



Association of American State Geologists

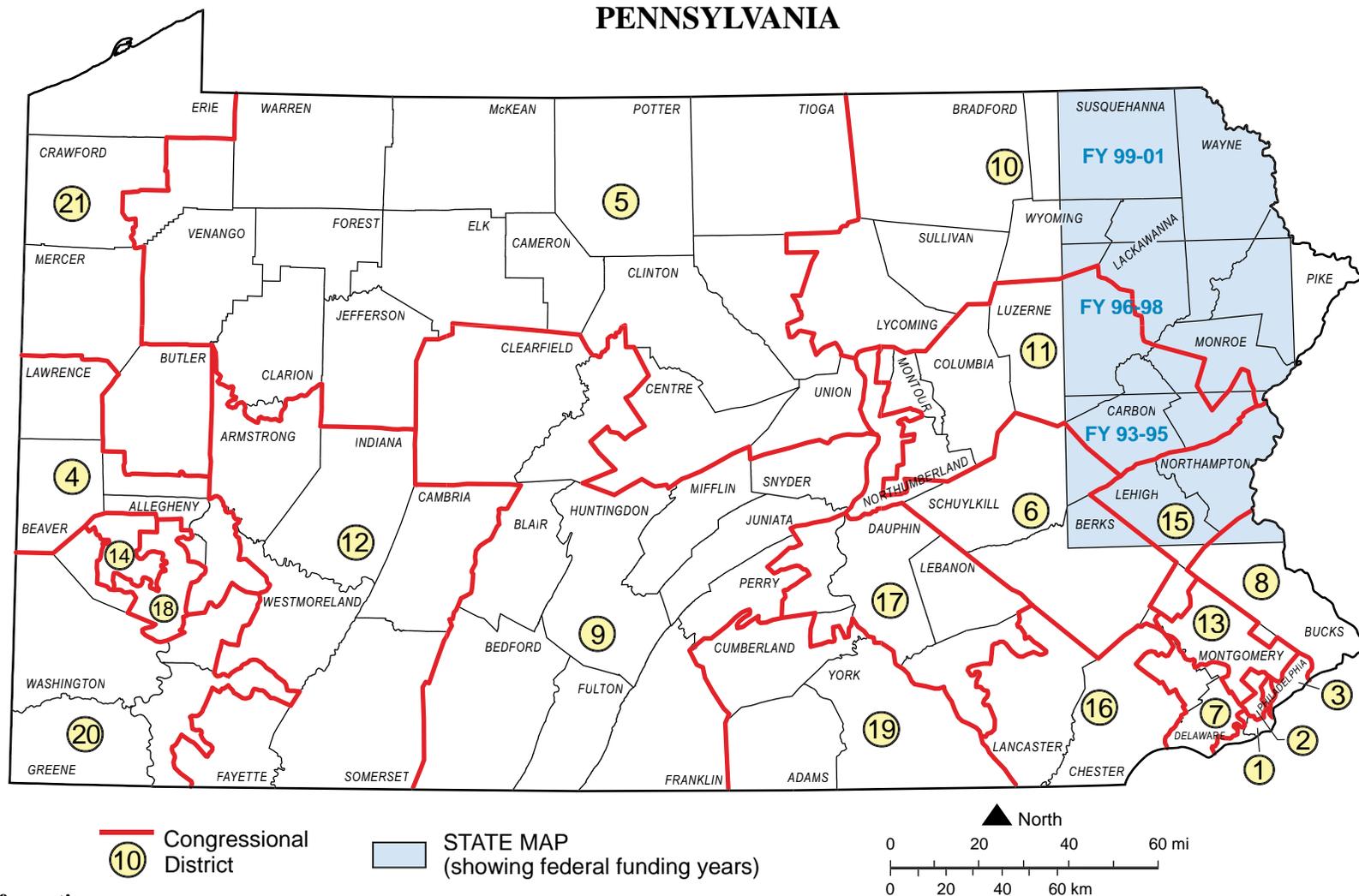


United States Geological Survey



National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping



Contact information

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SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN PENNSYLVANIA

Federal Fiscal Year	Project Title	State Dollars	Federal Dollars	Total Project Dollars
93	Surficial Geology of the Allentown 30 × 60 quadrangle	\$40,182	\$40,000	\$80,182
94	Surficial Geology of the Allentown 30 × 60 quadrangle	48,556	40,000	88,556
95	Surficial Geology of the Allentown 30 × 60 quadrangle	56,974	34,423	91,397
96	Bedrock and Surficial Geology of the Scranton 30 × 60 quadrangle	80,581	75,489	156,070
97	Bedrock and Surficial Geology of the Scranton 30 × 60 quadrangle	132,616	132,616	265,232
98	Bedrock and Surficial Geology of the Scranton 30 × 60 quadrangle	127,728	122,458	250,186
99	Bedrock and Surficial Geology of the Honesdale 30 × 60 quadrangle	77,094	75,000	152,094
00	Bedrock and Surficial Geology of the Honesdale 30 × 60 quadrangle	108,644	108,415	217,059
01	Bedrock and Surficial Geology of the Honesdale 30 × 60 quadrangle	131,717	131,444	263,161
TOTALS		\$804,092	\$759,845	\$1,563,937

Pennsylvania has benefited from the National Cooperative Geologic Mapping Program (NCGMP). It has enabled Pennsylvania to provide new geologic information in its northeast, an area lacking adequate geologic data and maps. Here glaciers deposited abundant sands and gravels. Over large areas these unconsolidated sediments deeply bury the layered sandstone bedrock. Northeast Pennsylvania is an area undergoing development requiring ground water and economic mineral resource, and land-use planning information that the NCGMP maps provide.

Produced to date are nearly seventy (70) geologic reconnaissance quadrangle maps (scale 1:24,000) of the sands and gravels, a construction resource. The maps also provide detailed basic information for local engineering studies, ground-water resource investigations, and for effective land-

use planning. Each is accompanied by depth-to-bedrock data that are particularly useful in resource assessments and engineering studies. The maps are being digitized for use as “layers” in a regional Geographic Information System (GIS) of the Wyoming–Lackawanna valley being developed for local planners at Wilkes University.

During this same time period, State-matching funds produced reconnaissance bedrock and surficial materials geologic maps of nearly twenty (20) additional quadrangles, mostly in the former anthracite-mining areas of the Wyoming–Lackawanna valley. The bedrock maps are particularly important to a wide range of users who are dealing with issues resulting from anthracite coal mining, including subsidence, environmental degradation, and engineering solutions needed for future development. Mapped former waste bedrock

resulting from anthracite production is now viewed as useful sources of aggregate and dimension stone. Through partnerships with local area universities, faculty and students are contracted to prepare surficial and bedrock quadrangle maps. Working in adjoining areas, field geologists of the Pennsylvania Geologic Survey prepare similar maps. Both analog and digital map products from the mapping are made quickly available to all potential users through an open-file-type report.

Future geologic-mapping efforts are anticipated in the geologically complex sedimentary, metamorphic and igneous terranes of southeastern Pennsylvania and in the southwestern portion of the state where critical geologic-mapping needs include mapping for effective land-use and geologic-hazard-avoidance planning.