

Ecoregions of Georgia

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 many 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 ecoregions and the conterminous United States has 84 ecoregions (United States Environmental Protection Agency [USEPA] 2000). 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), Omernik and others (2000), Griffith and others (2001) and Gallant and others (1989).

Georgia contains barrier islands and coastal lowlands, large river floodplain forests, rolling plains and plateaus, forested mountains, and a variety of aquatic habitats. Ecological and biological diversity is enormous. There are 6 level III ecoregions and 28 level IV ecoregions in Georgia and most continue into ecologically similar parts of adjacent states.

The level III and IV ecoregion map was compiled at a scale of 1:250,000 and depicts revisions and subdivisions of earlier level III ecoregions that were originally compiled at a smaller scale (USEPA 2000; Omernik 1987). This poster is part of a collaborative project primarily between USEPA Region IV, USEPA National Health and Environmental Effects Research Laboratory (Corvallis, Oregon), Georgia Department of Natural Resources (GA DNR), and the United States Department of Agriculture-Natural Resources Conservation Service (NRCS). Collaboration and consultation also occurred with the United States Department of Agriculture-Forest Service (USFS), United States Department of the Interior-Geological Survey (USGS)-Earth Resources Observation Systems (EROS) Data Center, and with other State of Georgia agencies.

The project is associated with an interagency effort to develop a common framework of ecological regions (McMahon and others, 2001). Reaching that objective requires recognition of the differences in the conceptual approaches and mapping methodologies applied to develop the most common ecoregion-type frameworks, including those developed by the USFS (Bailey and others, 1994), the USEPA (Omernik 1987, 1995), and the NRCS (U.S. Department of Agriculture-Soil Conservation Service, 1981). As each of these frameworks is further refined, their differences are becoming less discernible. A regional collaborative project such as this one in Georgia, where some agreement has been reached among multiple resource management agencies, is a step toward attaining consensus and consistency in ecoregion frameworks for the entire nation.

