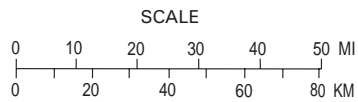
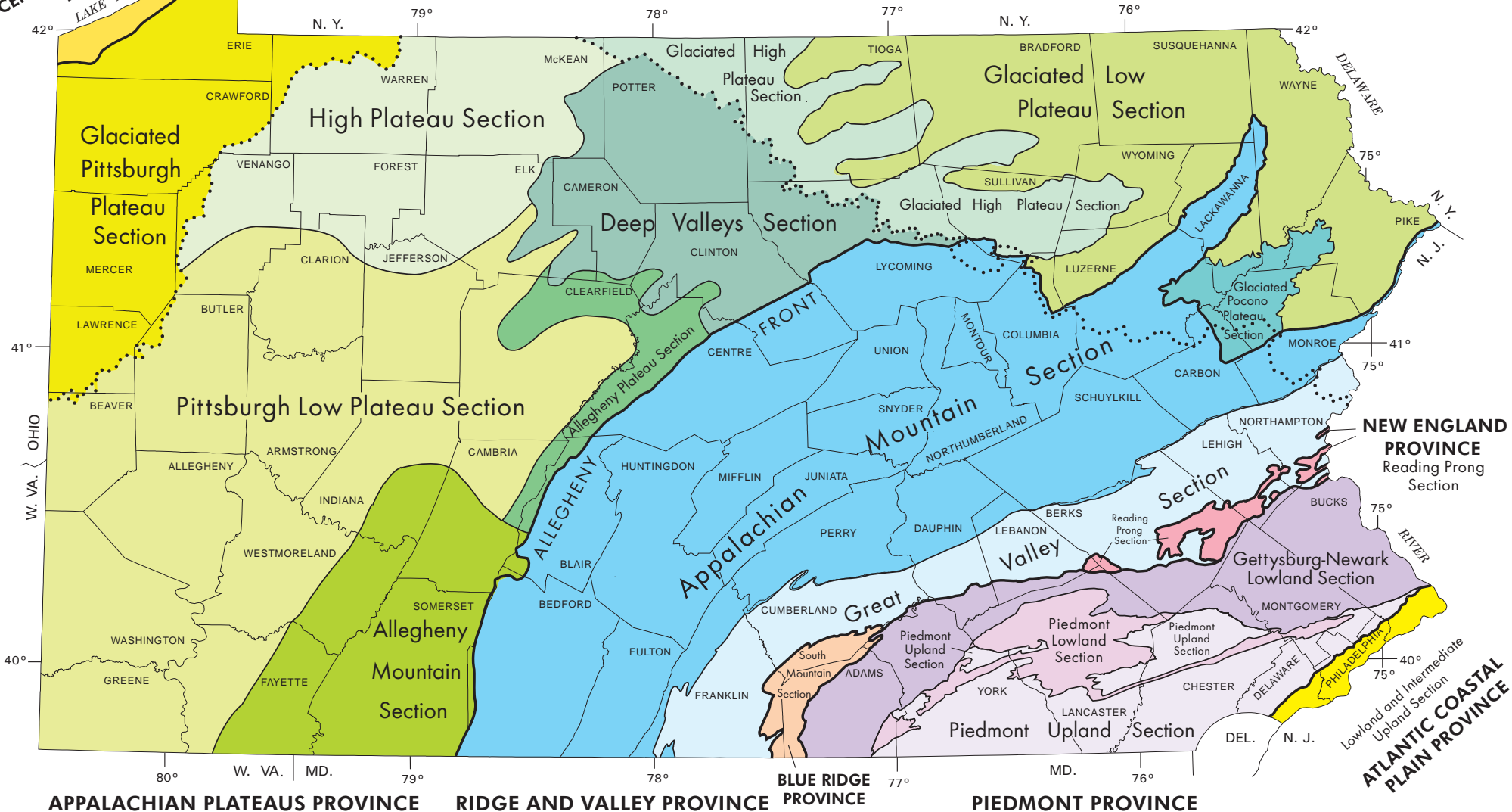


