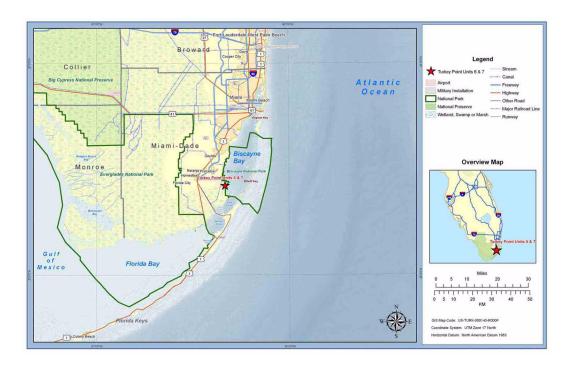
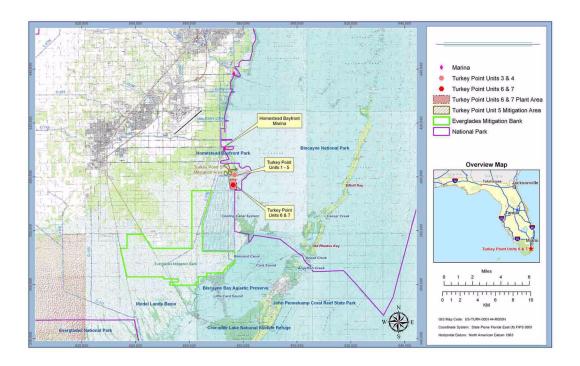
Figure 2.3-1 Major Hydrological Features Near Units 6 & 7



2.3-152 Revision 2

Figure 2.3-2 Areas Surrounding the Turkey Point Plant Property



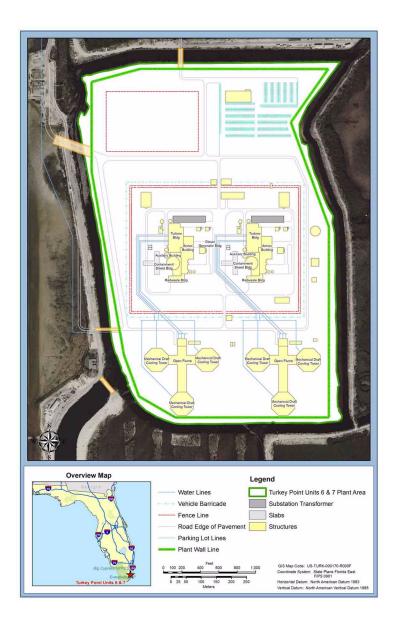
2.3-153 Revision 2

Figure 2.3-3 The Turkey Point Plant Property Including the Industrial Wastewater Facility



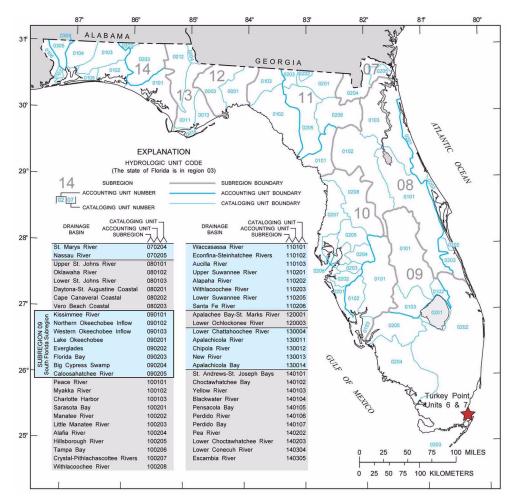
2.3-154 Revision 2

Figure 2.3-4 General Arrangement of Units 6 & 7



2.3-155 Revision 2

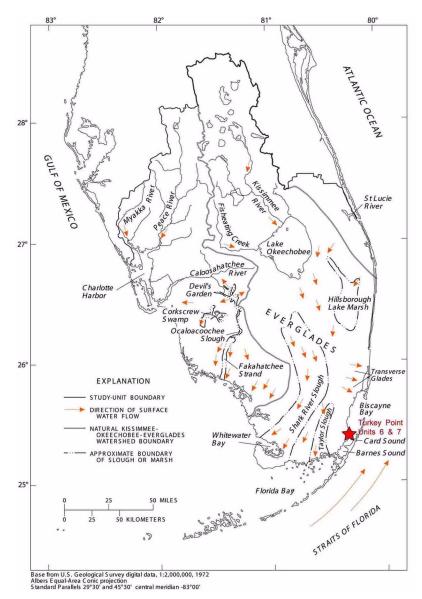
Figure 2.3-5 Map of South Florida Watershed Subregions



