Ecoregions of Louisiana

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. By recognizing the spatial differences in the capacities and potentials of ecosystems, ecoregions stratify the environment by its probable response to disturbance (Bryce and others, 1999).

Ecoregions are general purpose regions that are critical for structuring and implementing ecosystem management strategies across federal agencies, state agencies, and nongovernment organizations responsible for different types of resources in the same geographical areas (Omernik and others, 2000). 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 (U.S. Environmental Protection Agency [USEPA], 2006). 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, 2004), Omernik and others (2000), and Gallant and others (1989).

The approach used to compile the ecoregion map of Louisiana 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 characteristics that affect or reflect differences in ecosystem quality and integrity (Wiken, 1986; Omernik, 1987, 1995). These characteristics 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 ecoregion hierarchical level.

Louisiana contains barrier islands and coastal lowlands, large river floodplains, rolling and hilly coastal plains with evergreen and deciduous forests, and a variety of aquatic habitats. There are level III ecoregions and 28 level IV ecoregions, and most of these continue into ecologically similar parts of adjacent states (Chapman and others, 2004; Griffith and others, 2004; Woods and others, 2004).

The ecoregion map on this poster 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 (U.S.
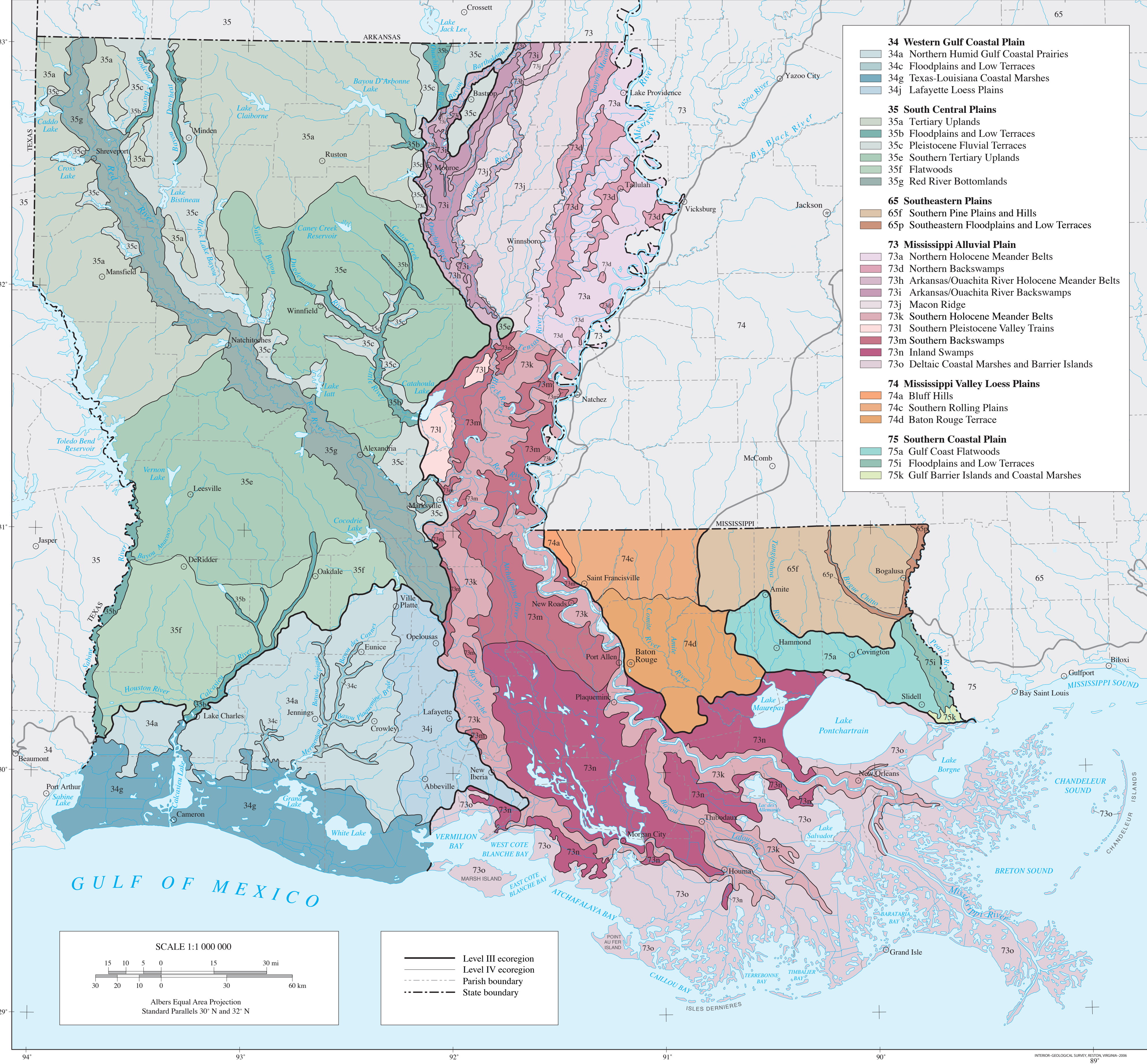
(references and literature-cited columns continue)