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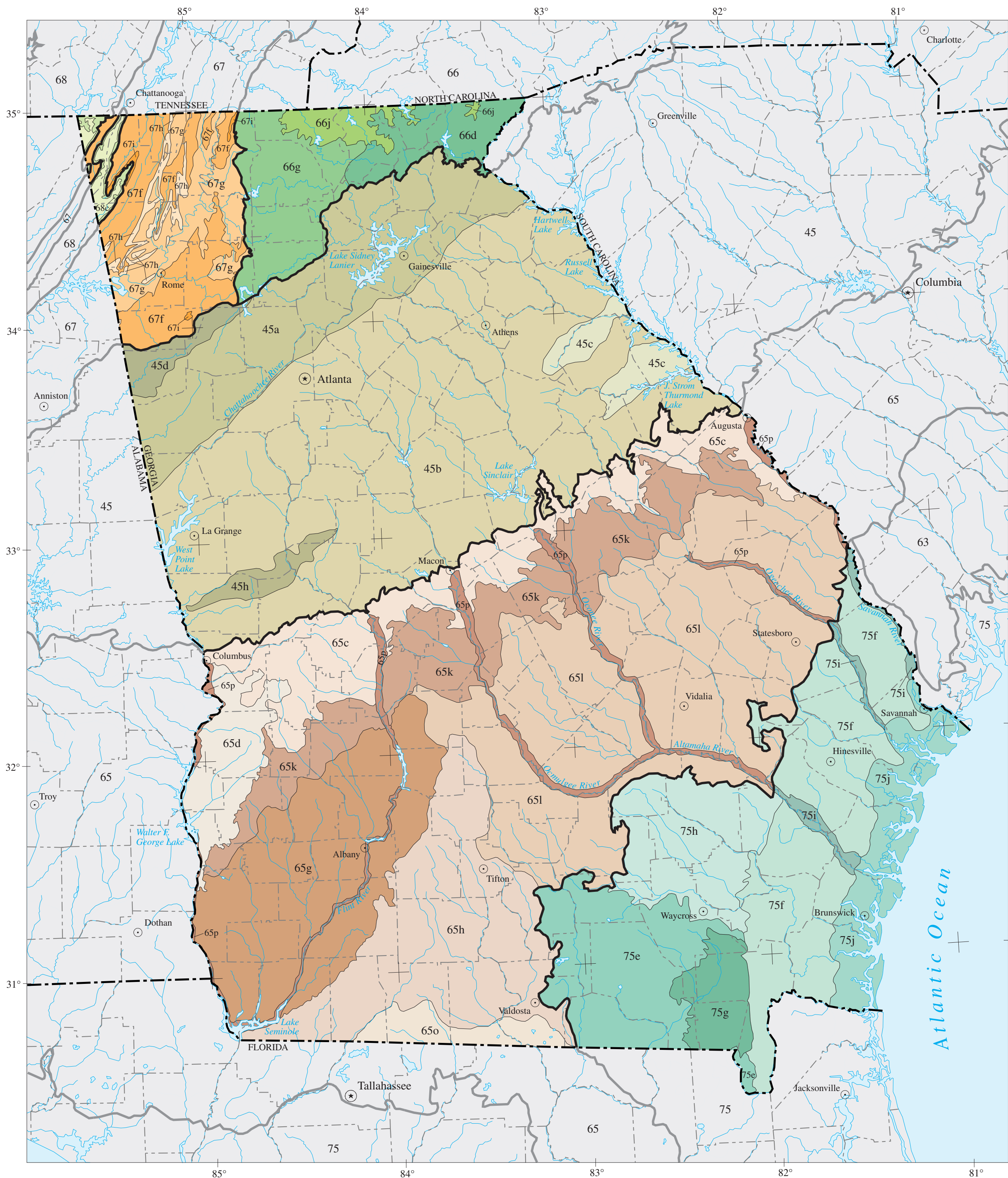
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To obtain additional copies of this map, the accompanying table of ecoregion characteristics, GIS coverages, or more information about Georgia or U.S. ecoregions, contact Glenn Griffith, USDA-NRCS, 200 SW 35th Street, Corvallis, OR 97333, phone (541)754-4465, email griffith.glenn@epa.gov, or see <http://www.epa.gov/wed/pages/ecoregions/ecoregions.htm>.

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45 Piedmont
45a Southern Inner Piedmont
45b Southern Outer Piedmont
45c Carolina Slate Belt
45d Talladega Upland
45h Pine Mountain Ridges

65 Southeastern Plains
65c Sand Hills
65d Southern Hilly Gulf Coastal Plain
65g Dougherty Plain
65h Tifton Upland
65k Coastal Plain Red Uplands
65l Atlantic Southern Loam Plains
65o Tallahassee Hills/Valdosta Limesink
65p Southeastern Floodplains and Low Terraces

66 Blue Ridge
66d Southern Crystalline Ridges and Mountains
66g Southern Metasedimentary Mountains
66j Broad Basins

67 Ridge and Valley
67f Southern Limestone/Dolomite Valleys and Low Rolling Hills
67g Southern Shale Valleys
67h Southern Sandstone Ridges
67i Southern Dissected Ridges and Knobs

68 Southwestern Appalachians
68c Plateau Escarpment
68d Southern Table Plateaus

75 Southern Coastal Plain
75e Okefenokee Plains
75f Sea Island Flatwoods
75g Okefenokee Swamp
75h Bacon Terraces
75i Floodplains and Low Terraces
75j Sea Islands/Coastal Marsh

— Level III ecoregion
— Level IV ecoregion
- - - State boundary
- - - County boundary

SCALE 1:1 500 000
15 10 5 0 30 60 mi
30 20 10 0 60 120 km
Albers Equal Area Projection
Standard parallels 31° N and 34° N