Modified from Marella 1999

2.3-156 Revision 2

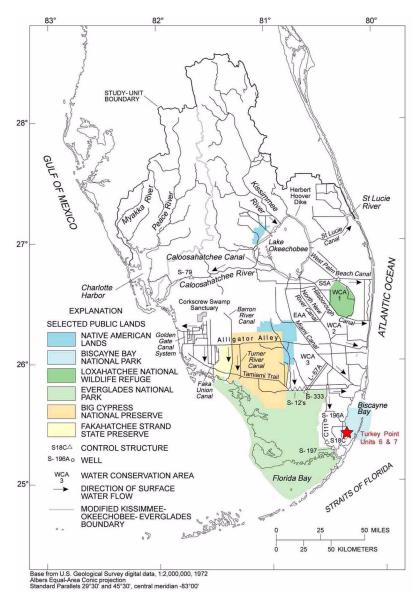
Figure 2.3-6 Hydrologic Features and Predevelopment Flow Patterns within the South Florida Watershed



Modified from McPherson and Halley 1997

2.3-157 Revision 2

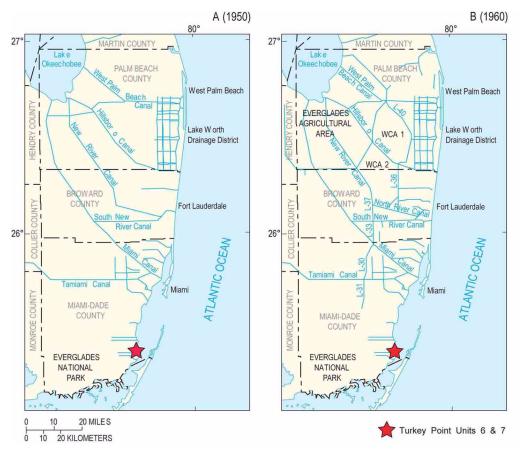
Figure 2.3-7 Selected Public Lands and Post-Development Flow Alteration within the South Florida Watershed



Modified from McPherson and Halley 1997

2.3-158 Revision 2

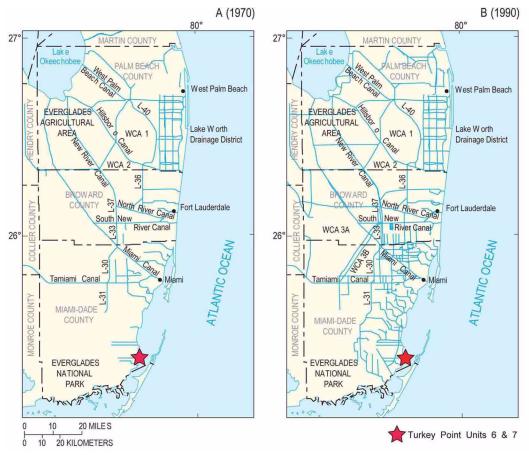
Figure 2.3-8 Surface Water Conveyance System in the South Florida Region in (A) 1950 and (B) 1960



Modified from Renken et al. 2005

2.3-159 Revision 2

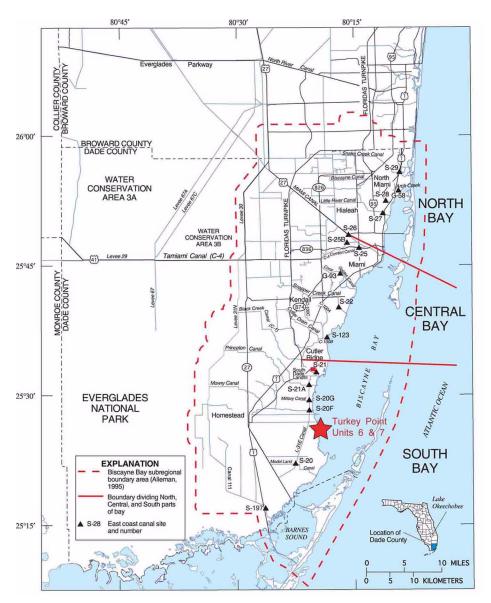
Figure 2.3-9 Surface Water Conveyance System in the South Florida Region in (A) 1970 and (B) 1990



Modified from Renken et al. 2005

2.3-160 Revision 2

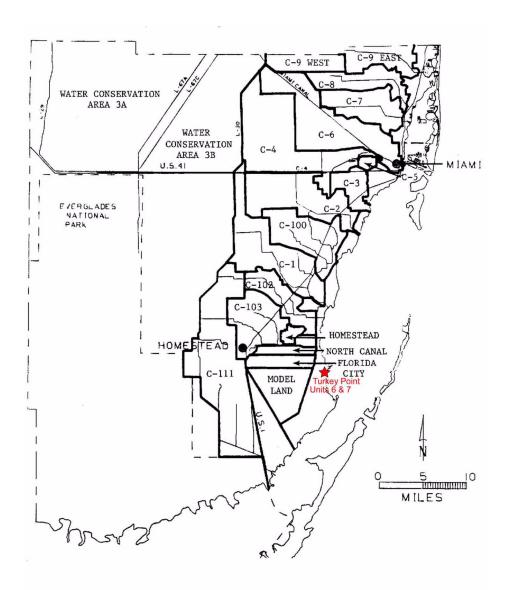
Figure 2.3-10 Locations of ENP-SDCS and C&SF Project Canals, Coastal Control Structures, and Planning Zones of the Biscayne Bay