PHYSIOGRAPHIC PROVINCES OF PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
Tom Ridge, Governor
DEPARTMENT OF
CONSERVATION AND NATURAL RESOURCES
John C. Oliver, Secretary
BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY



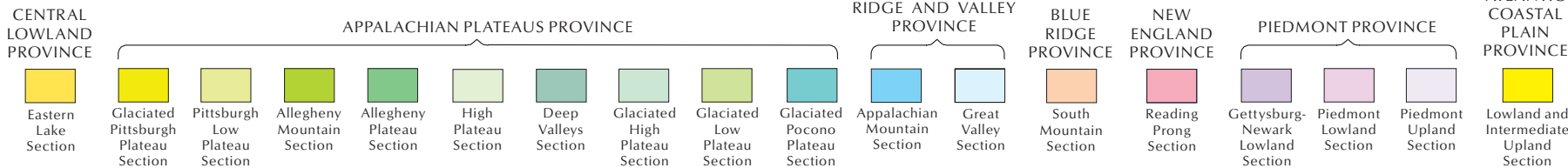
CENTRAL LOWLAND PROVINCE
Eastern Lake Section



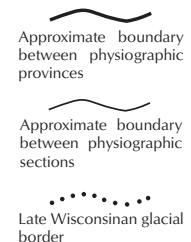
NEW ENGLAND PROVINCE
Reading Prong Section

