Level III and IV Ecoregions of EPA Region 3

Ecoregions denote areas of general similarity in ecosystems and in the type, quality, and quantity of environmental resources; they are designed to serve as a spatial framework for the research, assessment, management, and monitoring of ecosystems and ecosystem components. Ecoregions are directly applicable to the immediate needs of state agencies, including the development of biological criteria and water quality standards and the establishment of management goals for nonpoint-source pollution. They are also relevant to integrated ecosystem management, an ultimate goal of most federal and state resource management agencies.

The approach used to compile this map is based on the premise that ecological regions can be identified through the analysis of the spatial patterns and the composition of biotic and abiotic phenomena that affect or reflect differences in ecosystem quality and integrity (Wiken 1986; Omernik 1987, 1995). These phenomena include geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The relative importance of each characteristic varies from one ecological region to another regardless of the hierarchical level. A Roman numeral hierarchical scheme has been adopted for different levels of ecological regions. Level I is the coarsest level, dividing North America into 15 ecological regions. Level II divides the continent into 52 regions (Commission for Environmental Cooperation Working Group 1997). At level III, the continental United States contains 104 regions (United States Environmental Protection Agency [USEPA],1998). Level IV is a further subdivision of level III ecoregions. Explanations of the methods used to define the USEPA's ecoregions are given in Omernik (1995), Griffith and others (1994), and Gallant and others (1989).

The level III and IV ecoregion map on this map was compiled at a scale of 1:250,000 and depicts revisions. It revises and subdivides earlier level III ecoregions that were compiled at a smaller scale (USEPA 1998; Omernik 1987). It includes previously published level IV ecoregions (Woods and Omernik, 1996; Woods and others, 1996). It expands level IV coverage to include, for the first time, western West Virginia and the Coastal Plain and Piedmont of Delaware, Maryland, and Virginia. Compilation of this map was part of a collaborative project with the United States Environmental Protection Agency (EPA) Region III Environmental Services Division, the EPA National Health and Environmental Effects Research Laboratory (NHEERL), and state environmental resource management agencies from Pennsylvania, Virginia, Maryland, and West Virginia.