Modified from Lietz 1999

2.3-161 Revision 2

Figure 2.3-11 Locations of Eastern Dade County Surface Water Management Basins

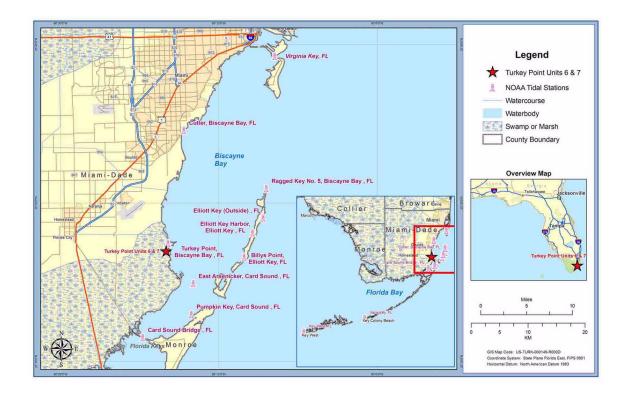


Location of Turkey Point Units 6 & 7 is approximate.

Modified from Cooper and Lane 1987

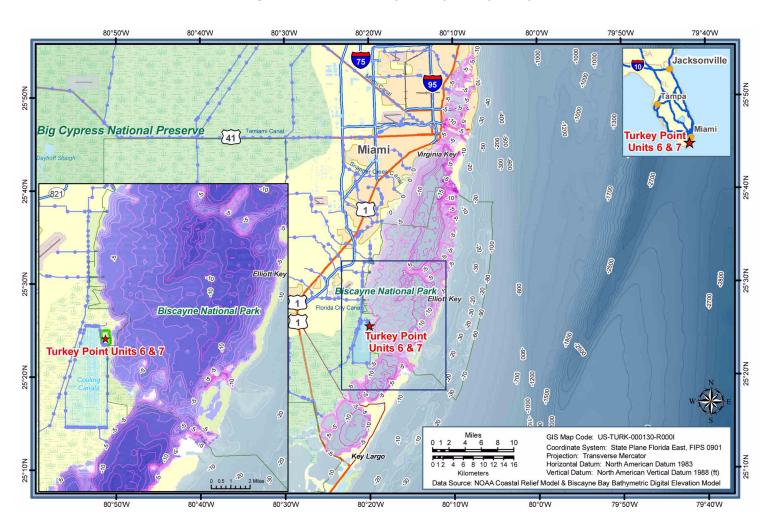
2.3-162 Revision 2

Figure 2.3-12 Locations of NOAA Tide Gages



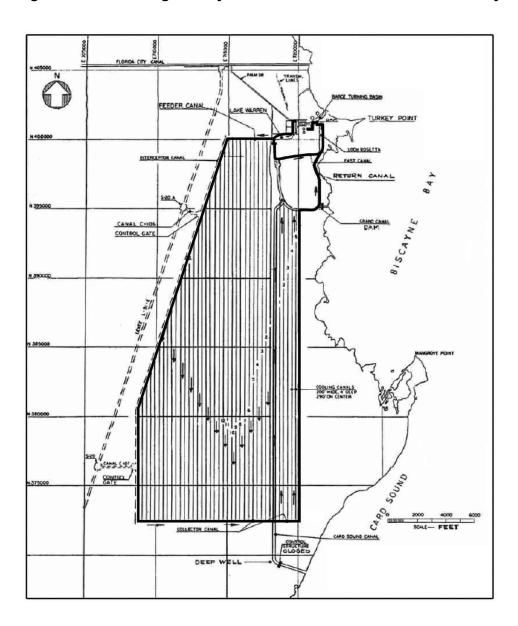
2.3-163 Revision 2

Figure 2.3-13 Biscayne Bay Bathymetry



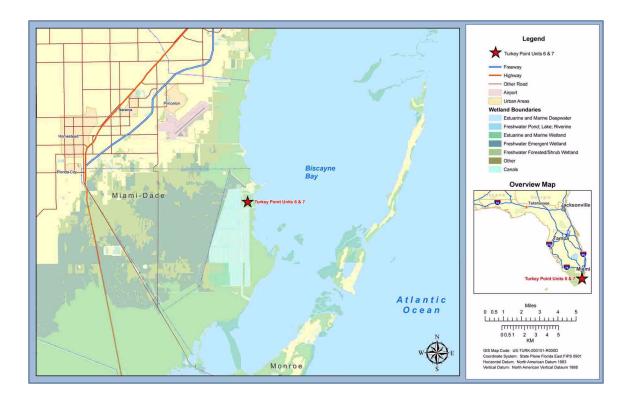
2.3-164 Revision 2

Figure 2.3-14 Designed Layout of the Industrial Wastewater Facility



2.3-165 Revision 2

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



2.3-166 Revision 2

#### Turkey Point Units 6 & 7 COL Application Part 3 — Environmental Report

Figure 2.3-16 Physiographic Features



Modified from Randazzo and Jones 1997 and White 1970

2.3-167 Revision 2

# Turkey Point Units 6 & 7 COL Application Part 3 — Environmental Report

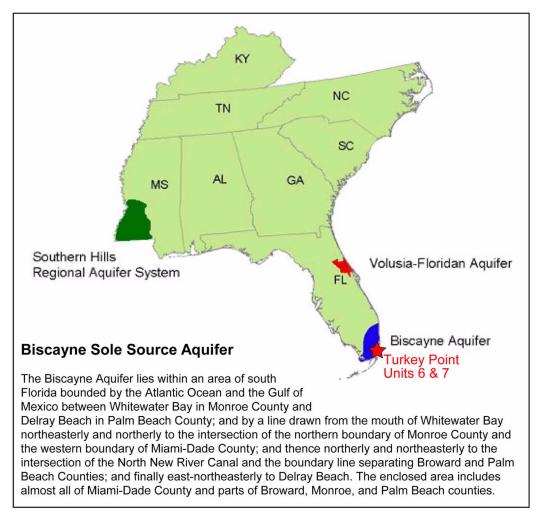
Figure 2.3-17 Regional Generalized Hydrostratigraphic Column

Series		Geologic unit		Marker units and horizons	Lithology Hydrogeologic unit		Hydrogeologic unit	thick	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	SURFICIAL AQUIFER SYSTEM	CONFINING BEDS LOWER TAMIAMI AQUIFER			* APPZ	Geologic unit(s) missing in some areas Avon Park
MIOCE		N GROUP	PEACE RIVER FORMATION	LHMU	Interbedded sand, silt, gravel, clay, carbonate, and phosphatic sand	INTERMEDIATE AQUIFER SYSTEM OR CONFINING UNIT	CONFINING UNIT  SANDSTONE AQUIFER OR PZ1(?)  CONFINING UNIT	0-900		permeable zone BZ Boulder Zone LHMU Lower Hawthorn marker unit PZ1, Permeable PZ2, zones in west-	
