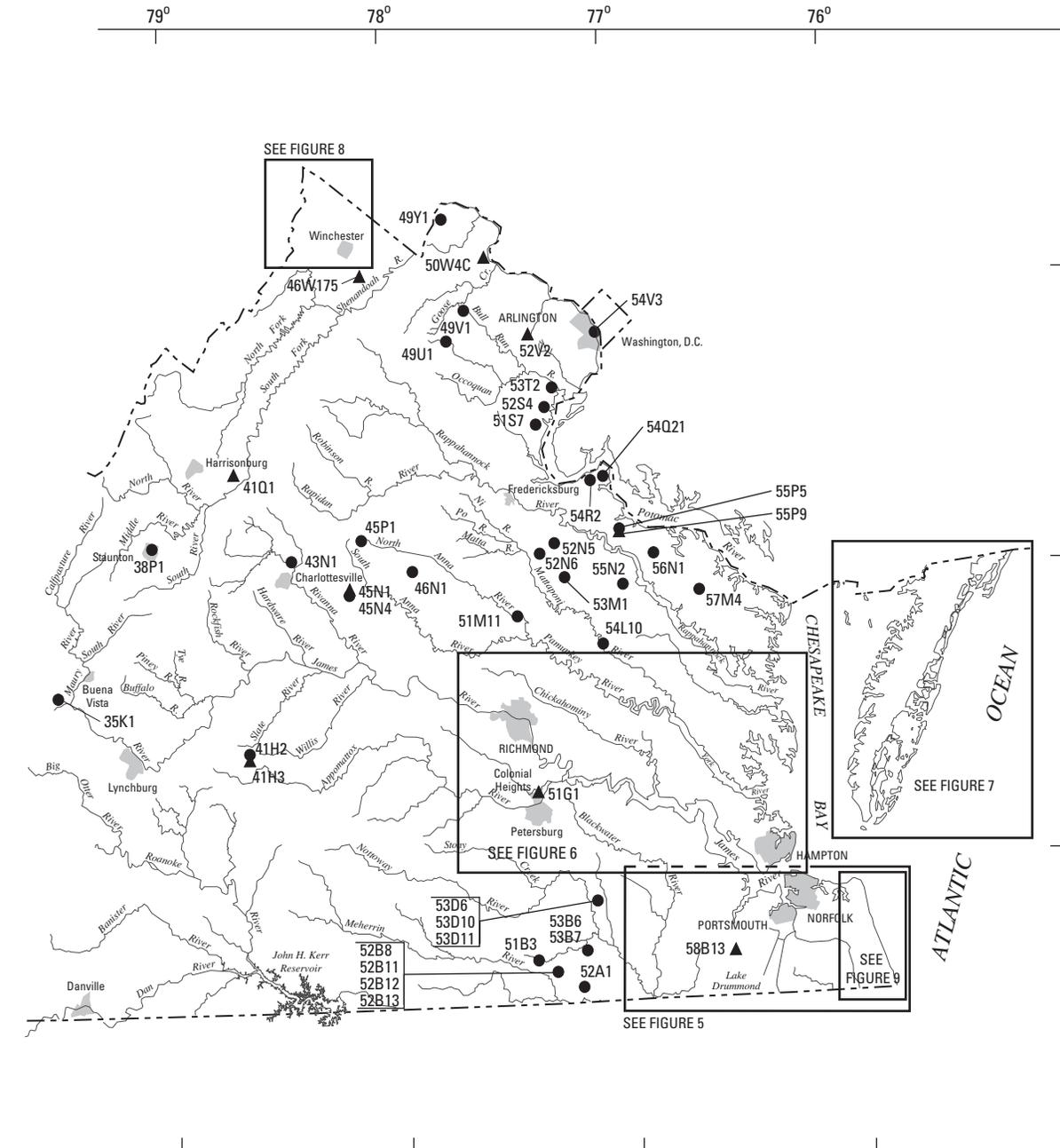


Figure 4. Location of ground-water observation wells.



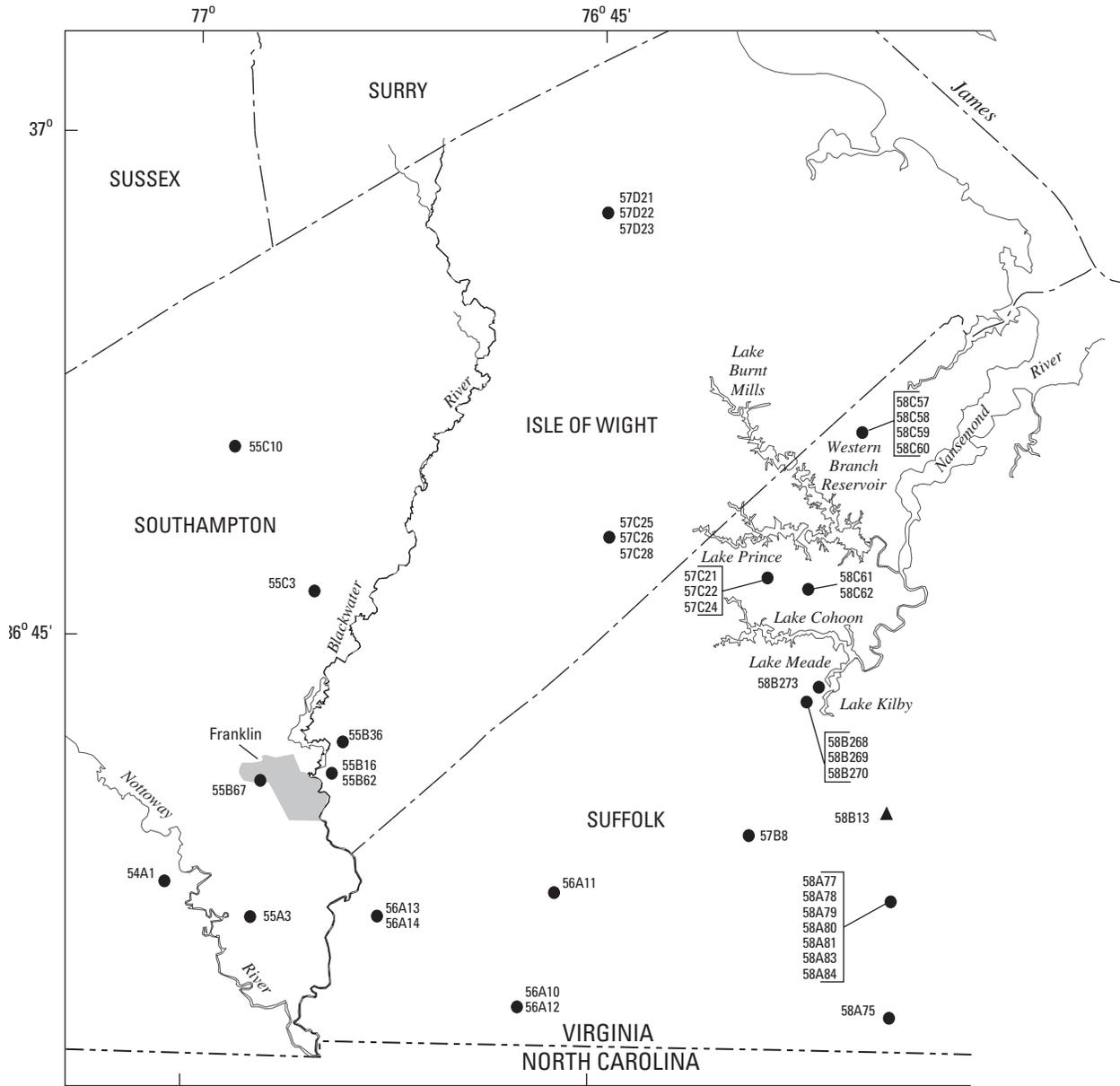
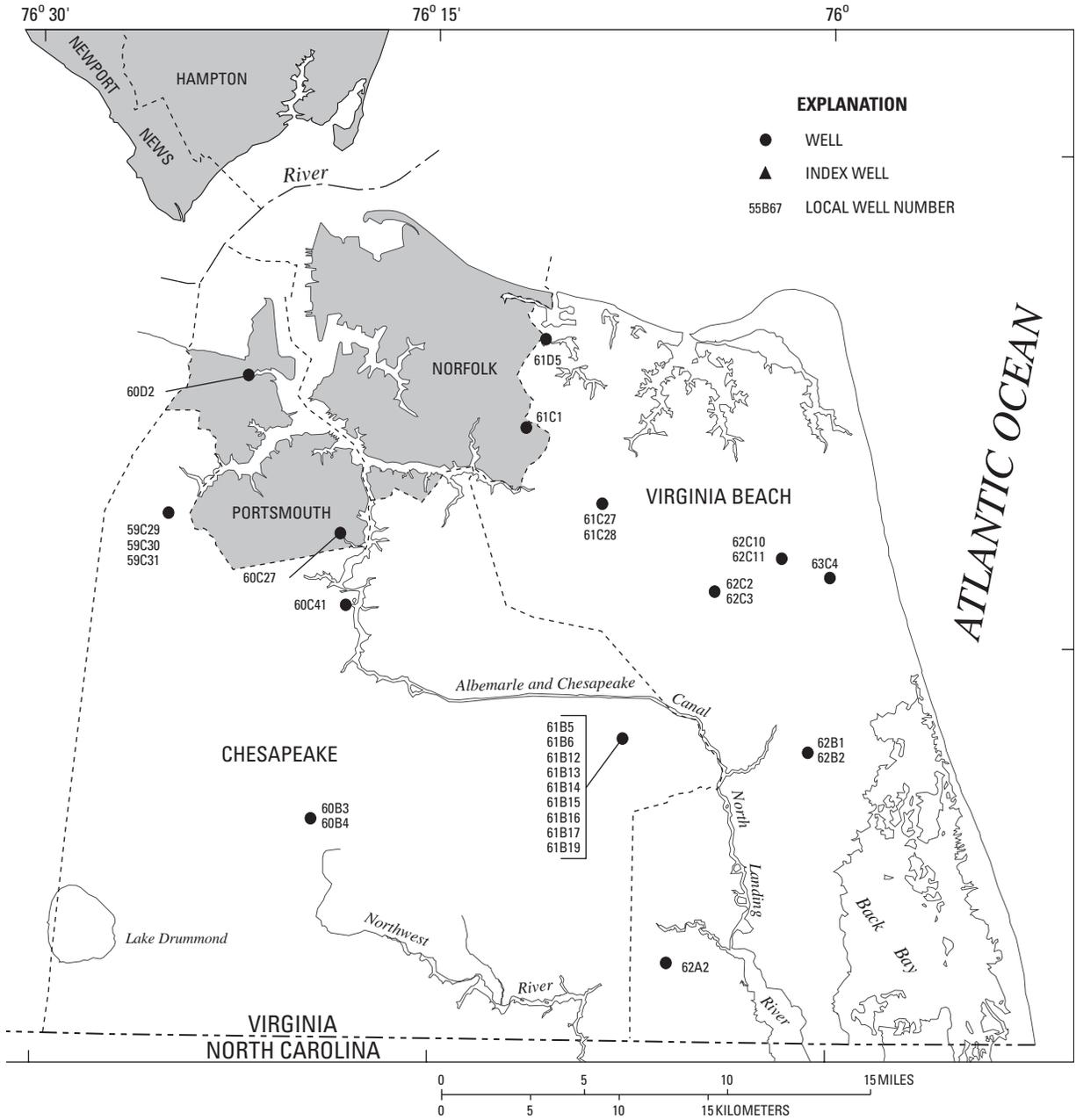


Figure 5. Location of ground-water observation wells in southeastern Virginia.



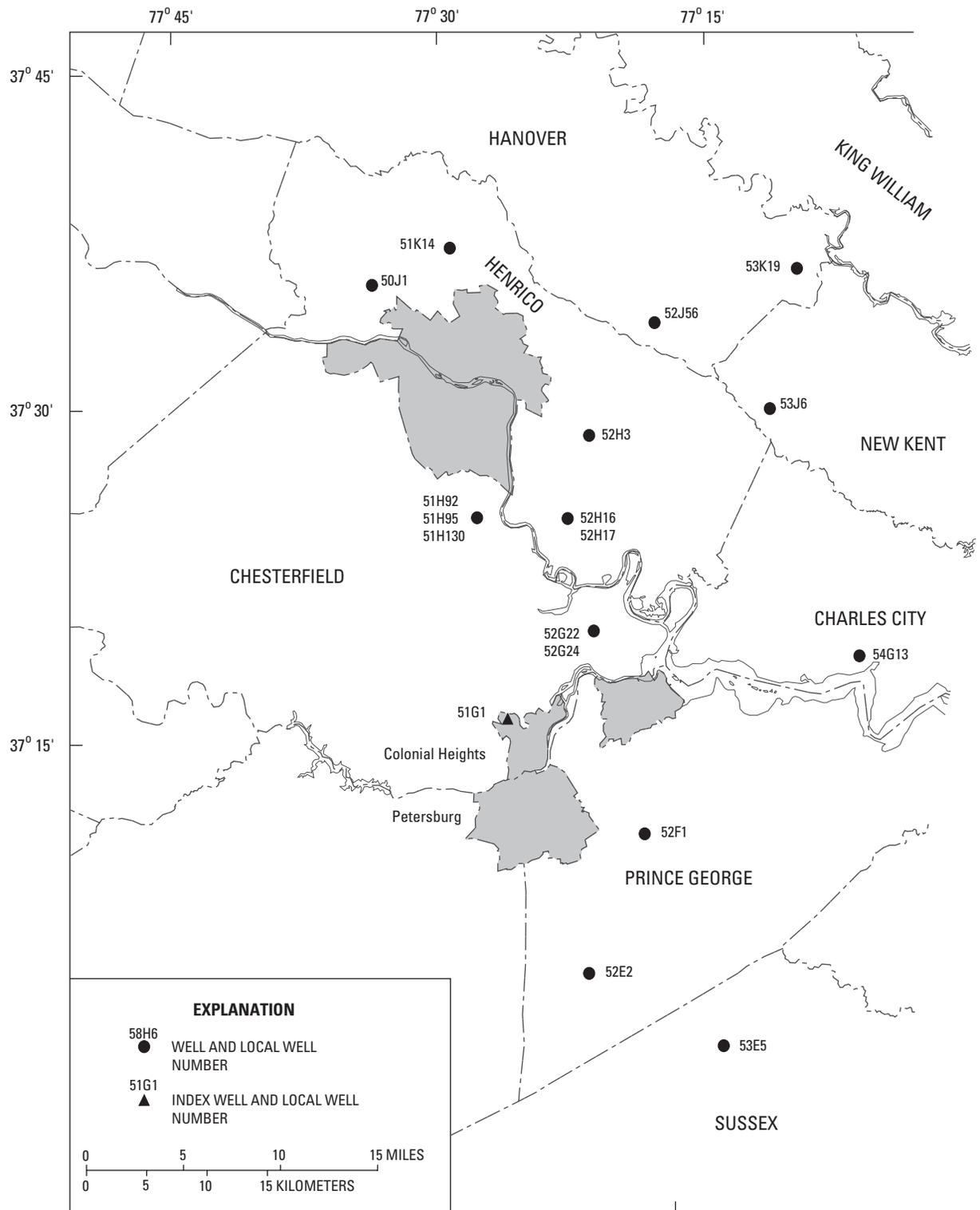
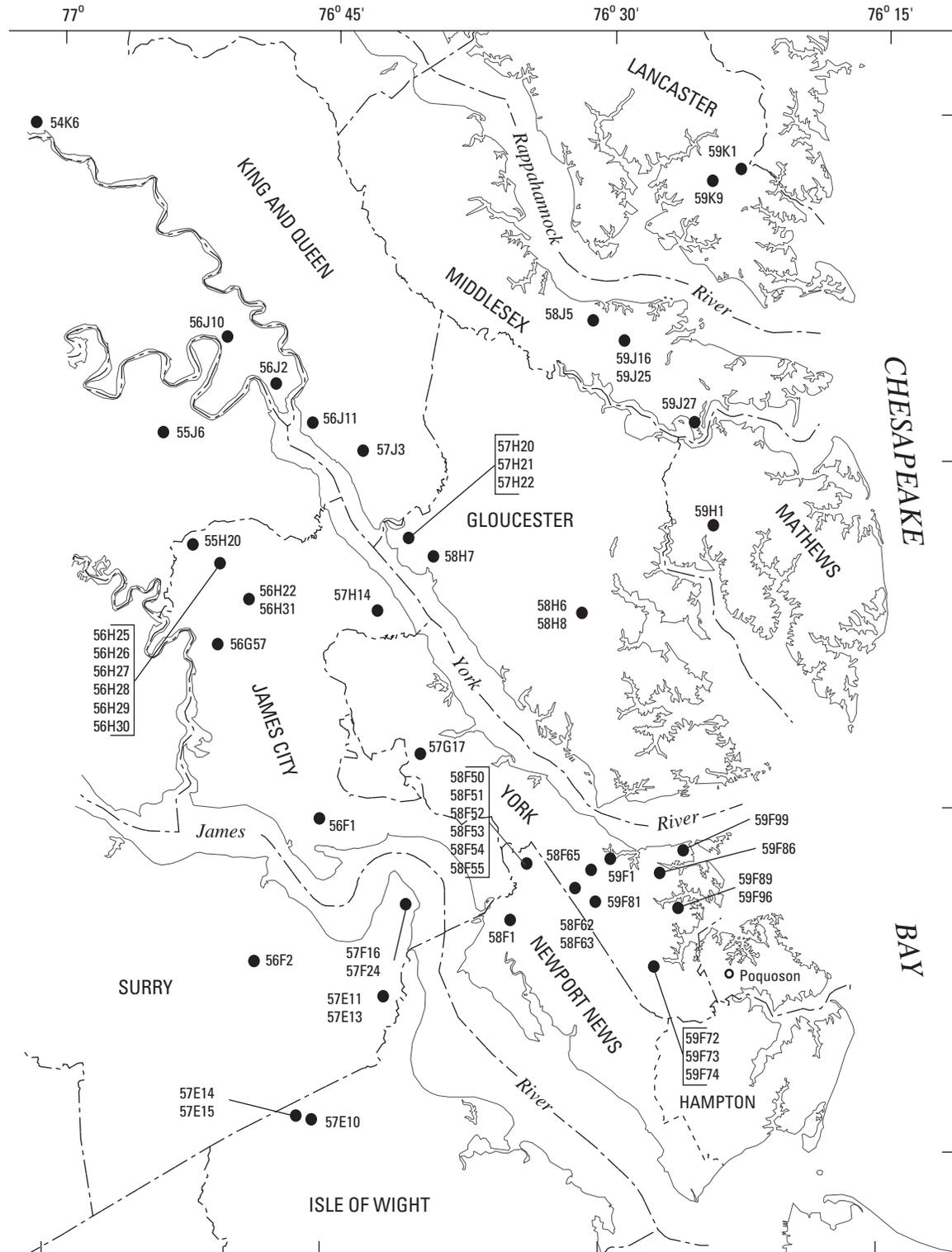


Figure 6. Location of ground-water observation wells on York-James peninsula and vicinity.



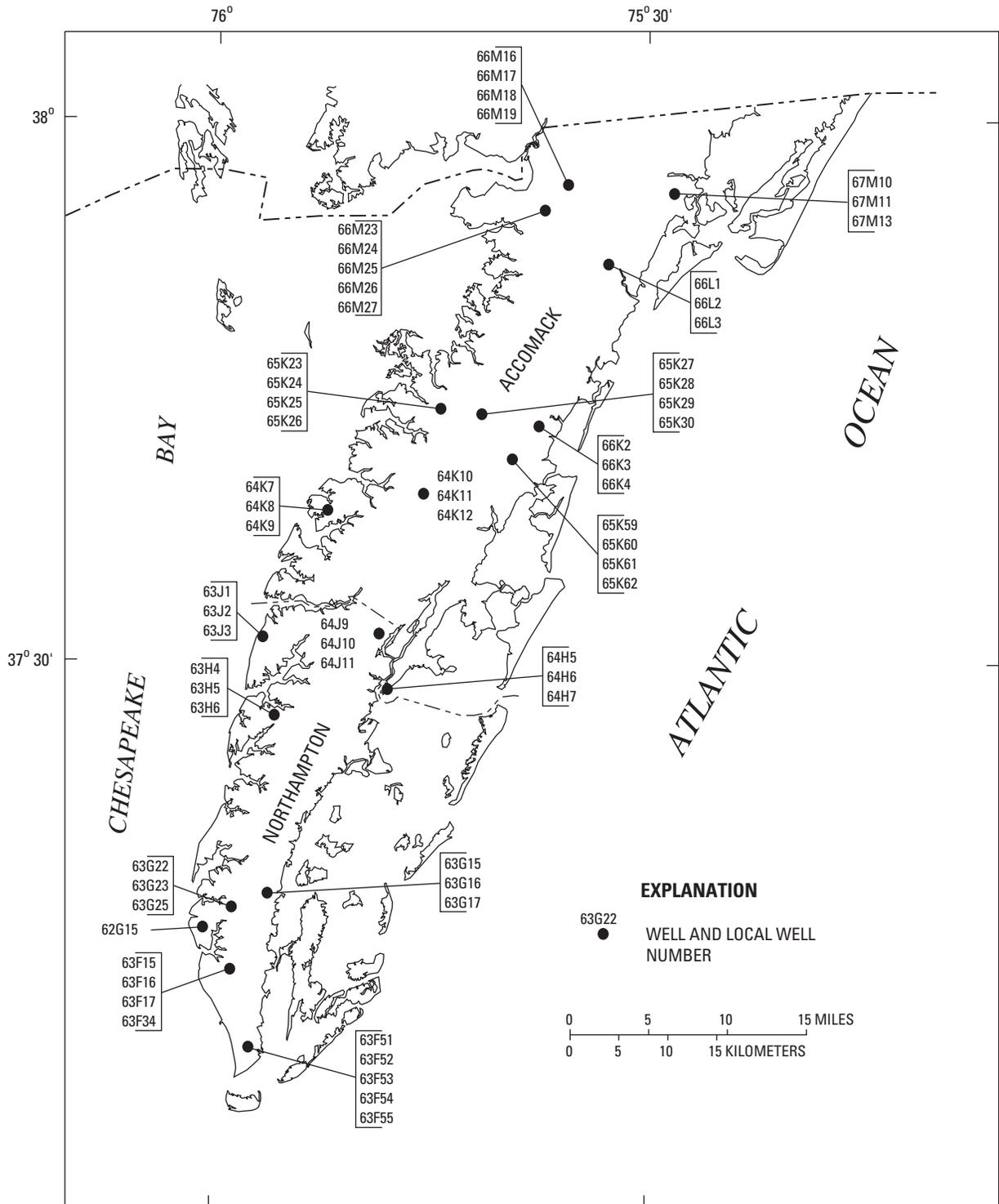


Figure 7. Location of ground-water observation wells on Delmarva peninsula.

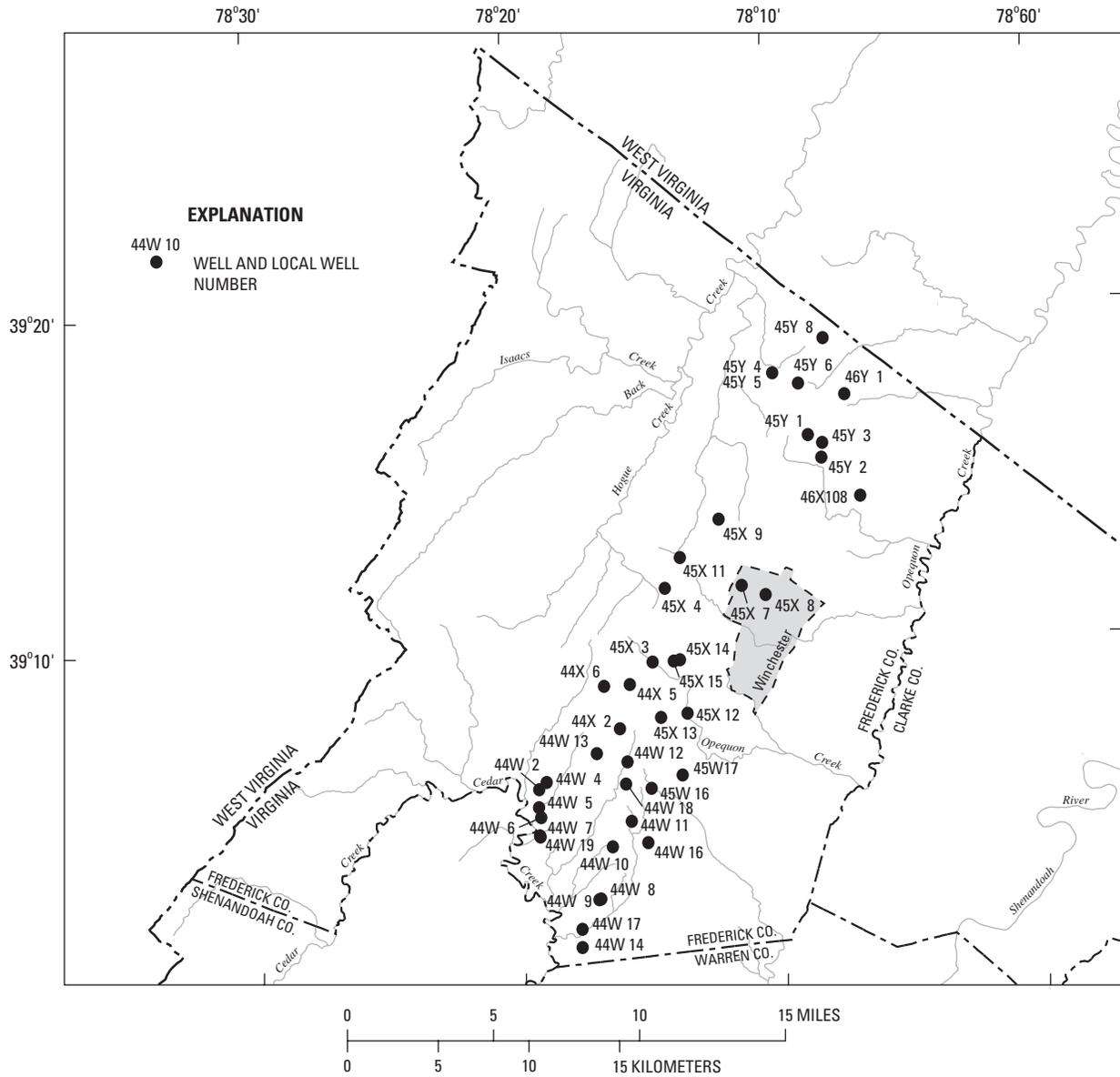


Figure 8. Location of ground-water observation wells in Frederick County, Virginia.

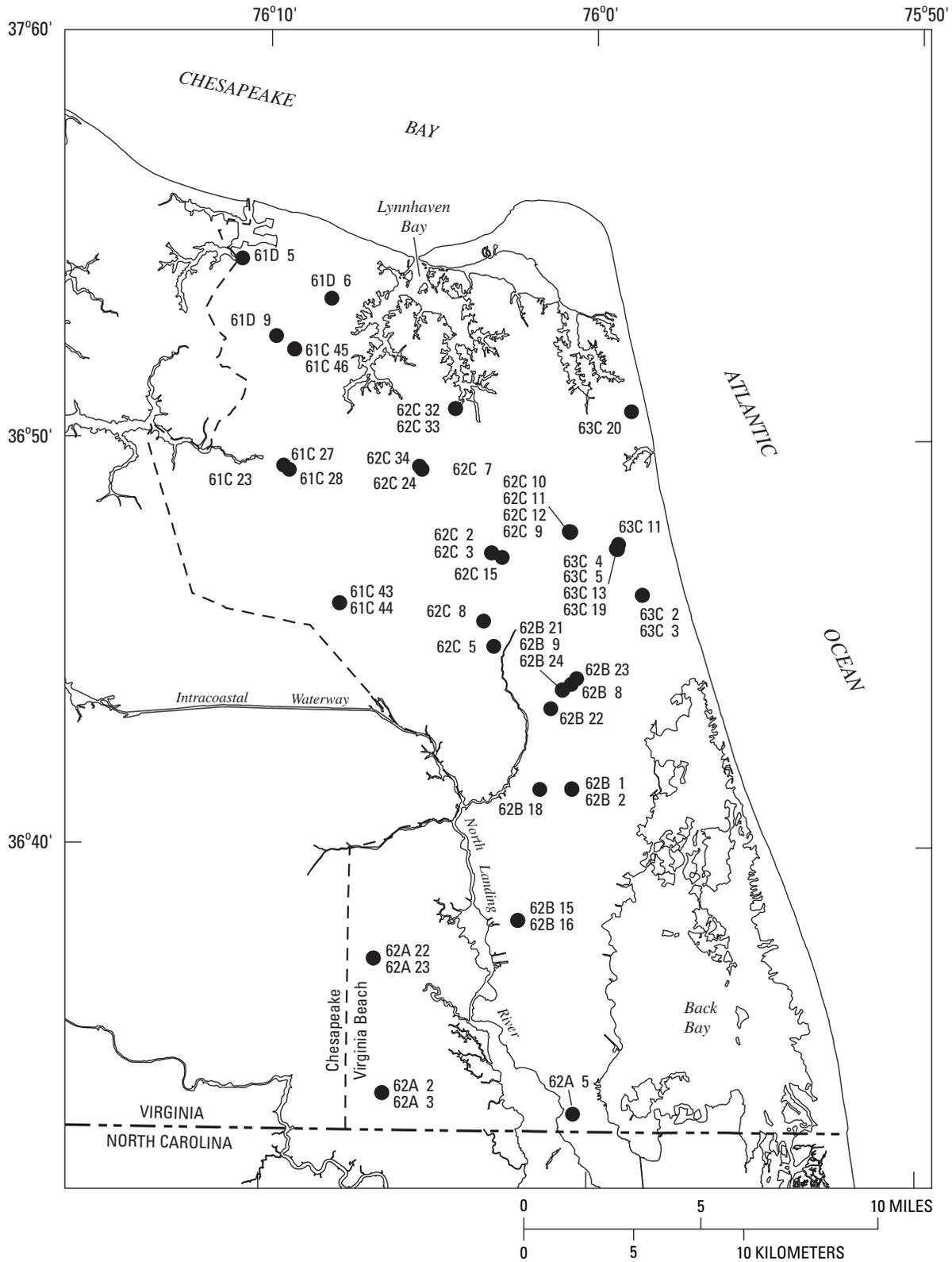


Figure 9. Location of ground-water observation wells in Virginia Beach, Virginia.