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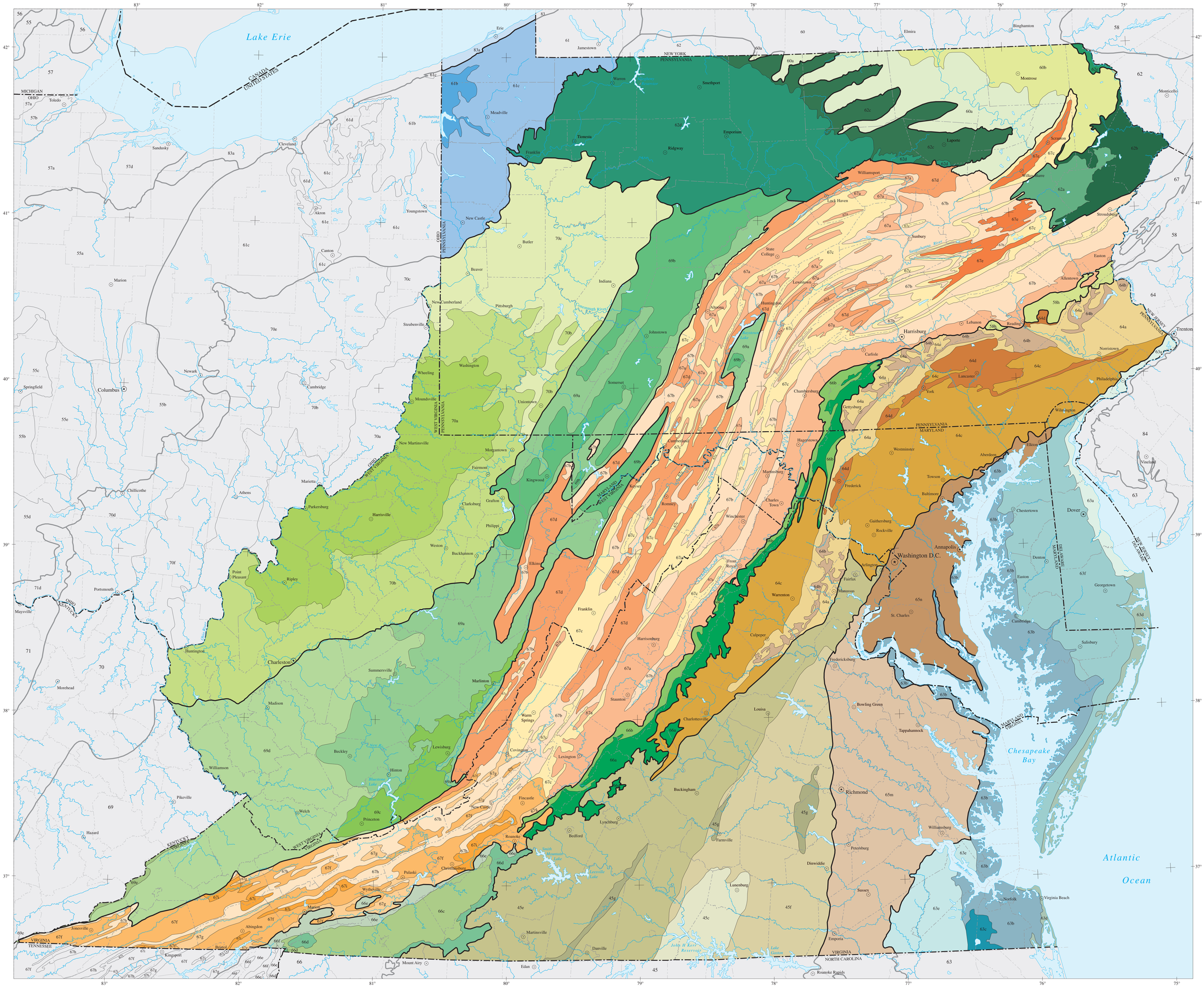
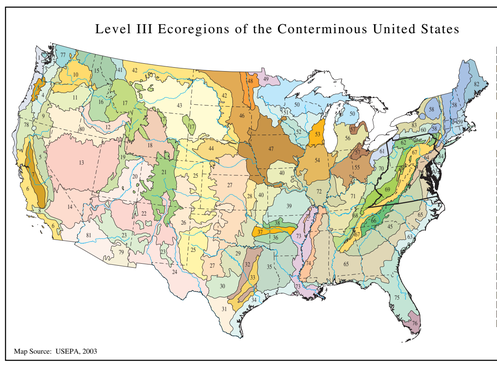


Level III Ecoregions of the Conterminous United States



Map Source: USEPA, 2003

1 Coast Range
2 Puget Lowland
3 Willamette Valley
4 Cascades
5 Sierra Nevada
6 Southern and Central California Chaparral and Oak Woodlands
7 Central California Valley
8 Southern California Mountains
9 Eastern Cascades Slopes and Foothills
10 Columbia Plateau
11 Blue Mountains
12 Snake River Plain
13 Central Basin and Range
14 Mojave Basin and Range
15 Northern Rockies
16 Idaho Batholith
17 Middle Rockies
18 Wyoming Basin
19 Wasatch and Uinta Mountains
20 Colorado Plateaus
21 Southern Rockies
22 Arizona/New Mexico Plateau
23 Arizona/New Mexico Mountains
24 Chihuahuan Deserts
25 Western High Plains
26 Southwestern Tablelands
27 Central Great Plains
28 Flint Hills
29 Central Oklahoma/Texas Plains
30 Edwards Plateau
31 Southern Texas Plains
32 Texas Blackland Prairies
33 East Central Texas Plains
34 Western Gulf Coastal Plain
35 South Central Plains
36 Ouachita Mountains
37 Arkansas Valley
38 Boston Mountains
39 Ozark Highlands
40 Central Irregular Plains
41 Canadian Rockies
42 Northwestern Glaciated Plains
43 Northwestern Great Plains
44 Nebraska Sand Hills
45 Piedmont
46 Northern Glaciated Plains
47 Western Corn Belt Plains
48 Lake Agassiz Plain
49 Northern Minnesota Wetlands
50 Northern Lakes and Forests
51 North Central Hardwood Forests
52 Driftless Area
53 Southeastern Wisconsin Till Plains
54 Central Corn Belt Plains
55 Eastern Corn Belt Plains
56 Southern Michigan/Northern Indiana Drift Plains
57 Huron/Erie Lake Plains
58 Northeastern Highlands
59 Northeastern Coastal Zone
60 Northern Appalachian Plateau and Uplands
61 Erie Drift Plain
62 North Central Appalachians
63 Middle Atlantic Coastal Plain
64 Northern Piedmont
65 Southeastern Plains
66 Blue Ridge
67 Ridge and Valley
68 Southwestern Appalachians
69 Central Appalachians
70 Western Allegheny Plateau
71 Interior Plateau
72 Interior River Valleys and Hills
73 Mississippi Alluvial Plain
74 Mississippi Valley Loess Plains
75 Southern Coastal Plain
76 Southern Florida Coastal Plain
77 North Cascades
78 Klamath Mountains
79 Madrean Archipelago
80 Northern Basin and Range
81 Sonoran Basin and Range
82 Laurentian Plains and Hills
83 Eastern Great Lakes and Hudson Lowlands
84 Atlantic Coastal Pine Barrens

