



Water-Data Report 2011

382154076574801 Local number CH Ee 70

Northern Atlantic Coastal Plain aquifer system
Lower Patapsco Aquifer In the Patapsco Formation

Charles County, MD

LOCATION.--Lat 38°21'56", long 76°57'51" referenced to North American Datum of 1927, Charles County, MD, Hydrologic Unit 02070011, 1.5 mi. north of Morgantown.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 1,132 ft. Upper casing diameter 2 in; top of first opening 1,090 ft, bottom of last opening 1,115 ft. Drilled, observation, artesian well.

DATUM.--Land-surface datum is 22.83 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of recorder shelter platform, 3.43 ft above land-surface datum, Oct. 1974 to present.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-level measurements by U.S. Geological Survey personnel. Equipped with graphic water-level recorder from May 1982 to January 1983. Equipped with digital water-level recorder--15 and 30-minute recorder intervals from June 1978 to October 1986. Equipped with electronic water-level recorder (transducer)--15-minute recorder interval from October 1986 to October 1992, and from May 1995 to current year. Missing record due to recorder malfunction.

REMARKS.--Southern Maryland Groundwater-Level Monitoring Network observation well. Water levels are affected by local and regional groundwater withdrawal.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.64 ft below sea level, January 6, 1985; lowest measured, 147.68 ft below sea level, December 16, 2009 (recorder).

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

[Measurement method: T, electric tape. Water-level status: - , static.]

Date	Water level	Measure-ment method	Water-level status	Date	Water level	Measure-ment method	Water-level status
Oct 7	-98.56	T	--	Apr 26	-108.52	T	--
Nov 18	-98.19	T	--	Jun 16	-108.33	T	--
Dec 22	-104.53	T	--	23	-101.15	T	--
Feb 3	-106.64	T	--	Aug 2	-105.39	T	--
Mar 17	-101.51	T	--	Sep 15	-106.76	T	--

Water year 2011 lowest: -108.52, Apr 26, 2011, highest: -98.19, Nov 18, 2010

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

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	-97.57	-102.22	-98.99	-104.33	-99.00	-105.20	-100.43	-105.22	-101.25	-106.91	-100.29	-106.12
2	-96.79	-101.62	-98.40	-102.90	-98.59	-103.64	-102.39	-108.21	-103.29	-107.82	-100.63	-107.30
3	-96.48	-102.22	-99.22	-105.86	-98.87	-104.72	-101.35	-107.92	-102.10	-107.82	-103.91	-108.93
4	-99.95	-104.60	-98.15	-104.00	-100.35	-104.81	-105.21	-110.80	-101.31	-107.01	-101.68	-106.38
5	-100.02	-103.84	-98.22	-104.06	-99.97	-104.64	-107.96	-112.51	-101.03	-106.85	-100.72	-106.68
6	-99.20	-101.94	-97.27	-102.46	-99.71	-105.67	-105.58	-111.84	-104.87	-108.62	-99.59	-103.90
7	-98.27	-104.78	-99.49	-104.63	-102.09	-107.07	-104.33	-109.93	-103.02	-108.42	-98.76	-107.13
8	-102.42	-105.85	-98.18	-103.50	-102.56	-108.35	-102.97	-108.86	-102.75	-107.20	-100.56	-106.50
9	-99.16	-103.42	-96.55	-101.74	-101.31	-106.70	-102.47	-110.76	-101.87	-107.07	-102.09	-107.08
10	-98.53	-104.73	-95.30	-101.35	-102.99	-114.32	-107.22	-111.58	-100.75	-105.51	-99.85	-105.88
11	-101.49	-104.91	-95.80	-100.09	-102.14	-107.84	-105.14	-109.73	-101.39	-107.11	-98.74	-105.06
12	-100.52	-105.80	-94.70	-100.50	-101.35	-109.02	-104.48	-110.07	-101.55	-107.49	-98.66	-104.70
13	-100.27	-104.34	-96.11	-101.70	-100.11	-106.27	-106.55	-110.31	-104.92	-108.14	-100.24	-103.91
14	-99.16	-103.38	-94.62	-99.27	-101.36	-106.28	-107.27	-111.28	-103.20	-107.65	-99.29	-106.06
15	-98.51	-103.40	-93.96	-99.06	-100.37	-106.46	-105.29	-120.07	-102.31	-106.81	-102.38	-107.66
16	-97.22	-102.08	-94.22	-99.99	-104.83	-110.27	-106.61	-120.97	-101.11	-107.59	-101.52	-107.94
17	-95.09	-100.15	-96.13	-100.42	-104.36	-109.51	-105.33	-118.77	-98.93	-102.09	-101.33	-106.67
18	-94.58	-99.85	-95.70	-100.37	-103.76	-108.70	-104.81	-111.85	-98.36	-104.86	-100.64	-105.76
19	-94.79	-100.21	-96.16	-100.37	-102.40	-108.78	-104.05	-108.97	-101.02	-108.38	-99.58	-105.36
20	-96.34	-101.66	-95.04	-99.62	-102.69	-109.29	-104.38	-113.19	-105.92	-111.08	-99.83	-104.55
21	-95.24	-99.98	-94.41	-98.43	-103.59	-107.98	-105.61	-110.12	-102.63	-111.31	-100.27	-105.80
22	-97.13	-102.11	-93.58	-98.68	-101.83	-105.82	-104.36	-108.85	-100.03	-103.45	-100.37	-104.60
23	-95.61	-101.77	-93.65	-97.65	-100.64	-107.34	-104.06	-109.47	-99.27	-104.21	-99.78	-106.23
24	-95.17	-99.54	-93.02	-97.85	-103.65	-107.73	-103.43	-108.07	-102.62	-107.25	-101.13	-106.48
25	-94.30	-101.22	-93.18	-98.97	-101.41	-107.55	-105.35	-108.93	-105.05	-108.40	-101.39	-107.12
26	-93.69	-99.93	-94.67	-100.48	-100.66	-106.77	-104.65	-109.06	-105.26	-109.86	-100.67	-106.60
27	-93.90	-97.69	-93.77	-98.30	-101.76	-107.49	-103.97	-115.18	-103.38	-108.34	-99.57	-104.01
28	-96.30	-99.70	-93.26	-97.65	-102.75	-109.24	-103.64	-108.63	-100.86	-106.66	-98.90	-105.88
29	-95.40	-100.70	-92.81	-101.36	-103.67	-110.51	-105.03	-111.21	---	---	-103.98	-111.13
30	-98.27	-103.60	-99.72	-105.81	-102.51	-108.36	-102.77	-107.58	---	---	-102.54	-107.90
31	-97.75	-104.06	---	---	-102.12	-107.26	-101.84	-106.14	---	---	-95.93	-107.34
Month	-93.69	-105.85	-92.81	-105.86	-98.59	-114.32	-100.43	-120.97	-98.36	-111.31	-95.93	-111.13

