

Figure 2.3-1 Major Hydrological Features Near Units 6 & 7



Figure 2.3-2 Areas Surrounding the Turkey Point Plant Property







Figure 2.3-4 General Arrangement of Units 6 & 7



Figure 2.3-5 Map of South Florida Watershed Subregions

Modified from Marella 1999

Figure 2.3-6 Hydrologic Features and Predevelopment Flow Patterns within the South Florida Watershed



Modified from McPherson and Halley 1997



Figure 2.3-7 Selected Public Lands and Post-Development Flow Alteration within the South Florida Watershed

Modified from McPherson and Halley 1997





Modified from Renken et al. 2005





Modified from Renken et al. 2005





Modified from Lietz 1999





Location of Turkey Point Units 6 & 7 is approximate.

Modified from Cooper and Lane 1987



Figure 2.3-12 Locations of NOAA Tide Gages



Figure 2.3-13 Biscayne Bay Bathymetry



Figure 2.3-14 Designed Layout of the Industrial Wastewater Facility



Figure 2.3-15 Locations of Wetlands Designated by U.S. Fish and Wildlife Services Near the Turkey Point Plant Property



Figure 2.3-16 Physiographic Features

Modified from Randazzo and Jones 1997 and White 1970

Figure 2.3-17 Regional Generalized Hydrostratigraphic Column

Series		Geologic unit		Marker units and horizons	Lithology		Hydrogeologic unit		ximate kness eet)		
HOLOCENE and PLEISTOCENE		Undifferentiated and various Pleistocene-aged formations			Quartz sand; silt; clay; shell; limestone; sandy shelly limestone	SYSTEM	WATER-TABLE / BISCAYNE AQUIFER	20-400		EXPLANATION	
PLIOCENE		TAMIAMI FORMATION			Silt; sandy clay; sandy, shelly limestone; calcareous sand- stone; and quartz sand	SURFIC AQUIFER	CONFINING BEDS LOWER TAMIAMI AQUIFER			* APPZ	Geologic unit(s) missing in some areas Avon Park
MIOCENE		N GROUP	PEACE RIVER FORMATION		Interbedded sand, silt, gravel, clay, carbonate, and phosphatic sand	NATE AQUIFER TEM OR NING UNIT	CONFINING UNIT SANDSTONE AQUIFER OR PZ1(2) CONFINING UNIT	0-900		BZ LHMU PZ1,	BZ Boulder Zone BZ Boulder Zone LHMU Lower Hawthorn marker unit PZ1, Permeable zones in weet
AND LA OLIGOC	ATE ENE	HAWTHORN	ARCADIA FORMATION	LHMU	Sandy micritic limestone; marlstone; shell beds; dolomite; phosphatic sand and carbonate; sand; silt;	INTERMED SYS CONFII	MID-HAWTHORN AQUIFER OR PZ2 CONFINING UNIT	AWTHORN ER OR		PZ3 20105 III West- central Florida MAP Middle Avon Park marker	
			HAWTHORN UNIT		and clay		LOWER HAWTHORN PRODUCING ZONE PZ3	0-300		GLAUC Glauconite	
EARLY OLIGOCENE		SUWANNEE LIMESTONE			Fossiliferous, calcarenitic limestone	SYSTEM	UPPER FLORIDAN AQUIFER	100-800		horizon PLEISTOCENE-AGED FORMATIONS	
	LATE	LI	OCALA * MESTONE		Chalky to fossiliferous, mud-rich to calcarenitic limestone	-oridan aquifer	(UF)			IN SOUTHEASTERN FLORIDA:	
EOCENE	MIDDLE	A' FC	VON PARK DRMATION	MAP	Fine-grained, micritic to fossiliferous limestone; dolomitic limestone; and dolostone. Also contains in the lower part aphydrite/		MIDDLE CONFINING UNIT (MC1) APPZ	0-600	500-1,500	Satilla F Paml Miami I Fort Tho Anasta:	Formation (formerly lico Sand) Limestone Ompson Formation sia Formation
				GLAUC	gypsum as bedded deposits, or more commonly as pore filling material. Glauconitic		LOWER	0-1,800 Z 0-700		Key Ları	go Limestone
	EARLY	• FC	ILDSMAR IRMATION		limestone near top of Oldsmar Formation in some areas		AQUIFER BZ				
PALEOCENE		CE	DAR KEYS	1	Dolomite and dolomitic limestone						
		TORMATION			Massive anhydrite beds		SUB-FLORIDAN CONFINING UNIT	1,200?			

Source: Reese and Richardson 2008





Source: U.S. EPA 2011

Figure 2.3-19 Site Hydrostratigraphic Column

ERATHEM	SYSTEM		нү	DROGEOLOGIC UNIT	STRATIGRAHIC UNIT		LITHOLOGY	APPROXIMATE TOP ELEVATION (feet NAVD 88)	APPROXIMATE THICKNESS (feet)
CENOZOIC	ĹΚΥ	TOCCENE NE TOCCENE	- -	Biscayne aquifer	Miami Limestone		sandy oplitic limestone	-3	25
	TERNA		systen		Key Largo Limestone		well indurated, vuggy, coralline limestone	-28	22
	QUA	PLEIS	quifer		Fort Thompson Formation		poor/well indurated fossiliferous limestone	-50	65
	TERTIARY	PLIOCENE	Surficial a	Semi-confining unit	Tamiami Formation		sand and silt with calcarenite limestone	-115 105	
		MIOCENE	ate confining unit		thorn Group	Peace River Formation	silty calcareous sand and silt	formation or natural gar -220	ontact based on nma signature 235
				Intermedia	Hawt	Arcadia Formation	calcareous wackestone with indurated limestones, sandstone, and sand	-455 drilling ended at	>160 -616.5 feet NAVD 88

Color represents similar composition (carbonates, clastics, and organics).

Figure 2.3-20 Not Used





Modified from Miller 1990

Figure 2.3-22 Base of the Biscayne Aquifer



Modified from Miller 1990



Figure 2.3-23 Location of the Freshwater-Saltwater Interface

Modified from Langevin 2001



Figure 2.3-24 Thickness of the Upper Floridan Aquifer

Modified from Reese and Richardson 2008



Figure 2.3-25 Units 6 & 7 Observation Well Locations





Modified from Langevin 2001





Modified from Langevin 2001





Figure 2.3-28 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, June 29, 2008 (Sheet 2 of 2) Low Tide

























