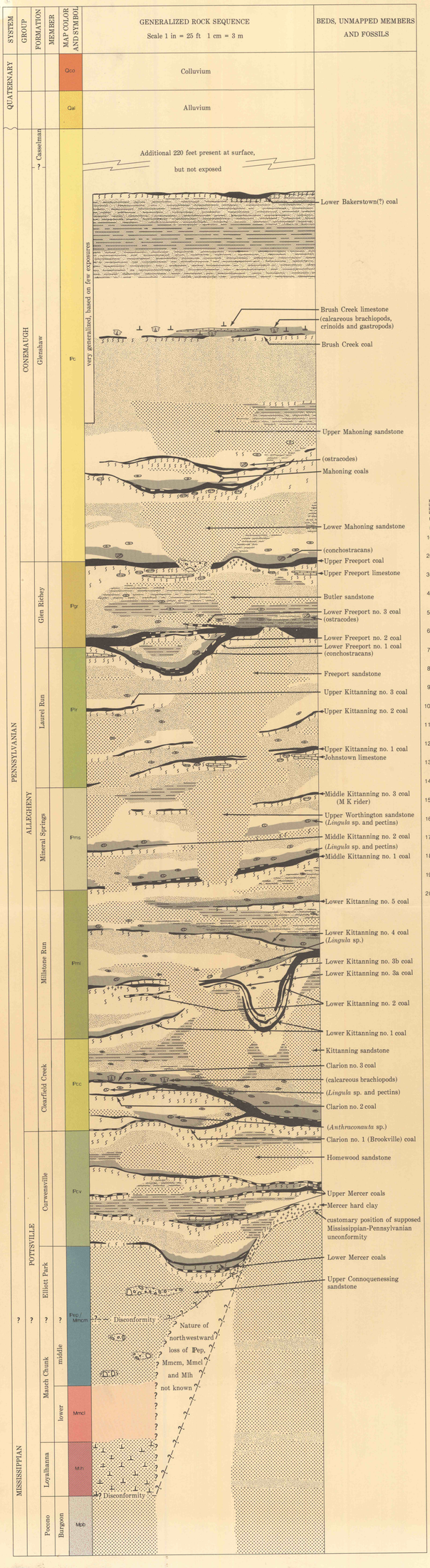
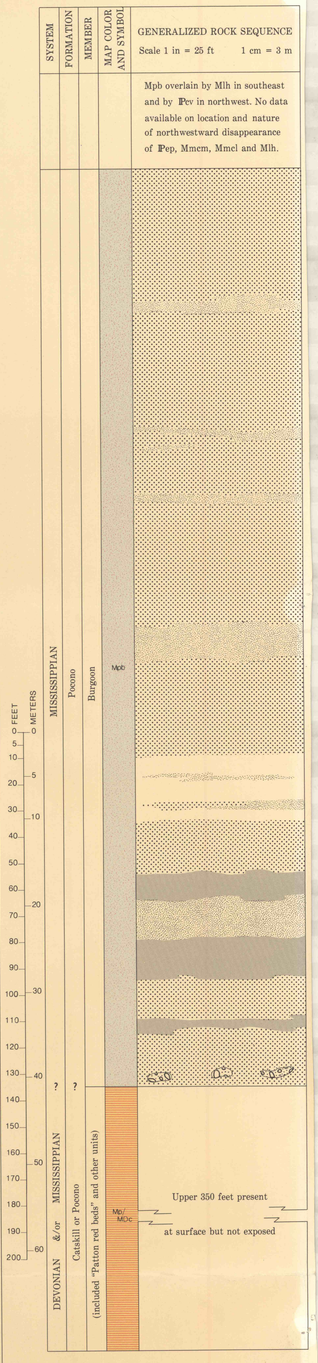
TOPOGRAPHIC AND GEOLOGIC SURVEY
Arthur A. Socolow, State Geologist

GENERALIZED STRATIGRAPHIC SECTION





SYMBOLS USED IN COLUMNAR SECTION

- CONGLOMERATE
- SANDSTONE
- SILTSTONE & SILT SHALE
- SAND-SILT LAMINITE
- SILT-CLAY LAMINITE
- CLAYSTONE & CLAY SHALE
- LIMESTONE & LIMESTONE NODULES
- CALCAREOUS CEMENT
- SIDERITE NODULES & STRINGERS
- COAL
- BONE COAL & SHALY COAL
- HARD CLAY (incl. flint clay, nodule clay, etc.)
- ROOT-WORKED, WEATHERED AND LEACHED ZONES (incl. underclay when used with claystone)
- RED COLOR
- BLACK, GRAY-BLACK AND DARK-GRAY COLOR (N1, N2, & N3)

NOTE: All other rocks are medium-dark gray to very light gray (N4 to N8) with occasional greenish cast, except Mlh which is gray green.

- MARINE INVERTEBRATES
- BRACKISH INVERTEBRATES
- FRESH WATER INVERTEBRATES

GROUND WATER

MAP UNITS	AVAILABILITY
Alluvium (Qal)	Generally water-saturated. High porosity and permeability. High yields, but may be contaminated by pollutants from associated streams.
Colluvium (Qcol)	Variable porosity and permeability. Strong seasonal flow variations. Minor unit.
Conemaugh Group (Pc) and Glen Richey (Pgr) Laurel Run (Plr) Mineral Springs (Pms) Millstone Run (Pml) Clearfield Creek (Pcc) and Curwensville (Pcv) Formations	Highly variable ground water characteristics, reflecting complex mixture of rock types. Thicker sandstones should provide substantial domestic yields. Perched aquifers occur frequently above underclay-coal zones, but water is often of poor quality. Shales and claystones generally produce poor yields. Water table frequently disrupted and contaminated in and above underground coal mines.
Elliott Park Formation and middle member of Mauch Chunk Formation undifferentiated (Pep/Mmcm)	Generally good porosity, but variable permeability. May produce moderate to high yields. Quality usually fair to good. Absent in western half of report area.
Lower member of Mauch Chunk Formation (Mmcl)	Low porosity and permeability. Poor yields. Minor unit, absent in western half of report area.
Loyalhanna Formation (Mlh) and Burgoon Member of Pocono Formation (Mpb)	Generally good porosity, but variable permeability. Moderate to high yields. Quality is usually good. Largest, most widespread potential water-producing interval. Loyalhanna absent in western part of report area.