Summary Table: Characteristics of the Ecoregions of Kentucky

Level IV Ecoreg	ion	Physiography		Geology		Soil			Climate	•	Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min/max; July min/max (°F)	*Source: <u>Küchler</u> , 1964	
68a. Cumberland Plateau	607	Unglaciated. Open low hills, ridges, rolling uplands, and intervening valleys. Streams have moderate to low gradients.	980-1500/ 100-520	Quaternary colluvium and alluvium. Mostly Pennsylvanian sandstone, shale, siltstone, and coal. Western areas: Pennsylvanian conglomerate, sandstone, and siltstone.	Ultisols (Hapludults). On floodplains: Entisols (Fluvaquents), Inceptisols (Dystrudepts).	Shelocta, Gilpin, Latham, Muse, Clymer, Whitley, Wellston, Trappist, Clymer, Tate, Ramsey. On floodplains: Atkins. Upland soils are generally well- drained, acidic, and have low natural fertility.	Mesic/ Udic. On floodplains: Aquic, Udio		170-185	23/46; 63/88	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On mesic sites: forests variously dominated by yellow-poplar, maple, elm, ash, beech, and hemlock. On drier sites: mixed oak forests chiefly dominated by white oak, oak-pine, and pine forests. On abandoned agricultural land on ridge tops and on south-facing slopes: successional forests dominated by Virginia pine, shortleaf pine, red maple, and black gum. On north-facing and lower slopes: successional forests often dominated by yellow-poplar and red maple.	Mostly forest or reverting to forest. Also som pastureland and limited cropland. Logging, coal mining, and livestock farming have degraded water quality. Past land use and topographic variation have contributed to today's highly variable forest composition. Reclaimed and unreclaimed mine lands occur. On broad ridge tops and in valleys: some hay corn, and tobacco are grown.
68c. Plateau Escarpment	1437	Unglaciated. Highly dissected plateau with ridges, cliffs, hollows, knobs, and valleys. High gradient, fast flowing streams are common in many areas. Elsewhere, broad, nearly level valleys with karst topography and sinking streams occur.	730-1650/ 400-920	Quaternary colluvium and alluvium. Uplands: Pennsylvanian sandstone, shale, siltstone, conglomerate, and coal. Lower slopes and western valleys: Mississippian calcareous shale, limestone, and sandstone. Rock outcrops occur.	Ultisols (Hapludults, Paleudults). In calcareous areas: Alfisols (Hapludalfs).	On sandstone, shale, and/or siltstone: Shelocta, Latham, Gilpin, Rigley, Jefferson, Tate, Muse, Ramsey. On limestone: Caneyville, Brookside, Fredonia, Talbott. Slopes: skeletal, stony colluvial soils are common.	Mesic/Udic	47-51	170-180		Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On upper slopes: mixed oak forests dominated by chestnut oak, red maple, white oak, and black oak. On middle and lower north- and east-facing slopes: mixed mesophytic forests variously dominated by beech, yellow-poplar, and sugar maple with diverse understories of small trees, shrubs, and herbs; common co-dominants and associates include white oak, ash, basswood, buckeye, hemlock, and magnolia. On middle and lower south- and west-facing slopes: mixed oak forests chiefly dominated by white oak with mountain laurel in the understory; common associates include black oak, scarlet oak, post oak, mockernut hickory, pignut hickory, black gum, and sourwood. In mesic coves and on bottoms: mixed mesophytic forests or hemlock and magnolia with a rhododendron understory. On reclaimed mine lands: planted species such as tall fescue and black locust and exotic shrubs.	Mostly forest; limited cropland and pastureland. Logging, coal mining, and gas production have degraded stream quality. Past land use and topographic variation have contributed to today's highly variable forest composition. Acid mine wastes have reduced or eliminated aquatic fauna in some stream segments. Reclaimed and unreclaimed mine lands occur. Steep slopes limit road building and logging. On ridge tops and in valleys: limited livestock, corn, tobacco, and hay farming.

Level IV Ecoregi	on	Physiography		Geology		Soil			Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min/max; July min/max (°F)	*Source: Küchler, 1964	
69d. Dissected Appalachian Plateau	5419	Unglaciated. Highly dissected, hilly and mountainous plateau with steep ridges, very narrow ridge tops, narrow valleys, and deep coves. Cool, high gradient streams with cobble or boulder substrates and extensive riffle sections are common.	550-3100/ 400-2100	Quaternary colluvium and alluvium. Mostly flat-lying Lower to Middle Pennsylvanian sandstone, shale, siltstone, and coal.	Ultisols (Hapludults), Inceptisols (Dystrudepts). On coal mine wastes: Entisols (Udorthents). On floodplains: Entisols (Fluvaquents, Udifluvents), Inceptisols (Eutrudepts, Endoaquepts).	Shelocta, Latham, Dekalb, Jefferson, Gilpin, Marrowbone, Kimper, Hazleton, Fedscreek, Allegheny, Ramsey. On coal mine wastes: Myra, Fairpoint. On floodplains and river banks: Grigsby, Nolin, Yeager, Nelse, Stendal. Soils are well-drained, acidic, and low in natural fertility.	Mesic/ Udic. On floodplains: Aquic, Udic	42-50	160-195	20/47; 62/89	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On upper slopes: mixed oak forests dominated by chestnut oak, red maple, white oak, and black oak. On middle and lower north- and east-facing slopes: mixed mesophytic forests variously dominated by beech, yellow-poplar, and sugar maple with diverse understories of small trees, shrubs, and herbs; common codominants and associates include white oak, ash, basswood, buckeye, hemlock, and magnolia. On middle and lower south- and west-facing slopes: mixed oak forests chiefly dominated by white oak with mountain laurel in the understory; common associates include black oak, scarlet oak, post oak, mockernut hickory, pignut hickory, black gum, and sourwood. In mesic coves and on bottomlands: mixed mesophytic forests or hemlock and magnolia with a rhododendron understory. On reclaimed mine lands: planted species such as tall fescue and black locust and exotic shrubs.	Mostly forest; also extensive coal mines fields, pastureland, and limited cropland Logging, coal mining, and gas-oil produ occur and have degraded stream quality. Acid mine wastes have reduced or elimi aquatic fauna in some stream segments. Surface, mountain top removal, contour deep mining for coal has occurred. On ladequately-drained floodplains and terra hay, tobacco, and corn farming. Past lan and topographic variation have contribut to today's highly variable forest compos Reclaimed and unreclaimed mine lands