GROUND-WATER-LEVEL RECORDS

GROUND-WATER LEVELS

ACCOMACK COUNTY

372922076470101. Local number, 64H 5 SOW 102C.

LOCATION.--Lat 37°29'21", long 75°47'04", NAD83, Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 306 ft, screened 296 to 306 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Nov. 13, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 1, 1988; 1.1 ft thereafter.

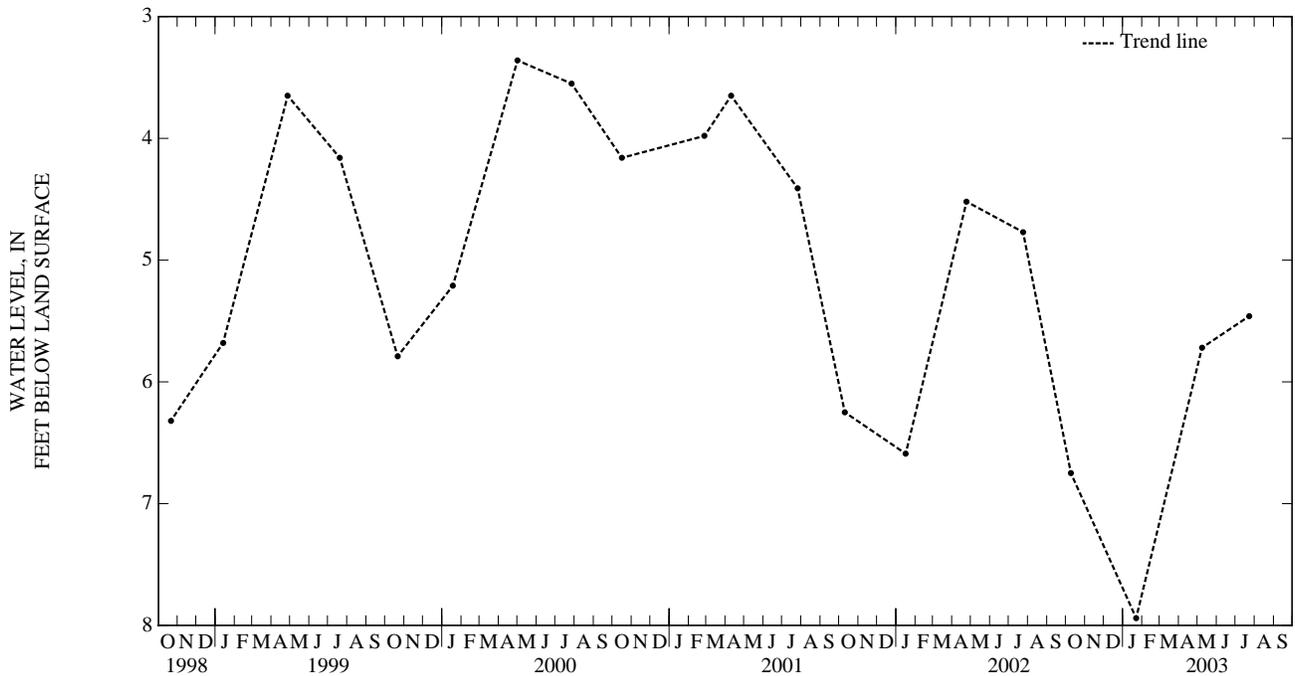
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.70 ft below land-surface datum, June 6, 1984; lowest measured, 7.94 ft below land-surface datum, Jan. 22, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	6.75	JAN 22	7.94	MAY 08	5.72	JUL 23	5.46
WATER YEAR 2003 HIGHEST		5.46	JUL 23, 2003		LOWEST		7.94
						JAN 22, 2003	



ACCOMACK COUNTY—Continued

372905075474002. Local number, 64H 6 SOW 102A.

LOCATION.--Lat 37°29'21", long 75°47'04", NAD83, Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 154 ft, screened 144 to 154 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Nov. 13, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

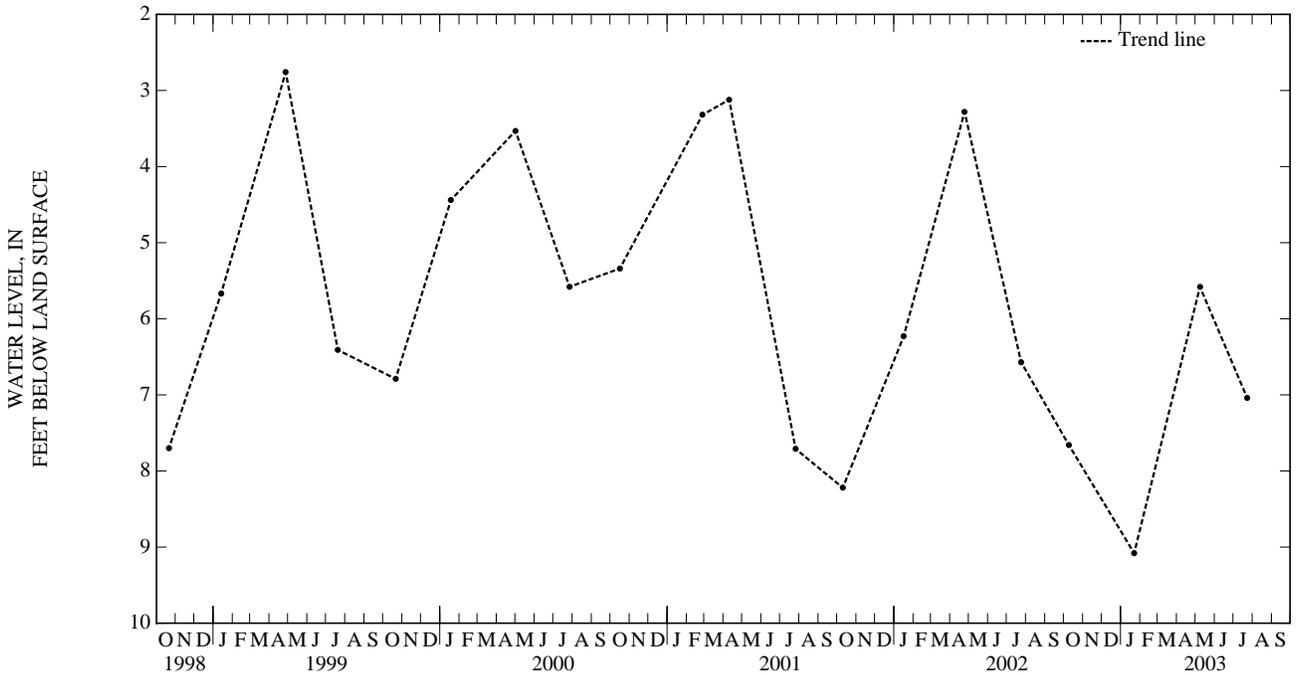
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.33 ft below land-surface datum, Oct. 30, 1984; lowest measured, 9.63 ft below land-surface datum, Sept. 1, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	7.66	JAN 22	9.08	MAY 08	5.58	JUL 23	7.04
WATER YEAR 2003 HIGHEST		5.58	MAY 08, 2003 LOWEST		9.08	JAN 22, 2003	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

372905075474001. Local number, 64H 7 SOW 102B.

LOCATION.--Lat 37°29'21", long 75°47'04", NAD83, Hydrologic Unit 02080110, at entrance to Virginia Landing, 0.2 mi south from end of State Highway 605, 2.0 mi southeast of Willis Wharf, and 5.2 mi southwest of intersection of State Highways 605 and 182. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Nov. 13, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Nov. 13, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

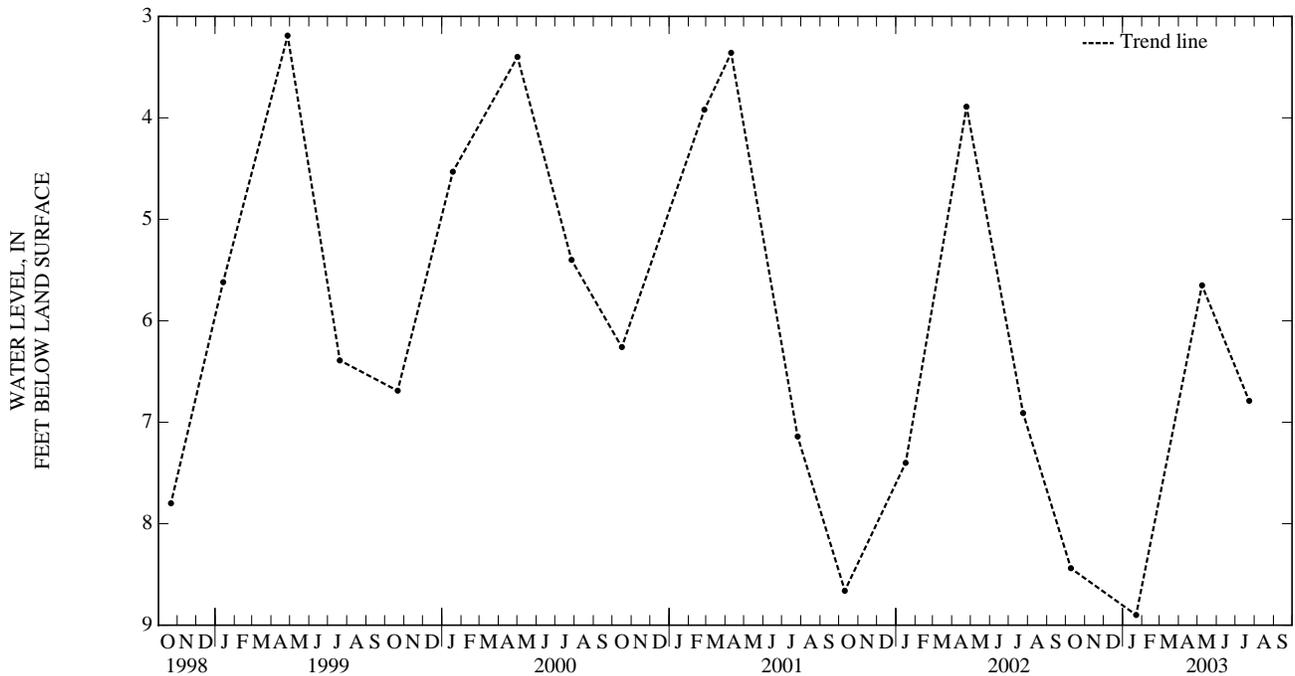
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.19 ft below land-surface datum, July 10, 1984; lowest measured, 8.90 ft below land-surface datum, Jan. 22, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	8.44	JAN 22	8.90	MAY 08	5.65	JUL 23	6.79
WATER YEAR 2003 HIGHEST		5.65	MAY 08, 2003 LOWEST		8.90	JAN 22, 2003	



ACCOMACK COUNTY—Continued

373845075522501. Local number, 64K 7 SOW 106C.

LOCATION.--Lat 37°38'45", long 75°52'24", NAD83, Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 176 ft, screened 166 to 176 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.73 ft above land-surface datum.

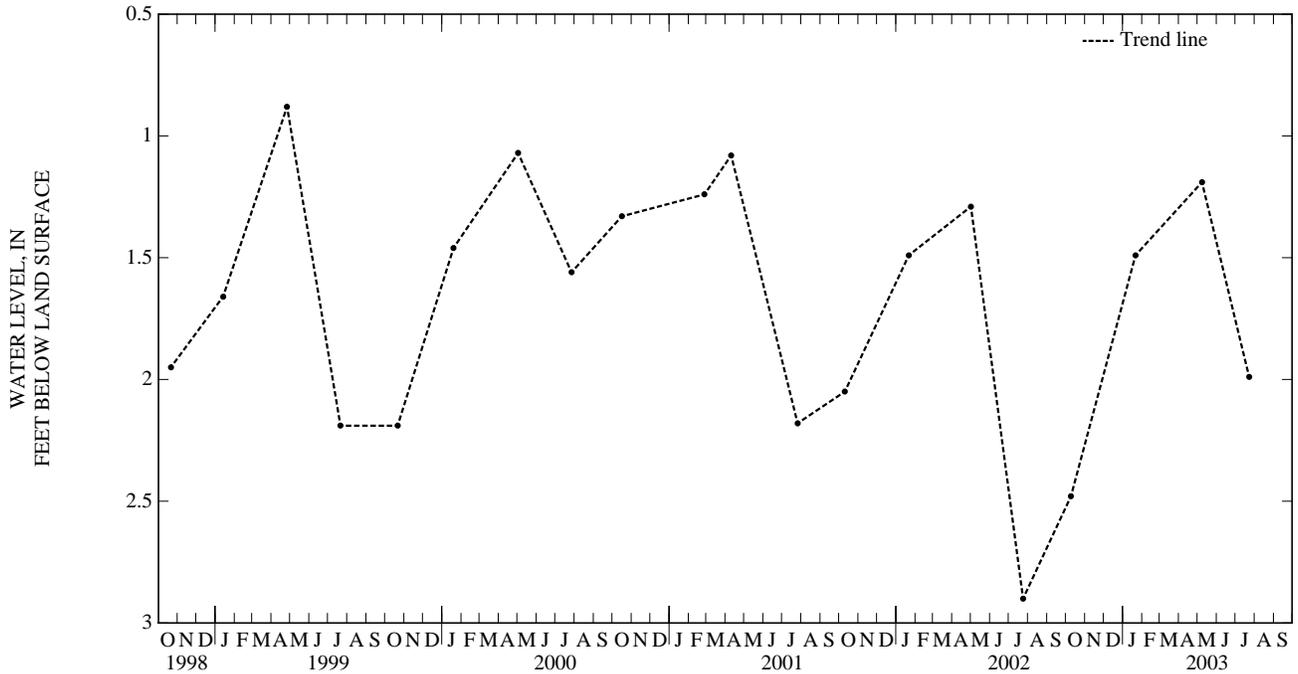
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.31 ft below land-surface datum, May 22, 1991; lowest measured, 2.90 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	2.48	JAN 21	1.49	MAY 08	1.19	JUL 23	1.99
WATER YEAR 2003 HIGHEST		1.19	MAY 08, 2003 LOWEST		2.48	OCT 09, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

373845075522503. Local number, 64K 8 SOW 106B.

LOCATION.--Lat 37°38'45", long 75°52'24", NAD83, Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 95 ft, screened 85 to 95 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 3 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

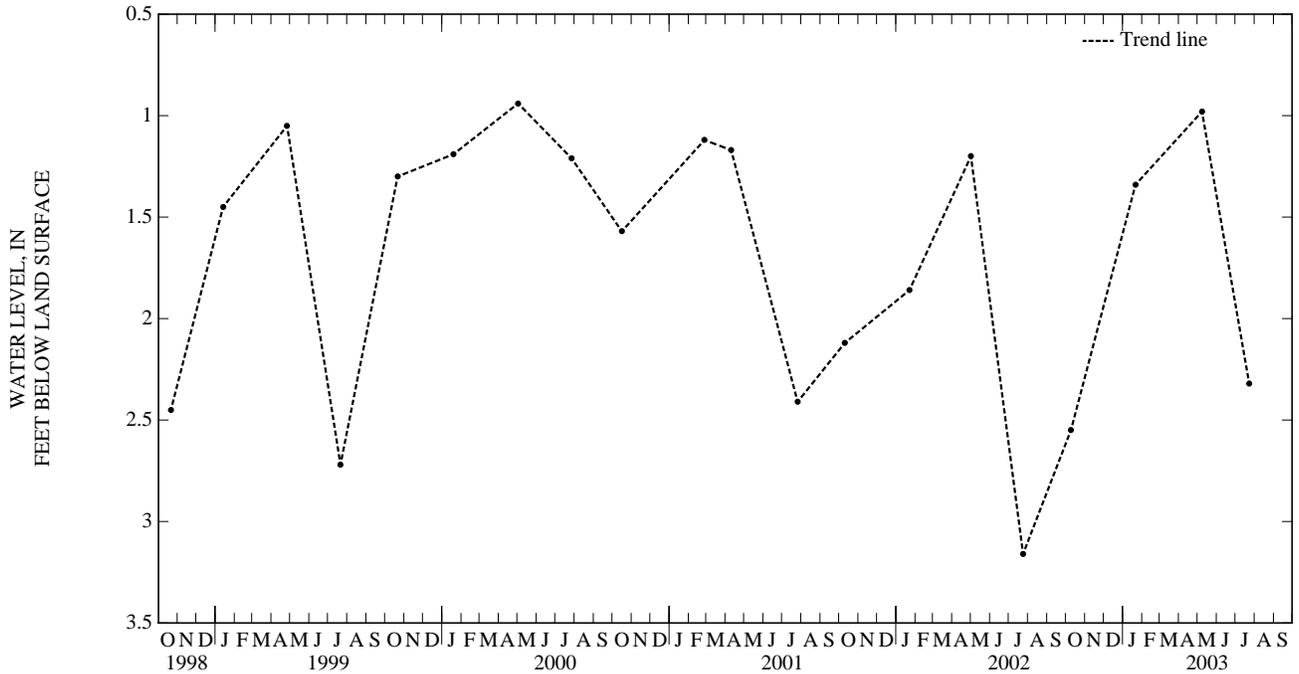
REMARKS.--Records provided by the Virginia Department of Environmental Quality. - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.69 ft below land-surface datum, Oct. 22, 1996; lowest measured, 3.16 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	2.55	JAN 21	1.34	MAY 08	.98	JUL 23	2.32
WATER YEAR 2003 HIGHEST		.98	MAY 08, 2003 LOWEST		2.55	OCT 09, 2002	



ACCOMACK COUNTY—Continued

373845075522502. Local number, 64K 9 SOW 106A.

LOCATION.--Lat 37°38'45", long 75°52'24", NAD83, Hydrologic Unit 02080109, 100 ft north of State Highway 633, 0.3 mi northwest of intersection of State Highways 631 and 633, and 0.3 mi northwest of Hacksneck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is approximately 3 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

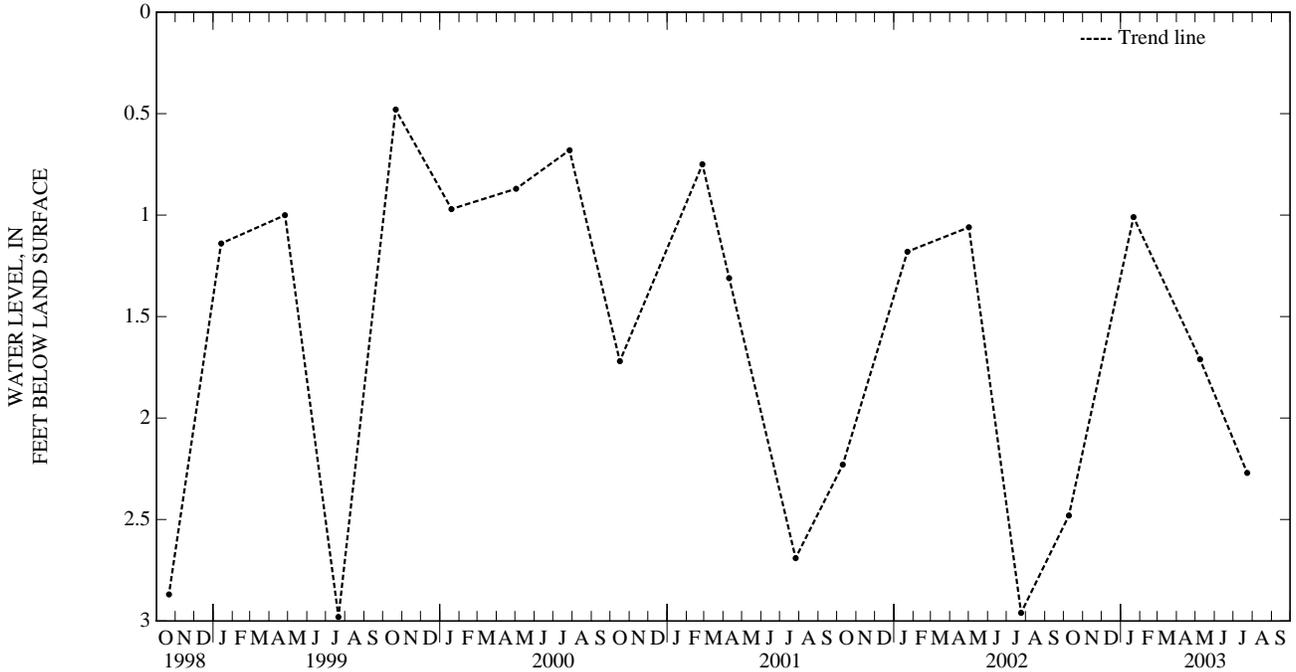
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.32 ft below land-surface datum, Feb. 24, 1994; lowest measured, 3.46 ft below land-surface datum, Sept. 14, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	2.48	JAN 21	1.01	MAY 08	1.71	JUL 23	2.27
WATER YEAR 2003 HIGHEST		1.01 JAN 21, 2003	LOWEST		2.48	OCT 09, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

373932075452701. Local number, 64K 10 SOW 108A.

LOCATION.--Lat 37°39'32", long 75°45'26", NAD83, Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 50 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.22 ft above land-surface datum prior to Mar. 1, 1988; 0.75 ft thereafter.

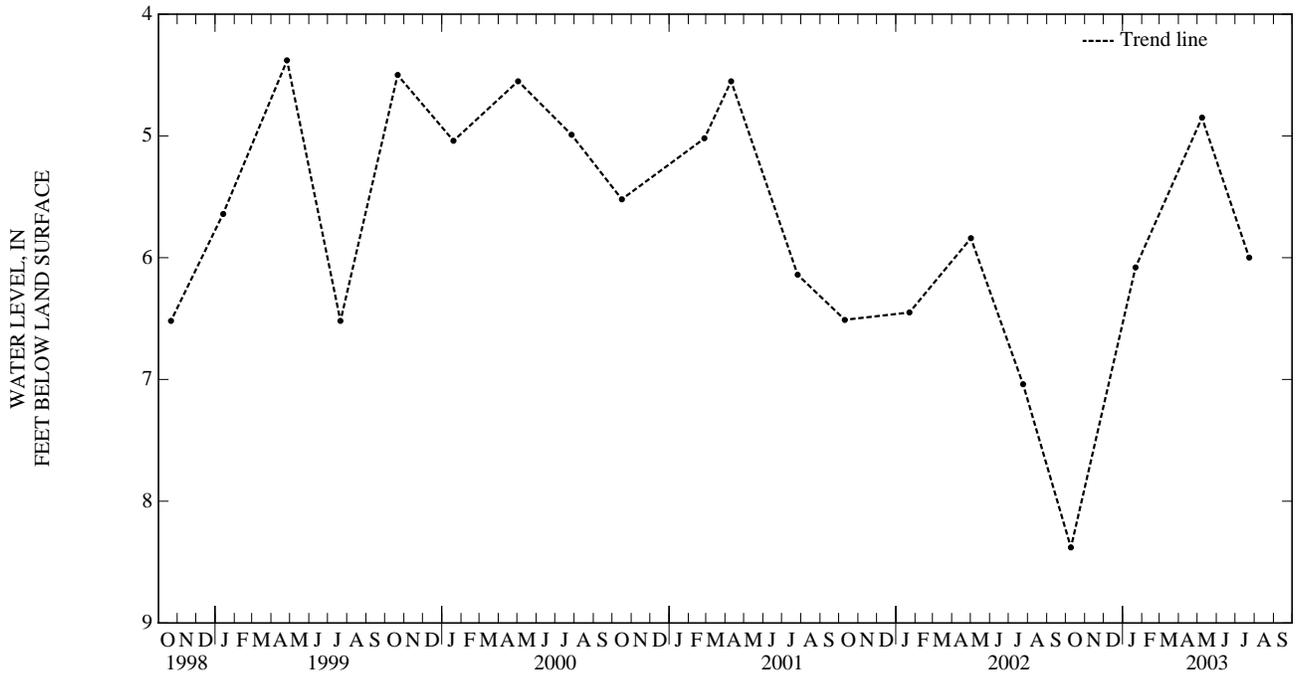
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.98 ft below land-surface datum, Apr. 21, 1983; lowest measured, 15.06 ft below land-surface datum, Jan. 30, 1985.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	8.38	JAN 21	6.08	MAY 08	4.85	JUL 23	6.00
WATER YEAR 2003 HIGHEST		4.85	MAY 08, 2003 LOWEST		8.38	OCT 09, 2002	



ACCOMACK COUNTY—Continued

373932075452702. Local number, 64K 11 SOW 108B.

LOCATION.--Lat 37°39'32", long 75°45'26", NAD83, Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 180 ft, screened 170 to 180 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

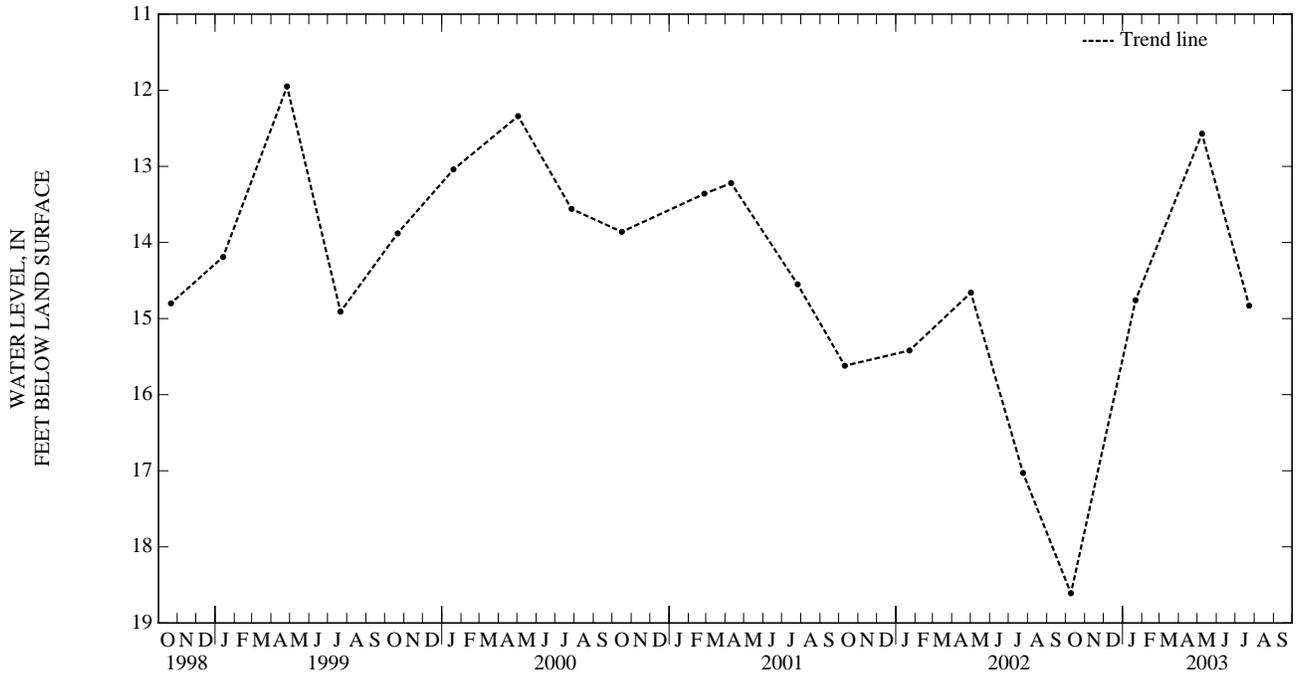
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.03 ft below land-surface datum, Aug. 1, 1979; lowest measured, 18.61 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	18.61	JAN 21	14.76	MAY 08	12.57	JUL 23	14.83
WATER YEAR 2003 HIGHEST		12.57	MAY 08, 2003 LOWEST		18.61	OCT 09, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