AND LA OLIGOC		HAWTHORN	ARCADIA FORMATION		Sandy micritic limestone; marlstone; shell beds; dolomite; phosphatic sand and carbonate; sand; silt;	INTERMEI SYS CONFI	MID-HAWTHORN AQUIFER OR PZ2 CONFINING UNIT			PZ3	PZ3 central Florida  MAP Middle Avon Park marker
			BASAL HAWTHORN UNIT		and clay		LOWER HAWTHORN PZ3	0-300		GLAUC	horizon Glauconite
EARLY OLIGOCENE		** SUWANNEE LIMESTONE			Fossiliferous, calcarenitic limestone  UPPER FLORIDAN AQUIFER  100-800		-800	marker horizon  PLEISTOCENE-AGED FORMATIONS			
EOCENE	LATE	OCALA LIMESTONE			Chalky to fossiliferous, mud-rich to calcarenitic limestone		(UF)			IN SOUTHEASTERN FLORIDA:	
	MIDDLE		VON PARK DRMATION	MAP	Fine-grained, micritic to fossiliferous limestone; dolomitic limestone; and dolostone. Also contains in the lower part anhydrite/	AQUIFER	MIDDLE CONFINING UNIT (MC1)  APPZ  MIDDLE CONFINING UNIT (MC2)	0-600	500-1,500	Pam Miami l Fort Tho Anastas	formation (formerly ico Sand) imestone impson Formation ia Formation
				GLAUC	gypsum as bedded deposits, or more commonly as pore filling material. Glauconitic	FLORIDAN	LOWER FLORIDAN	0-1,800 0-700		Key Lar	go Limestone
	EARLY		OLDSMAR ORMATION		limestone near top of Oldsmar Formation in some areas		AQUIFER BZ				
PALEOCENE		CEDAR KEYS FORMATION			Dolomite and dolomitic limestone		CUD EL ODIDAN				
					Massive anhydrite beds		SUB-FLORIDAN CONFINING UNIT	1,2	00?		

