsylvania, pt. 1, Lithofacies; pt. 2, Economic and engineering geology: U. S. Geol. Survey, Prof. Paper 621, 47 p.
- Briggs, R. P., Pomeroy, J. S., and Davies, W. E., 1975, Landsliding in Allegheny County, Pennsylvania: U. S. Geol. Survey, Circ. 728, 18 p.
- Kent, B. H., 1972, Geologic map of the Prosperity quadrangle, southwestern Pennsylvania: U. S. Geol. Survey Geol. Quad Map GQ-1003.
- Kent, B. H., Schweinfurth, S. P., and Roen, J. B., 1969, Geology and land use in eastern Washington County, Pennsylvania: Pennsylvania Geol. Survey, 4th ser., Bull. G 56 (Gen. Geology Rept.), 31 p.
- Pomeroy, J. S., 1976, Reconnaissance maps showing landslides in the Amity, Bridgeville, California, Canonsburg, Ellsworth, Hackett, Monongahela, and Washington East quadrangles, eastern Washington County, Pennsylvania: U.S. Geol. Survey open-file Rept. 76-
- Pomeroy, J. S., and Davies, W. E., 1975, Map of susceptibility to landsliding, Allegheny County, Pennsylvania: U.S. Geol. Survey Misc. Field Studies Map MF-685B, 2 sheets with text.
- Roen, J. B., 1973, Geologic map of the Midway quadrangle, Washington County, southwestern Pennsylvania: U. S. Geol. Survey Geol. Quad Map GQ-1067.
- Schweinfurth, S. P., 1976^d, Geologic map of the Avella quadrangle and part of the Steubenville East quadrangle, Washington County,

Schweinfurth, S. P., 1976^b, Geologic map of the West Middletown quadrangle
and part of the Bethany quadrangle, Washington County, Pennsylvania:
U. S. Geol. Survey Misc. Geol. Inv. Map I-871.

U. S. Soil Conservation Service, 1974a, Volume 1, Soil survey
interpretations for Greene and Washington Counties, Pennsylvania:
Pa. Dept. Environmental Resources, State Conservation Commission,
103 p.

_____ 1974b, Volume 2, Soil survey map for Washington County,
Pennsylvania: Pa. Dept. Environmental Resources, State
Conservation Commission.



Index map of Washington County showing
quadrangles included in this report (within heavy line)
(quadrangles in eastern half of Washington County included in
Pomeroy, 1976)

Pennsylvania (Washington Co., West). Landslides 1:24,000. 1976
sheet 9
cop.!

76-789m

EXPLANATION

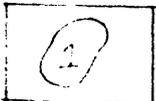
Younger Landslides



Younger landslides, well-defined, may still be active, includes the most recent landslides characterized by fresh scars; also includes slightly older extremely hummocky and/or bulgy areas which are believed to have been formed within the past 100 years.

Older Landslides

Represented by individually mapped bodies or extensive slope areas involving many linear kms. (where separation of individual slides cannot be determined). Most of the designated older landslide areas do not represent single events but are accumulations of landslides deposits that probably occurred during and immediately after Wisconsin glaciation. Older landslides may be presently stable but are often sensitive to modification by man and can be reactivated by excavation, loading, and changes in ground-water and surface-water conditions.



Older landslides, definite to somewhat less definite, conspicuous to slightly subdued hummocky and/or bulgy surfaces, boundaries approximate



Older landslides, probable, fair to poorly defined, boundaries inferred; evidence is less distinct than for previous category.