373932075452703. Local number, 64K 12 SOW 108C.

LOCATION.--Lat 37°39'32", long 75°45'26", NAD83, Hydrologic Unit 02080109, 200 ft east of State Highway 609, 0.2 mi southeast of intersection of State Highways 609 and 627, and 0.9 mi northwest of Melfa. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 284 ft, screened 274 to 284 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 47 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

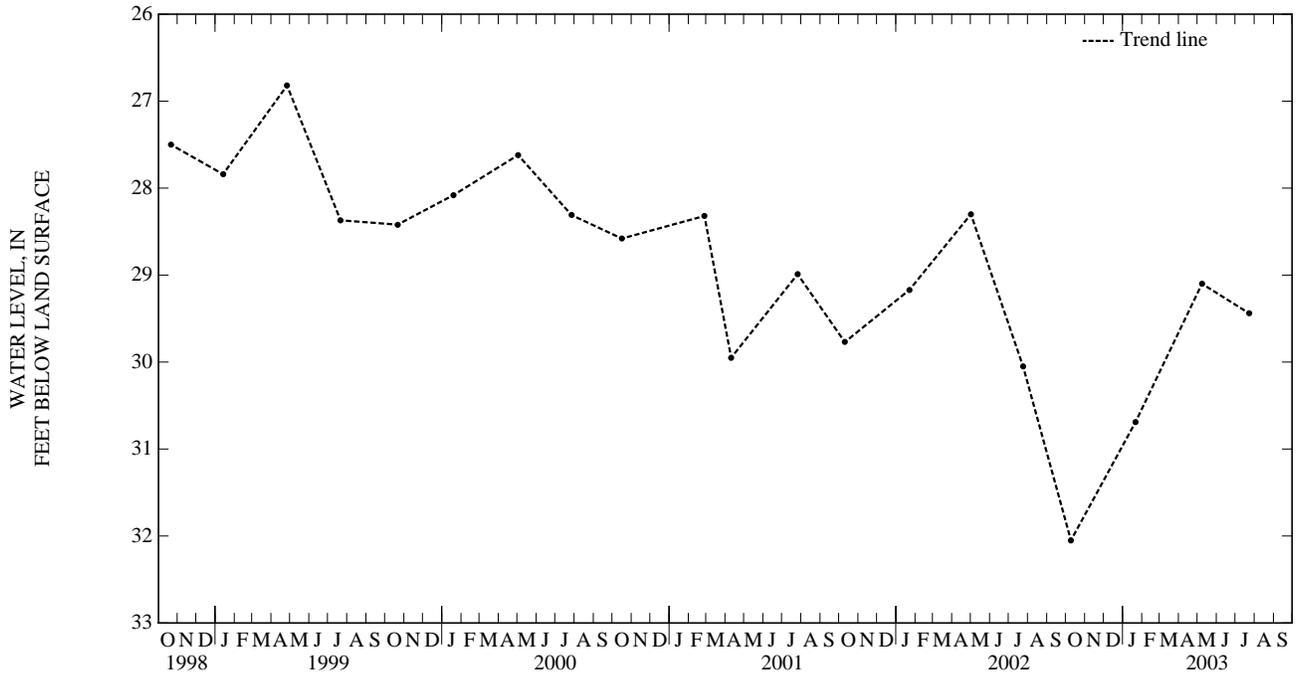
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.50 ft below land-surface datum, Feb. 2, 1984; lowest measured, 32.05 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	32.05	JAN 21	30.69	MAY 08	29.10	JUL 23	29.44
WATER YEAR 2003 HIGHEST		29.10	MAY 08, 2003 LOWEST		32.05	OCT 09, 2002	



ACCOMACK COUNTY—Continued

374442075432501. Local number, 65K 23 SOW 109C.

LOCATION.--Lat 37°44'42", long 75°43'24", NAD83, Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum.

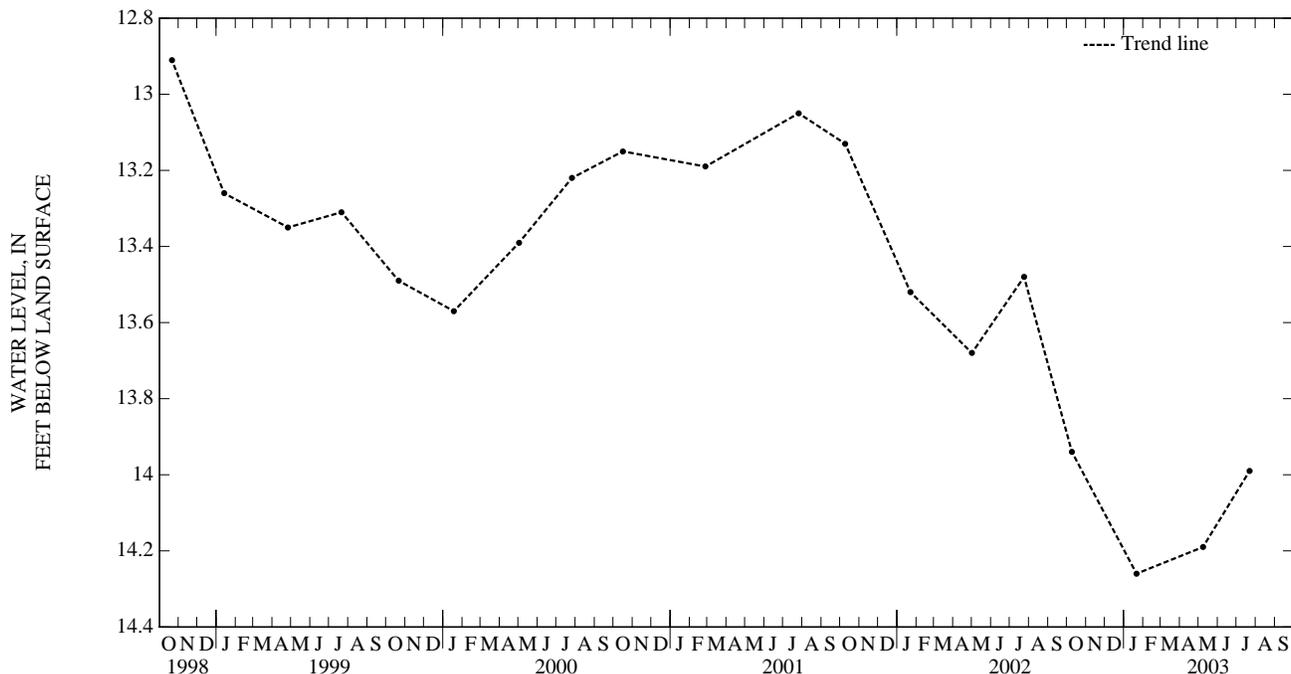
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.36 ft below land-surface datum, Dec. 30, 1982; lowest measured, 16.65 ft below land-surface datum, Mar. 12, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	13.94	JAN 21	14.26	MAY 08	14.19	JUL 22	13.99
WATER YEAR 2003 HIGHEST		13.94	OCT 09, 2002 LOWEST		14.26	JAN 21, 2003	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374442075432502. Local number, 65K 24 SOW 109A.

LOCATION.--Lat 37°44'42", long 75°43'24", NAD83, Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

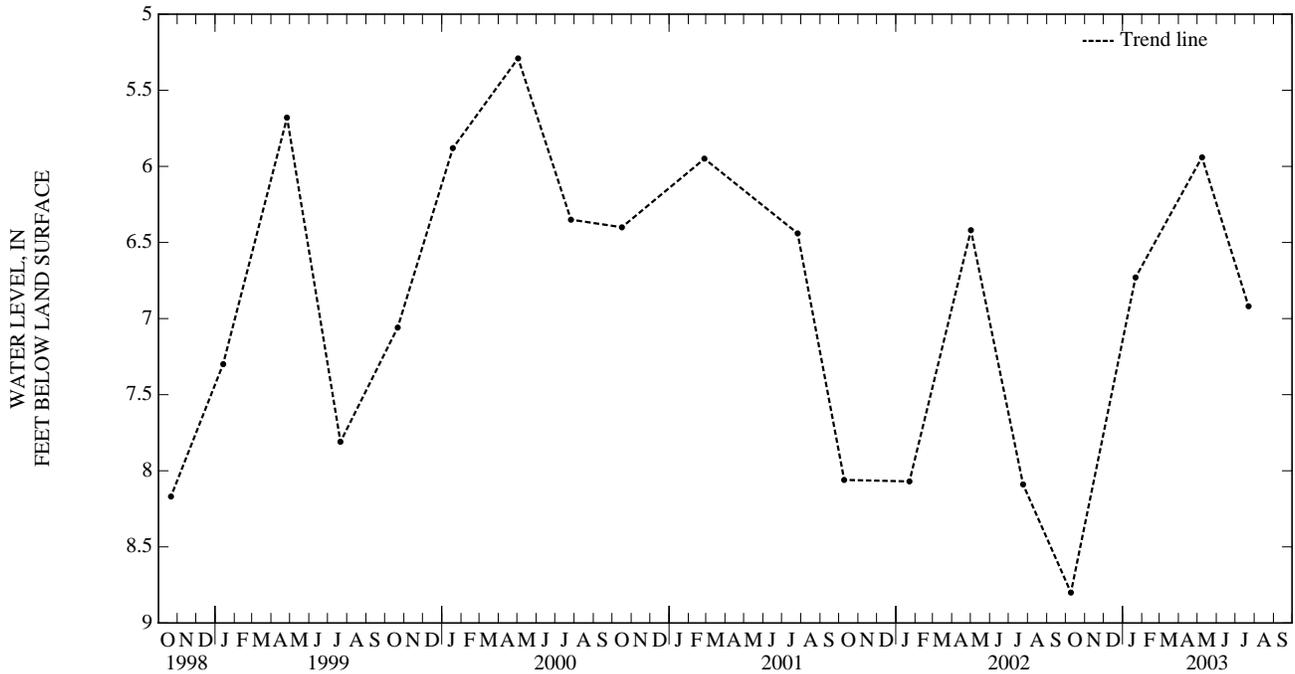
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.35 ft below land-surface datum, Apr. 21, 1983; lowest measured, 9.27 ft below land-surface datum, Oct. 23, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	8.80	JAN 21	6.73	MAY 08	5.94	JUL 22	6.92
WATER YEAR 2003 HIGHEST		5.94	MAY 08, 2003 LOWEST		8.80	OCT 09, 2002	



ACCOMACK COUNTY—Continued

374442075432503. Local number, 65K 25 SOW 109B.

LOCATION.--Lat 37°44'42", long 75°43'24", NAD83, Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 228 ft, screened 218 to 228 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

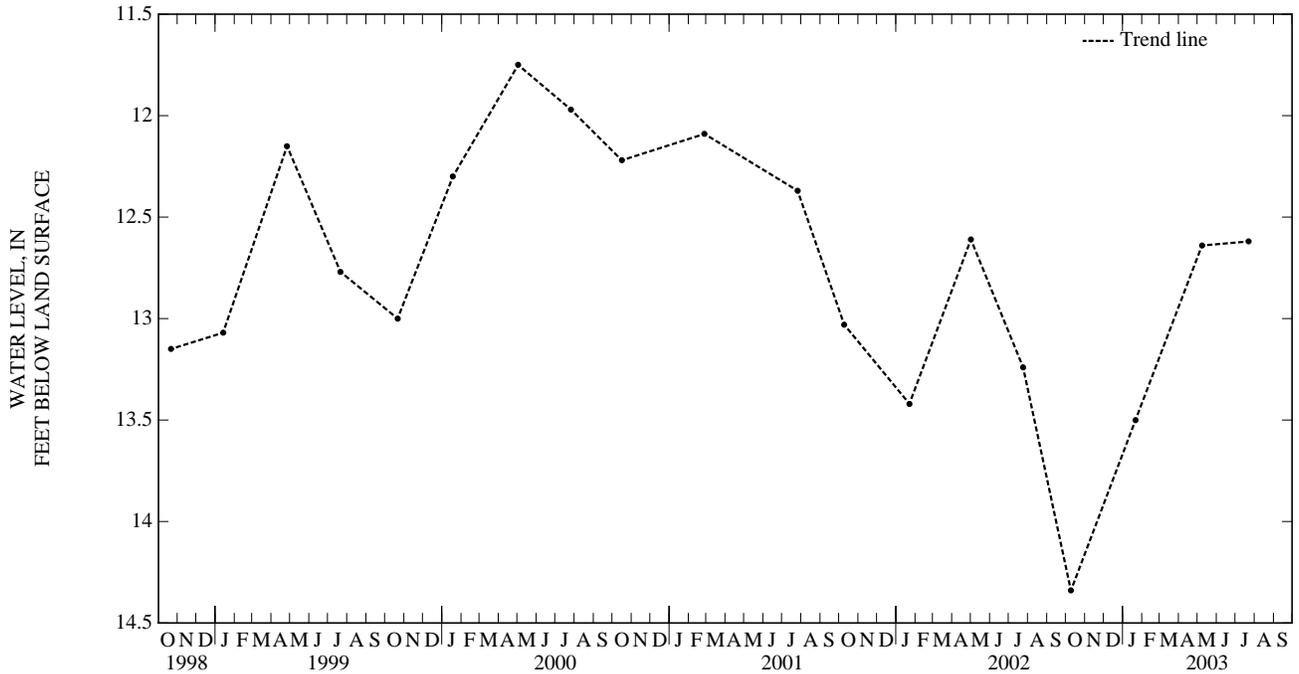
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.15 ft below land-surface datum, June 20, 1984; lowest measured, 14.34 ft below land-surface datum, Sept. 10, 1991 and Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	14.34	JAN 21	13.50	MAY 08	12.64	JUL 22	12.62
WATER YEAR 2003 HIGHEST		12.62	JUL 22, 2003 LOWEST		14.34	OCT 09, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374442075432504. Local number, 65K 26 SOW 109S.

LOCATION.--Lat 37°44'42", long 75°43'24", NAD83, Hydrologic Unit 02080109, 50 ft north of State Highway 658, 0.1 mi northeast of intersection of State Highways 658 and 660, and 2.2 mi southeast of Deep Creek. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 15 to 25 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.37 ft above land-surface datum prior to Mar. 1, 1988; 0.5 ft thereafter.

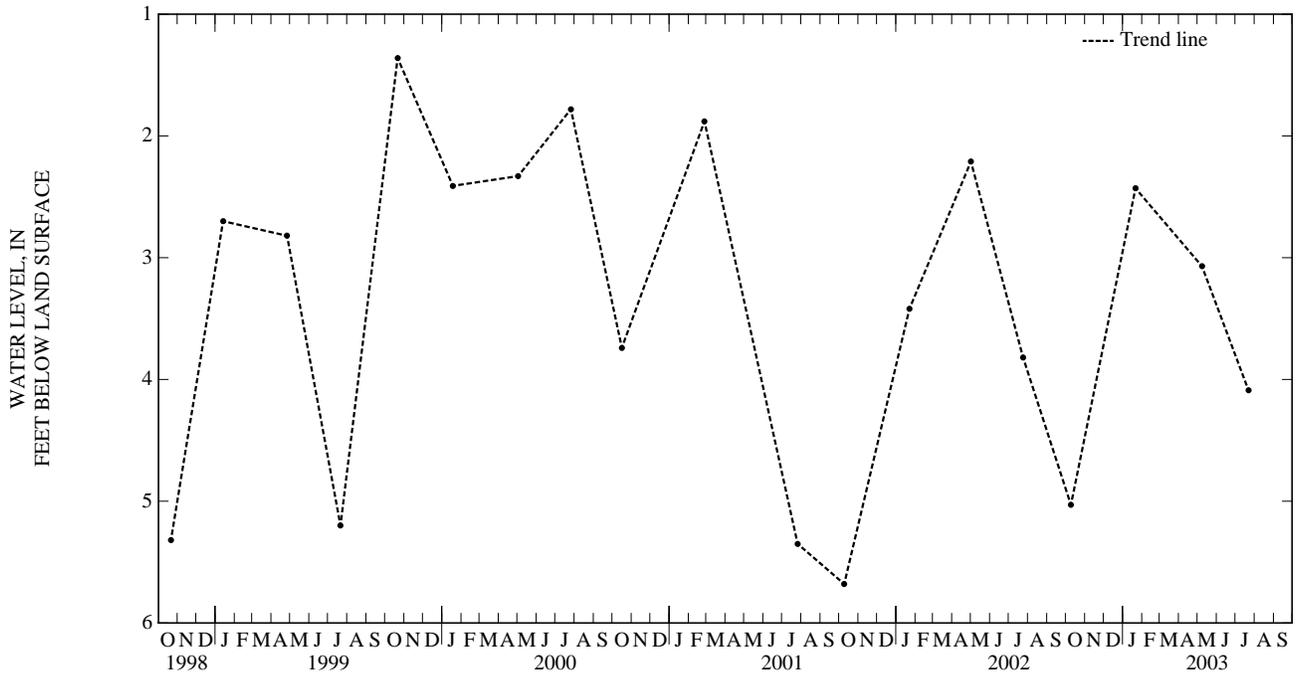
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.03 ft below land-surface datum, Feb. 24, 1994; lowest measured, 6.57 ft below land-surface datum, Oct. 31, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	5.03	JAN 21	2.43	MAY 08	3.07	JUL 22	4.09
WATER YEAR 2003 HIGHEST		2.43	JAN 21, 2003 LOWEST		5.03	OCT 09, 2002	



ACCOMACK COUNTY—Continued

374425075400001. Local number, 65K 27 SOW 114A.

LOCATION.--Lat 37°44'25", long 75°39'59", NAD83, Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 160 ft, screened 150 to 160 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.4 ft above land-surface datum prior to Feb. 27, 1990; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage. Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

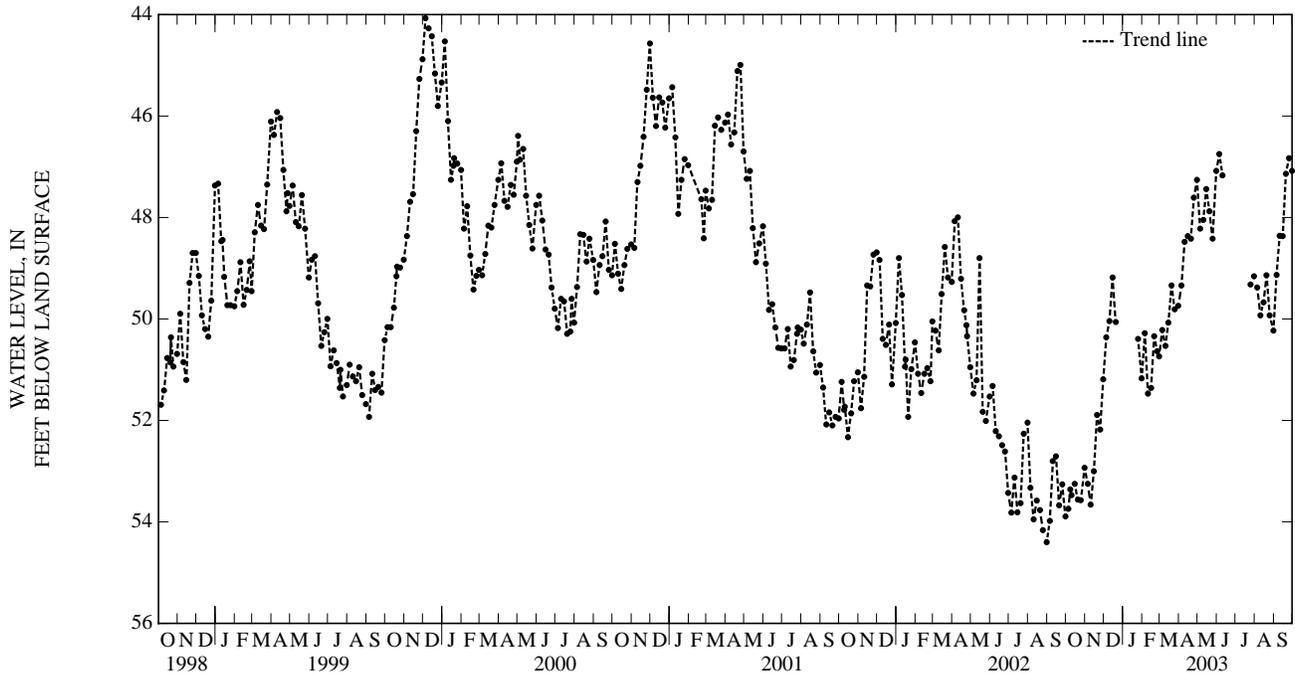
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.59 ft below land-surface datum, June 6, 1984; lowest measured, 54.72 ft below land-surface datum, Sept. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 46.37 ft below land-surface datum, Sept. 23, 24; lowest instantaneous water-level, 53.87 ft below land-surface datum, Oct. 5.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.74	53.25	50.36	---	50.28	50.22	49.34	48.22	46.75	---	49.38	49.13
10	53.47	53.66	50.04	---	51.47	50.53	48.48	48.05	47.17	---	49.93	48.36
15	53.25	53.00	49.18	---	51.36	50.07	48.37	47.44	---	---	49.67	48.37
20	53.56	51.89	50.06	---	50.34	49.34	48.42	47.88	---	---	49.14	47.14
25	53.57	52.18	---	50.39	50.64	49.81	47.61	48.42	---	49.32	49.93	46.83
EOM	52.93	51.19	---	51.17	50.74	49.74	47.26	47.08	---	49.16	50.23	47.08

WATER YEAR 2003 HIGHEST 46.75 JUN 05, 2003 LOWEST 53.74 OCT 05, 2002



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374425075400002. Local number, 65K 28 SOW 114B.

LOCATION.--Lat 37°44'25", long 75°39'59", NAD83, Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

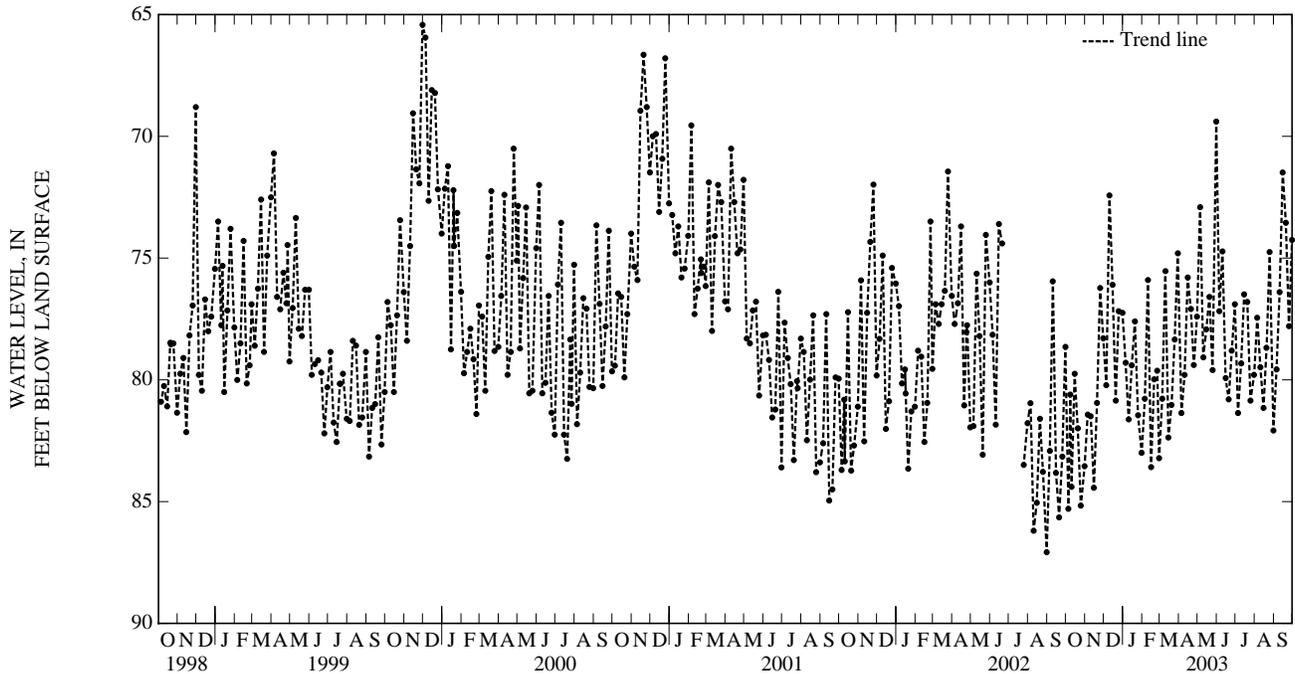
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 49.40 ft below land-surface datum, June 6, 1987; lowest recorded, 87.22 ft below land-surface datum, Sept. 1, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 69.40 ft below land-surface datum, June 2; lowest instantaneous water-level, 85.38 ft below land-surface datum, Oct. 12.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.30	81.43	80.22	79.30	80.78	80.77	81.36	72.91	77.18	81.36	77.45	79.57
10	84.39	81.50	72.42	81.62	75.90	75.53	79.80	79.08	74.72	79.32	79.48	76.40
15	79.75	84.43	76.10	79.40	83.59	82.37	75.80	77.93	79.93	76.49	81.15	71.49
20	81.99	80.95	80.85	77.60	79.98	81.03	77.09	76.60	80.80	76.80	78.68	73.55
25	85.17	76.23	77.18	81.46	79.62	78.34	79.39	79.60	78.80	80.85	74.75	77.80
EOM	83.55	78.29	77.25	83.00	83.22	74.80	77.40	69.40	76.90	79.79	82.08	74.25

WATER YEAR 2003 HIGHEST 69.40 MAY 31, 2003 LOWEST 85.30 OCT 05, 2002



ACCOMACK COUNTY—Continued

374425075400003. Local number, 65K 29 SOW 114C.

LOCATION.--Lat 37°44'27", long 75°39'59", NAD83, Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 315 ft, screened 305 to 315 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Feb. 27, 1990; 1.6 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage. Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

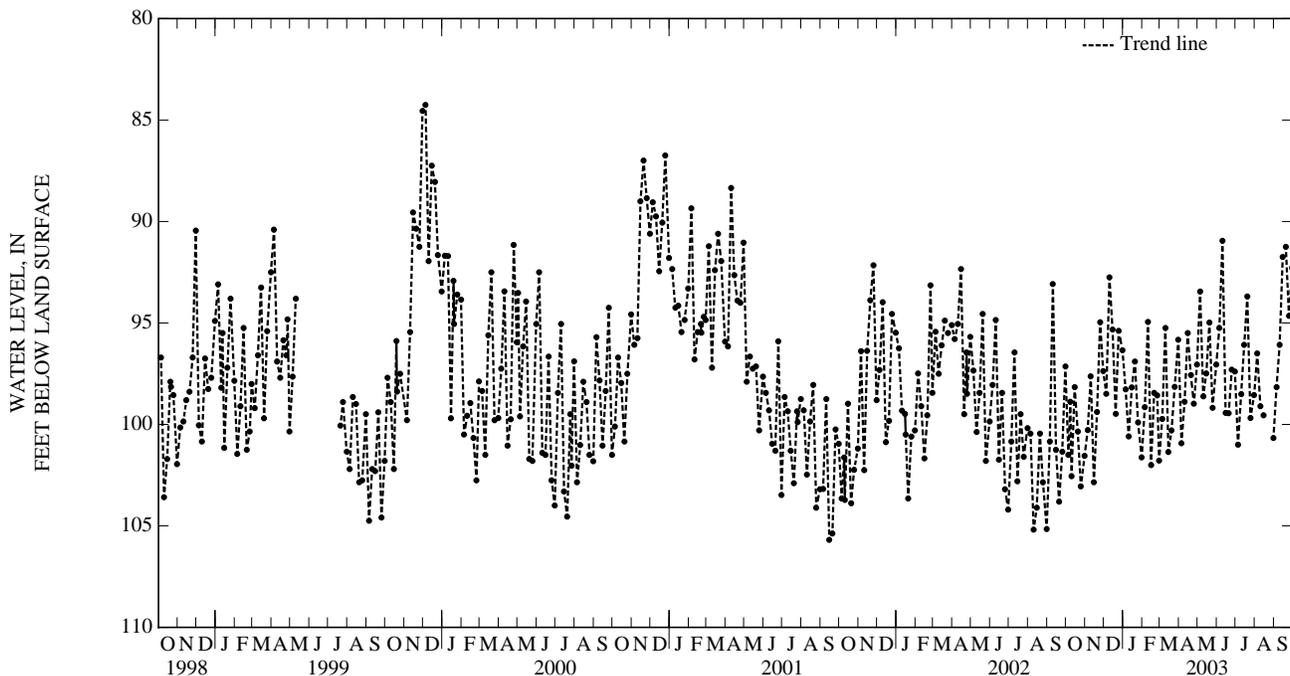
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 71.50 ft below land-surface datum, Feb. 24, 1986; lowest recorded, 108.92 ft below land-surface datum, Aug. 17, 1991.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 88.52 ft below land-surface datum, Sept. 23; lowest instantaneous water level, 103.97 ft below land-surface datum, Nov. 9.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	101.50	100.28	98.49	98.27	99.15	99.73	100.93	93.45	95.24	101.00	96.50	98.16
10	102.55	97.63	92.75	100.59	94.95	95.25	98.88	98.61	90.95	98.50	99.10	96.08
15	98.16	102.85	95.32	98.18	102.00	101.36	95.49	97.49	99.43	96.08	99.55	91.75
20	100.35	99.39	99.48	96.90	98.45	100.30	97.57	94.98	99.45	93.70	---	91.25
25	103.06	94.96	95.38	99.90	98.57	98.15	98.98	99.18	97.30	99.68	---	94.65
EOM	101.55	97.37	96.35	101.62	101.78	95.83	97.05	97.05	97.39	98.55	100.67	92.28

WATER YEAR 2003 HIGHEST 90.95 JUN 10, 2003 LOWEST 103.06 OCT 25, 2002



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374425075400004. Local number, 65K 30 SOW 114S.