Source: Reese and Richardson 2008

2.3-168 Revision 2

Figure 2.3-18 Approximate Boundaries of Region 4 Sole Source Aquifers



Modified from U.S. EPA 2008a

2.3-169 Revision 2

### Turkey Point Units 6 & 7 COL Application Part 3 — Environmental Report

Figure 2.3-19 Site Hydrostratigraphic Column

ERATHEM	SYSTEM	SERIES	нү	DROGEOLOGIC UNIT	STRATIGRAHIC UNIT		LITHOLOGY	APPROXIMATE TOP ELEVATION (feet NAVD 88)	APPROXIMATE THICKNESS (feet)
	١٢	HOLOCENE	Surficial aquifer system	Biscayne aquifer		organic muck	organic soil and silt	0	3
CENOZOIC	IAR	PLEISTOCENE			Miami Limestone		sandy, oolitic limestone	-3	25
	QUATERNARY				Key Largo Limestone		well indurated, vuggy, coralline limestone	-28	22
	auA				Fort Thompson Formation		poor/well indurated fossiliferous limestone	-50	65
		PLIOCENE Surficial ac		Semi-confining unit	Tamiami Formation		sand and silt with calcarenite limestone	-115	105
	TERTIARY	MIOCENE		Intermediate confining unit	Hawthorn Group	Peace River Formation	silty calcareous sand and silt	formation contact based on natural gamma signature  -220 235	
				Intermediat	Hawth	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).

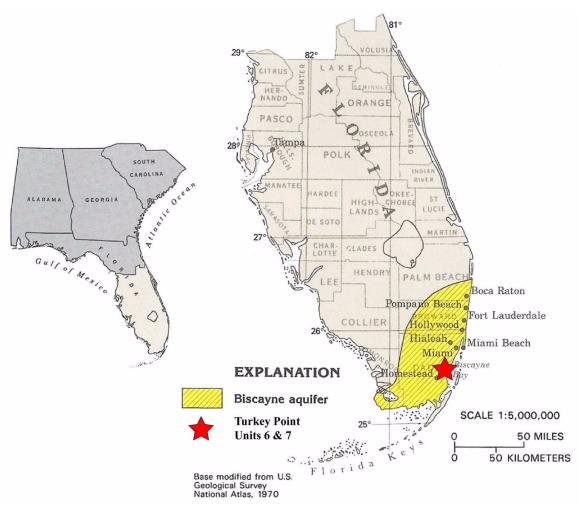
2.3-170 Revision 2

## Turkey Point Units 6 & 7 COL Application Part 3 — Environmental Report

Figure 2.3-20 Not Used

2.3-171 Revision 2

Figure 2.3-21 Location of the Biscayne Aquifer in Southeast Florida

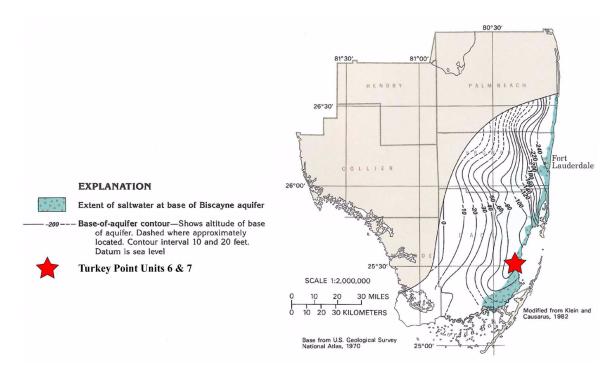


Modified from Miller 1990

2.3-172 Revision 2

#### Turkey Point Units 6 & 7 COL Application Part 3 — Environmental Report

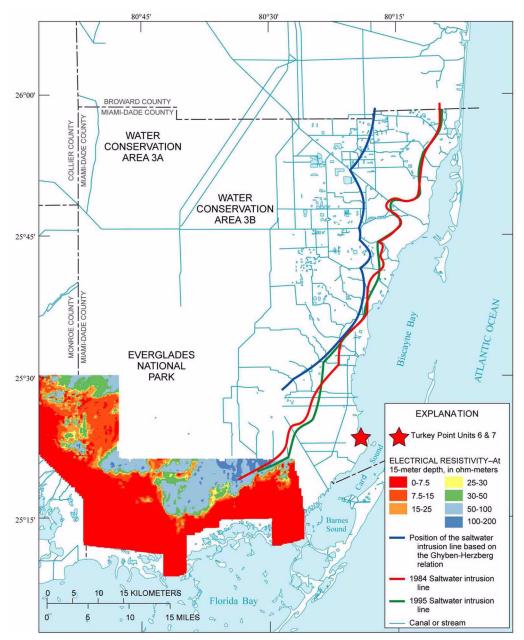
Figure 2.3-22 Base of the Biscayne Aquifer



Modified from Miller 1990

2.3-173 Revision 2

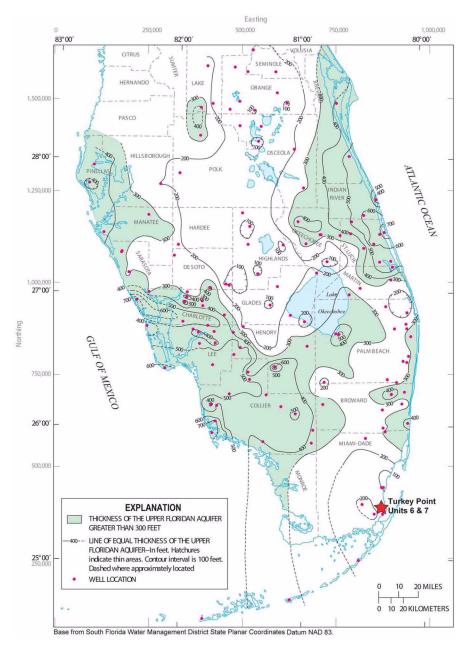
Figure 2.3-23 Location of the Freshwater-Saltwater Interface