69e. Cumberland Mountain Thrust Block	697	Unglaciated. Mountainous thrust block containing steep ridges, narrow valleys, and coves. Cool, high gradient streams are common and have waterfalls, many riffle sections, few pools, and cobble or boulder substrates. Includes Cumberland, Log, Little Black, and Black mountains as well as the southeast-facing portion of Pine Mountain.	980-4139/ 500-2000	Quaternary colluvium and alluvium. Mostly Pennsylvanian shale, siltstone, sandstone, and coal. Highest areas: interbedded Pennsylvanian sandstone, shale, and coal. On bounding ridges: Lower Pennsylvanian sandstone, conglomerate, shale, and coal.	Ultisols (Hapludults), Inceptisols (Dystrudepts). On coal mine wastes: Entisols (Udorthents). On floodplains: Entisols (Fluvaquents), Inceptisols (Eutrudepts).	Shelocta, Kimper, Hazleton, Guyandotte, Gilpin, Dekalb, Ramsey. On coal mine wastes: Fairpoint. On steep flanks of Cumberland Mountain and Pine Mountain: Jefferson, Grimsley, Alticrest, Shelocta. On floodplains: Bonnie, Grigsby.	Mesic/ Udic. On floodplains: Aquic, Udic	45-55+	160-185	20/44; 62/86	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ Mixed second- or third-growth forest containing oaks (chiefly white oak and black oak), sugar maple, red maple, yellow-poplar, black walnut, black locust, hickory, white ash, beech, black cherry, buckeye, hemlock, and white basswood. On mesic sites: mixed mesophytic forests variously dominated by beech, yellow-poplar, sugar maple, and white oak with ash, black walnut, buckeye, basswood, northern red oak, and other mesophytes as associates and co-dominants. On drier slopes: white oak and hickory. On shallow, sandy soils on steeply dipping sandstone: pine. In gorges: hemlock and magnolia with a rhododendron understory. On reclaimed mine lands: planted species such as tall fescue and black locust and exotic shrubs.	Mostly forests, extensive coal mines, and pastureland. Logging, underground and surface coal mining contribute silt and sediment to surface waters. Past land use topographic variation have contributed to today's highly variable forest composition. Acid mine wastes have reduced or eliminal aquatic fauna along segments of some streams. Reclaimed and unreclaimed minlands occur.

70.	WESTERN ALLI				G 1			CI ! :		D 4 (* 181 4 187 4 4* */	
Level IV Ecoregic	On Physiography		Geology		Soil			Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)	Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min/max; July min/max (°F)	*Source: Küchler, 1964	
70b. Monongahela Transition Zone	Unglaciated. Hills and ridges. Rough, broken topography is common. Many land slips occur on steep, saturated slopes.	about 510- 1000/ 200-490	Quaternary colluvium. Clay shale, siltstone, sandstone, and minor amounts of limestone of the Pennsylvanian Monongahela and Conemaugh formations.	Mostly Alfisols (Hapludalfs); also Ultisols (Hapludults). On floodplains: Inceptisols (Eutrudepts), Entisols (Fluvaquents).	Mostly Vandalia, Upshur; also Gilpin, Latham, Shelocta, Hayter. On floodplains: Nolin, Newark, Lindside. Soils readily erode after disturbance. Clayey regolith is unstable when saturated.	Mesic/ Udic. On floodplains: Aquic, Udic	40-42	170-176	19/43; 62/87	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ Mixed forests. On lower, north-facing slopes: dominants include white oak, northern red oak, yellow-poplar, and red maple. On south slopes: mixed oak with hickory. On floodplains: pin oak, eastern cottonwood, northern red oak, yellow-poplar, sweetgum, river birch, and sycamore.	Forest especially on steep slopes, pasturela on gentler slopes, and cropland in valleys. Livestock, hay, tobacco, corn, and small gr farming. Gas production. Past land use and topographic variation have contributed to today's highly variable forest composition.
70d. Knobs–Lower Scioto Dissected Plateau	928 Unglaciated. Rugged knobs, hills, ridges, foothills, and, in the south, cliffs. Narrow valleys are common and contain high gradient streams. A few wide, locally swampy valley floors separate knobs near the Bluegrass. Streams have moderate to high gradients and cobble or gravel substrates.	about 500- 1600/ less than 50-800	Quaternary colluvium and, in broad valleys, alluvium. Mississippian shale, siltstone, and sandstone, Devonian black shale, and, near the Bluegrass, Middle Silurian dolomite and shale. Upper Mississippian limestone and scattered, limited areas of Pennsylvanian sandstone and conglomerate are confined to crests. Rock outcrops occur.	Mostly Ultisols (Hapludults), Inceptisols (Dystrudepts), Alfisols (Hapludalfs); also Ultisols (Fragiudults), Alfisols (Fragiudalfs). On floodplains: Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents), Mollisols (Hapludolls).	Berks, Cranston, Shelocta, Latham, Colyer, Bledsoe, Gilpin, Weikert, Carpenter, Beasley, Rigley, Muse, Allegheny, Elk, Shrouts, Captina, Otwell, Tilsit. On floodplains: Melvin, Huntington, Newark, Nolin, Lindside.	Mesic/ Udic. On floodplains: Aquic, Udic	40-48	165-200	20/47; 63/89	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On mesic uplands: forests dominated by beech, yellow-poplar, sugar maple, northern red oak, and red maple. On drier, non-calcareous uplands: mostly mixed oak forest with hickory. On calcareous upland slopes: oak—ash forest. On dry slopes: grassy openings. On bottomlands: beech, sweetgum, red maple, pin oak, sycamore, and river birch.	Forest on upland knobs; also some pastureland and cropland. Uplands: logging Broader valleys: woodland and livestock, hourley tobacco, corn, and soybean farming. Past land use and topographic variation have contributed to today's highly variable forest composition.
