WYRICK 1960	LICHTLER 1960	CLARKE 1964	LEVE 1966	WOLANSKY 1978	MILLER 1980	BOGGESS 1986; ARTHUR AND OTHERS 2008	SWFWMD PRESENT
nonartesian aquifer	Shallow aquifer	water-table aquifer	shallow aquifer system	unconfined aquifer	surficial aquifer	surficial aquifer system	surficial aquifer
confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit

Not to scale

[SWFWMD, Southwest Florida Water Management District]

SPROUL AND OTHERS 1972	JOYNER, SUTCLIFFE 1976		WEDDERBURN AND OTHERS WOLANSKY 1982 1983			BARR 1996		TORRES AND OTHERS 2001		KNOCHENMUS 2006		ARTHUR AND OTHERS 2008		SWFWMD PRESENT	
confining unit	confining unit		confining unit	(	confining unit		confining unit		confining unit		confining unit		confining unit		confining unit
sandstone aquifer	Zone 1	System	Sandstone aquifer			_	Permeable Zone 1	L	Tamiami/ Peace River zone (PZ1)	E	Zone 1	_			Peace River aquifer
confining unit	confining unit	uifer	confining unit	ဟ	Tamiami -	oper vthorn uifer syste	confining unit	stem	confining unit	ystem	confining unit	aquifer syst	zones/ aquifers were not	n aquifer system	confining unit
upper Hawthorn aquifer	Zone 2	Hawthorn Adu	mid-Hawthorn aquifer	ediate	Hawthorn aquifer		Permeable Zone 2	ate aquifer sy	Upper Arcadia zone (PZ2)	ate aquifer s	Zone 2				upper Arcadia aquifer
confining unit	confining unit		confining unit	Interm	confining unit	nedi	confining unit	nedi	confining unit	nedi	confining unit	ediate nediat		awthorn	confining unit
lower Hawthorn aquifer	Zone 3	FAS	lower Hawthorn / Tampa producing	Int	Lower Hawthorn - upper Tampa aquifer	Intern	Permeable Zone 3	Intern	Lower Arcadia zone (PZ3)	Intermedi	Zone 3	Interm		Hawt	lower Arcadia aquifer
confining unit	confining unit		zone confining unit	(	confining unit		confining unit		confining unit		confining unit		confining unit		confining unit

Not to scale

[FAS, Floridan aquifer system; PZ, permeable zone; SWFWMD, Southwest Florida Water Management District]

STRINGFIELD 1936	PARKER AND OTHERS 1955	STRINGFIELD 1966	MILLER 1982	BUSH 1982	MILLER 1986	REESE AND RICHARDSON 2008	ARTHUR AND OTHERS 2008	WILLIAMS AND KUNIANSKY 2016	SWFWMD PRESENT
confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit
chief water-bearing					Upper Floridan aquifer	Lower Hawthorn producing zone Upper Floridan aquifer		Upper permeable zone	upper Floridan aquifer Ocala low- permeability zone
artesian formations	Floridan aquifer	principal artesian aquifer	permeable zone	Upper permeable zone	middle confining unit I	MC1 (middle semiconfining unit and/or confining unit, upper part)	Upper Floridan aquifer	System  Park low  Park low  Poriginal adnitication  COCAPIPZ)  (OCAPIPZ)	Avon Park high- permeability zone <sup>2</sup> middle confining unit I
			less limestone aduifer system some some less	Tertiary limestone aquifer successions and successions are successions and successions and successions are successions are successions and successions are successions are successions and successions are successions are successions are successions and successions are suc	Lower Floridan aquifer below middle confining unit I	Avon Park permeable zone  MC2 (middle	Floridan aquifer sy	Avon Park Permeable Zone	Avon Park high- permeability zone <sup>2</sup> lower Floridan aquifer below middle confining unit l
			less permeable zone	Intra-aquifer low-permeablity zone	middle confining unit II or VI	semiconfin- ing unit and/or confining unit, lower part)	Middle Floridan confining unit <sup>1</sup>		middle confining unit II or VI
			permeable zone	Lower permeable zone	Lower Floridan aquifer below middle confining unit II or VI middle confining unit VIII³ Lower Floridan aquifer below middle confining unit VIIII	Lower Floridan aquifer	Lower Floridan aquifer	Lower Avon Park permeable zone Glauconite marker unit (GLAUCIpu)  Oldsmar permeable zone  zone	lower Floridan aquifer below middle confining unit II or VI middle confining unit VIII³ lower Floridan aquifer below middle confining unit VIII
			confining unit	confining unit	confining unit	confining unit	confining unit	confining unit	confining unit

## Not to scale

[Terms shown are for hydrogeologic units present within the Southwest Florida Water Management District (SWFWMD)]

<sup>&</sup>lt;sup>1</sup>Arthur and others acknowledge existence of the middle confining unit I within the Southwest Florida Water Management but do not map it for Special Publication 68.