ATLANTIC COASTAL PLAIN PROVINCE
Lowland and Intermediate Upland Section

EXPLANATION



SYMBOLS



PHYSIOGRAPHIC PROVINCES OF PENNSYLVANIA

PHYSIOGRAPHIC PROVINCE	PHYSIOGRAPHIC SECTION	DOMINANT TOPOGRAPHIC FORM	LOCAL RELIEF ¹	UNDERLYING ROCK TYPE	GEOLOGIC STRUCTURE	APPROXIMATE ELEVATION ² Min. Max.	DRAINAGE PATTERN	BOUNDARIES	ORIGIN
ATLANTIC COASTAL PLAIN	Lowland and Intermediate Upland	Flat upper terrace surface cut by narrow, steep-sided valleys to open, shallow valleys; includes Delaware River floodplain.	Very low.	Unconsolidated to poorly consolidated sand and gravel, underlain by schist, gneiss, and other metamorphic rocks.	Unconsolidated deposits underlain by very complex, faulted and folded metamorphic rocks.	0 200	Dendritic.	<i>North:</i> Maximum limit of continuous deposits of Pensauken and Bridgeton Formations, undivided.	Fluvial erosion and deposition; Delaware River floodplain includes glacial meltwater deposits.
PIEDMONT	Piedmont Upland	Broad, gently rolling hills and valleys.	Low to moderate.	Schist, gneiss, quartzite, and other metamorphic rocks; ultramafic rocks, granite, and pegmatite are also present; much of terrain is weathered to saprolite.	Extremely complex; faulted and folded.	100 1,220	Dendritic.	<i>East:</i> Coastal Plain deposits. <i>North:</i> Lower Paleozoic carbonate rocks and Mesozoic red beds.	Fluvial erosion of deeply weathered metamorphic rocks; some periglacial mass wasting.
	Piedmont Lowland	Broad, moderately dissected valleys separated by broad, low hills; karstic terrain is common.	Low.	Dominantly carbonate rocks (limestone, dolomite, marble); phyllitic shale and phyllite; some sandstone.	Very complexly folded and faulted.	170 630	Dendritic and karstic.	<i>South:</i> Metamorphic rocks of Piedmont Upland section. <i>North:</i> Mesozoic red beds.	Fluvial erosion of deeply weathered rocks; solution of carbonate rocks; some periglacial mass wasting.
	Gettysburg-Newark Lowland	Rolling lowlands; isolated hills and highlands.	Low to moderate.	Red and gray shale, siltstone, sandstone, and conglomerate; diabase.	Half-graben structure; low, monoclinical, dominantly northwest-dipping beds.	40 1,355	Dendritic.	Contacts with Paleozoic and Precambrian rocks of South Mountain, Great Valley, Reading Prong, and Piedmont.	Fluvial erosion of moderately resistant and non-resistant beds; minor periglacial mass wasting.
NEW ENGLAND	Reading Prong	Circular to linear, rounded hills or ridges, in some places isolated by limestone valleys.	Moderate.	Granitic gneiss, granodiorite, and quartzite.	Multiple nappes.	140 1,240	Dendritic.	<i>North:</i> Great Valley carbonate rocks. <i>South:</i> Mesozoic red beds.	Fluvial erosion of deeply weathered rocks; some periglacial mass wasting.
BLUE RIDGE	South Mountain	Pronounced ridges and deep valleys.	Moderate to high.	Metavolcanic rocks, quartzite, and some dolomite.	Major anticlinorium having many second- and third-order folds.	450 2,080	Dendritic.	<i>North and west:</i> Great Valley carbonate rocks. <i>East:</i> Mesozoic red beds and diabase.	Fluvial erosion of highly variable, metamorphosed extrusive rocks and quartzite; periglacial mass wasting and deposition.
RIDGE AND VALLEY	Great Valley	Very broad, moderately dissected valleys having a gently undulating surface; karstic terrain in southern half.	Low to moderate.	Shale and sandstone on northwest side (includes slate belt at east end); limestone and dolomite on southeast side.	Thrust sheets, nappes, overturned folds, and steep faults; many third- and fourth-order folds.	140 1,100	Dendritic and karstic.	<i>North:</i> Prominent change in gradient on upper slope, southeast side of Blue Mountain. <i>South:</i> South Mountain, Mesozoic rocks, and Reading Prong rocks.	Fluvial erosion; some periglacial mass wasting; glacial erosion and deposition in east; solution of carbonate rocks.
	Appalachian Mountain	Long, narrow ridges and broad to narrow valleys; some karstic terrain.	Moderate to very high.	Wide variety of sedimentary rocks, including sandstone, siltstone, shale, conglomerate, limestone, dolomite, and others (anthracite in east).	Open and closed plunging folds having narrow hinges and planar limbs; thrust, reverse, and strike-slip faults.	300 3,135	Trellis, angulate, and some karstic.	<i>Southeast:</i> Prominent change in gradient on upper slope, southeast side of Blue Mountain. <i>North and west:</i> Crest of Allegheny Front. <i>East:</i> Delaware River escarpment. Arbitrary from Delaware River escarpment to Allegheny Front.	Fluvial erosion; periglacial mass wasting; glacial erosion and deposition in north and east; solution of carbonate rocks.