70f. Ohio/ Kentucky Carboniferous Plateau	1740 Unglaciated. Dissected, hilly uplands. Narrow valleys containing moderate to high gradient channels are common but wider valleys occur along the lower Little Sandy River and Ohio River. Valleys become more open towards the north. Streams are cool. Riffles typically have cobble or boulder substrates. Pools usually have sandy bottoms. Stream incision is limited by resistant sandstone strata. Sandstone is deeper in the east than in the west and, as a result, relief is greatest in the east.	about 500- 1400/ 200-500. Relief is greatest in eastern areas.	Quaternary colluvium and alluvium. Mostly Pennsylvanian sandstone, shale, siltstone, and coal; also, in western valleys, some Upper Mississippian limestone and, in the northeast, Upper Pennsylvanian shale, siltstone, sandstone, coal, calcareous shale, and limestone.	Ultisols (Hapludults), Inceptisols (Dystrudepts). On coal mine wastes: Entisols (Udorthents). On floodplains: Inceptisols (Dystrudepts, Endoaquepts, Eutrudepts), Entisols (Fluvaquents).	Latham, Shelocta, Gilpin, Muskingum, Wernock, Montevallo, Jefferson, Whitley, Morehead, Allegheny, Alticrest. On coal mine wastes: Fairpoint, Bethesda. On floodplains: Cuba, Pope, Stendal, Grigsby, Clifty.	Mesic/ Udic. On floodplains: Aquic, Udic	40-48	160-180	20/47; 62/88	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On slopes: mixed oak and oak–pine forests variously dominated by white oak, black oak, yellow-poplar, red maple, scarlet oak, Virginia pine, shortleaf pine, white pine, and northern red oak. On well-drained bottoms, terraces, footslopes, and in coves: yellow-poplar, black walnut, white oak, white pine, black walnut, buckeye, northern red oak, sugar maple, and eastern hemlock. On poorly-drained bottoms: forests dominated by pin oak, cottonwood, sweetgum, red maple, sycamore, hackberry, and slippery elm.	Mosaic of forest, pastureland, cropland, and coal mines. Logging, livestock farming, towns, oil production, and underground and surface coal mining degrade stream quality. Some burley tobacco, hay, corn, soybean, and small grain farming. Reclaimed and unreclaimed mine lands occur. Past land us and topographic variation have contributed today's highly variable forest composition.
70g. Northern Forested Plateau Escarpment	Unglaciated. Very rugged, highly dissected hills, narrow ridges, coves, and, along rivers, cliffs. Narrow valleys and ravines are common. Karst is not extensive but does occur. Streams are typically cool, clear, and have moderate to high gradients and cobble, boulder, or bedrock bottoms.	650-1600/ 200-600	Quaternary colluvium and alluvium. Mostly Pennsylvanian sandstone, conglomerate, shale, siltstone, and coal, Upper Mississippian limestone, and Lower Mississippian shale and siltstone. Thick, resistant Pennsylvanian quartzose sandstone caps the ridges. Mississippian limestone and siliclastic rocks are exposed on lower slopes and in valleys. Rock outcrops occur.	Ultisols (Hapludults), Inceptisols (Dystrudepts), Alfisols (Hapludalfs). On coal mine wastes: Entisols (Udorthents). On floodplains: Inceptisols (Dystrudepts, Endoaquepts, Eutrudepts), Entisols (Fluvaquents, Udifluvents), Mollisols (Hapludolls).	Shelocta, Brookside, Bledsoe, Latham, Gilpin, Rigley, Steinsburg, Cranston, Berks, Caneyville, Whitley, Carpenter, Helechawa, Alticrest, Morehead. On floodplains: Huntington, Newark, Lindside, Bruno, Melvin, Pope, Grigsby, Clifty, Skidmore. Upland soils can be sandy and droughty.	Mesic/ Udic. On floodplains: Aquic, Udic	45-49	160-175	20/46; 62/87	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On slopes: mixed oak and oak—pine forests variously dominated by white oak, chestnut oak, scarlet oak, black oak, hickory, Virginia pine, shortleaf pine, yellow-poplar, white pine, red maple, and eastern redcedar. On footslopes, terraces, well-drained bottoms, and in coves: yellow-poplar, black walnut, white oak, white pine, northern red oak, sugar maple, rhododendron, and eastern hemlock. On deep, poorly-drained bottoms: forests dominated by pin oak, sweetgum, sycamore, red maple, and river birch.	Mostly forest; also some pastureland and, of bottomlands and some ridge tops, cropland Logging, recreational opportunities, livesto farming, and oil production. Some corn, ha and small patches of tobacco are grown. Past land use and topographic variation hav contributed to today's highly variable fores composition.
70h. Carter Hills	495 Unglaciated. Dissected hills, ridges, coves, and narrow valleys. Streams typically have moderate to high gradients, rock substrates, extensive riffle sections, and low waterfalls. Lower Tygarts Creek: much broader bottoms and lower channel gradients than typical for the ecoregion. Karst topography occurs in valleys that are underlain by limestone.	about 500- 1200/ 200-500	Quaternary alluvium and colluvium. Pennsylvanian sandstone, conglomerate, shale, siltstone, and coal. Upper Mississippian limestone underlies some valleys. Rock outcrops occur.	Ultisols (Hapludults, Fragiudults), Inceptisols (Dystrudepts), Alfisols (Hapludalfs). On bottoms: Inceptisols (Endoaquepts, Eutrudepts, Dystrudepts), Entisols (Fluvaquents, Udifluvents).	Latham, Shelocta, Berks, Muskingum, Cranston, Ramsey, Gilpin, Wellston, Monongahela, Allegheny, Caneyville, Bledsoe, Whitley. On bottoms: Pope, Bruno, Stendal, Newark, Nolin, Skidmore, Grigsby, Stokly, Cuba.	Mesic/ Udic. On floodplains: Aquic, Udic	40-46	160-175	23/46; 62/88	Mixed mesophytic forest; American chestnut was a former dominant on drier sites/ On mesic uplands: forests dominated by beech, yellow-poplar, sugar maple, and northern red oak. On drier uplands: mostly mixed oak forests with hickory. In abandoned fields: young pines and cedars. On poorly-drained bottomlands: forests dominated by pin oak, northern red oak, red maple, sweetgum, sycamore, river birch, hackberry, and slippery elm. In well-drained valleys: forest dominants include yellow-poplar, black walnut, white oak, white pine, northern red oak, and sugar maple. In ravines: hemlock and magnolia with a rhododendron understory.	Mostly forest; also pastureland and, in valleys, some cropland. Logging, clay mini recreational opportunities, oil production, and livestock, hay, corn, tobacco, soybean, and small grain farming. Past land use and topographic variation have contributed to today's highly variable forest composition.

