

Water-Data Report 2011

263117082051002 Local number L 2821.

Intermediate aquifer system
Hawthorn Limestone Aquifer

Lee County, FL

LOCATION.--Lat 26°31'18.0", long 82°05'09.2" referenced to North American Datum of 1983, in SE ¼ SW ¼ sec.26, T.45 S., R.22 E., Lee County, FL, Hydrologic Unit 03100103, 32 ft west of H. Stringfellow Road (County Road 767) and 6.6 mi south of Pine Island Road and 0.9 mi north of Saint James City Post Office.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 340 ft. Upper casing diameter 4 in.; top of first opening 290 ft, bottom of last opening 340 ft. Artesian well, open hole 290 to 340 ft.

DATUM.--Land-surface datum is 3.40 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of 3/4-in. four-way brass fitting, for chalked-tape measurements, 7.07 ft above National Geodetic Vertical Datum of 1929 (NGVD), Feb. 5, 2009, to present. From Oct. 1978 to present, measuring point has been top of 8-in. well casing, for pressure gage measurements, 6.55 ft above NGVD. See REMARKS.

PERIOD OF RECORD.--October 1978 to August 2003 (monthly), August 2003 to current year. See REMARKS.

GAGE.--Satellite data collection platform, with pressure transducer.

REMARKS.--Data from artesian wells measured with a calibrated pressure gage are considered accurate to +/- 0.1 ft. This artesian well is also used for salinity monitoring. The well lost pressure on December 11, 2006 to July 21, 2008. During this period, instrumentation was not available for continuous recording, and biannual salinity monitoring could not be accomplished during 2008. The continuous water-level record is considered poor because of pressure transducer inaccuracy. The wellhead was modified February 5, 2009, to allow access for pressure gage readings, chalked tape measurements, and salinity monitoring, throughout changes in potentiometric head.

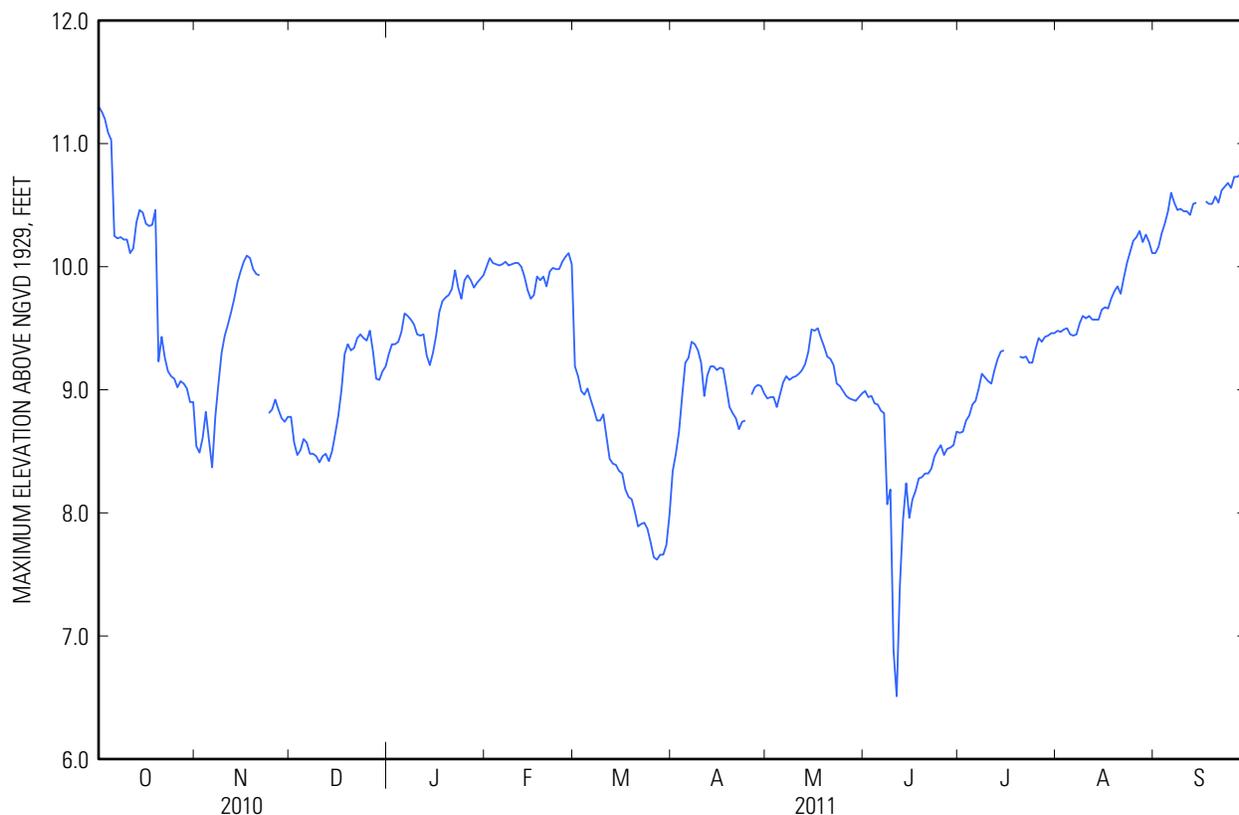
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.4 ft NGVD, Oct. 24, 1995; lowest daily maximum, 2.09 ft below NGVD, May 15, 2009.

