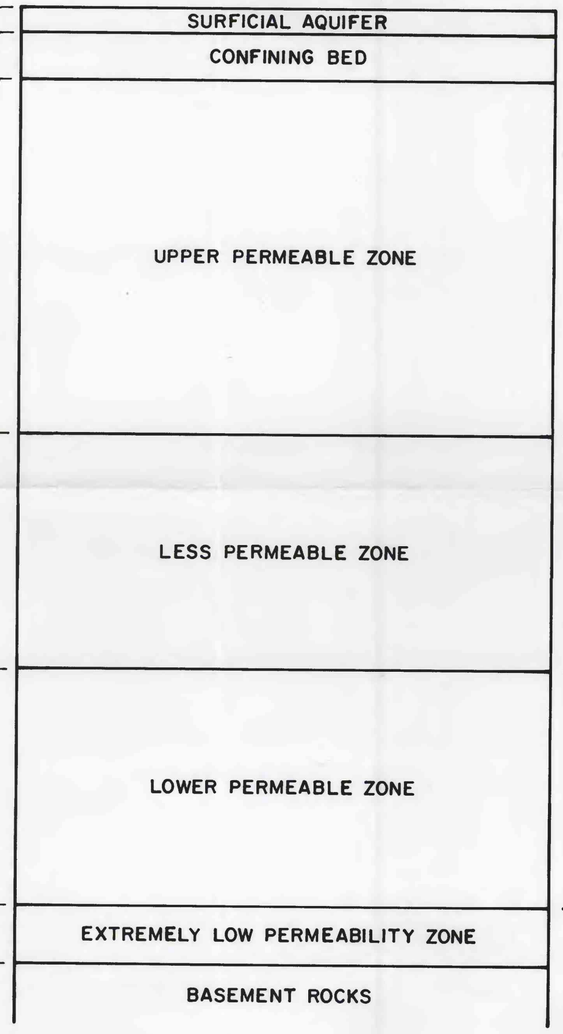
GEOLOGIC UNITS
(ADAPTED FROM FAULKNER, 1973, FIG. 11)