LOCATION.--Lat 37°44'25", long 75°39'59", NAD83, Hydrologic Unit 02080109, 0.2 mi northwest of intersection of State Highway 662 and U.S. Highway 13, 0.6 mi northwest of State Highway 662, and 0.9 mi east of Greenbush. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Mar. 1, 1988; 1.5 ft thereafter.

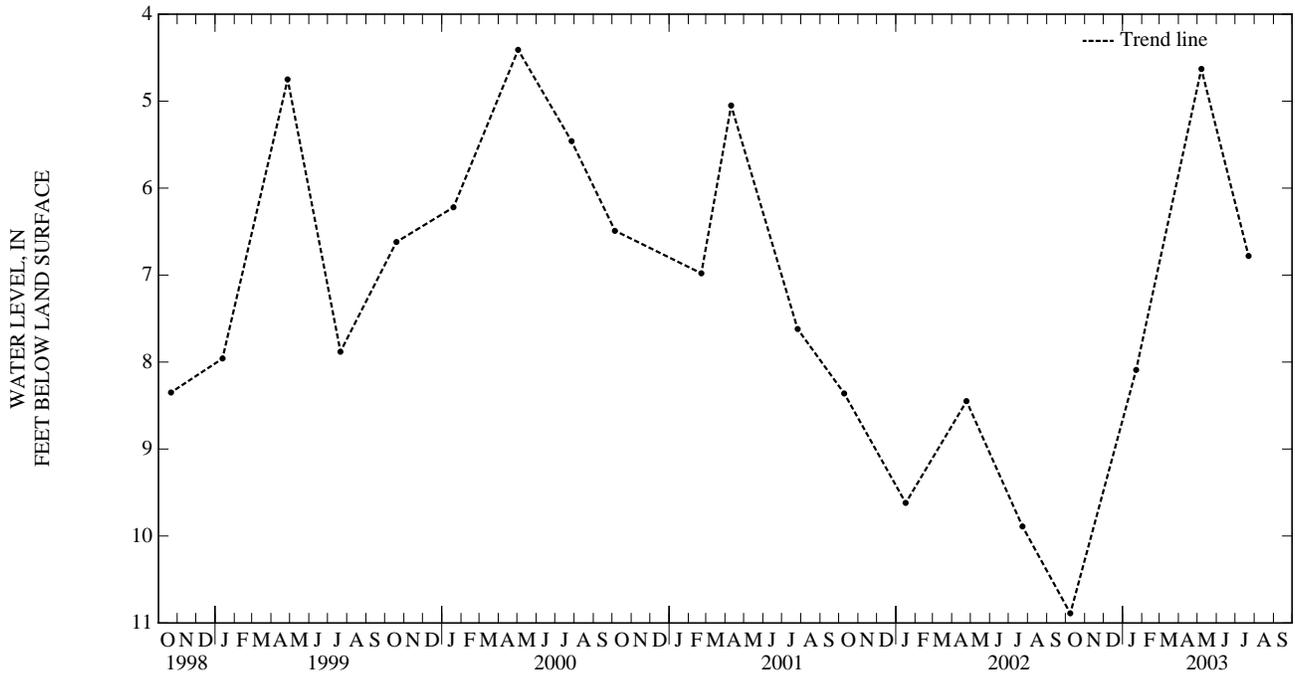
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.06 ft below land-surface datum, Oct. 21, 1996; lowest measured, 20.10 ft below land-surface datum, Dec. 9, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.89	JAN 22	8.09	MAY 07	4.63	JUL 22	6.78
WATER YEAR 2003 HIGHEST		4.63 MAY 07, 2003		LOWEST		10.89 OCT 08, 2002	



ACCOMACK COUNTY—Continued

374314075401402. Local number, 65K 59 SOW 183A.

LOCATION.--Lat 37°43'14", long 75°40'13", NAD83, Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 250 ft, diameter 2 in. from 250 to 285 ft, depth 285 ft, screened 275 to 285 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 6, 1990 to Jan. 28, 1997, continuous strip-chart recorder. Prior to Aug. 7, 1990, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

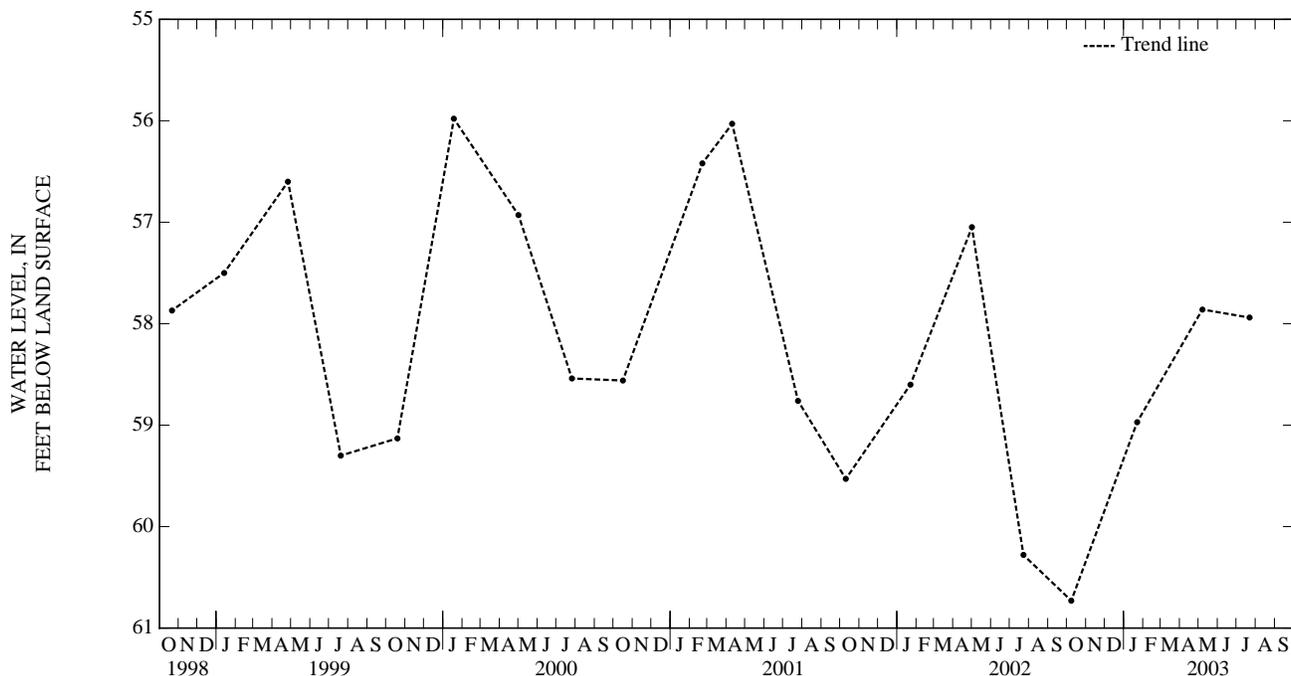
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage. Missing record due to recorder malfunction.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 52.28 ft below land-surface datum, Jan. 13, 1993; lowest recorded, 61.24 ft below land-surface datum, Sept. 29, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	60.73	JAN 22	58.97	MAY 07	57.86	JUL 22	57.94
WATER YEAR 2003 HIGHEST		57.86 MAY 07, 2003		LOWEST		60.73 OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374314075401403. Local number, 65K 60 SOW 183B.

LOCATION.--Lat 37°43'14", long 75°40'13", NAD83, Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 210 ft, diameter 2 in. from 210 to 235 ft, depth 235 ft, screened 225 to 235 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

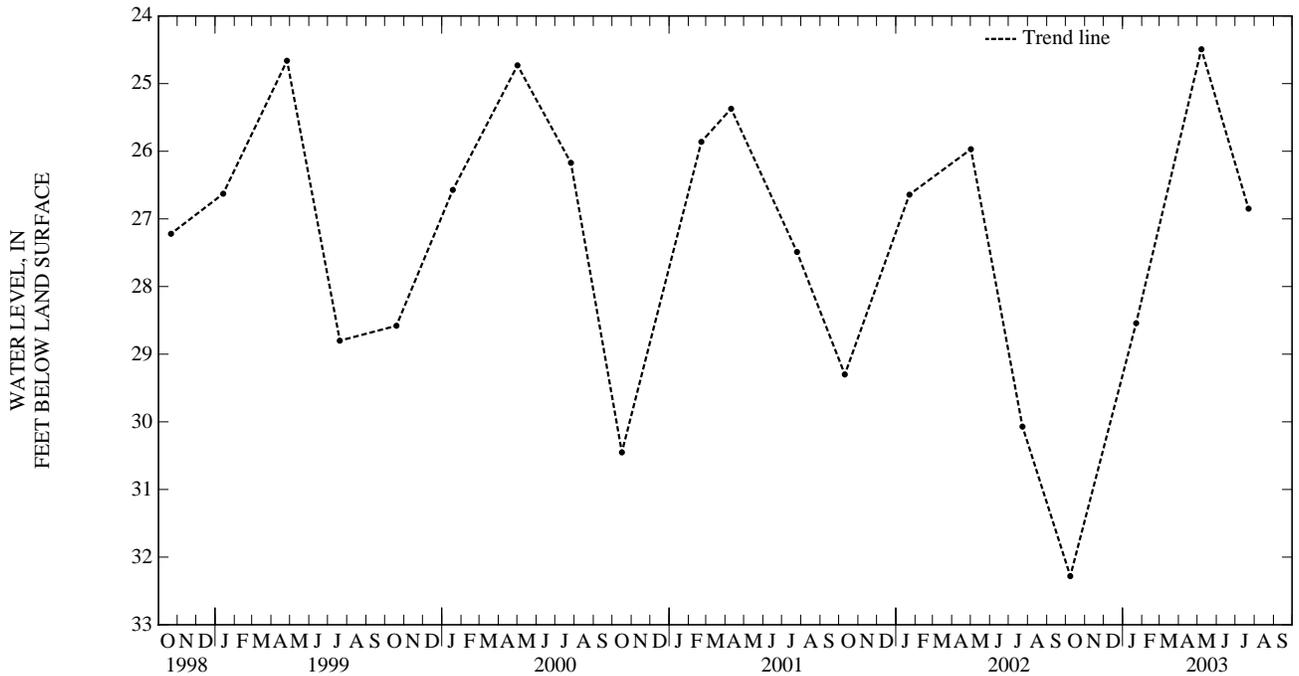
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.50 ft below land-surface datum, May 7, 1990; lowest measured, 32.28 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	32.28	JAN 22	28.54	MAY 07	24.49	JUL 22	26.85
WATER YEAR 2003 HIGHEST		24.49	MAY 07, 2003 LOWEST		32.28	OCT 08, 2002	



ACCOMACK COUNTY—Continued

374314075401404. Local number, 65K 61 SOW 183C.

LOCATION.--Lat 37°43'14", long 75°40'13", NAD83, Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 82 ft, diameter 2 in. from 82 to 134 ft, depth 134 ft, screened 124 to 134 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 6, 1990 to Jan. 28, 1997, continuous strip-chart recorder. Prior to Aug. 6, 1990, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

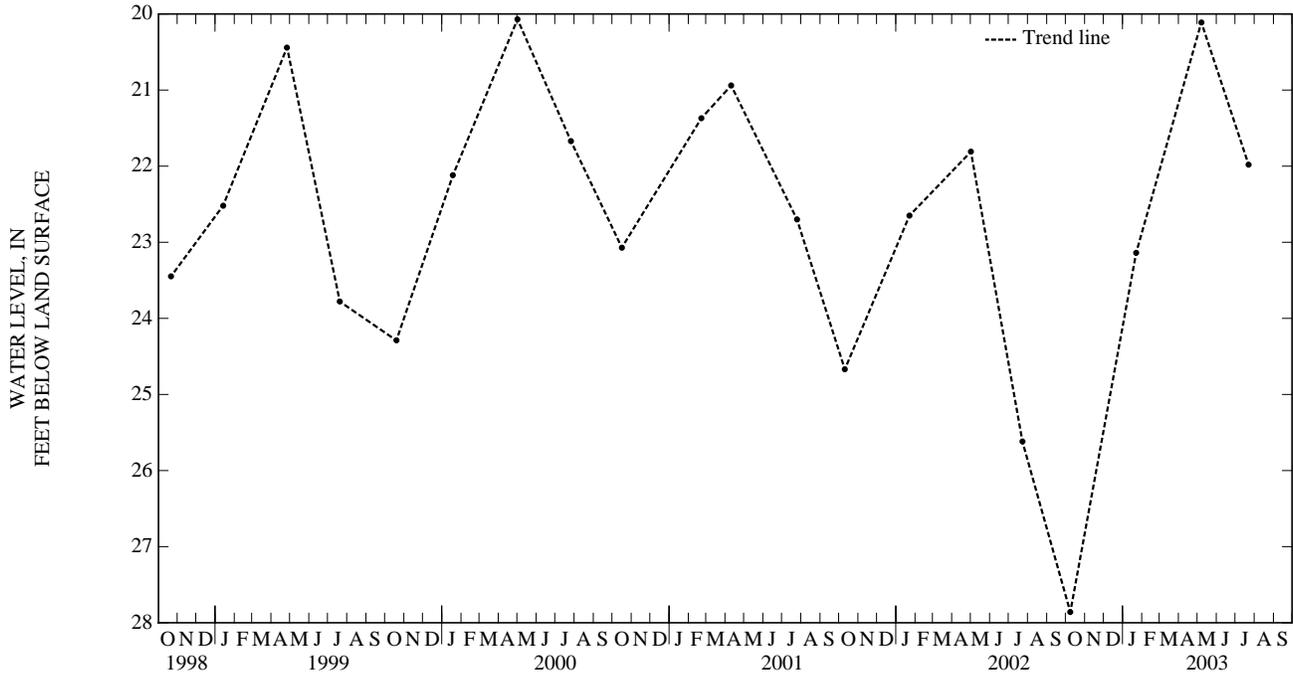
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.20 ft below land-surface datum, May 7, 1990; lowest recorded, 27.86 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	27.86	JAN 22	23.14	MAY 07	20.11	JUL 22	21.98
WATER YEAR 2003 HIGHEST		20.11	MAY 07, 2003 LOWEST		27.86	OCT 08, 2002	



GROUND-WATER LEVELS
ACCOMACK COUNTY—Continued

374314075401405. Local number, 65K 62 SOW 183D.

LOCATION.--Lat 37°43'14", long 75°40'13", NAD83, Hydrologic Unit 02080109, at Accomac, 500 ft north of U.S. Highway 13 (Business), 700 ft east of intersection of State Highway 764, and U.S. Highway 13 (Business). Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 15 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

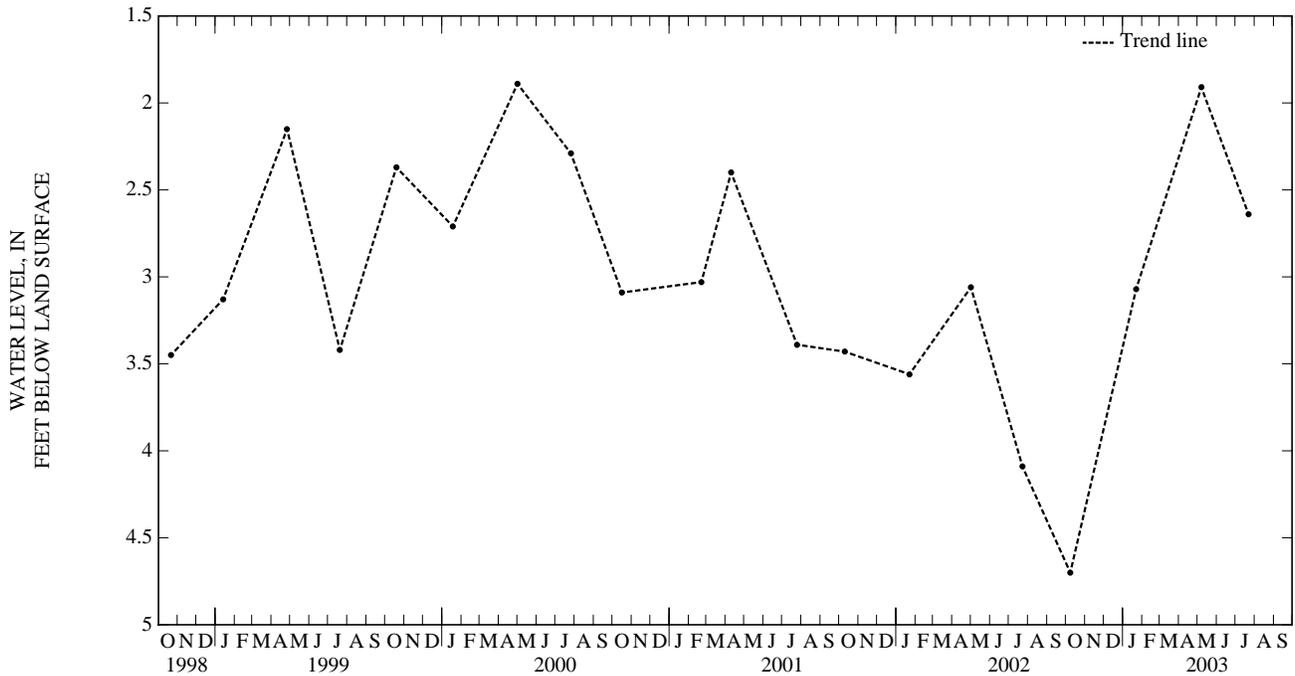
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.09 ft below land-surface datum, Jan. 4, 1993; lowest measured, 4.70 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	4.70	JAN 22	3.07	MAY 07	1.91	JUL 22	2.64
WATER YEAR 2003 HIGHEST		1.91	MAY 07, 2003 LOWEST		4.70	OCT 08, 2002	



ACCOMACK COUNTY—Continued

374320075380501. Local number, 66K 2 SOW 101C.

LOCATION.--Lat 37°43'19", long 75°36'55", NAD83, Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 292 ft, screened 282 to 292 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

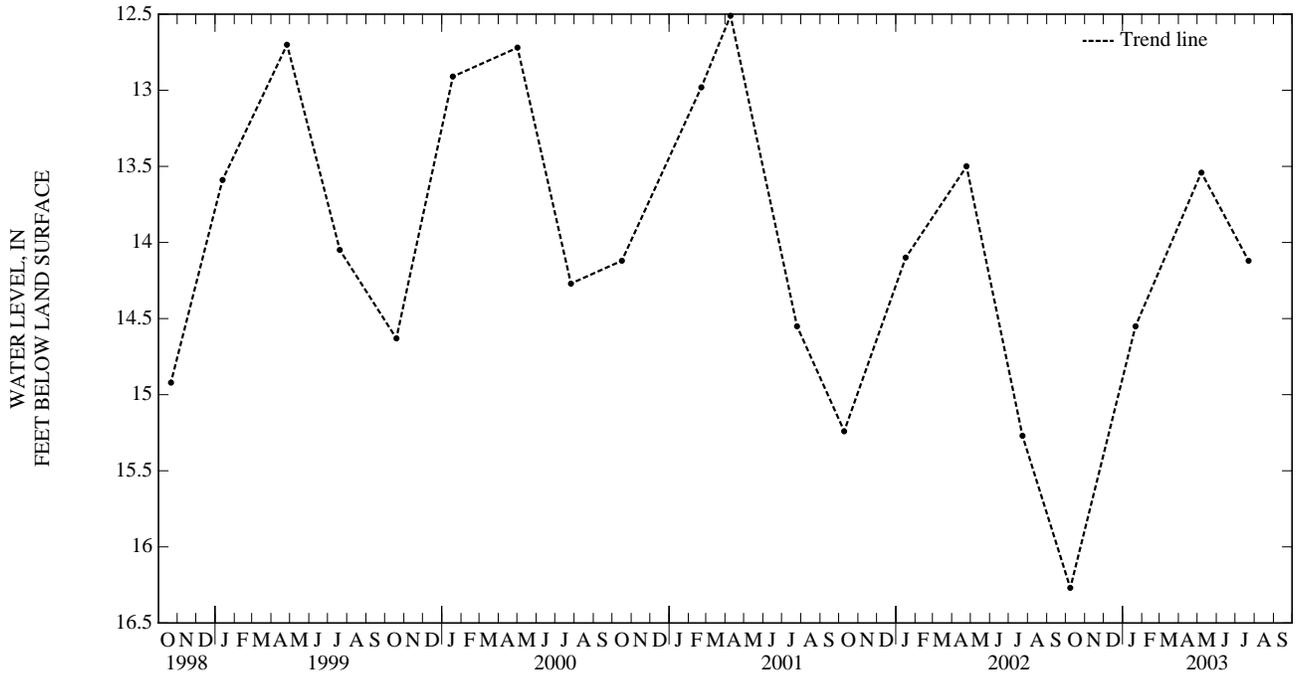
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.57 ft below land-surface datum, Apr. 25, 1984; lowest measured, 17.30 ft below land-surface datum, Aug. 5, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	16.27	JAN 21	14.55	MAY 07	13.54	JUL 22	14.12
WATER YEAR 2003 HIGHEST		13.54	MAY 07, 2003 LOWEST		16.27	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

374320075365602. Local number, 66K 3 SOW 101B.

LOCATION.--Lat 37°43'19", long 75°36'55", NAD83, Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.36 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft thereafter.

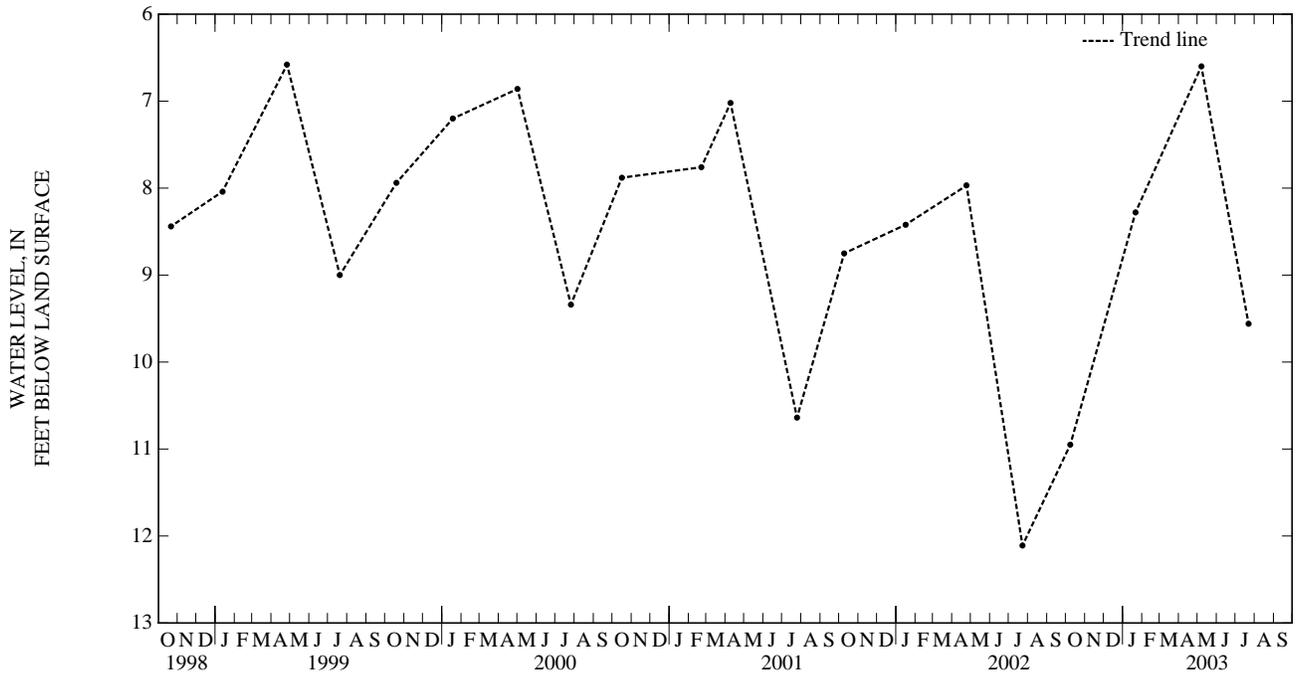
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.04 ft below land-surface datum, Apr. 25, 1984; lowest measured, 12.11 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.95	JAN 21	8.28	MAY 07	6.60	JUL 22	9.56
WATER YEAR 2003 HIGHEST		6.60	MAY 07, 2003 LOWEST		10.95	OCT 08, 2002	



ACCOMACK COUNTY—Continued

374320075365603. Local number, 66K 4 SOW 101A.

LOCATION.--Lat 37°43'19", long 75°36'55", NAD83, Hydrologic Unit 02080110, 0.2 mi north of State Highway 662, 2.2 mi east of intersection of State Highway 662 and U.S. Highway 13 (Business), and 2.8 mi east of Accomac. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 152 ft, screened 142 to 152 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Mar. 1, 1988; 0.65 ft Mar. 1, 1988, to June 20, 1989; at land-surface datum June 21, 1989, to Jan. 3, 1990; 0.85 ft above land-surface datum thereafter.

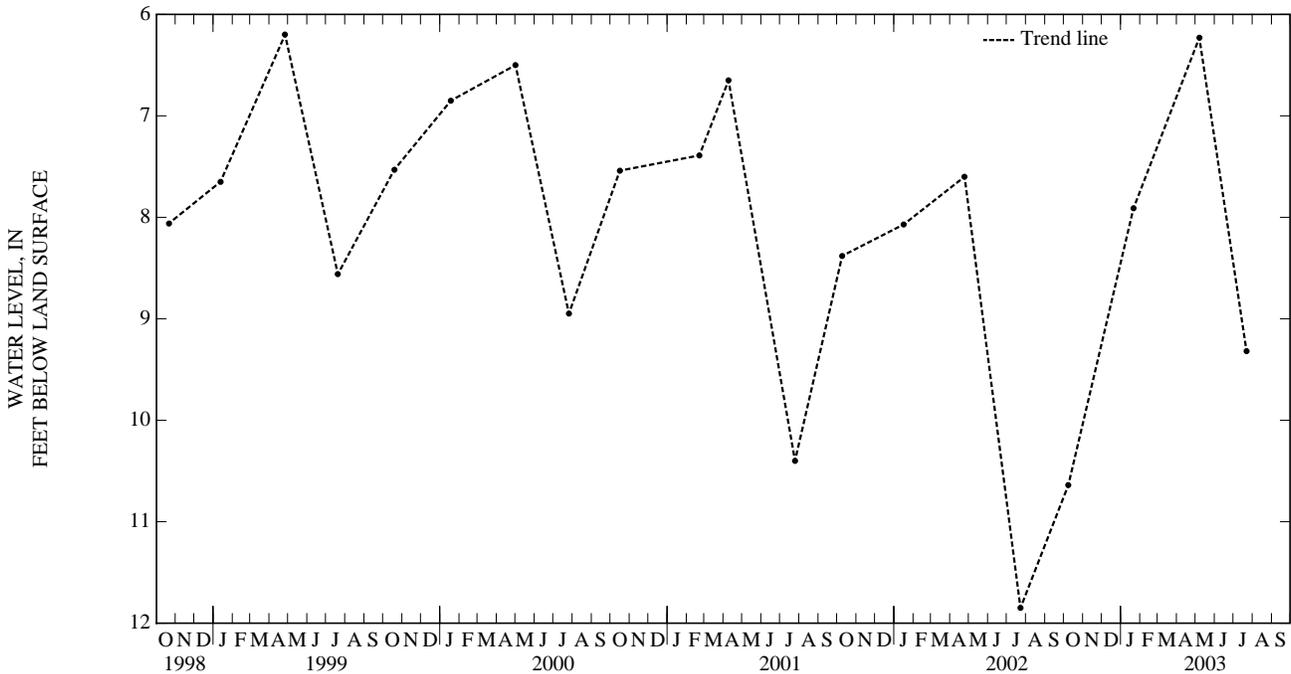
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.99 ft below land-surface datum, Apr. 25, 1984; lowest measured, 11.85 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.64	JAN 21	7.91	MAY 07	6.23	JUL 22	9.32
WATER YEAR 2003 HIGHEST		6.23	MAY 07, 2003 LOWEST		10.64	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375225075321701. Local number, 66L 1 SOW 107C.