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ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MAXIMUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11.3	8.5	8.8	9.3	10.0	9.2	8.3	8.9	9.0	8.7	9.5	10.1
2	11.3	8.5	8.6	9.4	10.1	9.1	8.5	8.9	8.9	8.7	9.5	10.2
3	11.2	8.6	8.5	9.4	10.0	9.0	8.7	8.9	8.9	8.8	9.5	10.3
4	11.1	8.8	8.5	9.4	10.0	9.0	8.9	8.9	8.9	8.8	9.5	10.3
5	11.0	8.6	8.6	9.5	10.0	9.0	9.2	9.0	8.9	8.9	9.4	10.4
6	10.2	8.4	8.6	9.6	10.0	8.9	9.3	9.1	8.8	8.9	9.4	10.6
7	10.2	8.8	8.5	9.6	10.0	8.8	9.4	9.1	8.8	9.0	9.4	10.5
8	10.2	9.1	8.5	9.6	10.0	8.8	9.4	9.1	8.1	9.1	9.5	10.5
9	10.2	9.3	8.5	9.5	10.0	8.8	9.3	9.1	8.2	9.1	9.6	10.5
10	10.2	9.4	8.4	9.4	10.0	8.8	9.2	9.1	6.9	9.1	9.6	10.4
11	10.1	9.5	8.5	9.4	10.0	8.6	8.9	9.1	6.5	9.1	9.6	10.4
12	10.2	9.6	8.5	9.4	10.0	8.4	9.1	9.2	7.4	9.2	9.6	10.4
13	10.4	9.7	8.4	9.3	9.9	8.4	9.2	9.2	7.9	9.2	9.6	10.5
14	10.5	9.9	8.5	9.2	9.8	8.4	9.2	9.3	8.2	9.3	9.6	10.5
15	10.4	10	8.6	9.3	9.7	8.3	9.2	9.5	8.0	9.3	9.7	---
16	10.3	10.0	8.8	9.4	9.8	8.3	9.2	9.5	8.1	---	9.7	---
17	10.3	10.1	9.0	9.6	9.9	8.2	9.2	9.5	8.2	---	9.7	10.5
18	10.3	10.1	9.3	9.7	9.9	8.1	9.0	9.4	8.3	---	9.7	10.5
19	10.5	10	9.4	9.8	9.9	8.1	8.9	9.3	8.3	---	9.8	10.5
20	9.2	9.9	9.3	9.8	9.8	8.0	8.8	9.3	8.3	9.3	9.8	10.6
21	9.4	9.9	9.3	9.8	10	7.9	8.8	9.2	8.3	9.3	9.8	10.5
22	9.3	---	9.4	10	10	7.9	8.7	9.2	8.4	9.3	9.9	10.6
23	9.2	---	9.4	9.8	10	7.9	8.7	9.1	8.5	9.2	10.0	10.7
24	9.1	8.8	9.4	9.7	10	7.9	8.8	9.0	8.5	9.2	10.1	10.7
25	9.1	8.8	9.4	9.9	10.0	7.8	---	9.0	8.6	9.3	10.2	10.6
26	9.0	8.9	9.5	9.9	10.1	7.6	9.0	8.9	8.5	9.4	10.2	10.7
27	9.1	8.8	9.3	9.9	10.1	7.6	9.0	8.9	8.5	9.4	10.3	10.7
28	9.1	8.8	9.1	9.8	10.0	7.7	9.0	8.9	8.5	9.4	10.2	10.8
29	9.0	8.7	9.1	9.9	---	7.7	9.0	8.9	8.6	9.4	10.3	10.7
30	8.9	8.8	9.2	9.9	---	7.7	9.0	8.9	8.7	9.5	10.2	10.8
31	8.9	---	9.2	9.9	---	8.0	---	9.0	---	9.5	10.1	---
Mean	10.0	---	8.9	9.6	10.0	8.3	---	9.1	8.3	---	9.8	---
Max	11.3	---	9.5	10.0	10.1	9.2	---	9.5	9.0	---	10.3	---
Min	8.9	---	8.4	9.2	9.7	7.6	---	8.9	6.5	---	9.4	---

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**WATER SURFACE ELEVATION IN FEET NGVD 1929
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

[Measurement method: M, manometer; G, pressure gage; H, calibrated pressure gage. Water-level status: --, static.]

Date	Water level	Measure-ment method	Water-level status	Date	Water level	Measure-ment method	Water-level status
Oct 18	10.34	M	--	Apr 25	8.83	M	--
Oct 19	10.27	M	--	Apr 26	8.02	G	--
Nov 8	8.87	M	--	May 26	8.86	M	--
Nov 29	8.46	M	--	May 26	8.89	M	--
Dec 21	9.14	H	--	Jun 17	8.01	M	--
Jan 21	9.81	M	--	Jul 20	9.26	M	--
Feb 25	9.89	M	--	Aug 24	10.13	M	--
Mar 31	7.39	M	--	Sep 15	10.46	M	--
Apr 7	9.25	M	--	Sep 16	10.49	M	--

Water year 2011 lowest: 7.39, Mar 31, 2011, highest: 10.49, Sep 16, 2011