Level IV Ecoregie	on	Physiography		Geology		Soil			Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)		Mean Temperature January min/max; July min/max (°F)	*Source: Küchler, 1964	
71a. Crawford– Mammoth Cave Uplands		Unglaciated. Hilly uplands containing cliffs and wide karst valleys. Dry valleys, hanging valleys, sinkholes, caverns, and subterranean drainage occur but surface drainage can still be significant. Upland streams are rocky, cool, clear and often fed by groundwater. Many springs discharge into rivers that are deeply incised into bedrock.	345-950/ 50-350	Quaternary loess and alluvium. Interbedded, Upper Mississippian Chesterian limestone, sandstone, shale, and siltstone; also Middle Mississippian Ste. Genevieve and St. Louis limestones under some eastern valleys and limited areas of Pennsylvanian sandstone, siltstone, conglomerate, and coal of the Caseyville Formation.	Mostly Alfisols (Fragiudalfs, Hapludalfs, Fraglossudalfs, Paleudalfs); also Inceptisols (Dystrudepts), Ultisols (Fragiudults).	Extensive on uplands and ridges: Zanesville, Fredonia, Frondorf; also Caneyville, Sadler, Talbott, Weikert, Tilsit, Nicholson, Baxter, Loring.	Mesic/ Udic	42-51	175-205	21/46; 65/91	Oak-hickory forest/ On uplands: white oak, black oak, southern red oak, pignut hickory, and post oak with open forests on drier slopes and broad ridges. On mesic sites: forests with beech, sugar maple, southern red oak, white ash, and yellow-poplar. Near streams: sycamore, red maple, birch, hemlock, hackberry, and sweet gum. On abandoned agricultural land: successional fields of little bluestem, broomsedge, eastern redcedar, and sumac and older successional forests of eastern redcedar and black locust.	Forests, pastureland, and cropland. Livestoc hay, corn, soybean, wheat, and tobacco farming. Oil production. Recreational opportunities especially in or near Mammot Cave National Park.
71b. Mitchell Plain	765	Unglaciated. Rolling karst plain containing depressions, ponds, sinking creeks and dry valleys; scattered ridges, knobs, and hills occur. Many depressions are seasonally ponded. Streams have moderate to low gradients. Stream density is low and incision is typically limited except along major rivers. Springs are common in incised areas.	to 1050 on	Limestone and St. Louis Limestone. On knobs and hills near the ecoregion's western periphery: Upper Mississippian Chesterian sedimentary rock.	Uplands: Mostly Alfisols (Paleudalfs); also Alfisols (Hapludalfs, Fragiudalfs), Ultisols (Hapludults, Paleudults). On terraces: Alfisols (Fragiudalfs, Hapludalfs). On floodplains: Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents), Mollisols (Endoaquolls).	On uplands: Crider, Pembroke, Vertrees, Sonora, Cumberland, Riney, Gatton, Nicholson; also Caneyville, Fredonia, Waynesboro. On terraces: Lawrence, Otwell, Elk, Ashton. On floodplains and in upland depressions: Nolin, Lindside, Newark, Melvin.	Mesic/ Udic. On floodplains: Aquic, Udic	45-50	175-190	21/43; 66/88	Mosaic of bluestem prairie and oak—hickory forest/ On steep slopes: mixed oaks. In poorly-drained areas: pin oak, swamp white oak, and sweetgum. Sinkhole wetlands are common. On abandoned agricultural land: successional fields of broomsedge, eastern redcedar, and sumac and older successional forests of eastern redcedar and black locust. On eroded, shallow soil: a few historic barrens (i.e. bluestem prairie dominated by little bluestem) still exist.	Cropland, pastureland, patches of woodland and military reservation. Corn, soybean, livestock, small grain, and tobacco farming.
71c. Knobs– Norman Upland		Unglaciated. Dissected, steep knobs, hills, and ridges. Narrow, high gradient valleys are common but a few wide, locally swampy valley floors separate knobs near the Bluegrass. Larger streams have cut gorges and have gravel or cobble bottoms.	380-1500/ less than 50-460	Quaternary alluvium, colluvium, and in broad valley bottoms, lacustrine sediments. Crests: mostly Middle Mississippian and some Upper Mississippian limestone; limited areas of Pennsylvanian sandstone and conglomerate on tops of some eastern knobs. Elsewhere: Lower Mississippian shale and siltstone, Devonian black shale, and Silurian and Ordovician limestone, shale, and dolomite. Rock outcrops occur.	Inceptisols (Dystrudepts, Eutrudepts), Ultisols (Hapludults, Fragiudults), Alfisols (Hapludalfs). Locally on flatter uplands: Alfisols (Paleudalfs). On floodplains: Inceptisols (Endoaquepts, Eutrudepts), Entisols (Fluvaquents), Mollisols (Hapludolls).	Weikert, Colyer, Rockcastle, Garmon, Crider, Trappist, Carpenter, Vertrees, Latham, McAfee, Tilsit, Lenberg, Lawrence, Christian, Caneyville, Markland. On floodplains: Stendal, Nolin, Huntington, Sensabaugh, Melvin, Lindside, Newark.	Mesic/ Udic. On floodplains: Aquic, Udic	45-51	170-190	64-88	Oak-hickory forest/ On mesic uplands: forest dominants include beech, white oak, yellow-poplar, sugar maple, and northern red oak. On drier uplands: mostly mixed oak forests (dominated by white oak) with hickory. On dry slopes and ridges: Virginia pine, shortleaf pine, and grassy openings. On limestone hill slopes: oak-ash forest. On floodplains: sweetgum and pin oak. On abandoned agricultural land: successional fields of broomsedge, eastern redcedar, and sumac and older successional forests of eastern redcedar and black locust.	Forests, especially on rocky, steep slopes; also pastureland, cropland, and military reservation. In broader valleys: woodland and livestock, hay, burley tobacco, corn, and soybean farming. Idle land and land that is reverting to forest occur.