Modified from Langevin 2001

2.3-174 Revision 2

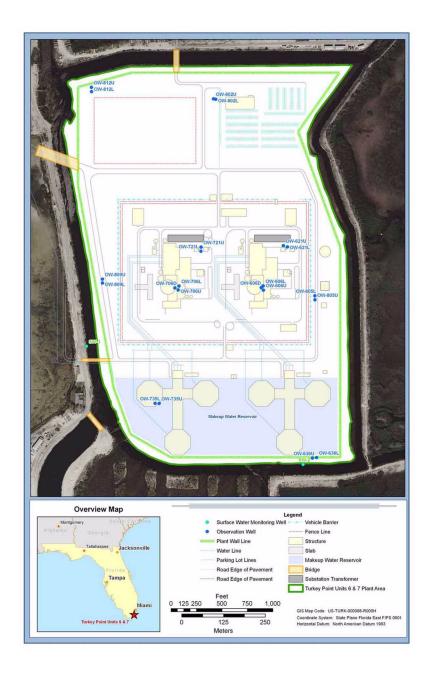
Figure 2.3-24 Thickness of the Upper Floridan Aquifer



Modified from Reese and Richardson 2008

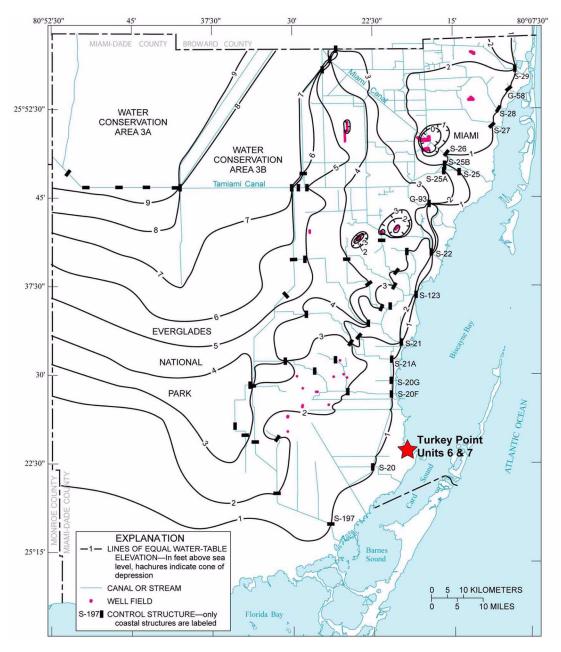
2.3-175 Revision 2

Figure 2.3-25 Observation Well Location Plan



2.3-176 Revision 2

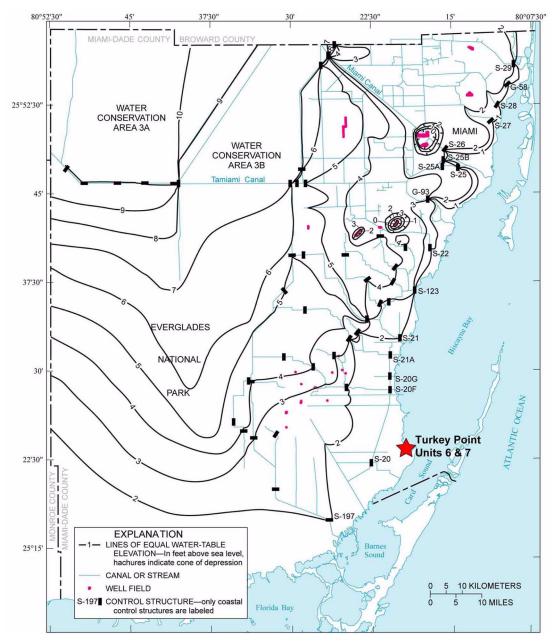
Figure 2.3-26 May 1993 Biscayne Aquifer Potentiometric Surface Map