45 Piedmont
- 45c Carolina Slate Belt
- 45e Northern Inner Piedmont
- 45f Northern Outer Piedmont
- 45g Triassic Basins

58 Northeastern Highlands
- 58h Reading Prong

60 Northern Appalachian Plateau
- 60a Glaciated Low Plateau
- 60b Northeastern Uplands

61 Erie/Ontario Drift And Lake Plains
- 61b Mosquito Creek/Pymatuning Lowlands
- 61c Low Lime Drift Plain

62 North Central Appalachians
- 62a Pocono High Plateau
- 62b Low Poconos
- 62c Glaciated Allegheny High Plateau
- 62d Unglaciated Allegheny High Plateau
- 62e Low Catskills

63 Middle Atlantic Coastal Plain
- 63a Delaware River Terraces and Uplands
- 63b Chesapeake-Pamlico Lowlands and Tidal Marshes
- 63c Swamps and Peatlands
- 63d Virginian Barrier Islands and Coastal Marshes
- 63e Mid-Atlantic Flatwoods
- 63f Delmarva Uplands

64 Northern Piedmont
- 64a Triassic Lowlands
- 64b Diabase and Conglomerate Uplands
- 64c Piedmont Uplands
- 64d Piedmont Limestone/Dolomite Lowlands

65 Southeastern Plains
- 65m Rolling Coastal Plain
- 65n Chesapeake Rolling Coastal Plain

66 Blue Ridge
- 66a Northern Igneous Ridges
- 66b Northern Sedimentary and Metasedimentary Ridges
- 66c New River Plateau
- 66d Southern Crystalline Ridges and Mountains
- 66e Southern Sedimentary Ridges
- 66f Limestone Valleys and Coves

67 Ridge and Valley
- 67a Northern Limestone/Dolomite Valleys
- 67b Northern Shale Valleys
- 67c Northern Sandstone Ridges
- 67d Northern Dissected Ridges
- 67e Anthracite Subregion
- 67f Southern Limestone/Dolomite Valleys and Low Rolling Hills
- 67g Southern Shale Valleys
- 67h Southern Sandstone Ridges
- 67i Southern Dissected Ridges and Knobs

69 Central Appalachians
- 69a Forested Hills and Mountains
- 69b Uplands and Valleys of Mixed Land Use
- 69c Greenbriar Karst
- 69d Dissected Appalachian Plateau
- 69e Cumberland Mountain Thrust Block

70 Western Allegheny Plateau
- 70a Permian Hills
- 70b Monongahela Transition Zone
- 70c Pittsburgh Low Plateau

83 Eastern Great Lakes and Hudson Lowlands
- 83a Erie Lake Plain

SCALE 1:1 000 000

10 5 0 30 60 mi
30 15 0 60 120 km

Albers Equal Area Projection

- Level III Boundary
- Level IV Boundary
- State Boundary
- County Boundary

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