71. Level IV Ecoregic		INTERIOR PLA Physiography		Geology		Soil			Climate	•	Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)	_	Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min/max; July min/max (°F)		
71d. Outer Bluegrass	4707	Glaciated in north. Rolling to hilly upland containing small sinkholes, springs, ravines, gorges, and, along the Ohio River, broad terraces and floodplains. Deeply entrenched streams and rivers occur. Degree of dissection is variable but generally increases toward rivers. Upland streams have moderate to high gradients and boulder, cobble, or bedrock substrates. Many streams are intermittent or ephemeral. Lowland stream systems have fewer riffles and smaller substrate sizes than upland streams.	382-1100/ 50-450	Quaternary alluvium, loess, and in northernmost Kentucky, discontinuous pre-Wisconsinan till, Quaternary glacial outwash (especially in valleys), and lacustrine deposits. Mostly Upper Ordovician limestone and shale; also, on the ecoregion's outer periphery, Lower and Middle Silurian limestone, dolomite, and shale as well as Middle and Upper Devonian limestone and shale.	Mostly Alfisols (Hapludalfs, Fragiudalfs); also Mollisols (Hapludolls, Argiudolls). On floodplains and in upland depressions: Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents), Mollisols (Hapludolls). Soils derived from Silurian dolomites are less naturally fertile than those from Ordovician limestone. Soils derived from pre-Wisconsinan till have been leached.	Otwell, Shrouts, Mercer, Culleoka, Eden, Wheeling, Hampshire, Sandview, Corydon, Tilsit, Pembroke, Lawrence. On floodplains and upland depressions: Nolin, Newark, Lindside,	Mesic/ Udic. On floodplains: Aquic, Udic	38-48. Snowfall is greater in northern portion.	160-210	20/45; 62/89. Northern portion is colder than southern portion.	Mostly oak-hickory forest. On Silurian dolomite: white oak stands with barren openings. In east: cane along streams and on bottoms. In the north where glacial drift deposits have been removed by erosion: maple—oak—ash forests. Upland glacial till sites on Rossmoyne soils: American beech—sugar maple. On well-drained soils over coarse glacial outwash deposits in north: a few, scattered dry prairie sites/ Mixed forests containing white oak, northern red oak, black oak, hickory, yellow buckeye, white ash, blue ash, eastern redcedar, scarlet oak, black walnut, black maple, beech, yellow-poplar, basswood, black cherry, sugar maple, chinquapin oak, bur oak, and black locust. Along river drainages and in gorges: white oak, northern red oak, scarlet oak, black oak, chinquapin oak, white ash, blue ash, sugar maple, red maple, Virginia pine, yellow-poplar, and eastern redcedar. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of redcedar and black locust.	Cropland, pastureland, woodland, military base, urban-suburban areas, and, especially in dissected areas, forest. Livestock, hay, burley tobacco, corn, soybean, small grain, and dairy farming. Stream quality is affected by agriculture and municipal effluent. Concentrations of suspended sediments and nutrients can be high.
71e. Western Pennyroyal Karst Plain	1990	Unglaciated. Gently sloping to rolling karst plain. Sinking streams, underground drainage, many sinkholes and ponds, scattered knobs, and, on the periphery, low hills occur. Typically, surface streams are rare and the degree and depth of dissection is limited. Deeper, more intense dissection is found near large, perennial streams that are fed by cool groundwater. Springs occur along entrenched streams.	Mostly 500-750; up to 930 in boundary areas and on knobs/ Mostly 50-200; 300+ in entrenched valleys.	Thin loess and alluvium of Quaternary age. Mostly Middle Mississippian Ste. Genevieve Limestone and St. Louis Limestone. Massive limestone is common and calcareous shale also occurs.	Mostly Alfisols (Paleudalfs, Hapludalfs); also Alfisols (Fragiudalfs, Fragiaqualfs), Ultisols (Paleudults). On floodplains and in upland depressions: Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents).	Mostly Crider, Pembroke, Baxter; also Nicholson, Hammack, Fredonia, Mountview, Vertrees, Cumberland, Caneyville, Robertsville, Bewleyville, Lawrence, Talbott, Dickson, Frederick. On floodplains and in upland depressions: Melvin, Nolin, Hamblen, Lindside, Newark.	Mesic, Thermic/ Udic. On floodplains: Aquic, Udic	45-52	180-200	23/48; 65/91	Mosaic of bluestem prairie and oak—hickory forest; more mesic sites were covered in mixed deciduous forest dominated by beech and oak, swamps occurred in subsidence areas/ In poorly-drained areas: mixed deciduous forest. On uplands: woodlands dominated by white oak with beech, red maple, yellow-poplar, and pignut hickory. Fields of broomsedge and little bluestem occur. Scattered barrens (i.e. bluestem prairie dominated by little bluestem) are maintained at Fort Campbell and various nature preserves. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust.	Mostly cropland or pastureland, also expanding urban areas, military reservations, and, in poorly-drained areas, patches of woodland. Tobacco, livestock, corn, soybean, and small grain farming. Agricultural runoff can contain high nitrate levels. Oil and gas production.