LOCATION.--Lat 37°52'25", long 75°32'16", NAD83, Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 305 ft, screened 295 to 305 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.33 ft above land-surface datum prior to Mar. 1, 1988; 0.4 ft thereafter.

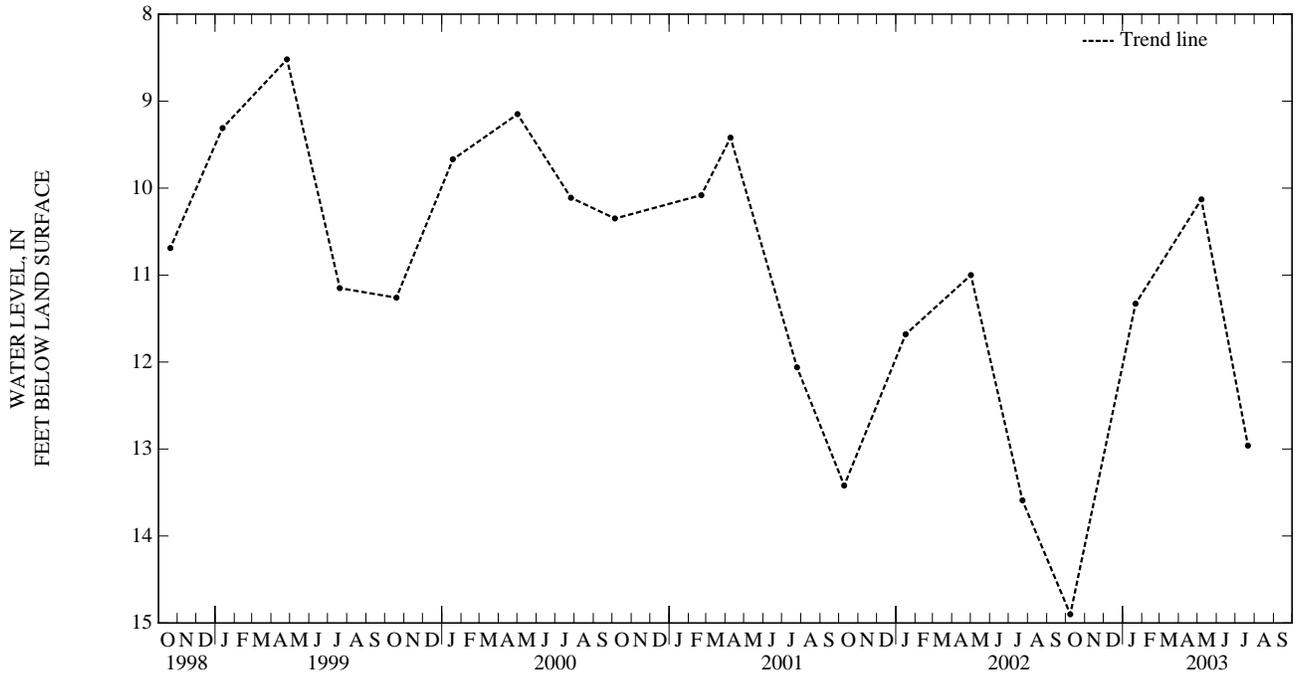
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--September 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.06 ft below land-surface datum, Jan. 4, 1984; lowest measured, 14.90 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	14.90	JAN 21	11.33	MAY 07	10.13	JUL 21	12.96
WATER YEAR 2003 HIGHEST		10.13	MAY 07, 2003 LOWEST		14.90	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375225075321702. Local number, 66L 2 SOW 107A.

LOCATION.---Lat 37°52'25", long 75°32'16", NAD83, Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.23 ft above land-surface datum prior to Mar. 1, 1988; 0.6 ft thereafter.

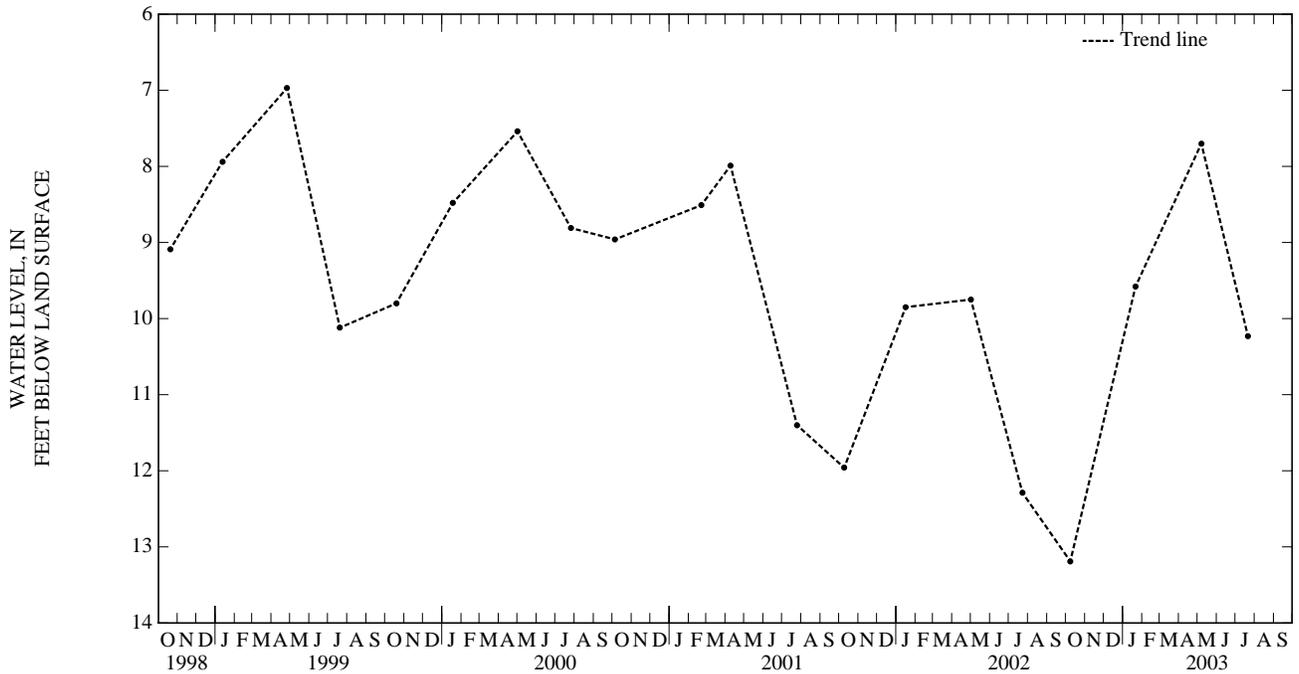
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.21 ft below land-surface datum, Apr. 25, 1984; lowest measured, 13.19 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	13.19	JAN 21	9.58	MAY 07	7.70	JUL 21	10.23
WATER YEAR 2003 HIGHEST		7.70	MAY 07, 2003 LOWEST		13.19	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375225075321703. Local number, 66L 3 SOW 107B.

LOCATION.--Lat 37°52'25", long 75°32'16", NAD83, Hydrologic Unit 02080110, 0.15 mi northwest of State Highway 679, 0.45 mi northeast of intersection of State Highways 679 and 790, and 0.7 mi west of Assawoman. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 206 ft, screened 191 to 201 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum prior to June 19, 1990; 0.3 ft thereafter.

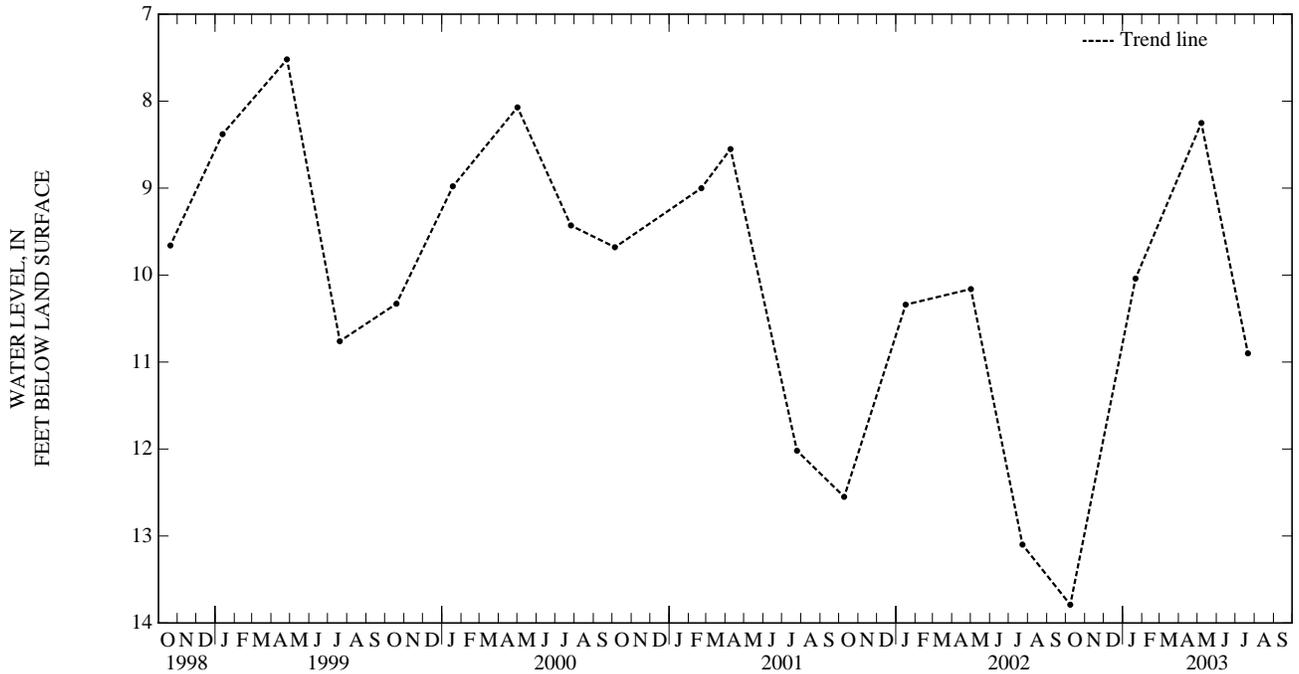
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.64 ft below land-surface datum, Apr. 25, 1984; lowest measured, 13.79 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	13.79	JAN 21	10.04	MAY 07	8.25	JUL 21	10.90
WATER YEAR 2003 HIGHEST		8.25	MAY 07, 2003 LOWEST		13.79	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375723075344401. Local number, 66M 16 SOW 110A.

LOCATION.--Lat 37°57'23", long 75°34'43", NAD83, Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.65 ft Mar. 1, 1988, to Oct. 3, 1989; at land-surface datum Oct. 4, 1989, to Jan. 3, 1990; 1.0 ft above land-surface datum Jan. 4, 1990, to Oct. 10, 1990; 0.70 ft thereafter.

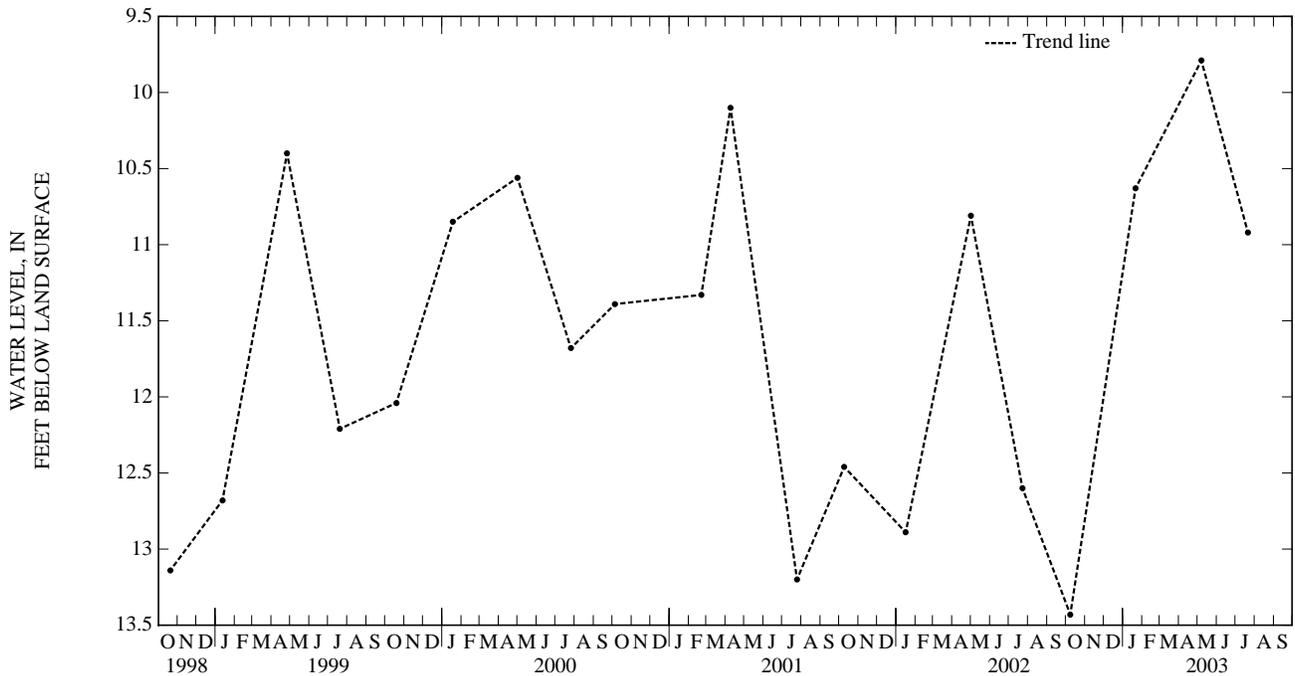
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.28 ft below land-surface datum, Feb. 19, 1986; lowest measured, 13.43 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	13.43	JAN 21	10.63	MAY 07	9.79	JUL 21	10.92
WATER YEAR 2003 HIGHEST		9.79	MAY 07, 2003 LOWEST		13.43	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375723075344402. Local number, 66M 17 SOW 110B.

LOCATION.--Lat 37°57'23", long 75°34'43", NAD83, Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 178 ft, screened 168 to 178 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum prior to Feb. 29, 1988; 0.75 ft thereafter.

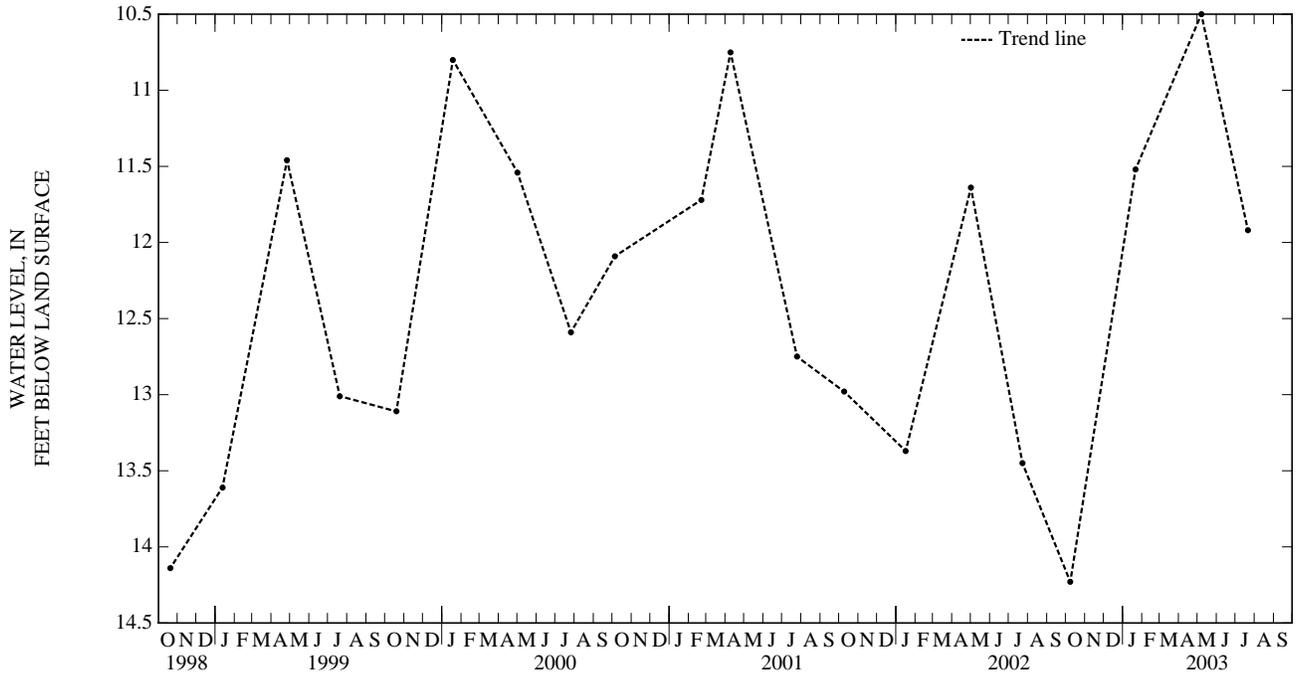
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.76 ft below land-surface datum, Apr. 1, 1980; lowest measured, 14.23 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	14.23	JAN 21	11.52	MAY 07	10.50	JUL 21	11.92
WATER YEAR 2003 HIGHEST		10.50 MAY 07, 2003		LOWEST		14.23 OCT 08, 2002	



ACCOMACK COUNTY—Continued

375723075344403. Local number, 66M 18 SOW 110C.

LOCATION.--Lat 37°57'23", long 75°34'43", NAD83, Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.65 ft above land-surface datum.

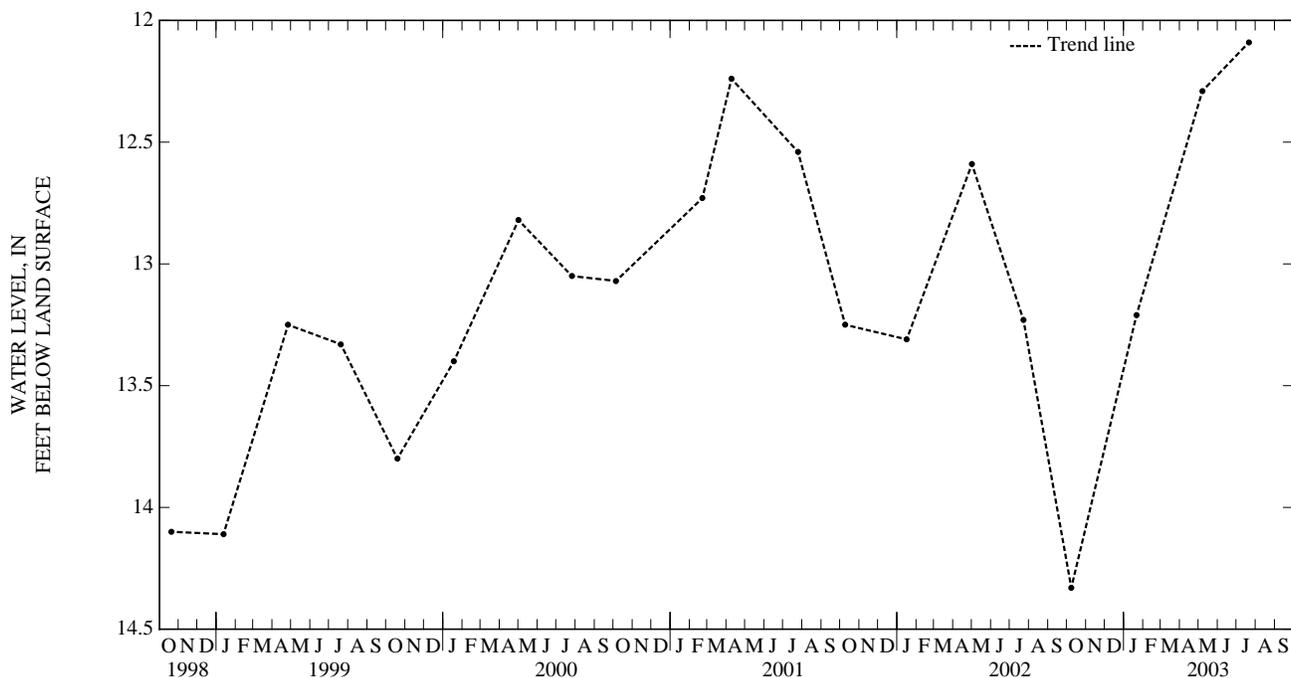
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.43 ft below land-surface datum, Aug. 12, 1981; lowest measured, 14.33 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	14.33	JAN 21	13.21	MAY 07	12.29	JUL 21	12.09
WATER YEAR 2003 HIGHEST		12.09	JUL 21, 2003 LOWEST		14.33	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375723075344404. Local number, 66M 19 SOW 110S.

LOCATION.--Lat 37°57'23", long 75°34'43", NAD83, Hydrologic Unit 02060009, 0.25 mi northeast of State Highway 693, 0.5 mi southeast of intersection of State Highways 693 and 706, and 2.3 mi northwest of Oak Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 36 ft, screened 26 to 36 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Feb. 29, 1988; 0.35 ft Mar. 1, 1988 to July 21, 2003; 1.57 ft thereafter.

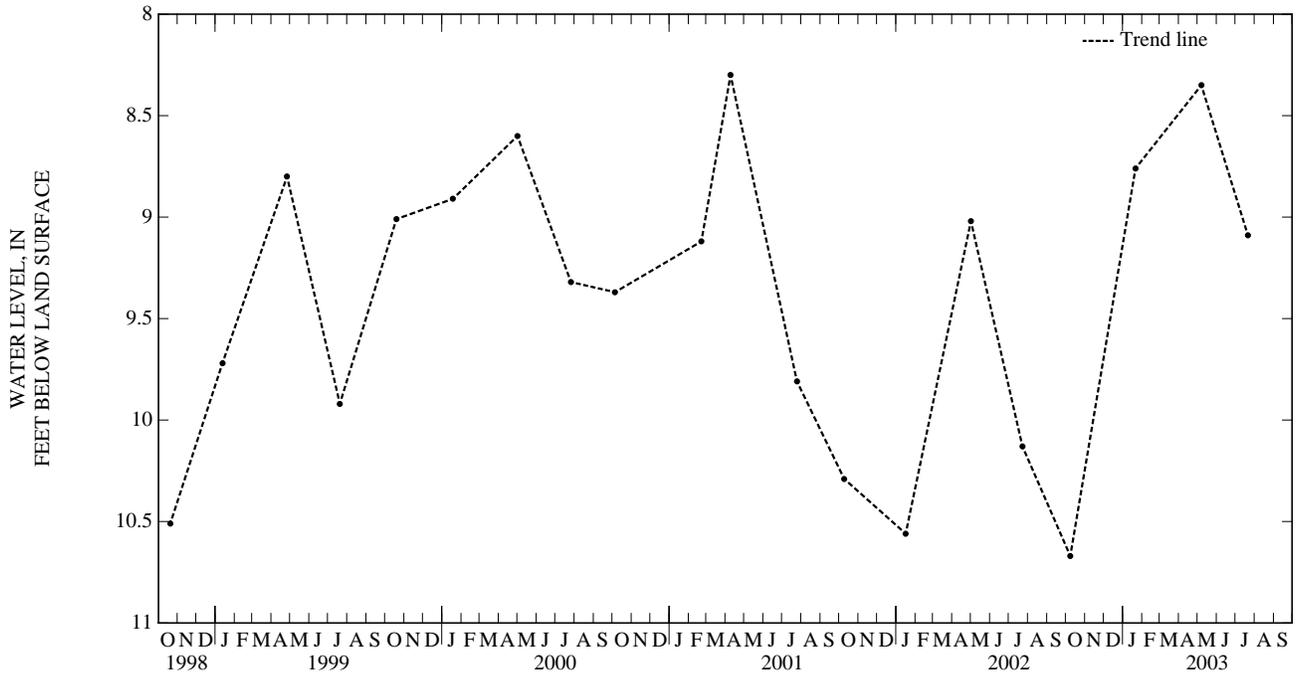
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.97 ft below land-surface datum, Oct. 21, 1996; lowest measured, 11.34 ft below land-surface datum, Nov. 6, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.67	JAN 21	8.76	MAY 07	8.35	JUL 21	9.09
WATER YEAR 2003 HIGHEST		8.35	MAY 07, 2003 LOWEST		10.67	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375610075361801. Local number, 66M 23 SOW 181A.

LOCATION.--Lat 37°56'10", long 75°36'17", NAD83, Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 1,300 ft, screened 1,290 to 1,300 ft.

INSTRUMENTATION.--Occasional measurement with manometer or chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with manometer or chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

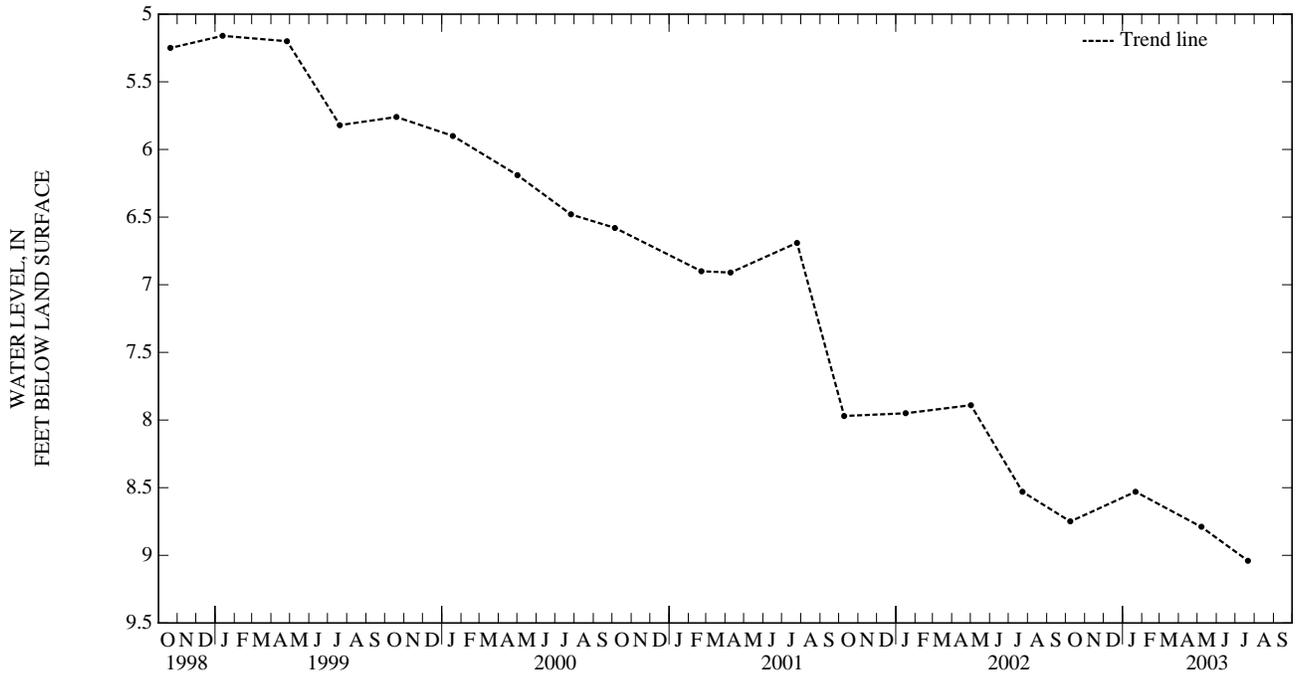
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional pumpage. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--January 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.38 ft above land-surface datum, Jan. 26, 1988; lowest measured, 9.04 ft below land-surface datum, July 21, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	8.75	JAN 21	8.53	MAY 07	8.79	JUL 21	9.04
WATER YEAR 2003 HIGHEST		8.53	JAN 21, 2003 LOWEST		9.04	JUL 21, 2003	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375610075361802. Local number, 66M 24 SOW 181B.