<sup>&</sup>lt;sup>2</sup>The Avon Park high-permeability zone (SWFWMD fracture zone) crosses middle confining unit I in central Polk County; therefore, it is present above the middle confining unit I in northern Polk and below the middle confining unit I in southern Polk.

<sup>&</sup>lt;sup>3</sup>The middle confining unit VIII of Miller (1986) in south Florida was extended across the entire peninsula as the Glauconite marker unit based on new data in Williams and Kuniansky (2016).

SERIES			LOGIC NITS	HYDROGEOLOGIC UNITS				
Holocei			rentiated					
Pleistoce	sand and clay			surficial				
Pliocen	e	Cypresshead Fm Caloosahatchee Fm			aquifer			
1 1100011				ami Fm				
	late		atchie	Bone Valley		confining unit		
	middle	d <sub>r</sub>	Coosawhat Formation	Feace Rivel Formation Member	∕stem¹	Peace River aquifer		
Miocene		irou	ပ္ပင္တ	P O	ır sy	confining unit		
Milocone		Hawthorn Group	ation		Hawthorn aquifer system	upper Arcadia aquifer		
	early	la V	orm			confining unit		
	<b>,</b>		Arcadia Formation	Tampa Member² Nocatee	Hawt	lower Arcadia aquifer		
	late		⋖	Member		confining unit		
Oligocene	early	Suwannee Limestone						
	late	Ocala Limestone				Ocala low- upper permeability zone		
Eocene	middle		Avoi	n Park nation	Floridan aquifer system	Floridan aquifer  Avon Park high- permeability zone <sup>3</sup> middle confining unit unit I  Avon Park high- permeability zone <sup>3</sup> lower Floridan aquifer below middle confining unit I middle confining unit II or VI		
	early		Oldsmar Formation			lower Floridan aquifer below middle confining unit II or VI middle confining unit VIII <sup>4</sup> lower Floridan aquifer below middle confining		
Paleoce	Cedar Keys Formation			unit VIII  confining unit				

This chart may be used to correlate the chronostratigraphic and lithostratigraphic units of the current hydrogeologic framework model of the Southwest Florida Water Management District

Note: ¹The Hawthorn aquifer system was previously referred to as the intermediate aquifer system. It is present only in the southern part of the District and pinches out north of central Hillsborough County. Where no aquifers are present, the Hawthorn sediments are confining and pinch out north of central Pasco County. 2The upper Floridan aquifer includes the Tampa Limestone where confinement is not present. 3The Avon Park highpermeability zone (SWFWMD fracture zone) crosses middle confining unit I in central Polk County; therefore, it is present above the middle confining unit I in northern Polk and below the middle confining unit I in southern Polk. <sup>4</sup>The middle confining unit VIII of Miller (1986) was extended beyond the original extent in south Florida based on new data (collected after 1986).

Not to scale

**GEOLOGIC** 

**HYDROGEOLOGIC** 

confining unit

**SERIES** UNITS **UNITS** Holocene undifferentiated sand and clay Pleistocene surficial Cypresshead Fm aquifer **Pliocene** Caloosahatchee Fm Tamiami Fm Coosawhatchie confining unit **Alachua Formation** late Peace River Formation Meu Bone Valley Formation o. Valley Member Peace River Hawthorn aquifer system aquifer middle Hawthorn Group confining unit Miocene upper Formation Arcadia aquifer confining unit early lower Tampa Arcadia Arcadia Member<sup>2</sup> Nocatee aquifer Member confining unit late Oligocene Suwannee Limestone early Crystal River Fm Ocala low-Ocala Williston Formation
Inglis Formation upper permeability zone late Limestone Floridan aquifer Avon Park high-Floridan aquifer system permeability zone middle confining unit unit I **Avon Park** middle Avon Park high-**Formation** permeability zone **Eocene** lower Floridan aguifer below middle confining unit I **Lake City Limestone** middle confining unit II or VI lower Floridan aquifer below middle confining Oldsmar unit II or VI early **Formation** middle condfining unit VIII lower Floridan aquifer below middle confining unit VIII Cedar Keys

Not to scale

**Paleocene** 

This chart may be used to correlate the chronostratigraphic and lithostratigraphic units of the current hydrogeologic framework model of the Southwest Florida Water Management District.

Note: ¹The Hawthorn aquifer system was previously referred to as the intermediate aquifer system. It is present only in the southern part of the District and pinches out north of central Hillsborough County. Where no aquifers are present, the Hawthorn sediments are confining and pinch out north of central Pasco County. ²The upper Floridan aquifer includes the Tampa Limestone where confinement is not present. ³The Avon Park high-permeability zone (SWFWMD fracture zone) crosses middle confining unit I in central Polk County; therefore, it is present above the middle confining unit I in northern Polk and below the middle confining unit I in southern Polk. ⁴The middle confining unit VIII of Miller (1986) was extended beyond the original extent in south Florida based on new data (collected after 1986).

Formation

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