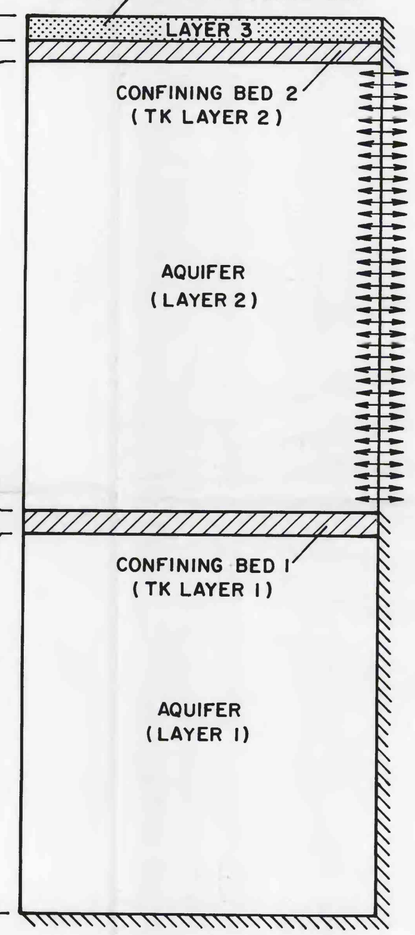
Era	System	Series	Stratigraphic unit	Thickness (feet)	Lithology	Aquifer
CENOZOIC	QUATERNARY	Holocene	Unnamed alluvial, lake, and windblown deposits	0-70±	Alluvium, freshwater marl, peats and muds in stream and lake bottoms. Also, some dunes and other windblown sand.	SURFICIAL AQUIFER
			unconformity			
		Pleistocene	Pamlico Formation and marine and estuarine terrace deposits	0-100±	Mostly marine quartz sand, unconsolidated, and generally well graded. Also, some fluviatile and lacustrine sand, clay, marl, and peat deposits.	
			unconformity			
	TERTIARY, UPPER	Pliocene	Jackson Bluff Formation	0-75±	Marine sands, argillaceous, carbonaceous; and sandy shell marl. Some phosphatic limestone.	Floridan aquifer
			Alachua Formation	0-100±	Nonmarine interbedded deposits of clay, sand, and sandy clay; much of unit is phosphatic, base characterized by rubble of phosphate rock and silicified limestone residuum in a gray and green phosphatic clay matrix.	
		Miocene	Fort[1/] Preston Formation	0-100±	Nonmarine fluviatile sand, white to gray, variegated orange, purple and red in upper part, fine- to coarse-grained to pebbly, clayey, crossbedded.	
			Hawthorn Formation	0-300±	Marine interbedded sand, cream, white and gray, phosphatic, often clayey; clay, green to gray and white, phosphatic, often sandy; dolomite, cream to white and gray, phosphatic, sandy, clayey; and some limestone, hard, dense, in part sandy and phosphatic. Tends to be sandy in upper part and dolomitic and limey in lower part.	
			unconformity			
	TERTIARY, LOWER	Eocene, Upper	Ocala Limestone[2/]: Upper[3/] member	0-100±	Marine limestone, cream to white, soft, granular, highly porous, coquinel; often consists almost entirely of tests of formanifers; cherty in places.	
			Ocala Limestone[2/]: Lower[4/] member	0-80±	Marine limestone, cream to tan and brown, granular, soft to firm, porous, highly fossiliferous; lower part at places is dolomite, grey and brown, crystalline, saccharoidal, porous.	
			unconformity			
		Eocene, Middle	Avon Park Limestone	200-400	Marine limestone, light brown to brown, finely fragmental, poor to good porosity, highly fossiliferous (mostly foraminifers); and dolomite, brown to dark brown, slightly porous to good porosity, crystalline, saccharoidal; both limestone and dolomite are carbonaceous or peaty; gypsum is present in small amounts.	
			unconformity			
		Eocene, Middle	Lake City Limestone	600-700	Marine limestone, light brown to brown, fragmental, highly fossiliferous, slightly carbonaceous or peaty and cherty; and dolomite, brown to dark brown with very minor amounts of gypsum and anhydrite. Unit is slightly porous to porous.	
		Eocene, Lower	Oldsmar Limestone	500-650	Marine limestone, light brown to chalky, white, porous, fossiliferous, with interbedded brown, porous, crystalline dolomite; minor amounts of anhydrite and gypsum.	
		Paleocene	Cedar Keys Limestone	400-700	Marine dolomite, light gray, hard, slightly porous to porous, crystalline, in part fossiliferous, with considerable anhydrite and gypsum, some limestone.	
			unconformity			
MESOZOIC	CRETACEOUS		Upper and Lower Cretaceous	1500-2500	Mostly marine Upper Cretaceous carbonats and evaporite rocks, sands and shales; thin Lower Cretaceous clastic section in some of area.	
			Coastal Plain Bedrock			
PALEOZOIC (?) and PRECAMBRIAN			DEVONIAN to PRECAMBRIAN (?)	Basement rocks	Marine Devonian, Silurian, and Ordovician quartose sandstone and dark shale, lower Paleozoic (?) or Precambrian (?) rhyolite, tuff, and agglomerate.	

1/ Usage of Bureau of Geology, Florida Department of Natural Resources.
2/ Ocala Group of Bureau of Geology, Florida Department of Natural Resources.
3/ Crystal River Formation of Ocala Group.
4/ Inglis Formation and Williston Formation (older to younger) of Ocala Group.

PRINCIPAL HYDROGEOLOGIC UNITS
(CONCEPTUAL MODEL)



EQUIVALENT LAYERS IN DIGITAL COMPUTER MODEL
CONSTANT-HEAD SOURCE BED



EXPLANATION

TYPICAL BOUNDARY CONDITIONS

- CONSTANT-HEAD BOUNDARY
- NO-FLOW BOUNDARY
- HEAD-CONTROLLED FLUX BOUNDARY
- CONFINING BED (SIMULATED AS A MEMBRANE BY TK LAYER WHICH HAS NO THICKNESS AND NO HORIZONTAL PERMEABILITY)

Figure 3.--Geologic units, hydrogeologic units, and equivalent layers used in computer model.