LOCATION.--Lat 37°56'10", long 75°36'17", NAD83, Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--St. Marys-Choptank aquifer of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 508 ft, screened 498 to 508 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

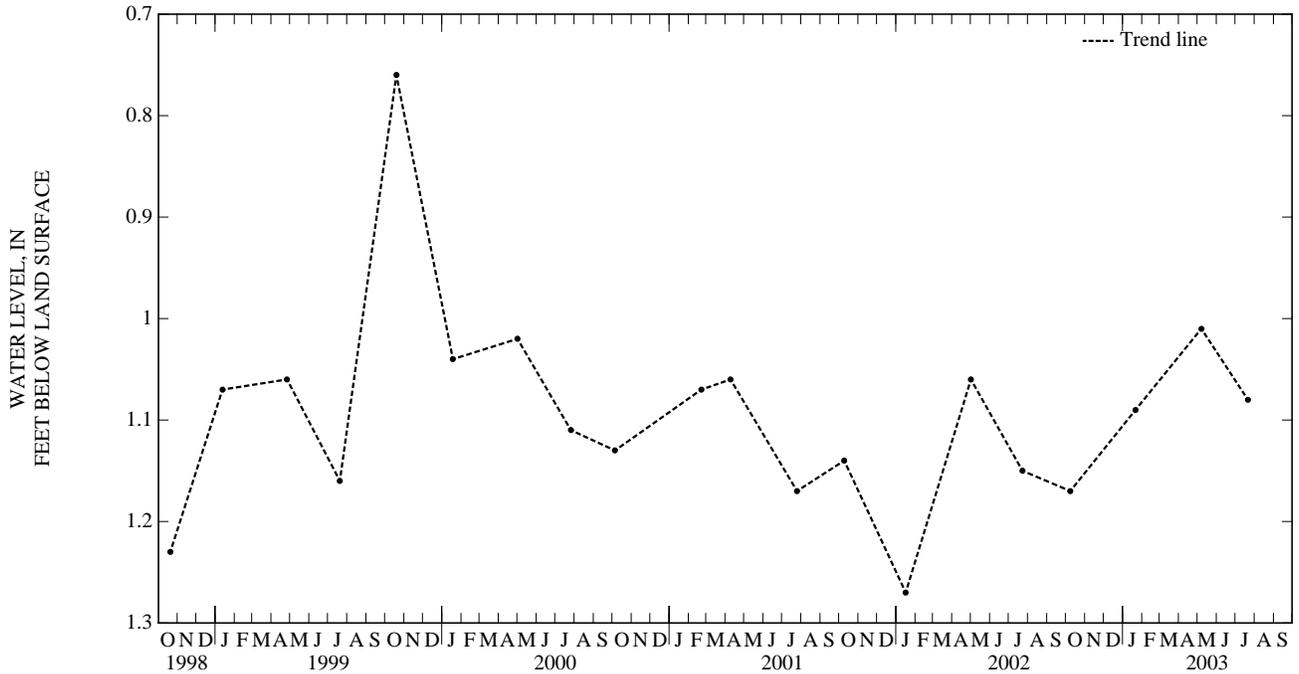
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.25 ft below land-surface datum, Mar. 7, 1989; lowest measured, 1.27 ft below land-surface datum, Jan. 16, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	1.17	JAN 21	1.09	MAY 07	1.01	JUL 21	1.08
WATER YEAR 2003 HIGHEST		1.01	MAY 07, 2003 LOWEST		1.17	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375610075361803. Local number, 66M 25 SOW 181C.

LOCATION.--Lat 37°56'10", long 75°36'17", NAD83, Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 340 ft, screened 330 to 340 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.95 ft above land-surface datum.

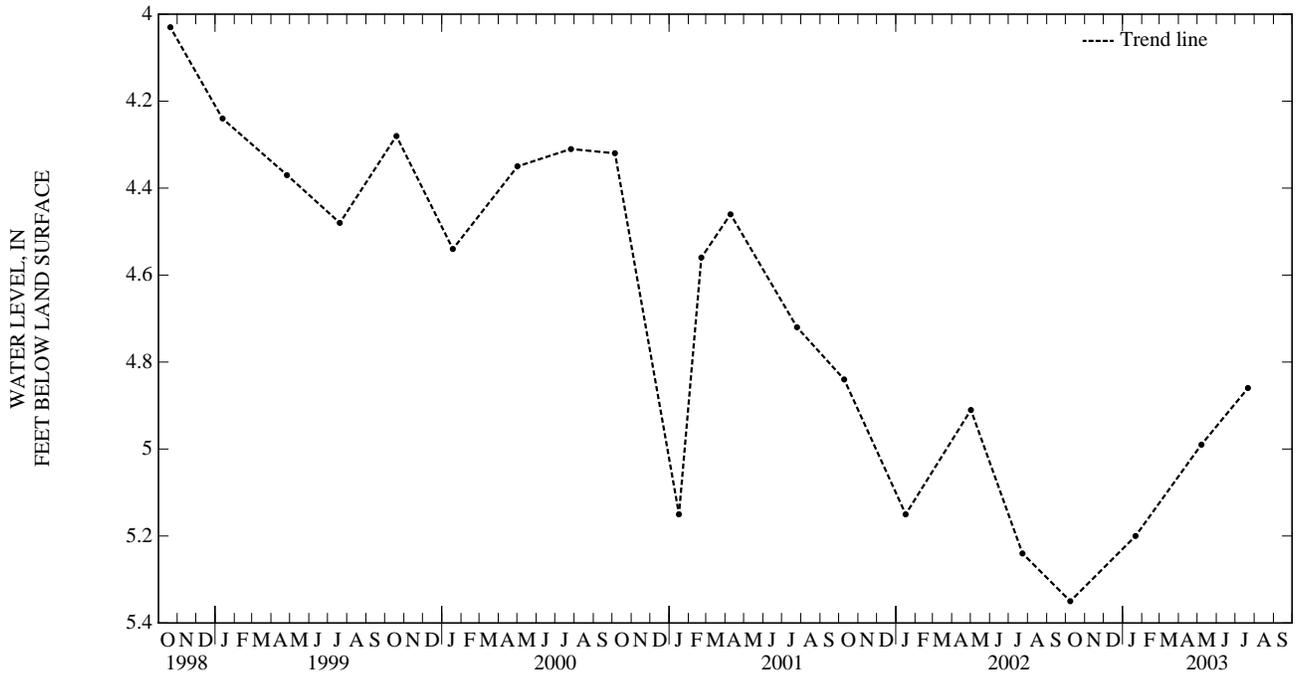
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.10 ft below land-surface datum, Apr. 28, 1993; lowest measured, 5.35 ft below land-surface datum, Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	5.35	JAN 21	5.20	MAY 07	4.99	JUL 21	4.86
WATER YEAR 2003 HIGHEST		4.86	JUL 21, 2003 LOWEST		5.35	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375610075361804. Local number, 66M 26 SOW 181D.

LOCATION.--Lat 37°56'10", long 75°36'17", NAD83, Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 230 ft, screened 220 to 230 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

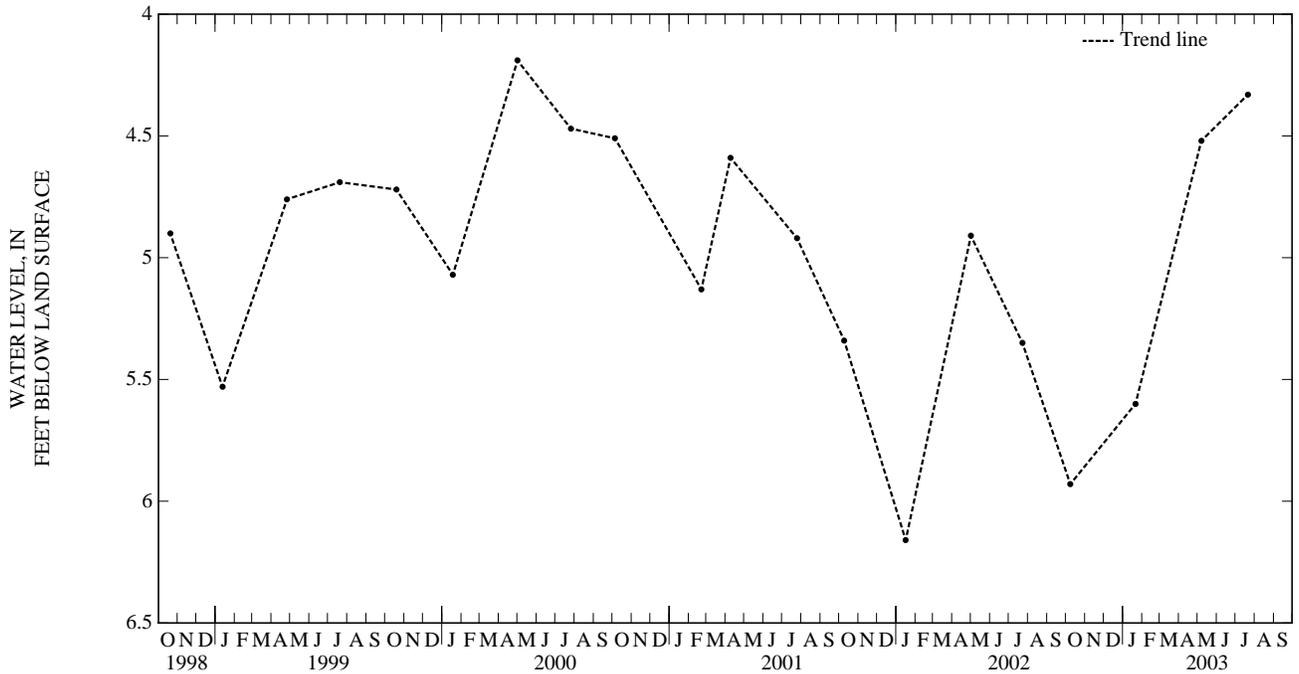
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.93 ft below land-surface datum, Apr. 28, 1993; lowest measured, 6.16 ft below land-surface datum, Jan. 16, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	5.93	JAN 21	5.60	MAY 07	4.52	JUL 21	4.33
WATER YEAR 2003 HIGHEST		4.33	JUL 21, 2003 LOWEST		5.93	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375610075361805. Local number, 66M 27 SOW 181E.

LOCATION.--Lat 37°56'10", long 75°36'17", NAD83, Hydrologic Unit 02080109, 100 ft south of State Highway 703, 0.1 mi east of intersection of State Highways 701 and 703, and 2.7 mi northwest of Makemie Park. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

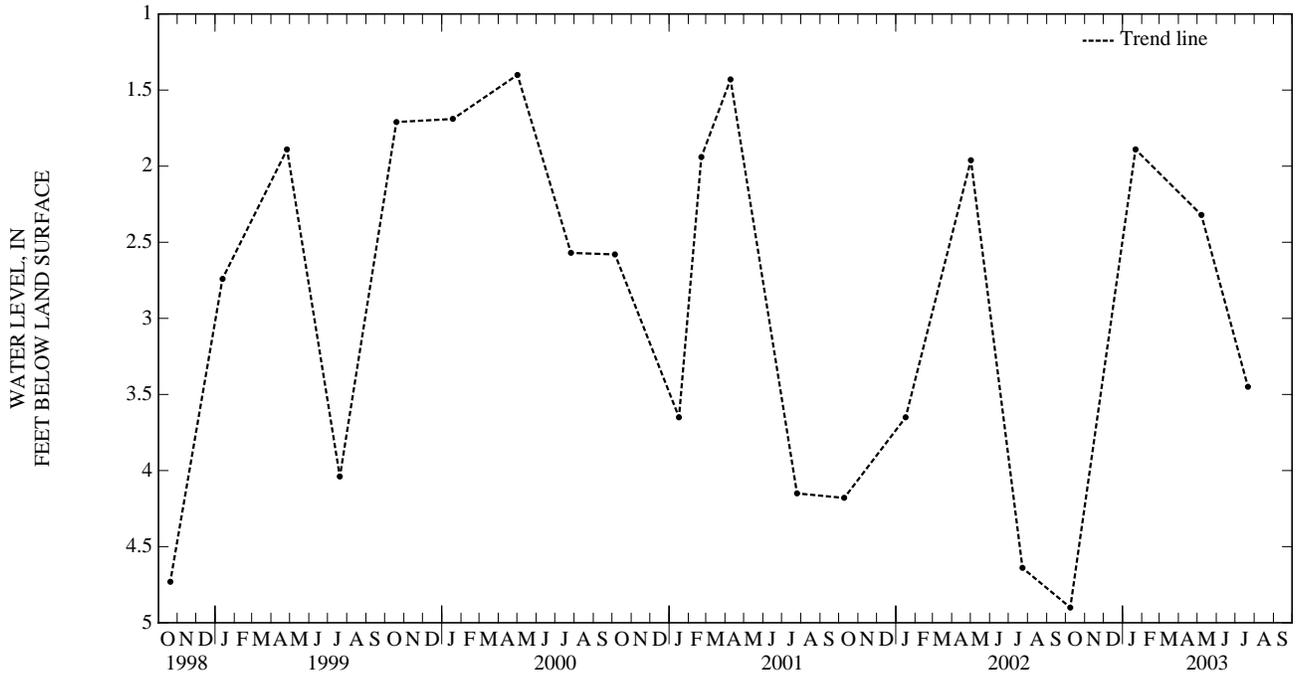
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.50 ft below land-surface datum, Aug. 8, 1989; lowest measured, 5.03 ft below land-surface datum, Oct. 10, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	4.90	JAN 21	1.89	MAY 07	2.32	JUL 21	3.45
WATER YEAR 2003 HIGHEST		1.89	JAN 21, 2003 LOWEST		4.90	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375635075271501. Local number, 67M 10 SOW 115A.

LOCATION.--Lat 37°56'35", long 75°27'14", NAD83, Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 52 ft, screened 32 to 52 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 20, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum prior to Feb. 28, 1988; 1.7 ft thereafter.

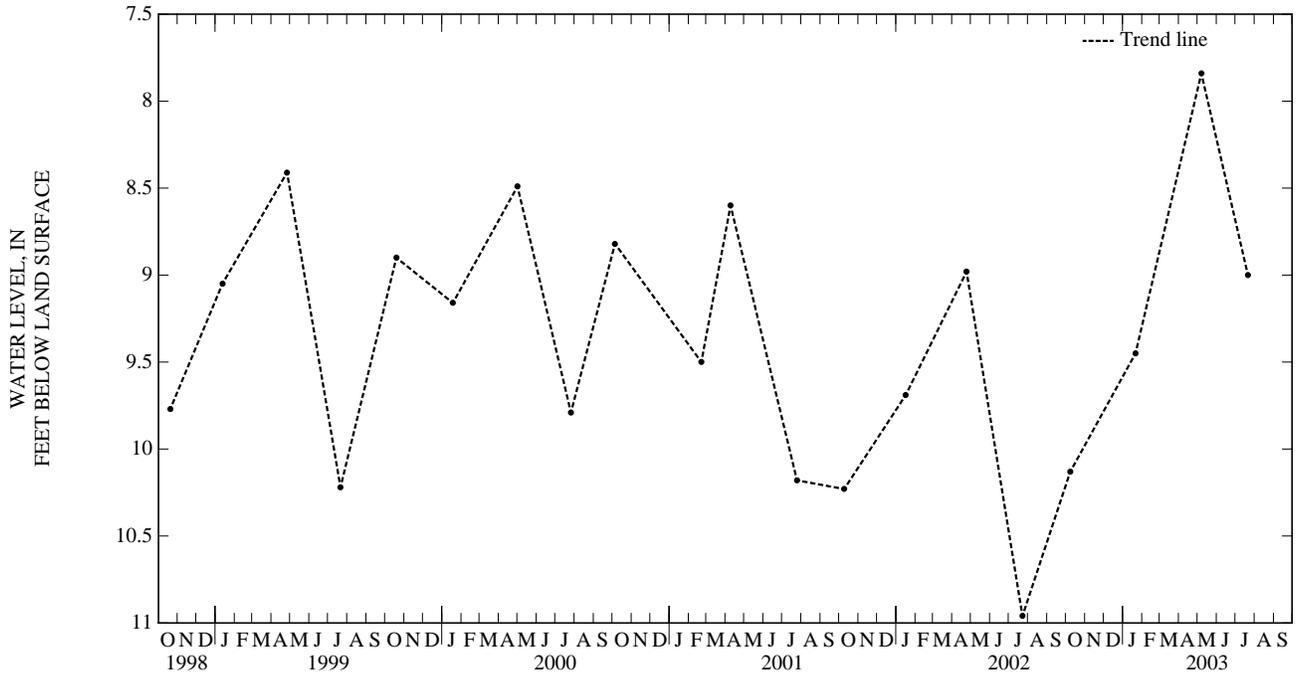
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.72 ft below land-surface datum, Oct. 3, 1989; lowest measured, 10.96 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.13	JAN 21	9.45	MAY 07	7.84	JUL 21	9.00
WATER YEAR 2003 HIGHEST		7.84	MAY 07, 2003 LOWEST		10.13	OCT 08, 2002	



ACCOMACK COUNTY—Continued

375635075271502. Local number, 67M 11 SOW 115B.

LOCATION.--Lat 37°56'35", long 75°27'14", NAD83, Hydrologic Unit 02060010, 200 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.5 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 138 ft, screened 118 to 138 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 14 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum prior to Feb. 29, 1988; 1.9 ft thereafter.

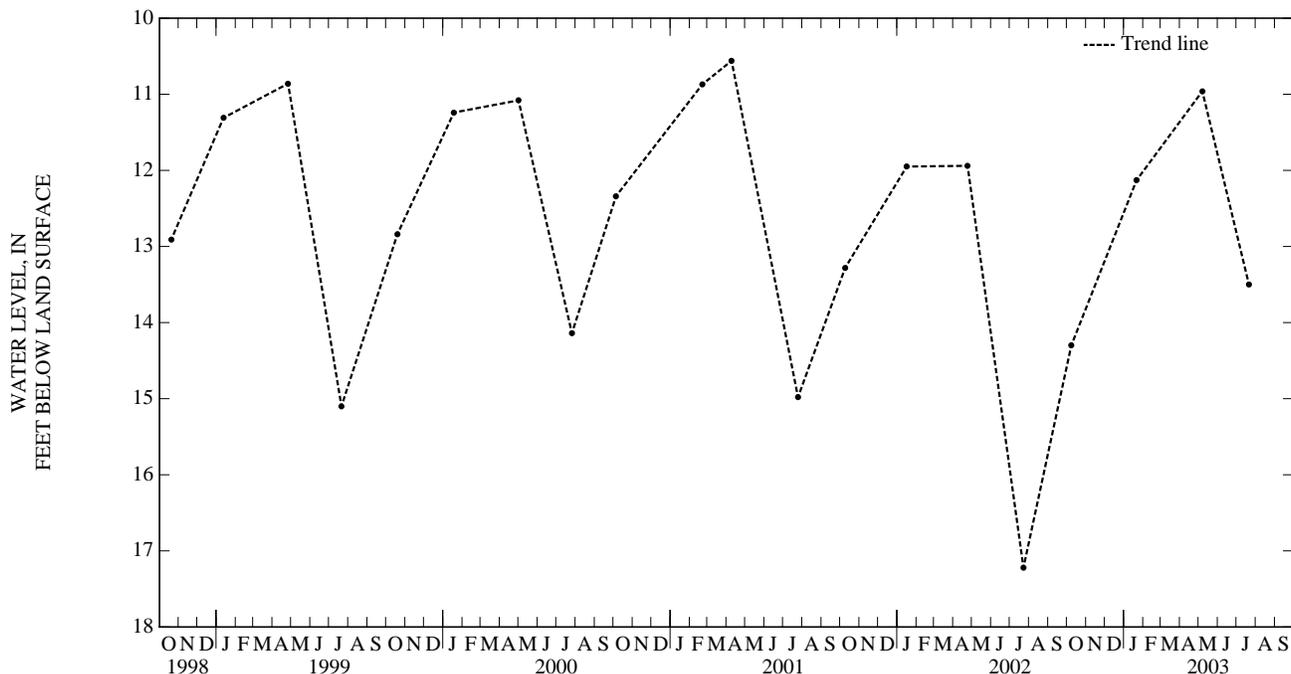
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.70 ft below land-surface datum, May 6, 1982; lowest measured, 17.22 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	14.30	JAN 21	12.13	MAY 07	10.96	JUL 21	13.50
WATER YEAR 2003 HIGHEST		10.96	MAY 07, 2003 LOWEST		14.30	OCT 08, 2002	



GROUND-WATER LEVELS
 ACCOMACK COUNTY—Continued

375635075271504. Local number, 67M 13 SOW 115D.

LOCATION.--Lat 37°56'35", long 75°27'14", NAD83, Hydrologic Unit 02060010, 50 ft east of State Highway 175, 2.4 mi east of Wattsville, and 2.6 mi northeast of intersection of State Highways 175 and 798. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 249 ft, screened 229 to 249 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 16 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum prior to Aug. 8, 1989; 1.5 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water levels affected by local pumpage. Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

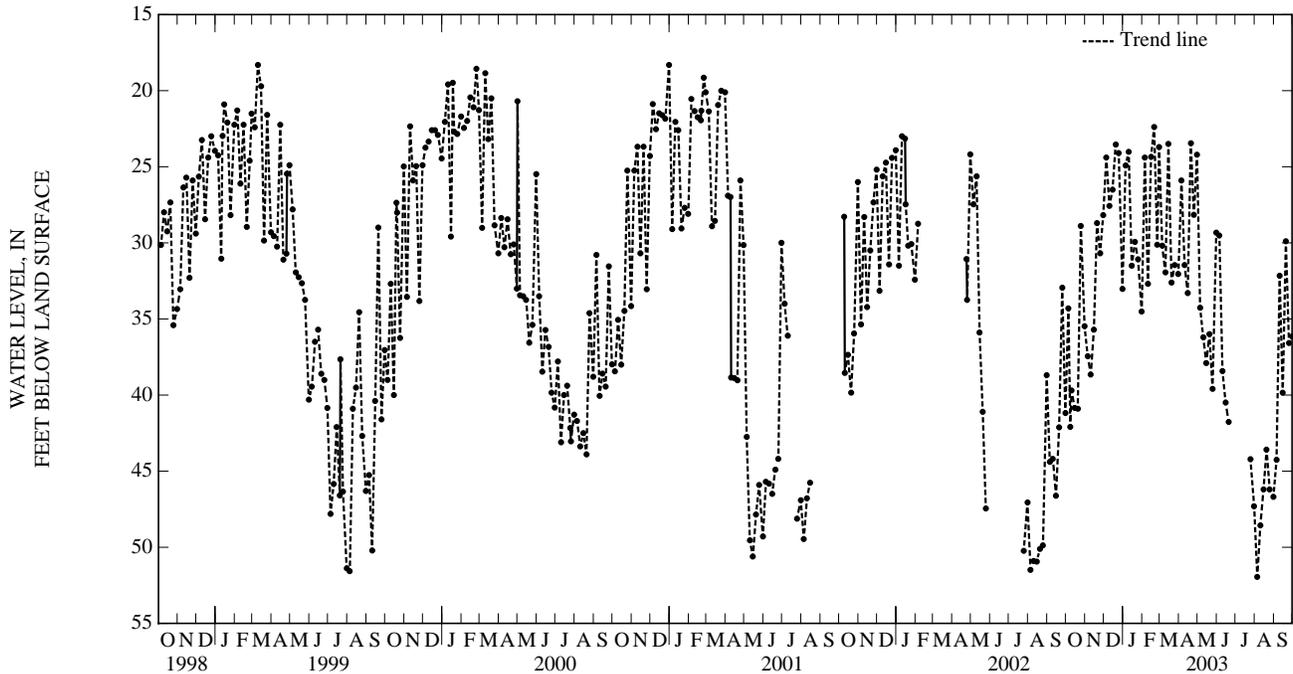
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.50 ft below land-surface datum, Jan. 22, 2000; lowest recorded, 53.19 ft below land-surface datum, May 14, 2001.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 18.59 ft below land-surface datum, Jan. 20; lowest instantaneous water level, 51.95 ft below land-surface datum, Aug. 5.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.31	37.45	24.39	24.92	24.39	30.19	25.90	34.26	29.52	---	51.95	44.25
10	39.69	38.65	27.57	24.01	32.70	31.95	31.45	36.20	38.42	---	48.55	32.16
15	40.84	35.70	26.50	31.50	24.35	23.50	33.30	37.90	40.49	---	46.20	39.85
20	40.90	28.70	23.54	29.94	22.39	32.61	23.45	36.00	41.77	---	43.59	29.90
25	28.88	30.68	24.10	31.08	30.12	31.45	28.15	39.59	---	44.22	46.19	36.58
EOM	35.48	28.18	33.02	34.52	23.70	32.04	24.21	29.32	---	47.30	46.69	36.15

WATER YEAR 2003 HIGHEST 22.39 FEB 20, 2003 LOWEST 51.95 AUG 05, 2003



ALBEMARLE COUNTY

380333078264801. Local number, 43N 1 SOW 028.

LOCATION.--Lat 38°03'33", long 78°26'47", NAD83, Hydrologic Unit 02080204, at Key West Subdivision, 1.1 mi east of Charlottesville. Owner: Key West Development Corporation.

AQUIFER.--Lynchburg Formation of Precambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 409 ft, cased to 52 ft, open hole 52 to 409 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Apr. 10, 1981 to Oct. 19, 1995 continuous strip-chart recorder. June 25, 1974 to Apr. 10, 1981 occasional measurement with chalked tape; Prior to June 25, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 345 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum.