71f. Western Highland Rim	892	Unglaciated. Dissected, rolling hills and ridges. Nearly level bottomlands occur near rivers. Karst features including caverns and springs can be found in limestone valleys. Moderate gradient, cool, clear streams are common and have cherty gravel, sand, or bedrock substrates.	359-700/ 50-300	Thin loess, alluvium, and colluvium of Quaternary age. Quaternary-Tertiary gravelly and sandy Coastal Plain deposits. Upper Cretaceous gravels and sands of the Tuscaloosa Formation and Mississippian Ste. Genevieve Limestone, St. Louis Limestone, Warsaw Limestone, Muldraugh Member of the Borden Formation, and west of the Tennessee River, Upper Cretaceous-Paleocene shale, siltstone, and sandstone of the Clayton and McNairy formations. Limestone bedrock is absent from the west.	Ultisols (Hapludults, Paleudults, Fragiudults), Alfisols (Paleudalfs, Fragiudalfs). On bottoms: Inceptisols (Dystrudepts, Eutrudepts).	Brandon, Baxter, Bodine, Loring, Saffell, Lax, Hammack. On bottoms: Clifty, Nolin. Upland soils are generally low in natural fertility, droughty, and can be cherty and gravelly.	Mesic, Thermic/ Udic	45-51	185-205	23/48; 66/91	Oak—hickory forest/ Mixed forest dominated by white oak, hickory, northern red oak, black oak, yellow-poplar, and red maple. On floodplains: bottomland forests dominated by pin oak, sweetgum, eastern cottonwood, hickory, red maple, sycamore, hackberry, and elm. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust.	Mostly forests; also pastureland and hay, corn, tobacco, and general farming. Logging occurs. Recreation is an important land use in the Land-Between-the-Lakes area.
71g. Eastern Highland Rim	3735	Unglaciated. Variably dissected, undulating plains and hills. Steep bluffs, springs, cascades, and wide bottomlands are found along the Cumberland River and some of its tributaries. A few karst areas occur. Low to moderate gradient streams are common. Riffles have cobble or gravel substrates.	500-1350/ 50-500	Quaternary alluvium, colluvium, and loess. Mostly Mississippian limestones, calcareous shales, shales, siltstones, and sandstones. Cherty Mississippian strata cap the higher hills and knobs. Some Devonian and Ordovician limestone, dolomite, and shale are exposed in stream cuts.	Alfisols (Paleudalfs, Hapludalfs), Ultisols (Paleudults, Fragiudults, Hapludults), Inceptisols (Eutrudepts). On floodplains: Mollisols (Hapludolls), Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents).	Baxter, Frederick, Dickson, Garmon, Frankstown, Mountview, Caneyville, Westmoreland, Christian, Dewey, Sango, Bodine, Trimble, Carpenter, Taft, Shelocta. On floodplains and in upland depressions: Staser, Lindside, Huntington, Newark, Melvin, Nolin.	Mesic, Thermic/ Udic. On floodplains: Aquic, Udic	48-52	173-195	23/48; 63/90	Oak-hickory forest; moister areas: mixed mesophytic forest/ Mixed forests dominated by white oak with hickory, northern red oak, southern red oak, yellow-poplar, black oak, eastern redcedar, ash, and Virginia pine. On floodplains: forests with sweetgum, pin oak, water oak, red maple, eastern cottonwood, sycamore, hackberry, silver maple, and elm. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust.	Forest, woodland, pastureland, and cropland. Logging and livestock, dairy, corn, soybean, small grain, and hay farming. Oil and gas production.
71h. Outer Nashville Basin	224	Unglaciated. Highly dissected, steep ridges and bluffs. Many large springs and waterfalls occur on bluffs. Floodplains, wide terraces, and hanging valleys are found along the meandering, down-cutting Cumberland River. Main channels have moderate gradients and gravel, cobble, or bedrock substrates.	535-900/ 100-360	Quaternary alluvium and, in gorges, colluvium. Mississippian-age through Ordovician-age limestone, dolomite, shale, and calcareous shale. Rock outcrops are common.	On dissected uplands: Inceptisols (Eutrudepts), Alfisols (Hapludalfs), Ultisols (Paleudults). On floodplains and terraces: Mollisols (Hapludolls), Inceptisols (Eutrudepts, Endoaquepts), Entisols (Fluvaquents).	On dissected uplands and terraces: Garmon, Cynthiana, Newbern, Carpenter, Caneyville, Trimble, Faywood, Dewey, Frederick, Lowell, Elk, Holston, Monongahela. On floodplains: Huntington, Chagrin, Lindside, Nolin, Melvin, Newark, Sensabaugh.	Mesic/ Udic. On floodplains: Aquic, Udic	50-52	175-182	24/44; 65/88	Oak—hickory forest; moister areas: mixed mesophytic forest/ Forests dominated by oaks, chiefly white oak and northern red oak; common associates are yellow-poplar, hickory, eastern redcedar, black locust, sugar maple, and honey locust. On terraces and floodplains: dominant species are sycamore, red maple, river birch, sweetgum, and yellow-poplar with cane in the understory. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust.	Forests, woodland, pastureland, and on broad bottoms, cropland. Livestock, hay, tobacco, corn, soybean, and small grain farming. Cold reservoir discharge from the Wolf Creek Dam (which forms Lake Cumberland) has nearly eliminated native fish and mussel fauna from the Cumberland River downstream to the Tennessee border.
71k. Hills of the Bluegrass	3033	Unglaciated. Strongly dissected uplands characterized by narrow ridges and hills and intervening narrow valleys. Only the incised Kentucky and Licking rivers have wide bottomlands. Many small ponds are found locally. Upland streams have high gradients and are often intermittent; they have bedrock, boulder, or cobble substrates.	455-1100/ 100-470	Quaternary alluvium, colluvium, lacustrine sediment, and loess. Mostly Upper Ordovician calcareous shale, siltstone, and thin interbedded limestone of the Clays Ferry Formation, Garrard Siltstone, and Kope Formation; on some ridges, Upper Ordovician Calloway Creek Siltstone and Ashlock Formation. Also, in the lower parts of some valleys, Middle Ordovician Lexington Limestone. Rock outcrops are common.	Mostly Alfisols (Hapludalfs, Fragiudalfs). On floodplains: Inceptisols (Eutrudepts), Mollisols (Hapludolls), Entisols (Fluvaquents).	Uplands: Mostly Eden, Lowell; also Nicholson, Cynthiana, Culleoka. On terraces: Licking, Otwell, Elk, Ashton. On floodplains: Nolin, Boonesboro, Newark, Lindside. Upland soils are usually fine-textured, slowly- permeable, droughty, and subject to rapid runoff and erosion. Bottoms can be fertile.	Mesic/ Udic. On floodplains: Aquic, Udic	42-45	170-195	19/43; 62/89	Oak-hickory forest/ Mixed forest of white oak, ash, hickory, black walnut, black locust, and eastern redcedar. On drier uplands: white oak-hickory forest. On moister uplands: oak-ash forest. On floodplains: sycamore-boxelder-red maple woodland with an understory of cane. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust.	Mostly wooded, pastureland, or hayland. Some ridge tops: tobacco, corn, and small grain farming. Some steeply sloping areas are reverting to forest or are bushy.
