

Water-Data Report 2006

262803080041101 Local number PB 1714. USGS Observation Well near Delray Beach, FL.

Surficial Aquifer System

Palm Beach County, FL

LOCATION.--Lat 26°27'55", long 80°04'11.5" referenced to North American Datum of 1927, in SE ¼ NW ¼ NW ¼ sec.16, T.46 S., R.43 E., Palm Beach County, FL, Hydrologic Unit 03090202, 16 ft east of the Florida East Coast Railroad and 22 ft north of the centerline of NE 2nd Street, 0.10 mi west of U.S. Highway 1.

WATER-QUALITY RECORDS

WELL CHARACTERISTICS.-- Drilled, observation well, diameter 2 in., depth 159 ft.

DATUM.--Land-surface datum is 17.8 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of casing, 17.85 ft above National Geodetic Vertical Datum of 1929, July 2, 2000, to present. Prior to June 10, 2003, measuring point was incorrectly considered to be 18.10 ft above NGVD. See REMARKS.

PERIOD OF RECORD.--September 2000 to current year.

INSTRUMENTATION.--Monthly measurement with chalked tape.

REMARKS.--Well is also used for salinity monitoring, including an annual induction log. Induction logs are used to assess the movement of the fresh-water/salt-water interface on ground water. See [RECORDS OF BULK CONDUCTIVITY](#). Induction log data contains spikes that occur at 40 ft increments. The spike data could be caused by well centralizers. A calibration error was found to have affected some of the historical bulk conductivity logs. Bulk conductivity logs prior to the water year 2002 had been calibrated to a standard of 1,301 mS/m. For these calibrations an internal setting limited the probe response to 1,000 mS/m. Data for the affected years was corrected by applying a 0.7686 multiplier. The figures of water level as elevation, in feet NGVD, prior to October 2003 are in error. Corrected records are in files of the U.S. Geological Survey. See DATUM.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.41 ft NGVD, Oct. 6, 2004; lowest, 2.85 ft NGVD, Jan. 7, 2002.

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Date	Time	Elev- ation, feet above NGVD (72020)	Specif. conduc- tance, wat unf μS/cm 25 degC (00095)	Chlor- ide, water, fltrd, mg/L (00940)
Nov				
17...	1553	7.19	498	28
Dec				
21...	1317	7.18	--	--
Jan				
12...	0803	6.49	--	--
Feb				
10...	1240	6.19	489	30
Mar				
03...	1320	5.87	--	--
31...	1325	5.23	--	--
May				
01...	0930	4.99	498	28
Jun				
20...	0000	4.97	--	--
Jul				
10...	1625	5.71	--	--
Aug				
10...	1217	4.66	488	30
Sep				
14...	1256	5.94	--	--

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INDUCTION LOG