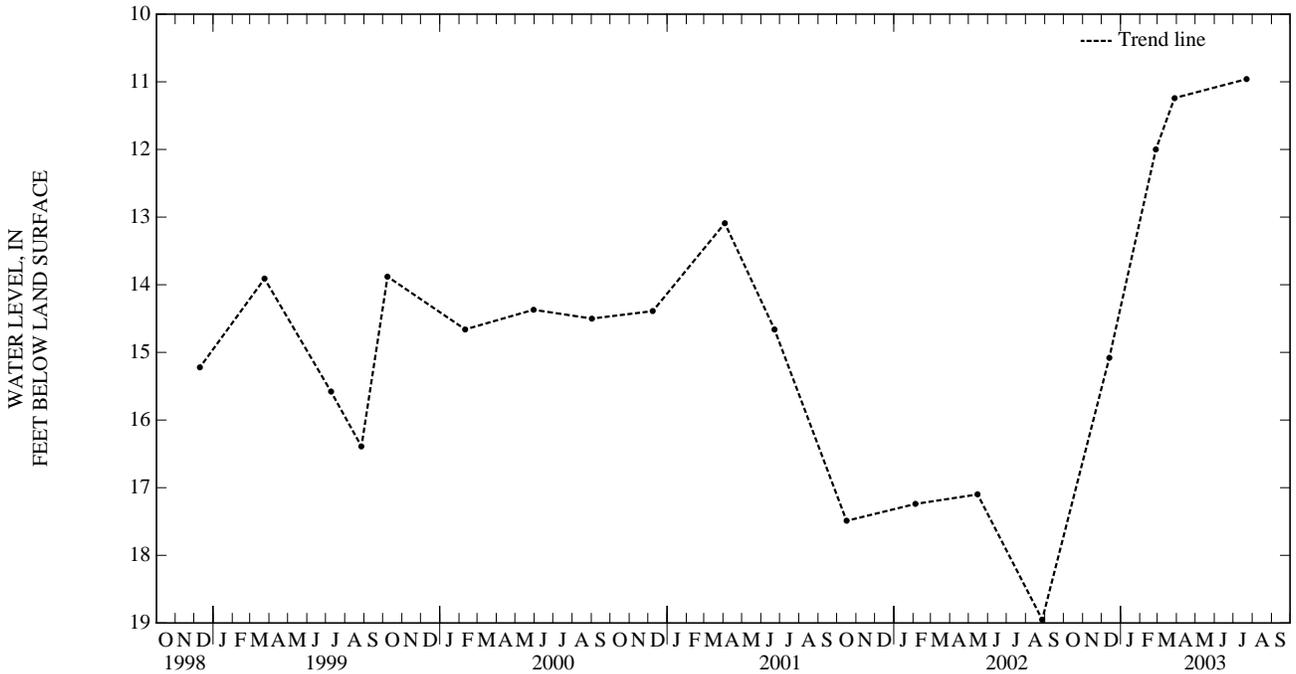
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.65 ft below land-surface datum, May 3, 1984; lowest recorded, 22.10 ft below land-surface datum, Nov. 30, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 13	15.08	FEB 26	12.00	MAR 28	11.24	JUL 22	10.96
WATER YEAR 2003 HIGHEST		10.96	JUL 22, 2003 LOWEST		15.08	DEC 13, 2002	



GROUND-WATER LEVELS

APPOMATTOX COUNTY

372514078394301. Local number, 41H 2.

LOCATION.--Lat 37°25'15", long 78°39'42", NAD83, Hydrologic Unit 02080207, 1.0 mi south of intersection of State Highway 636 on the east side of State Highway 640, 2.8 mi southeast of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 68 ft, diameter 1.25 in. from 68 to 73 ft, depth 73 ft, screened 68 to 73 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder 60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

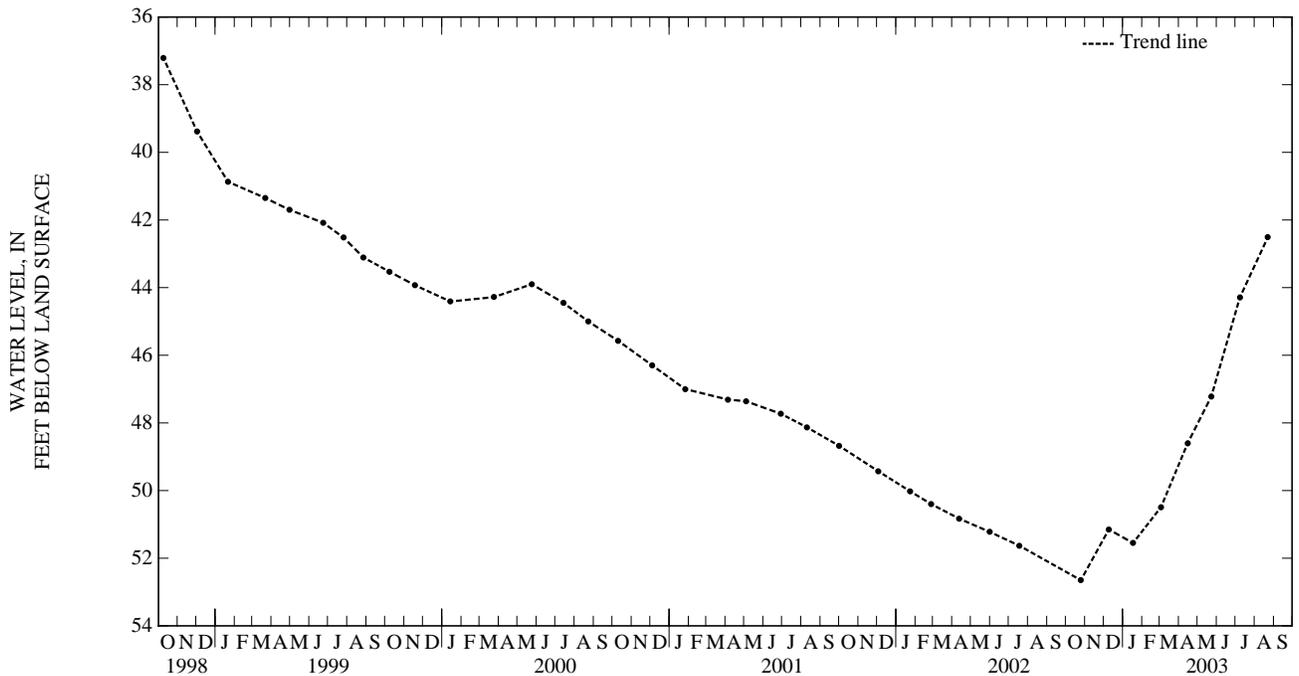
DATUM.--Elevation of land-surface datum is 640 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.56 ft below land-surface datum, May 11, 1998; lowest measured, 52.65 ft below land-surface datum, Oct. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	52.65	JAN 17	51.55	APR 15	48.60	JUL 08	44.29
DEC 09	51.15	MAR 03	50.49	MAY 23	47.22	AUG 22	42.51
WATER YEAR 2003 HIGHEST 42.51 AUG 22, 2003		LOWEST 52.65		OCT 25, 2002			



ARLINGTON COUNTY

385253077042301. Local number, 54V 3.

LOCATION.--Lat 38°52'53", long 77°04'22", NAD83, Hydrologic Unit 02070010, at Arlington National Cemetery in Arlington. Owner: National Park Service, National Capitol Parks.

AQUIFER.--Terrace gravels of Holocene age and sand of Early Cretaceous age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 48 in., depth 50 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1989 to Oct. 26, 1995, monthly measurement with chalked tape. Prior to Oct. 1, 1989, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 205 ft above NGVD of 1929, from topographic map. Measuring point: Top of brick and stone casing, 3.0 ft above land-surface datum.

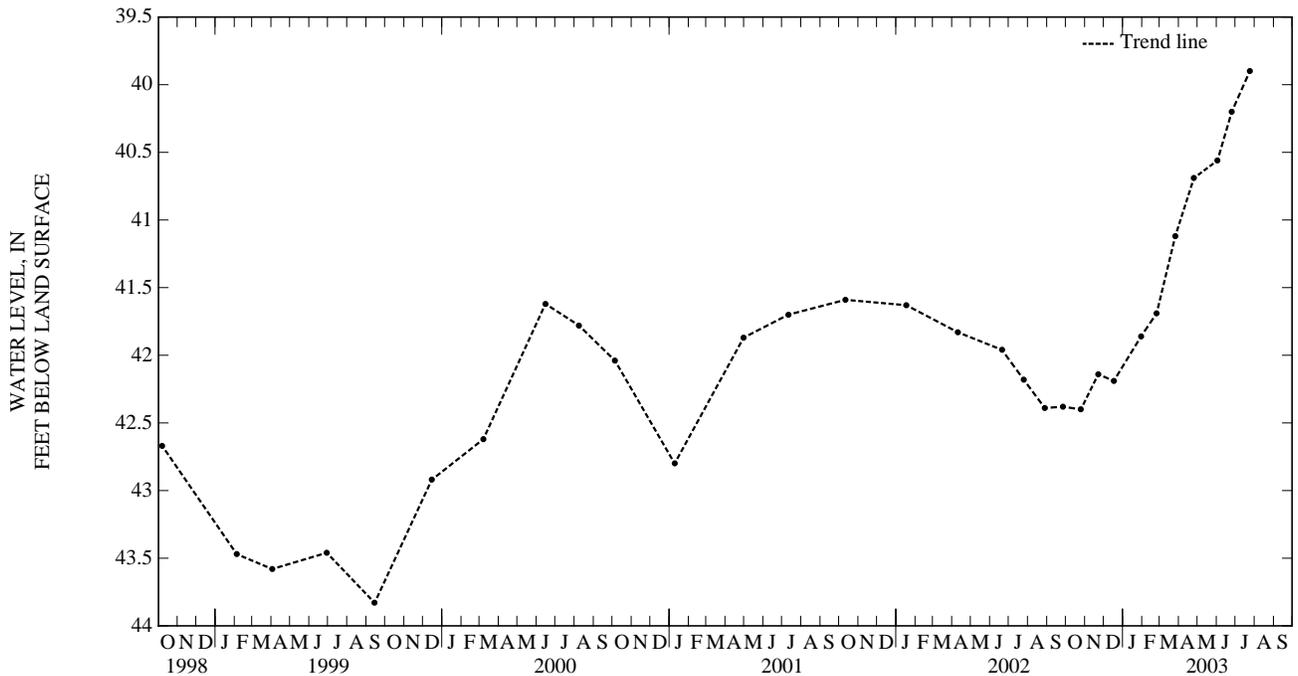
PERIOD OF RECORD.--January 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.90 ft below land-surface datum, July 24, 2003; lowest measured, 45.28 ft below land-surface datum, Nov. 28, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 25	42.40	DEC 17	42.19	FEB 24	41.69	APR 25	40.69	JUN 25	40.20
NOV 22	42.14	JAN 30	41.86	MAR 26	41.12	JUN 02	40.56	JUL 24	39.90

WATER YEAR 2003 HIGHEST 39.90 JUL 24, 2003 LOWEST 42.40 OCT 25, 2002



GROUND-WATER LEVELS

AUGUSTA COUNTY

382523078535501. Local number, 38P 1 SOW 070.

LOCATION.--Lat 38°07'49", long 79°04'06", NAD83, Hydrologic Unit 02070005, 100 ft east of State Highway 613, 0.5 mi south of intersection of State Highway 613 and U.S. Highway 11, and 0.9 mi south of Dogwood Hill. Owner: Augusta County Water Authority.

AQUIFER.--Beekmantown Group of Early Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 30 ft, diameter 6 in. from 30 to 97 ft, depth 250 ft, open hole from 97 to 250 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Jan. 10, 1974, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 1,490 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

PERIOD OF RECORD.--December 1973 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

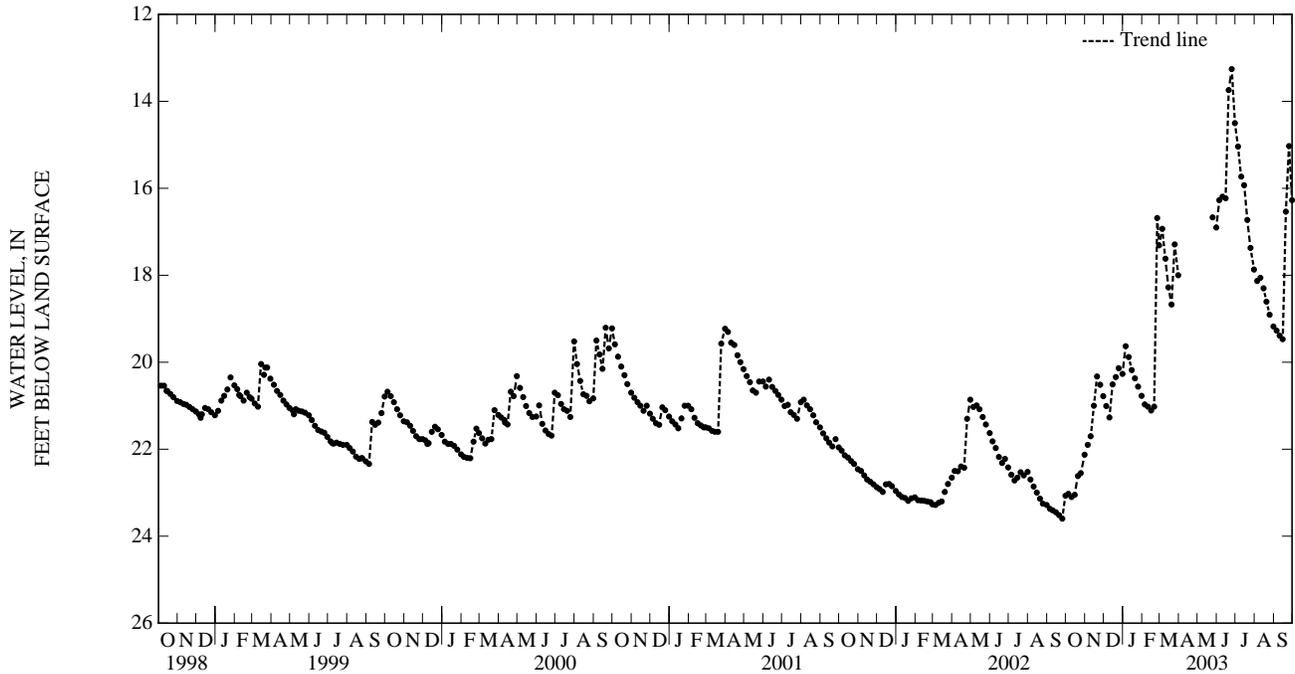
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.02 ft below land-surface datum, Feb. 20, 1998; lowest recorded, 27.02 ft below land-surface datum, Oct. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 12.17 ft below land-surface datum, June 21; lowest instantaneous water level, 23.10 ft below land-surface datum, Oct. 10-12.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.03	21.90	21.01	19.63	20.97	16.93	---	---	16.27	15.04	18.13	19.27
10	23.10	21.70	21.27	19.88	21.02	17.62	---	---	16.19	15.73	18.06	19.39
15	23.05	21.00	20.51	20.18	21.11	18.28	---	---	16.23	15.93	18.30	19.47
20	22.62	20.33	20.34	20.37	21.02	18.67	---	---	13.74	16.73	18.61	16.54
25	22.55	20.52	20.14	20.56	16.68	17.29	---	16.67	13.26	17.37	18.91	15.03
EOM	22.13	20.78	20.27	20.77	17.31	18.00	---	16.90	14.50	17.87	19.18	16.27

WATER YEAR 2003 HIGHEST 13.26 JUN 25, 2003 LOWEST 23.10 OCT 10, 2002



BUCKINGHAM COUNTY

372608078404601. Local number, 41H 3.

LOCATION.--Lat 37°26'09", long 78°40'45", NAD83, Hydrologic Unit 02080207, 0.85 mi west of Ranger Headquarters on south side of dirt road off State Highway 636, 1.5 mi south of Sliders. Owner: U.S. Geological Survey.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Augered observation water well, diameter 3 in. to 49 ft, diameter 1.25 in. from 49 to 54 ft, depth 54 ft, screened 49 to 54 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. October 1974 to June 12, 1998, occasional measurement with chalked tape by USGS personnel. August 1970 to October 1974, digital recorder 60-minute punch. Prior to August 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 683.8 ft above NGVD of 1929. Measuring point: Top of casing, 1.3 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Prior to Oct. 1, 1981, well was reported as being located in Appomattox County.

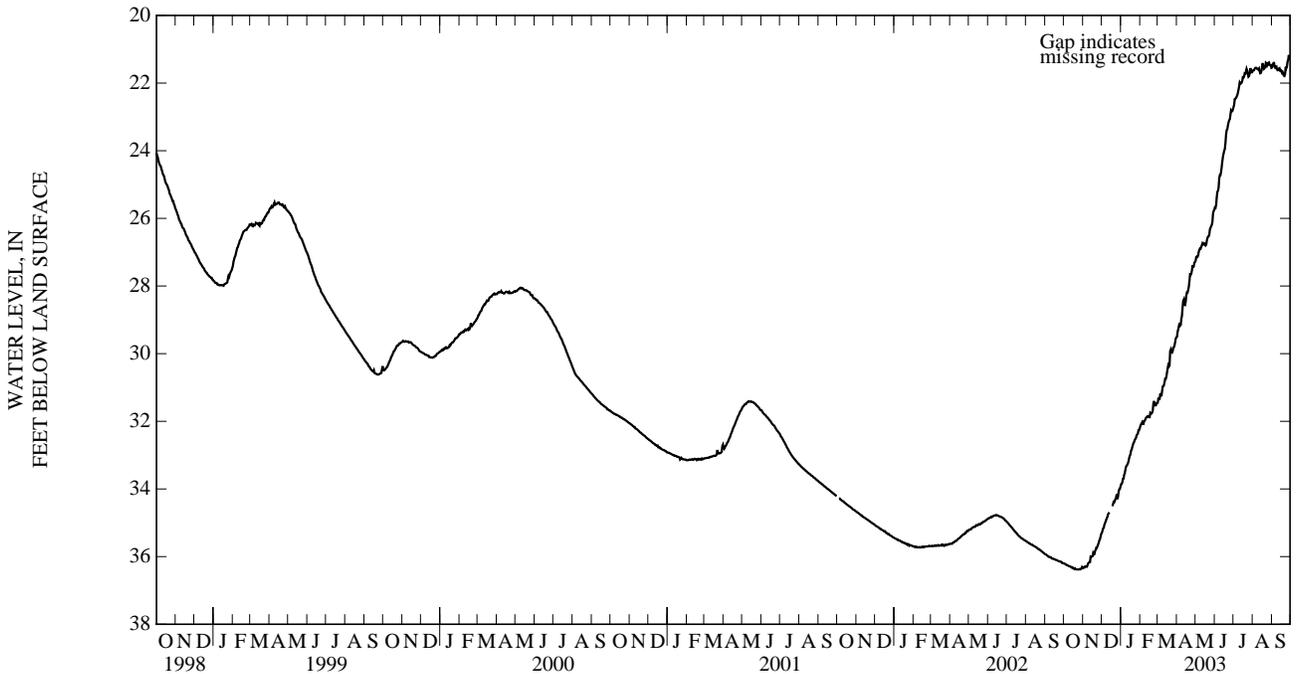
PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.31 ft below land-surface datum, Apr. 12, 1973; lowest recorded, 36.38 ft below land-surface datum, Oct. 21-25, 27, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 21.09 ft below land-surface datum, Sept. 19, 28; lowest instantaneous water level, 36.38 ft below land-surface datum, Oct. 21-25, 27.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	36.25	36.29	35.07	33.69	32.08	31.20	29.10	27.10	25.22	22.44	21.55	21.50
10	36.29	36.18	34.82	33.31	31.90	30.96	28.63	26.84	24.72	22.10	21.60	21.62
15	36.32	36.00	---	33.02	31.86	30.67	28.46	26.74	24.08	21.94	21.64	21.62
20	36.37	35.84	34.38	32.70	31.74	30.35	28.02	26.58	23.39	21.72	21.56	21.78
25	36.38	35.64	34.16	32.49	31.53	29.93	27.54	26.28	23.07	21.81	21.46	21.50
EOM	36.34	35.33	33.93	32.21	31.45	29.52	27.29	25.75	22.78	21.68	21.55	21.30



GROUND-WATER LEVELS

CAROLINE COUNTY

380624077172801. Local number, 52N 5.

LOCATION.--Lat 38°06'24", long 77°17'27", NAD83, Hydrologic Unit 02080104, in block pumphouse under water tank at Camp Wilcox at Fort A. P. Hill, 1.1 mi north of U.S. Highway 301, and near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to unknown depth, diameter 4 in. from unknown depth to 524 ft, depth 524 ft, screened 468 to 501 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 210 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

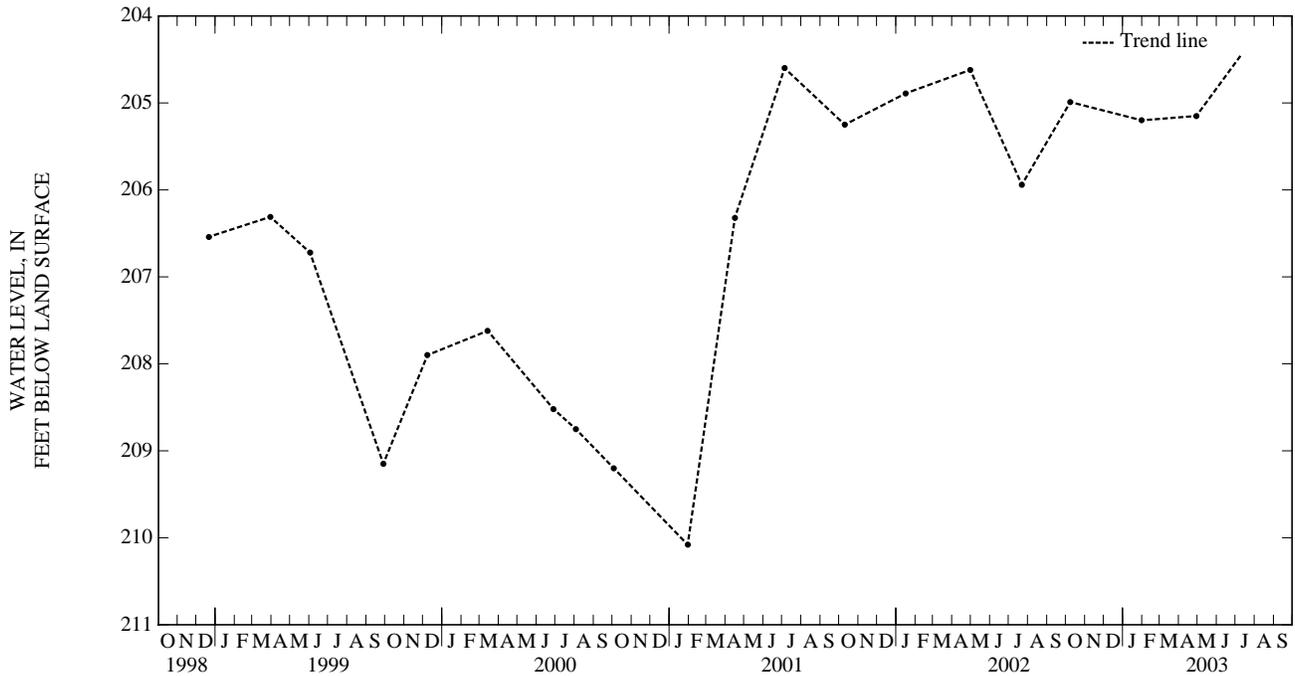
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 172.20 ft below land-surface datum, Dec. 16, 1971; lowest measured, 210.08 ft below land-surface datum, Jan. 30, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	204.99	JAN 31	205.20	APR 29	205.15	JUL 14	204.41
WATER YEAR 2003 HIGHEST 204.41		JUL 14, 2003		LOWEST 205.20		JAN 31, 2003	



CAROLINE COUNTY—Continued

380415077194101. Local number, 52N 6.

LOCATION.--Lat 38°04'15", long 77°19'40", NAD83, Hydrologic Unit 02080105, on the southwest corner of the intersection of Burke Street and Second Street in the headquarters area of Fort A. P. Hill near Bowling Green. Owner: U.S. Department of the Army.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 480 ft, diameter 3 in. from 446 to 500 ft, depth 500 ft, screened 488 to 498 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 214 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

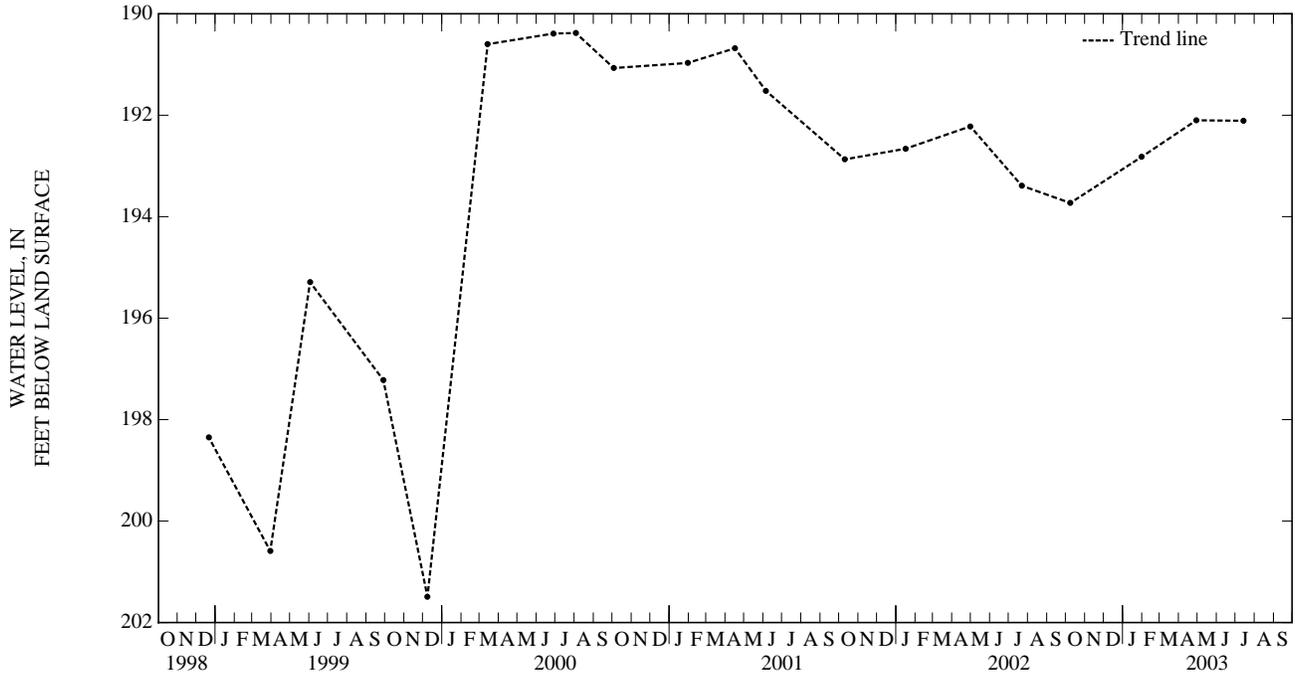
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1971 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 158.65 ft below land-surface datum, Feb. 10, 1982; lowest measured, 207.74 ft below land-surface datum, Mar. 19, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	193.73	JAN 31	192.82	APR 29	192.10	JUL 14	192.11
WATER YEAR 2003 HIGHEST		192.10 APR 29, 2003		LOWEST		193.73 OCT 08, 2002	



GROUND-WATER LEVELS

CAROLINE COUNTY—Continued

375922077142901. Local number, 53M 1.

LOCATION.--Lat 37°59'22", long 77°14'28", NAD83, Hydrologic Unit 02080105, at Sparta Volunteer Fire Co., 200 ft south of State Highway 721 and 50 ft west of Maracossic Creek. Owner: U.S. Geological Survey.

AQUIFER.--Aquia aquifer of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 110.75 ft, screened 100.75 ft to 110.75 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to October 1998, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 89 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.75 ft above land-surface datum prior to Dec. 28, 1998; 1.44 ft thereafter.

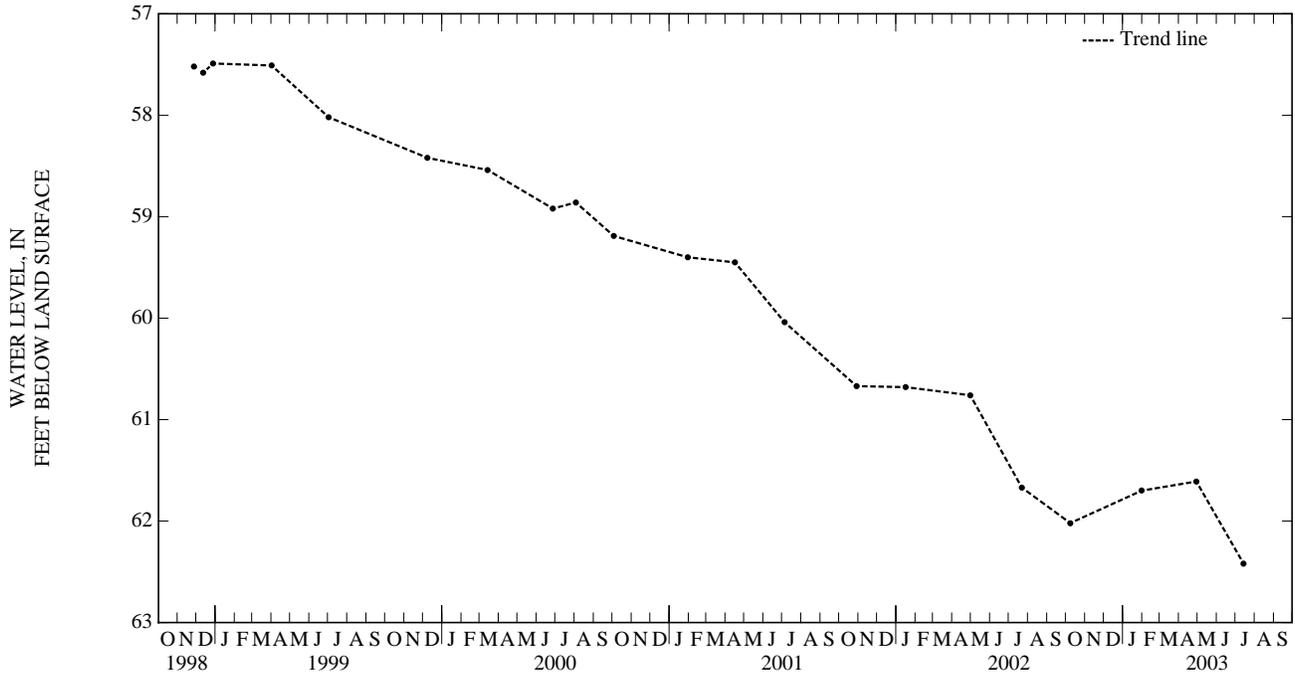
REMARKS.--Well drilled as part of Fall Zone ground-water study. Water level affected by regional drawdown.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 55.64 ft below land-surface datum, June 11, 1997; lowest measured, 62.42 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	62.02	JAN 31	61.70	APR 29	61.61	JUL 14	62.42
WATER YEAR 2003 HIGHEST		61.61	APR 29, 2003 LOWEST		62.42	JUL 14, 2003	



CHARLES CITY COUNTY

371956076055101. Local number, 54G 13 SOW 067.

LOCATION.--Lat 37°19'57", long 77°05'50", NAD83, Hydrologic Unit 02080206, 0.6 mi east of Bowens Store on State Highway 5, 1.6 mi southwest of Charles City. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 227 ft, screened 222 to 227 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.4 ft above land-surface datum.