Modified from Langevin 2001

2.3-177 Revision 2

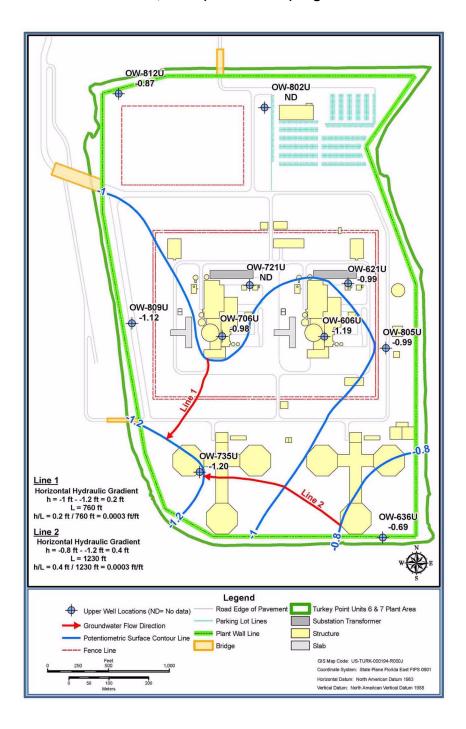
Figure 2.3-27 November 1993 Biscayne Aquifer Potentiometric Surface Map



Modified from Langevin 2001

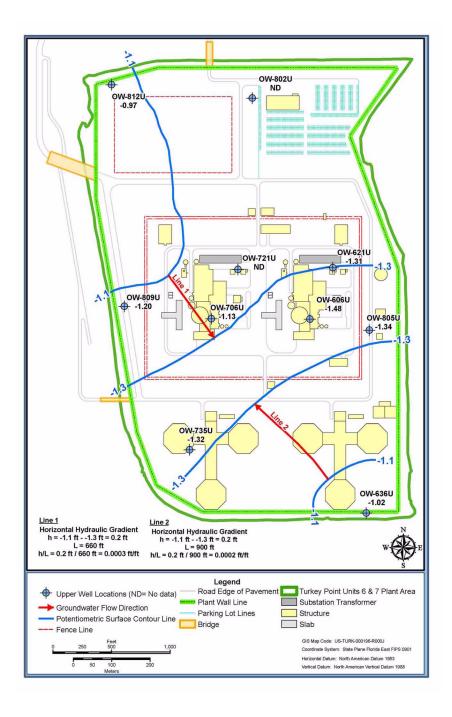
2.3-178 Revision 2

Figure 2.3-28 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, June 29, 2008 (Sheet 1 of 2) High Tide



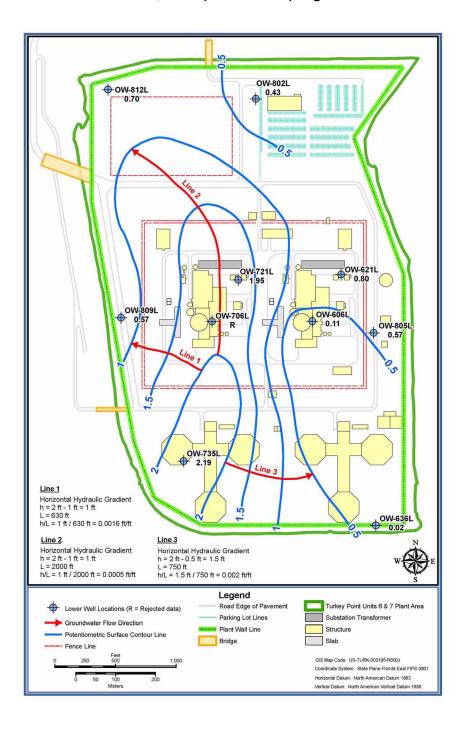
2.3-179 Revision 2

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



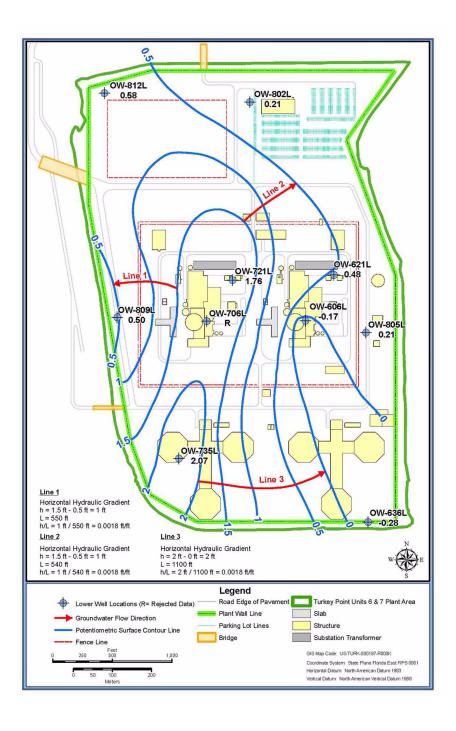
2.3-180 Revision 2

Figure 2.3-29 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, June 29, 2008 (Sheet 1 of 2) High Tide