APPALACHIAN PLATEAUS	Glaciated Pocono Plateau	Broad, undulatory upland surface having dissected margins.	Low to moderate.	Sandstone, siltstone, and shale; some conglomerate.	Low, north-dipping beds; some small folds.	1,200 2,320	Deranged.	<i>South and east:</i> Crest of Pocono escarpment. <i>North:</i> Crest of drainage divide. <i>West:</i> Arbitrary.	Fluvial and glacial erosion; some glacial deposition.
	Glaciated Low Plateau	Rounded hills and valleys; some buried valleys.	Low to moderate.	Sandstone, siltstone, and shale.	Low-amplitude folds.	440 2,690	Dendritic.	<i>West:</i> Base of escarpment at northern uplands, the glacial border, and crest of Pocono Plateau escarpment. <i>Southeast:</i> Crest of Delaware River valley escarpment.	Fluvial and glacial erosion; glacial deposition.
	Glaciated High Plateau	Broad to narrow, rounded to flat, elongate uplands dissected by deep to shallow valleys.	Moderate to high.	Sandstone, siltstone, shale, and conglomerate; some coal.	Moderate-amplitude, open folds.	620 2,560	Angulate and dendritic.	<i>South:</i> Crest of Allegheny Front. <i>West:</i> Glacial border. <i>East:</i> Base of escarpment between lowlands and uplands.	Fluvial and glacial erosion; glacial deposition.
	Deep Valleys	Very deep, angular valleys, which follow structural axes to varying degrees; moderately broad to narrow uplands.	Moderate to very high.	Sandstone, siltstone, shale, and conglomerate.	Moderate-amplitude, open folds.	560 2,540	Angulate and rectangular.	<i>Southeast:</i> Crest of Allegheny Front. <i>East:</i> Glacial border. <i>Northwest:</i> Mainly along drainage divides between Susquehanna and Ohio Rivers. <i>Southwest:</i> Arbitrary.	Fluvial erosion; periglacial mass wasting.
	High Plateau	Broad, rounded to flat uplands having deep, angular valleys.	Moderate to high.	Sandstone, siltstone, shale, conglomerate, and some coal.	Low-amplitude, open folds.	1,080 2,500	Dendritic.	<i>Northwest:</i> Glacial border. <i>South:</i> Approximates boundary between coal-bearing and noncoal-bearing rocks. <i>Northeast:</i> Glacial border. <i>Southeast:</i> Arbitrary along drainage divides.	Fluvial erosion; periglacial mass wasting; some glacial erosion and deposition in east.
	Allegheny Plateau	Rounded to flat uplands having shallow to moderately deep, angular to rounded valleys.	Low to moderate.	Sandstone, siltstone, shale, and conglomerate.	Subhorizontal beds; some strike-slip faults.	880 2,625	Dendritic.	<i>East:</i> Crest of Allegheny Front. <i>Northeast:</i> Arbitrary. <i>West:</i> Approximates boundary between coal-bearing and noncoal-bearing rocks.	Fluvial erosion; some periglacial mass wasting.
	Allegheny Mountain	Wide ridges separated by broad valleys; ridge elevations decrease to northwest.	Moderate to high.	Sandstone, siltstone, shale, conglomerate, some limestone, and coal.	Large-amplitude, open folds; a few steep thrusts.	775 3,210	Dendritic.	<i>East:</i> Crest of Allegheny Front. <i>West:</i> West flank of Chestnut Ridge. <i>North:</i> Approximates northeast terminous of large-amplitude, open folds.	Fluvial erosion, strongly controlled by major folds; some periglacial mass wasting.
	Pittsburgh Low Plateau	Smooth, undulating surface having numerous narrow, relatively shallow valleys; some high-level terraces.	Low to moderate.	Shale, siltstone, sandstone, limestone, and coal.	Moderate- to low-amplitude, open folds, decreasing in occurrence northward; many strike-slip faults in northeast.	660 1,700	Dendritic.	<i>Northwest:</i> Glacial border. <i>North and northeast:</i> Approximates boundary between coal-bearing and noncoal-bearing rocks. <i>Southeast:</i> West flank of Chestnut Ridge.	Fluvial erosion; some periglacial mass wasting.
	Glaciated Pittsburgh Plateau	Broad, rounded uplands having steep-sided, broad, linear valleys; numerous buried valleys.	Very low to moderate.	Shale, siltstone, and sandstone.	Subhorizontal beds.	900 2,200	Dendritic.	<i>Northwest:</i> Escarpment. <i>South and east:</i> Glacial border.	Glacial erosion and deposition; some fluvial erosion.
CENTRAL LOWLAND	Eastern Lake	Northwest-sloping, lake-parallel, low-relief ridges.	Very low to low.	Shale and siltstone.	Low, south-dipping to almost horizontal beds.	570 1,000	Parallel.	<i>Northwest:</i> Lake Erie. <i>Southeast:</i> Escarpment.	Glacial, lake, and fluvial deposition and erosion.

¹Local relief: 0 to 100 feet, very low; 101 to 300 feet, low; 301 to 600 feet, moderate; 601 to 1,000 feet, high; >1,000 feet, very high. (Relief categories listed here for Pennsylvania do not necessarily apply to other states or countries.)

²Elevations are in feet.