MAP 7

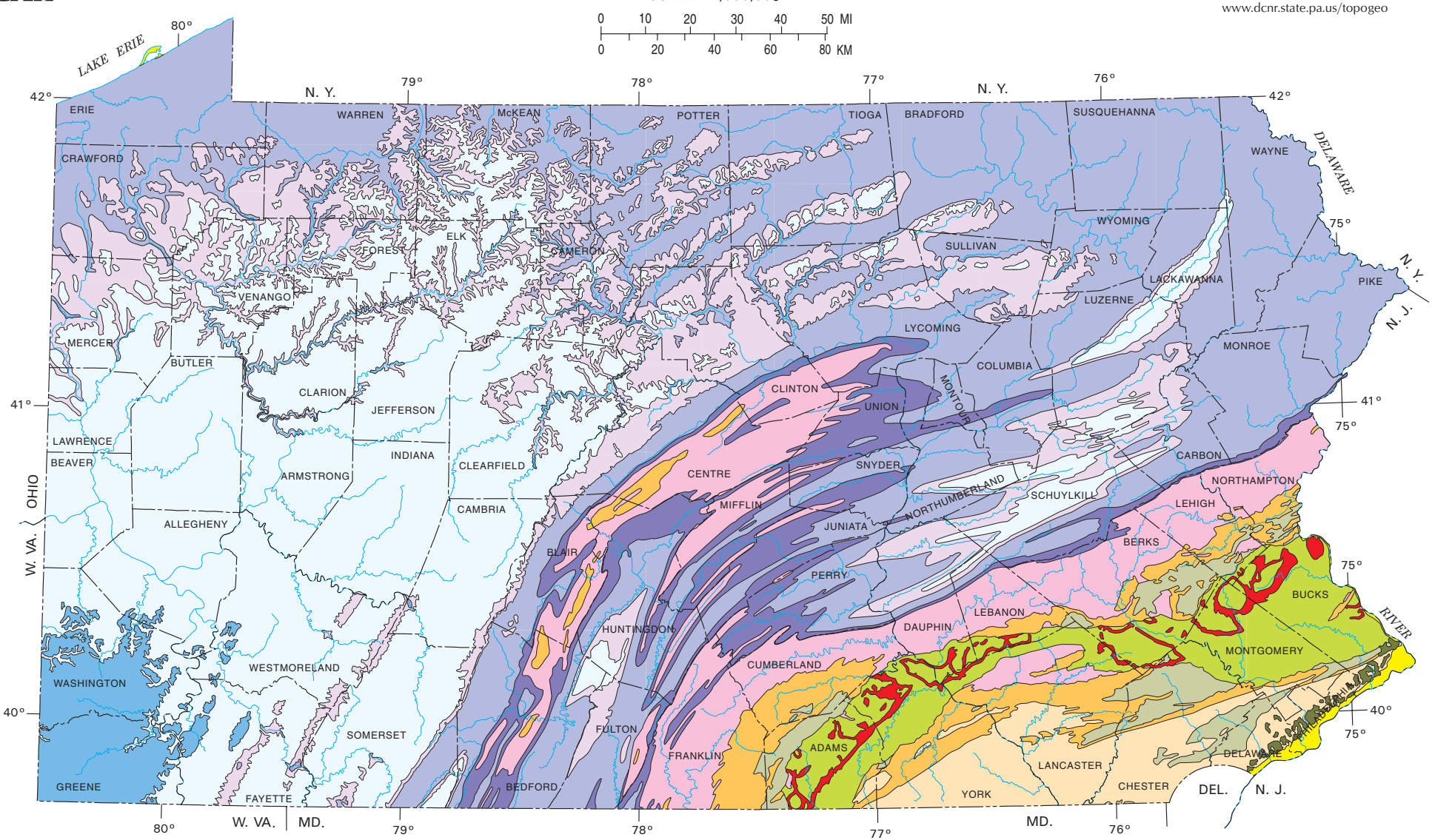
# GEOLOGIC MAP OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF
CONSERVATION AND NATURAL RESOURCES
BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY
www.dcnr.state.pa.us/topogeo

SCALE 1:2,000,000

0 10 20 30 40 50 MI

0 20 40 60 80 KM




## EXPLANATION

**QUATERNARY** (0–1.8 mil. yrs.)
Sand, gravel, and silt.
*Sand and gravel.*

**TERTIARY** (1.8–65 mil. yrs.)
Sand, gravel, silt, and clay.
*Sand and gravel.*

* **JURASSIC AND TRIASSIC** (144–248 mil. yrs.)
Red sandstone, shale, and conglomerate (green), intruded by diabase (red).
*Building stone, iron.*

**PERMIAN** (248–290 mil. yrs.)
Cyclic sequences of shale, sandstone, limestone, and coal.
*Lime, clay.*

**PENNSYLVANIAN** (290–323 mil. yrs.)
Cyclic sequences of sandstone, red and gray shale, conglomerate, clay, coal, and limestone.
*Coal, clay, lime, building stone.*

**MISSISSIPPIAN** (323–354 mil. yrs.)
Red and gray sandstone, shale, and limestone.
*Flagstone, limestone, clay.*

**DEVONIAN** (354–417 mil. yrs.)
Red sandstone, gray shale, black shale, limestone, and chert.
*Flagstone, silica sand, clay, lime.*

**SILURIAN** (417–443 mil. yrs.)
Red and gray sandstone, conglomerate, shale, and limestone.
*Lime, building stone.*

**ORDOVICIAN** (443–490 mil. yrs.)
Shale, limestone, dolomite, and sandstone.
*Slate, limestone, zinc, clay.*

**CAMBRIAN** (490–570 mil. yrs.)
Limestone, dolomite, sandstone, shale, quartzite, and phyllite.
*Lime, building stone.*

**LOWER PALEOZOIC** (443–570 mil. yrs.)
Metamorphic rocks (metasedimentary and meta-igneous); schist, gneiss, quartzite, serpentine, slate, and marble.
*Building stone, talc.*

**PRECAMBRIAN** (older than 570 mil. yrs.)
Gneiss, granite, anorthosite, metadiabase, metabasalt, metarhyolite, and marble.
*Building stone, graphite, sericite.*

*Cretaceous rocks, which are present in small areas of southern Montgomery County, cannot be shown at the scale of this map.

*Prepared by Bureau of Topographic and Geologic Survey. Third Edition, 1990; Fourth Printing, Slightly Revised, 2007.*

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