71l. Inner Bluegrass	1355	Unglaciated. Nearly level to rolling, weakly dissected upland plain characterized by extensive karst. Deep, precipitous gorges occur along the incised Kentucky and Dix rivers. On uplands, streams have low to moderate gradients and bedrock or cobble substrates. Many upland streams are intermittent but some have plentiful, year-round flow; sinking streams, underground drainage, springs, and many sinkholes and ponds occur. In the gorges, tributary stream reaches have moderate to steep gradients.	500-1100/ Mostly 50-150; entrenched rivers up to 400.	Quaternary alluvium and colluvium. Mostly phosphatic limestones and calcareous shales of the Middle Ordovician Lexington Limestone; gorges expose limestones and calcareous shales of the Middle Ordovician High Bridge Group.	Alfisols (Paleudalfs, Hapludalfs, Fragiudalfs), Mollisols (Argiudolls, Hapludolls). On floodplains: Entisols (Fluvaquents), Inceptisols (Eutrudepts), Mollisols (Endoaquolls).	Maury, McAfee, Lowell, Loradale, Mercer, Fairmount, Faywood, Caleast, Chenault, Braxton, Elk, Salvisa. On floodplains: Newark, Nolin, Lindside, Dunning. Upland soils have high base status and are naturally fertile.	Mesic/ Udic. On floodplains: Aquic, Udic	42-47	170-195	20/42; 62/88	Oak-hickory forest/ Uplands: remnants of an open forest dominated by blue ash and oaks; co-dominants and associates are white oak, shumard oak, walnut, chinquapin oak, bur oak, shellbark hickory, and Kentucky coffeetree. Along river drainages and in gorges: oak-maple forests with white oak, northern red oak, scarlet oak, black oak, chinquapin oak, white ash, sugar maple, red maple, and eastern redcedar. On poorly-drained floodplains: forests dominated by sweetgum, pin oak, yellow-poplar, box elder, and hackberry. Sinkholes: sycamore, black locust, hackberry, and mulberry. On abandoned agricultural land: successional fields of broomsedge and sumac and older successional forests of eastern redcedar and black locust. Cane is a common understory species throughout the ecoregion.	Pastureland, cropland, urban-suburban development, and, in drainages, forests. Thoroughbred horse, cattle, burley tobacco, corn, and hay farming. Urban-suburban areas are expanding. Nutrient levels in streams are high. Low dissolved oxygen and high trace metal levels occur in some stream reaches downstream of urban areas.

Level IV Ecoregic	on Physiography		Geology		Soil			Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)	Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Frost Free Mean annual (days)	Mean Temperature January min/max; July min/max (°F)	*Source: Küchler, 1964	
72a. Wabash–Ohio Bottomlands	700 Unglaciated. Nearly level floodplains, undulating terraces, and low ridges. Wetlands, ponds, abandoned channels, and oxbow lakes occur. Natural (i.e. unchannelized) streams meander; they have low gradients and silt or sand substrates. Seasonally high water tables are typical and seasonal flooding occurs.	310-410/ less than 50	Quaternary alluvium, lacustrine deposits, and glacial outwash valley-train deposits.	Mollisols (Hapludolls), Alfisols (Hapludalfs, Endoaqualfs, Fragiudalfs, Fragiaqualfs), Inceptisols (Endoaquepts, Eutrudepts), Entisols (Fluvaquents, Udifluvents).	Huntington, Ginat, Melvin, Newark, Egam, Elk, Nolin, Otwell, Henry, Uniontown, Henshaw, Rosebloom, Wheeling, Robinsonville, Lindside. Poorly-drained bottomlands are common.	Mesic, Thermic/ Aquic, Udic	43-50	190-205		Southern floodplain forest (dominants: <i>Quercus, Nyssa, Taxodium)</i> / Bottomland mixed deciduous forests. Bottomland oak forests dominated by pin oak, cherrybark oak, overcup oak, pecan, red maple, willow oak, and sweetgum. In wettest areas that are often flooded: bald cypress—tupelo forests.	Cropland, pastureland, and forest. Corn, soybean, wheat, tobacco, alfalfa, and live farming. Sand and gravel mining and oil production. Wetland wildlife refuges occ Drainage conditions affect land use. Mos streams have been extensively channelized Drainage ditches are found throughout the region.
72c. Green River– Southern Wabash Lowlands	2879 Unglaciated. Broad, nearly level bottomlands and low hills. The ecoregion is drained by meandering, low gradient streams and rivers with wide floodplains and soft substrates. Wetlands and oxbow lakes are common. Upland unchannelized streams have low gradients and sandy or silty bottoms. Seasonal flooding occurs.		Quaternary alluvium, loess, and lacustrine sediment. Pennsylvanian shale, siltstone, sandstone, and coal beds; the Sturgis Formation and the Carbondale Formation are widespread and exposures of the Tradewater Formation occur in the south and east.	Alfisols (Fragiudalfs, Hapludalfs, Fraglossudalfs). On floodplains: Inceptisols (Endoaquepts, Eutrudepts), Entisols (Fluvaquents).	Loring, Wellston, Zanesville, Frondorf, Grenada, Otwell, Memphis, Uniontown. On floodplains: Karnak, Belknap, Melvin, Waverly, Wilbur, Newark. Poorlydrained bottomlands are common.	Mesic/ Udic. On floodplains: Aquic, Udic	44-50	175-200		Oak-hickory forest/ On uplands: oak forest often dominated by white oak with post oak, southern red oak, cherrybark oak, and shingle oak as common associates. On mesic sites: forests dominated by beech, yellow-poplar, sugar maple, and northern red oak. On bottomlands: bottomland oak forests with overcup oak, pin oak, silver maple, pecan, slippery elm, sweetgum, and red maple. In wettest areas that are often flooded: bald cypress.	Cropland, pastureland, woodland, and coamines. Corn, soybean, wheat, tobacco, ha and livestock farming. Underground and surface coal mining. Oil and gas production Mining contributes sediment and acidic runoff to streams. Reclaimed and unreclaimine lands occur. Oil brine has discharge into streams and wetlands. Channelized streams are common and have high turbid very warm water, low amounts of dissolve oxygen, few fish, and a low diversity of fispecies.