Map Legend

34 Western Gulf Coastal Plain
- 34a Northern Humid Gulf Coastal Prairies
- 34b Floodplains and Low Terraces
- 34g Texas-Louisiana Coastal Marshes
- 34j Lafayette Loess Plains

35 South Central Plains
- 35a Tertiary Uplands
- 35b Floodplains and Low Terraces
- 35c Pleistocene Fluvial Terraces
- 35e Southern Tertiary Uplands
- 35f Flatwoods
- 35g Red River Bottomlands

65 Southeastern Plains
- 65f Southern Pine Plains and Hills
- 65p Southeastern Floodplains and Low Terraces

73 Mississippi Alluvial Plain
- 73a Northern Holocene Meander Belts
- 73d Northern Backswamps
- 73h Arkansas/Ouachita River Holocene Meander Belts
- 73i Arkansas/Ouachita River Backswamps
- 73k Macon Ridge
- 73m Southern Holocene Meander Belts
- 73n Southern Pleistocene Valley Trains
- 73m Southern Backswamps
- 73o Inland Swamps
- 73p Deltaic Coastal Marshes and Barrier Islands

74 Mississippi Valley Loess Plains
- 74a Bluff Hills
- 74c Southern Rolling Plains
- 74d Baton Rouge Terrace

75 Southern Coastal Plain
- 75a Gulf Coast Flatwoods
- 75e Floodplains and Low Terraces
- 75k Gulf Barrier Islands and coastal Marshes

Level III ecoregion
Level IV ecoregion
Parish boundary
State boundary

SCALE 1:1 000 000

Albers Equal Area Projection
Standard Parallels 30° N and 32° N

Level III Ecoregions of the Conterminous United States

Base Map: USEPA, 2006

34. Western Gulf Coastal Plain

The principal distinguishing characteristics of the Western Gulf Coastal Plain are its relatively flat topography and mainly grassland potential natural vegetation. Inland from this region, the plains are older, more irregular, and have mostly forest vegetation in the Louisiana portion (Ecoregion 35) or savanna-type vegetation potentials to the west in Texas (Ecoregion 33).

34a Northern Humid Gulf Coastal Prairies

34g Texas-Louisiana Coastal Marshes

34j Lafayette Loess Plains

35. South Central Plains

Ecoregion 35 is composed of rolling plains that are broken by nearly flat fluvial terraces, bottomlands, sandy low hills, and some cuestas.

35c Pleistocene Fluvial Terraces

35e Southern Tertiary Uplands

35f Flatwoods

35g Red River Bottomlands

65. Southeastern Plains

Although mostly tree-covered, these irregular plains have a mosaic of cropland, pasture, woodland, and forest land cover. Natural vegetation in the Louisiana portion was predominantly upland longleaf pine woodlands.

65f Southern Pine Plains and Hills

65p Southeastern Floodplains and Low Terraces

73. Mississippi Alluvial Plain

This riverine ecoregion extends from southern Illinois, at the confluence of the Ohio River with the Mississippi River, south to the Gulf of Mexico.

73a Northern Holocene Meander Belts

73d Northern Backswamps

73h The Arkansas/Ouachita River Holocene Meander Belts

73i Arkansas/Ouachita River Backswamps

73k The prominent Macon Ridge

73m Southern Holocene Meander Belts

73n Southern Pleistocene Valley Trains

73m Southern Backswamps

73o Inland Swamps

73p Deltaic Coastal Marshes and Barrier Islands

74. Mississippi Valley Loess Plains

This ecoregion stretches from the Ohio River in western Kentucky to Louisiana.

74a The Bluff Hills

74c The Southern Rolling Plains

74d The Baton Rouge Terrace

75. Southern Coastal Plain

The Southern Coastal Plain extends from South Carolina and Georgia through much of central Florida, and along the Gulf coast lowlands of the Florida Panhandle, Alabama, Mississippi, and eastern Louisiana.

75a The Gulf Coast Flatwoods

75k The Gulf Barrier Islands and Coastal Marshes

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