Figure 11. Principal aquifers in the lower Tennessee River Basin. (Modified from King and Beikman, 1974)

Areal extent	Aquifer	Lithology and hydrogeology
	Cretaceous sand aquifer	Unconsolidated sand, silt, clay, and gravel. Ground-water flow occurs in intergranular pore spaces. Flow paths are short to very long. Wells in these aquifers produce enough water for domestic use and locally small public supplies. Wells can yield up to 100 gallons per minute.
	Pennsylvanian sandstone aquifer	Sandstone, conglomerate, siltstone, shale, and coal. Aquifers consist primarily of sandstone and conglomerate. Permeability of these formations is low and ground-water flow generally occurs along fractures. Artesian conditions often occur. Flow paths generally are short, small springs are common. Well yields typically are low but yield enough for domestic use.
	Mississippian carbonate aquifer	Limestone and chert. Aquifers occur primarily in massive bedded limestone formations. Locally, productive aquifers are present in chert gravels present in regolith overlying bedrock. Most ground-water flow occurs in solution channels formed in joints and bedding planes. Flow paths generally are short, moderately large springs are common. Aquifers used for domestic and public supply. Well yields range from low to very high (more than 3,000 gallons per minute).
	Ordovician carbonate aquifer	Predominantly limestone, minor dolomite. Most ground-water flow occurs in solution channels formed in joints and bedding planes. Ground-water flow paths typically are short and springs are common. Well yields generally are between 2 to 20 gallons per minute but can be as high as 300 gallons per minute.