72h. Caseyville Hills	1902 Unglaciated. Moderately dissected hills and, locally, sandstone cliffs. Streams have low to moderate gradients. Upland streams have gravelly bottoms.	350-850/ 75-350	Thin loess and alluvium of Quaternary age. Mostly Pennsylvanian sandstones, siltstones, shales, and coal beds of the Tradewater and Caseyville formations; also Mississippian Chesterian limestone, sandstone, siltstone, and shales.	In loess on gentle slopes: Alfisols (Fragiudalfs, Hapludalfs, Fraglossudalfs). On steeper slopes: Inceptisols (Dystrudepts).	Zanesville, Wellston, Frondorf, Weikert, Dekalb, Muskingum, Sadler.	Mesic/ Udic	45-52	170-200	63/90	Oak-hickory forest/ On uplands: mixed oak forest containing post oak, southern red oak, white oak, black oak, and shagbark hickory. On mesic upland sites: forests dominated by beech, yellow-poplar, sugar maple, and northern red oak. On drier slopes and on some broad ridges: oak forests with grassy openings.	Forests, pastureland, and some cropland. Logging and oil production; also natural a production and coal mining. Livestock, ha and some soybean, corn, tobacco, and wh farming.

Level IV Ecoregic	Level IV Ecoregion Physiography			Geology	ology	Soil	Soil		Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)		Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes		Mean annual	Mean Temperature January min/max; July min/max (°F)	Source: Kuchler, 1964	
73a. Holocene Meander Belts		Unglaciated. Broad, nearly level, floodplains, low terraces, and meander belts of the Mississippi River containing swales, abandoned channels, oxbow lakes, shallow ponds, back swamps, interfluves, natural levees, point bars, and a few low gradient streams. High water tables and flooding are seasonal problems.	257-310/ less than 50	Quaternary alluvium.	Inceptisols (Epiaquepts), Entisols (Fluvaquents, Udifluvents, Udipsamments), Vertisols (Epiaquerts), Mollisols (Hapludolls).	Openlake, Bardwell, Commerce, Robinsonville, Sharkey, Tunica, Crevasse. Very slowly, slowly, and moderately permeable soils. Soil fertility is naturally high.	Thermic/ Aquic, Udic	51-53	190-200	67/90	Forests dominated by sweetgum, sugarberry, red maple, slippery elm, pecan, pin oak, overcup oak, willow oak, cottonwood, and sycamore. In wettest areas that are often flooded: bald cypress—tupelo forests.	Cropland with limited forests, swamps, a wetlands. Mostly livestock, soybean, corn and wheat farming. Water and marsh bird are abundant. Drainage of wetlands and removal of bottomland forest has occurre Channelization is common.

Level IV Ecoregic	on	Physiography		Geology		Soil			Climate		Potential Natural Vegetation*/ Present Vegetation	Land Cover and Land Use
	Area (square miles)	·	Elevation/ Local Relief (feet)	Surficial and Bedrock	Order (Great Group)	Common Soil Series	Temperature/ Moisture Regimes	Precipitation Mean annual (inches)	Mean annual	Mean Temperature January min/max; July min/max (°F)		
74a. Bluff Hills	36	Unglaciated. Narrow belt of hills and long winding ridges. Steep bluffs occur in the west near the Mississippi River. Dissected by intermittent streams and gullies with narrow silty, sandy, or gravelly bottoms.	280-550/ 100-200	unconsolidated sandy and gravelly coastal	Alfisols (Hapludalfs, Fragiudalfs), Ultisols (Hapludults), Entisols (Udifluvents).	On loess: Memphis, Loring. On coastal plain sediments: Molena. On narrow floodplains: Adler.	Thermic/ Udic	51-53	190-200	23/43; 66/90	Oak-hickory forest/ On mesic slopes: forests dominated by sugar maple, bitternut hickory, yellow-poplar, and beech. On drier uplands: oak-hickory and mixed oak forests mostly dominated by white oak.	Woodland, pastureland, and cropland. Stee slopes are forested and unstable if disturbe Gentler slopes are used for livestock, hay, corn, soybean, and wheat farming.
74b. Loess Plains	1854	Unglaciated. Undulating to rolling plains with broad bottomlands and terraces. Western streams are characteristically low in gradient and have many wetlands along their lower reaches. Sandy and gravelly hills occur in the east and are dissected by gullies. Upland streams have gravelly or sandy substrates.	300-570/ 50-150	alluvium, Quaternary-Tertiary unconsolidated sandy and gravelly coastal plain sediments. Tertiary sand, silt, and clay of the Jackson Formation, Tertiary shale and sandstone of the Wilcox Formation, and Tertiary Porters Creek Clay	On uplands and terraces: Alfisols (Fragiudalfs, Fraglossudalfs, Hapludalfs, Fragiaqualfs), Ultisols (Hapludults, Fragiudults). On floodplains: Entisols (Fluvaquents, Udifluvents), Inceptisols (Endoaquepts). Fragipans often limit drainage.	Grenada, Loring, Calloway, Brandon, Memphis, Henry, Routon, Smithdale, Lax. On floodplains: Adler, Collins, Convent, Falaya, Rosebloom, Waverly.	Thermic/ Udic. On floodplains: Aquic, Udic	45-52	185-205		hickory forest mosaic and southern floodplain forest (dominants: <i>Quercus, Nyssa, Taxodium</i>)/ On uplands: mixed oak forests with white oak, hickory, southern red oak, post oak, black oak, and	Cropland, pastureland, and, on floodplains bottomland deciduous forest. On eastern uplands: patches of woodland. Mostly corn soybean, wheat, hay, livestock, tobacco, ar poultry farming. Some cropland is revertin to forest. Historic barrens (i.e. bluestem prairie) are cultivated. Gravel, sand, and cl mining. Streams are extensively channelized

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