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

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	-95.98	-107.47	-99.11	-102.45	---	---	---	---	---	---	---	---
2	-100.59	-107.45	-97.90	-103.99	---	---	---	---	---	---	---	---
3	-97.67	-101.63	-98.11	-102.21	---	---	---	---	---	---	---	---
4	-97.06	-111.86	-97.29	-102.38	---	---	---	---	---	---	---	---
5	-103.97	-105.86	-97.52	-104.94	---	---	---	---	---	---	---	---
6	-100.07	-106.13	-100.84	-104.97	---	---	---	---	---	---	---	---
7	-98.67	-103.81	-98.65	-102.76	---	---	---	---	---	---	---	---
8	-98.92	-104.07	-98.03	-104.45	---	---	---	---	---	---	---	---
9	-103.47	-109.92	-100.09	-107.50	---	---	---	---	---	---	---	---
10	-103.91	-107.05	-101.56	-106.32	---	---	---	---	---	---	---	---
11	-103.22	-122.00	-101.38	-105.42	---	---	---	---	---	---	---	---
12	-106.51	-116.43	-100.57	-103.53	---	---	---	---	---	---	---	---
13	-104.57	-109.03	-100.10	-106.91	---	---	---	---	---	---	---	---
14	-102.56	-109.77	-101.42	-105.56	---	---	---	---	---	---	---	---
15	-101.80	-106.76	-100.59	-105.05	---	---	---	---	---	---	---	---
16	-104.42	-109.38	-100.21	-109.52	---	---	---	---	---	---	-103.97	-121.97
17	-103.44	-109.03	-101.72	-107.58	---	---	---	---	---	---	-106.87	-120.77
18	-102.75	-109.16	-102.07	-107.80	---	---	---	---	---	---	-104.77	-107.97
19	-101.00	-106.06	-103.67	-107.87	---	---	---	---	---	---	-103.97	-106.57
20	-99.17	-105.41	-103.34	-108.69	---	---	---	---	---	---	-103.26	-107.07
21	-98.46	-106.78	-101.26	-105.37	---	---	---	---	---	---	-102.76	-108.96
22	-100.33	-106.36	-101.02	-107.12	---	---	---	---	---	---	-101.36	-104.66
23	-98.75	-104.39	-102.06	-110.15	---	---	---	---	---	---	-101.56	-105.46
24	-97.58	-103.54	-105.61	-111.63	---	---	---	---	---	---	-102.36	-106.56
25	-99.25	-103.92	-104.93	-109.02	---	---	---	---	---	---	-102.36	-117.46
26	-103.70	-114.12	-104.43	-109.65	---	---	---	---	---	---	-104.66	-113.16
27	-102.70	-108.15	-104.61	-107.91	---	---	---	---	---	---	-103.56	-111.06
28	-101.35	-105.99	-104.20	-106.48	---	---	---	---	---	---	-103.26	-109.96
29	-104.42	-107.63	-103.82	-108.67	---	---	---	---	---	---	-104.26	-108.66
30	-101.48	-109.23	-103.16	-108.07	---	---	---	---	---	---	-102.36	-105.86
31	---	---	-103.84	-107.74	---	---	---	---	---	---	---	---
Month	-95.98	-122.00	-97.29	-111.63	---	---	---	---	---	---	-101.36	-121.97

	Max	Min
Year	-92.81	-122.00

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