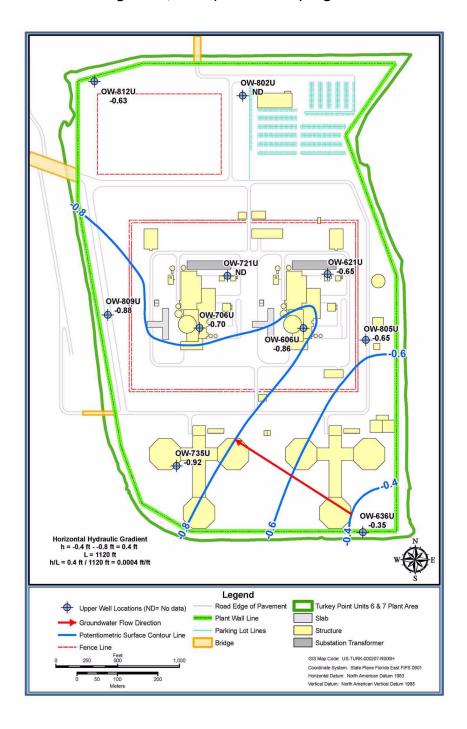
2.3-181 Revision 2

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



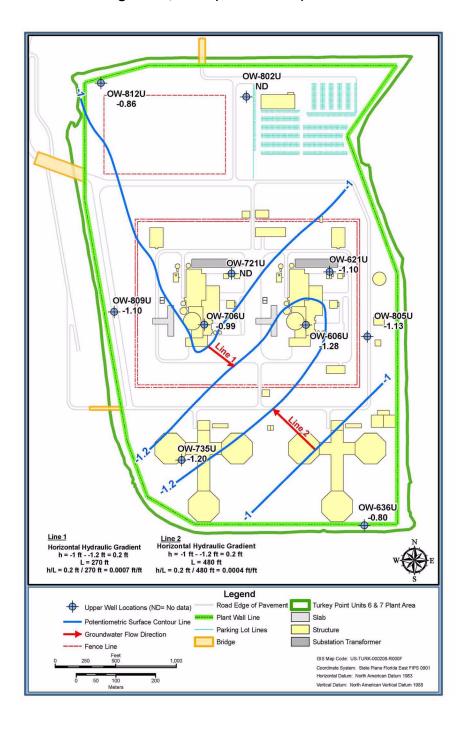
2.3-182 Revision 2

Figure 2.3-30 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, August 15, 2008 (Sheet 1 of 2) High Tide



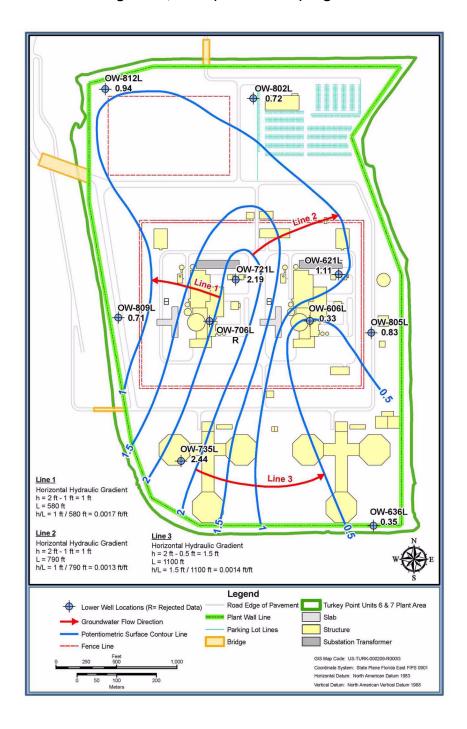
2.3-183 Revision 2

Figure 2.3-30 Biscayne Aquifer Potentiometric Surface Map, Upper Monitoring Interval, August 15, 2008 (Sheet 2 of 2) Low Tide



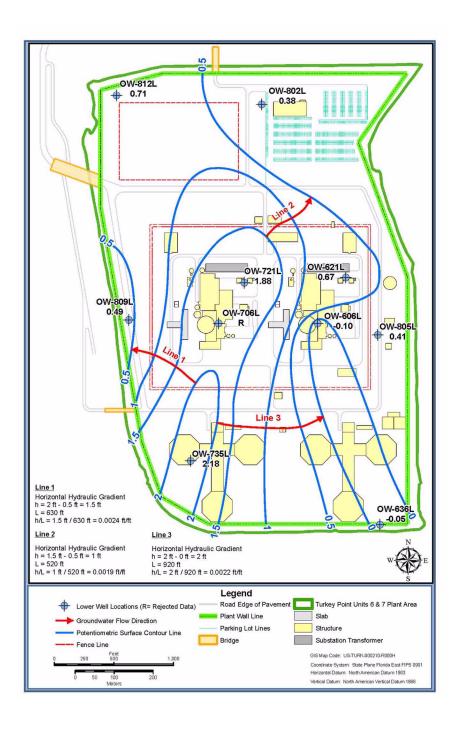
2.3-184 Revision 2

Figure 2.3-31 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, August 15, 2008 (Sheet 1 of 2) High Tide



2.3-185 Revision 2

Figure 2.3-31 Biscayne Aquifer Potentiometric Surface Map, Lower Monitoring Interval, August 15, 2008 (Sheet 2 of 2) Low Tide



2.3-186 Revision 2