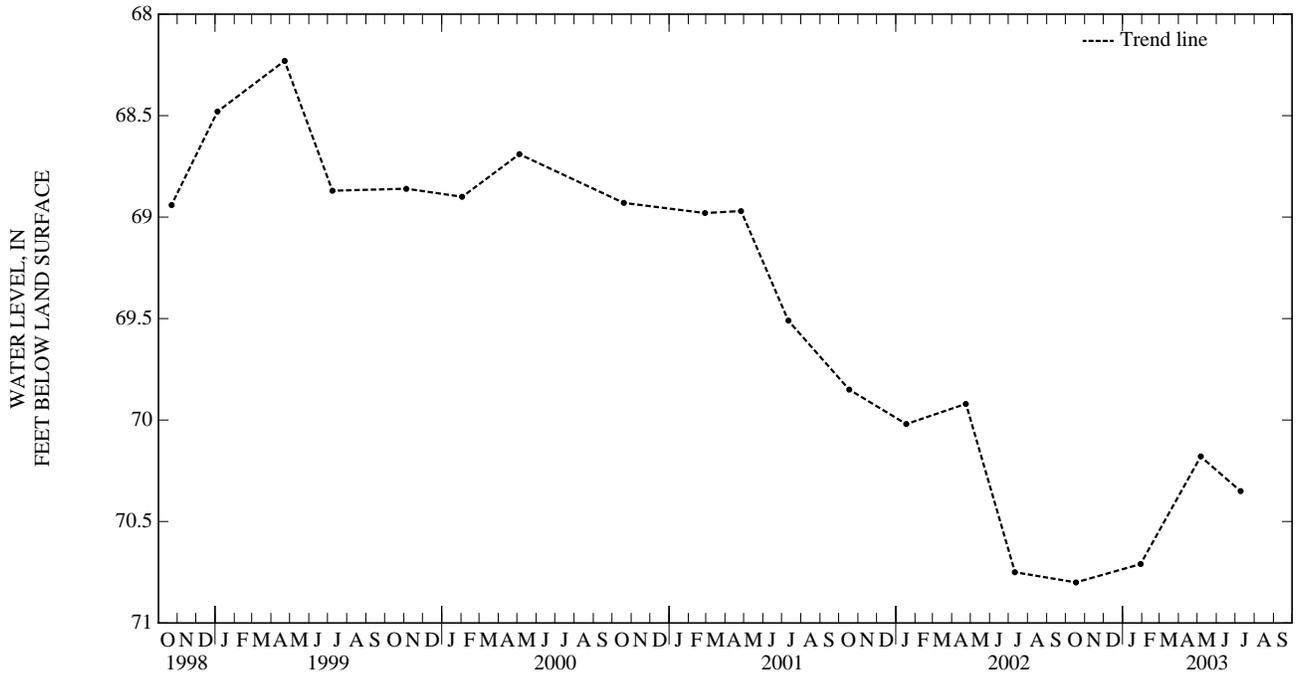
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1973 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 44.63 ft below land-surface datum, June 7, 1973; lowest measured, 70.80 ft below land-surface datum, Oct. 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	70.80	JAN 29	70.71	MAY 06	70.18	JUL 09	70.35
WATER YEAR 2003 HIGHEST		70.18	MAY 06, 2003 LOWEST		70.80	OCT 17, 2002	



GROUND-WATER LEVELS

CITY OF CHESAPEAKE

364852076252201. Local number, 59C 29 SOW 163A.

LOCATION.--Lat 36°48'53", long 76°25'21", NAD83, Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 35 ft, screened 25 to 35 ft.

INSTRUMENTATION.--Biweekly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 21, 1985 to Oct. 9, 1996, bimonthly measurement with chalked tape. Prior to Aug. 21, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum, prior to Mar. 11, 1996; 2.45 ft Mar. 12, 1996 to May 28, 1998; 3.74 ft thereafter.

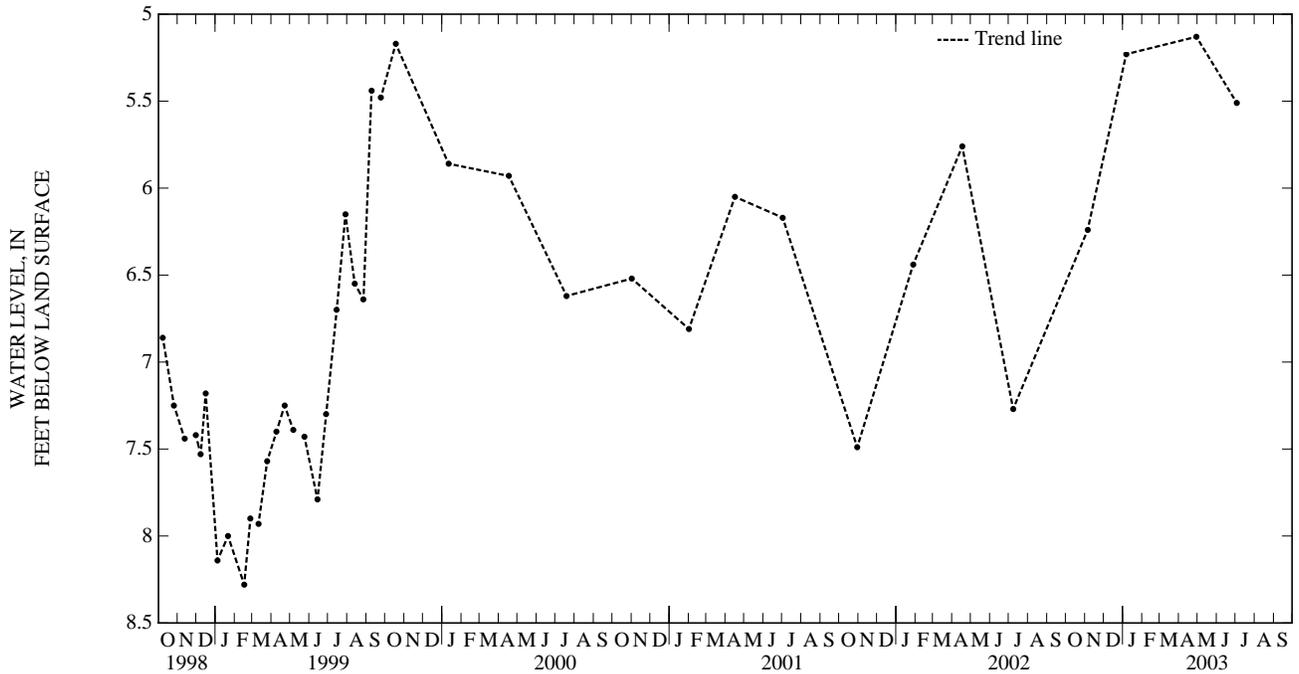
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.70 ft below land-surface datum, Mar. 14, 1989; lowest measured, 18.39 ft below land-surface datum, Nov. 5, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	6.24	JAN 06	5.23	APR 29	5.13	JUL 03	5.51
WATER YEAR 2003 HIGHEST		5.13	APR 29, 2003 LOWEST		6.24	NOV 05, 2002	



CITY OF CHESAPEAKE—Continued

364852076252202. Local number, 59C 30 SOW 163B.

LOCATION.--Lat 36°48'53", long 76°25'21", NAD83, Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 948 ft, screened 938 to 948 ft.

INSTRUMENTATION.--Biweekly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 21, 1985 to Oct. 9, 1996, bimonthly measurement with chalked tape. Prior to Aug. 21, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum, prior to Mar. 11, 1996; 2.47 ft thereafter.

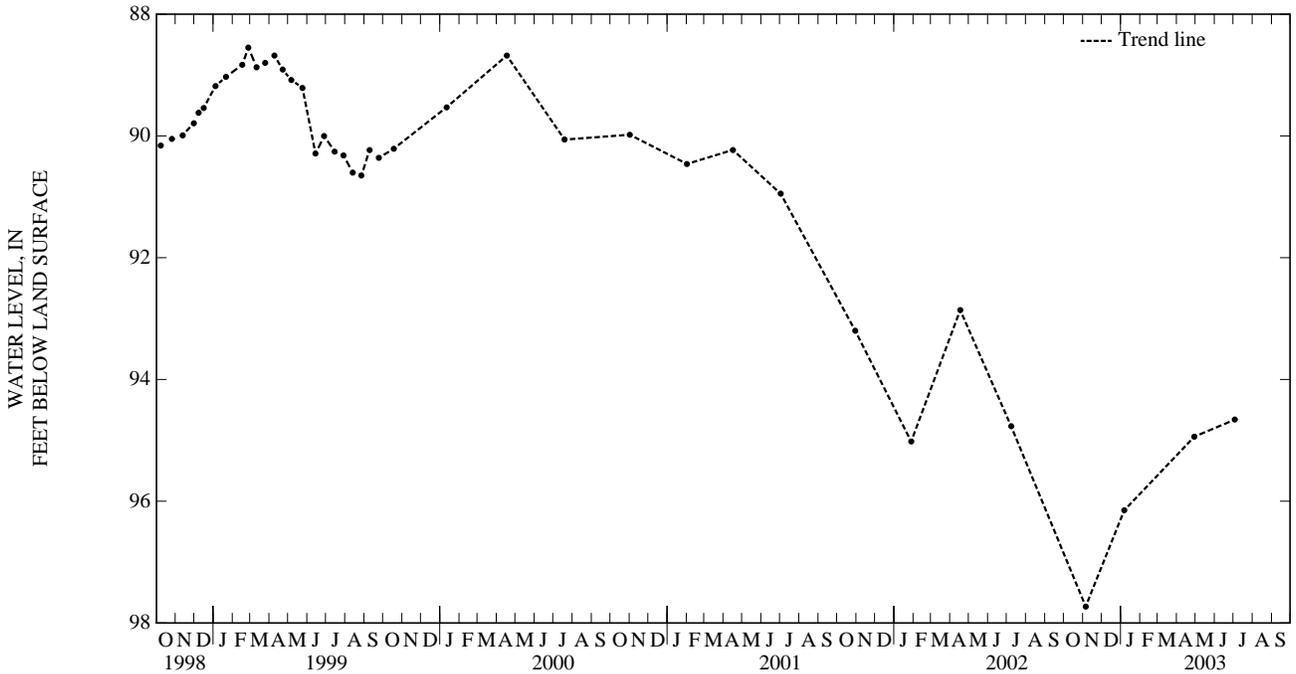
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.06 ft below land-surface datum, May 25, 1983; lowest measured, 97.73 ft below land-surface datum, Nov. 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	97.73	JAN 06	96.15	APR 29	94.94	JUL 03	94.66
WATER YEAR 2003 HIGHEST		94.66	JUL 03, 2003 LOWEST		97.73	NOV 05, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

364852076252203. Local number, 59C 31 SOW 163C.

LOCATION.--Lat 36°48'53", long 76°25'21", NAD83, Hydrologic Unit 02080208, 0.7 mi southeast of intersection of State Highways 191 and 337 in Chesapeake. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 631 ft, screened 621 to 631 ft.

INSTRUMENTATION.--Biweekly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 21, 1985 to Oct. 9, 1996, bimonthly measurement with chalked tape. Prior to Aug. 21, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum, prior to Mar. 11, 1996; 2.88 ft thereafter.

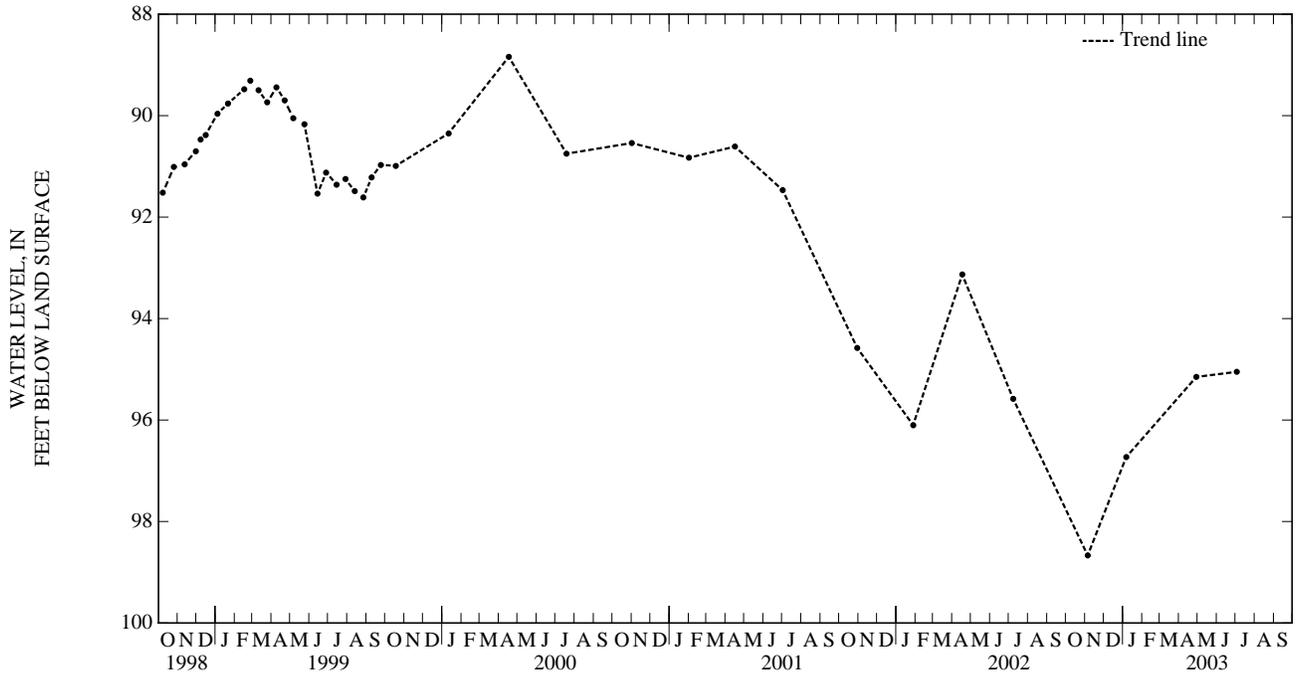
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 67.13 ft below land-surface datum, Feb. 23, 1983; lowest measured, 98.67 ft below land-surface datum, Nov. 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	98.67	JAN 06	96.73	APR 29	95.15	JUL 03	95.05
WATER YEAR 2003 HIGHEST		95.05	JUL 03, 2003 LOWEST		98.67	NOV 05, 2002	



CITY OF CHESAPEAKE—Continued

363836076201701. Local number, 60B 3 SOW 090A.

LOCATION.--Lat 36°38'37", long 76°20'16", NAD83, Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 855 ft, screened 824 to 834 ft.

INSTRUMENTATION.-- Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 25, 1985 to Oct. 12, 1995, continuous strip-chart recorder. Prior to Aug. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 16 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

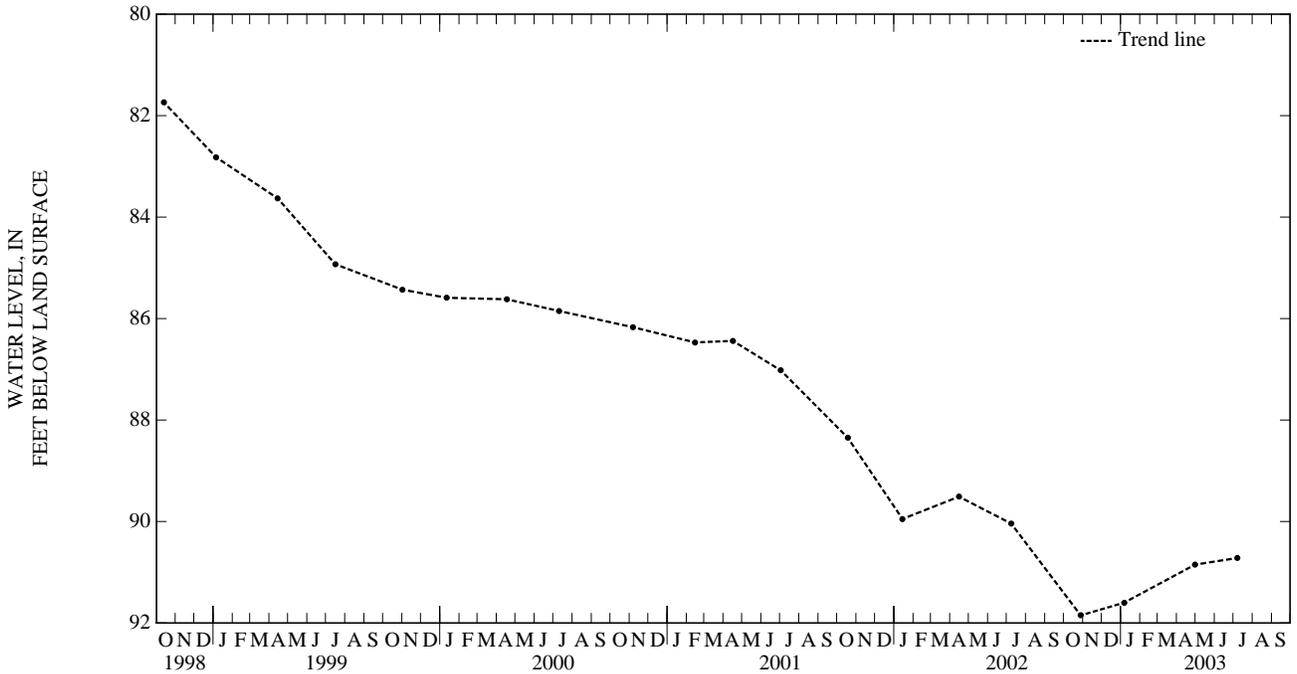
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.80 ft below land-surface datum, July 11, 1978; lowest recorded, 91.85 ft below land-surface datum, Oct. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	91.85	JAN 06	91.60	APR 30	90.85	JUL 07	90.72
WATER YEAR 2003 HIGHEST		90.72	JUL 07, 2003 LOWEST		91.85	OCT 28, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

363836076201702. Local number, 60B 4 SOW 090B.

LOCATION.--Lat 36°38'37", long 76°20'16", NAD83, Hydrologic Unit 03010205, 0.15 mi north of intersection of Benefit and West Roads, 1.5 mi north of Cornland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 556 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 9, 1985, to July 6, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 16 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.05 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft thereafter.

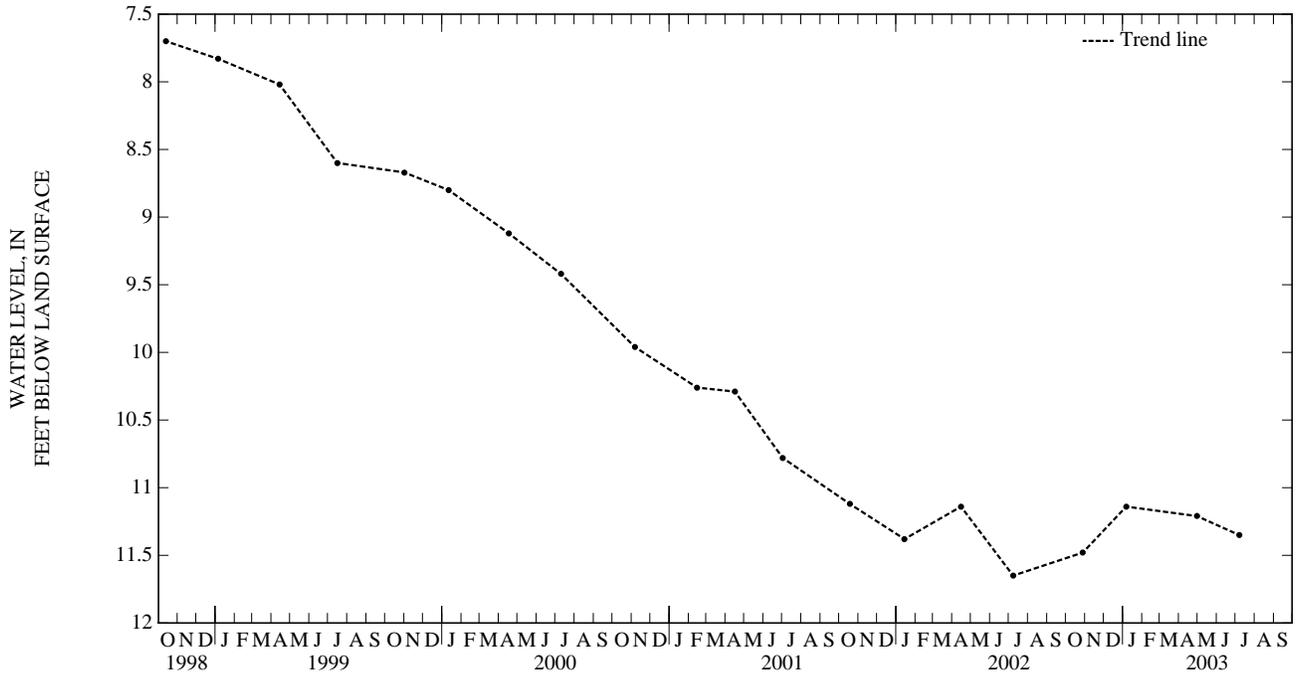
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.20 ft above land-surface datum, Feb. 1, 1978; lowest measured, 11.65 ft below land-surface datum, July 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	11.48	JAN 06	11.14	APR 30	11.21	JUL 07	11.35
WATER YEAR 2003 HIGHEST		11.14	JAN 06, 2003 LOWEST		11.48	OCT 28, 2002	



CITY OF CHESAPEAKE—Continued

364615076182101. Local number, 60C 41 SOW 164.

LOCATION.--Lat 36°46'16", long 76°18'20", NAD83, Hydrologic Unit 02080208, 50 ft north of entrance road to Virginia Power powerplant, 500 ft south of Military Highway in Chesapeake. Owner: Virginia Power.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 400 ft, diameter 4 in. from 400 to 928 ft, depth 928 ft, screened 770 to 780 ft, 875 to 885 ft, 918 to 928 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Nov. 25, 1982 to Oct. 12, 1995, continuous strip-chart recorder. Prior to Nov. 25, 1982, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum prior to July 15, 1987; 1.5 ft thereafter.

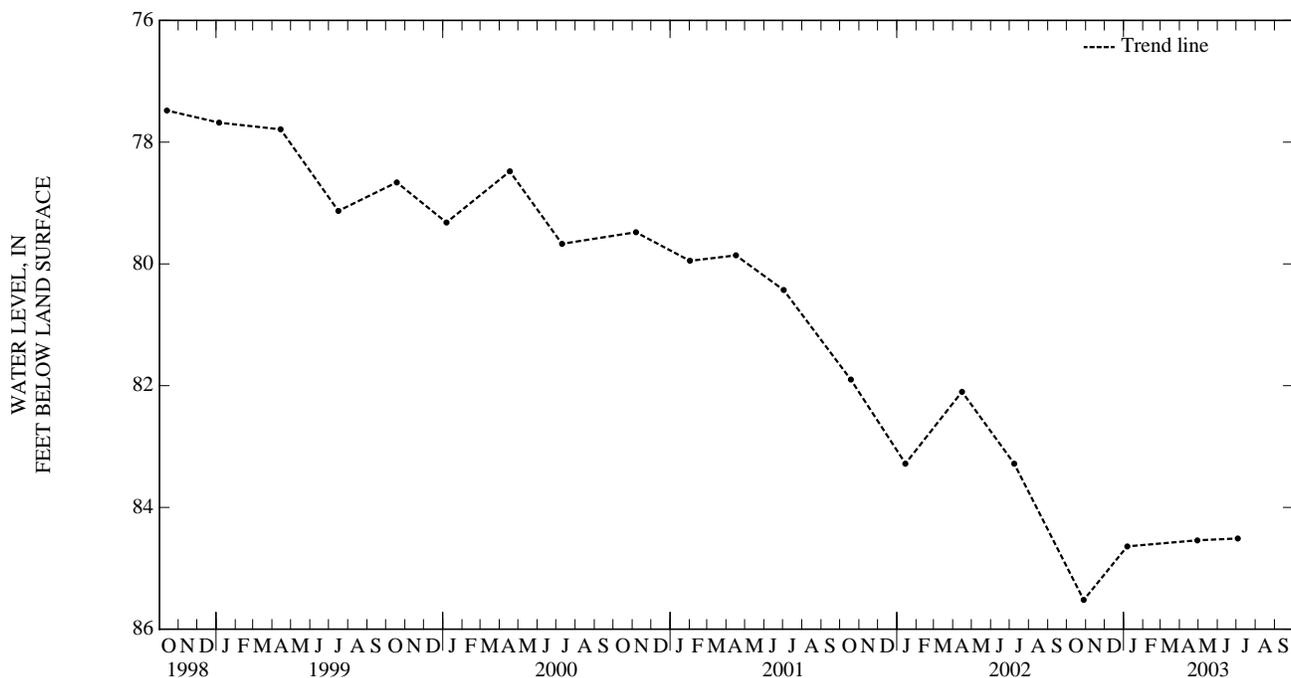
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--February 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.22 ft below land-surface datum, Mar. 15, 1983; lowest recorded, 85.52 ft below land-surface datum, Oct. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	85.52	JAN 06	84.64	APR 29	84.54	JUL 03	84.51
WATER YEAR 2003 HIGHEST		84.51	JUL 03, 2003 LOWEST		85.52	OCT 28, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

364227076074702. Local number, 61B 5 SOW 091B.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,040 to 1,060 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 9, 1985, to July 6, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

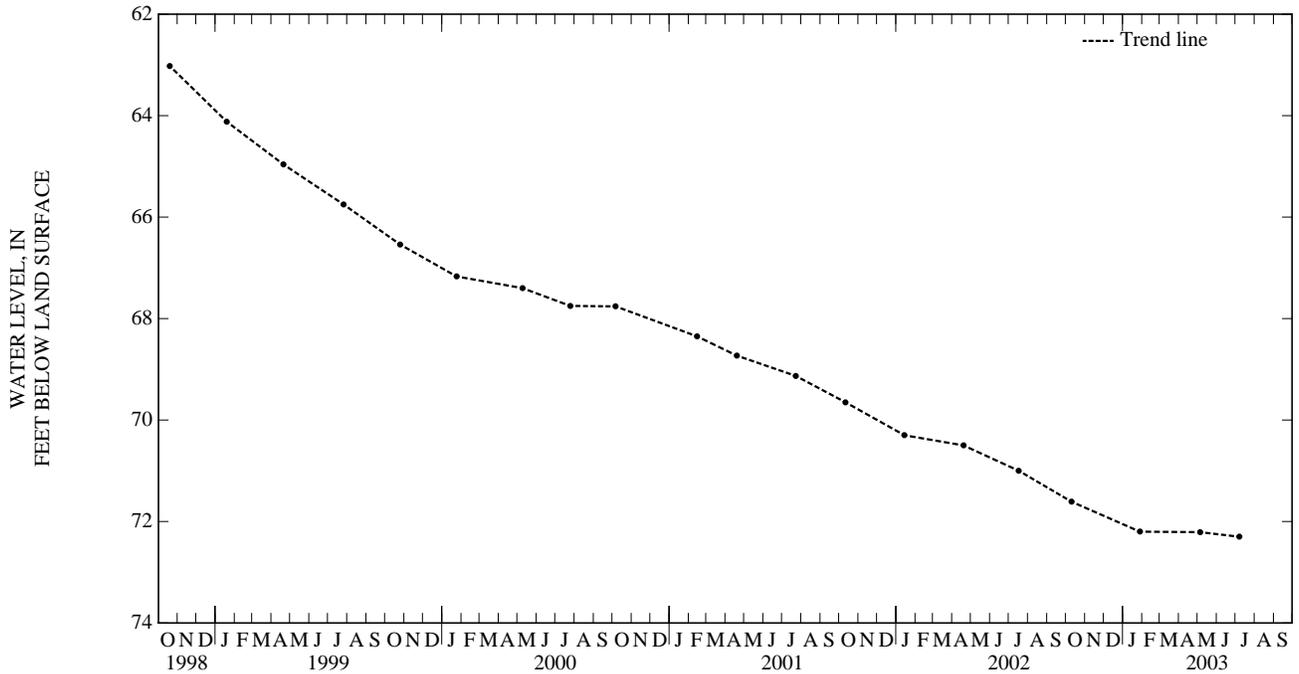
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.83 ft below land-surface datum, Aug. 28, 1980; lowest measured, 72.30 ft below land-surface datum, July 7, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	71.61	JAN 28	72.20	MAY 05	72.21	JUL 07	72.30
WATER YEAR 2003 HIGHEST		71.61	OCT 10, 2002 LOWEST		72.30	JUL 07, 2003	



CITY OF CHESAPEAKE—Continued

364227076074703. Local number, 61B 6 SOW 091C.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 780 ft, screened 760 to 780 ft.

INSTRUMENTATION.--Occasional measurement with manometer or chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 9, 1985, to July 6, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with manometer.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 7.0 ft above land-surface datum prior to Jan. 11, 1989; 1.2 ft thereafter.

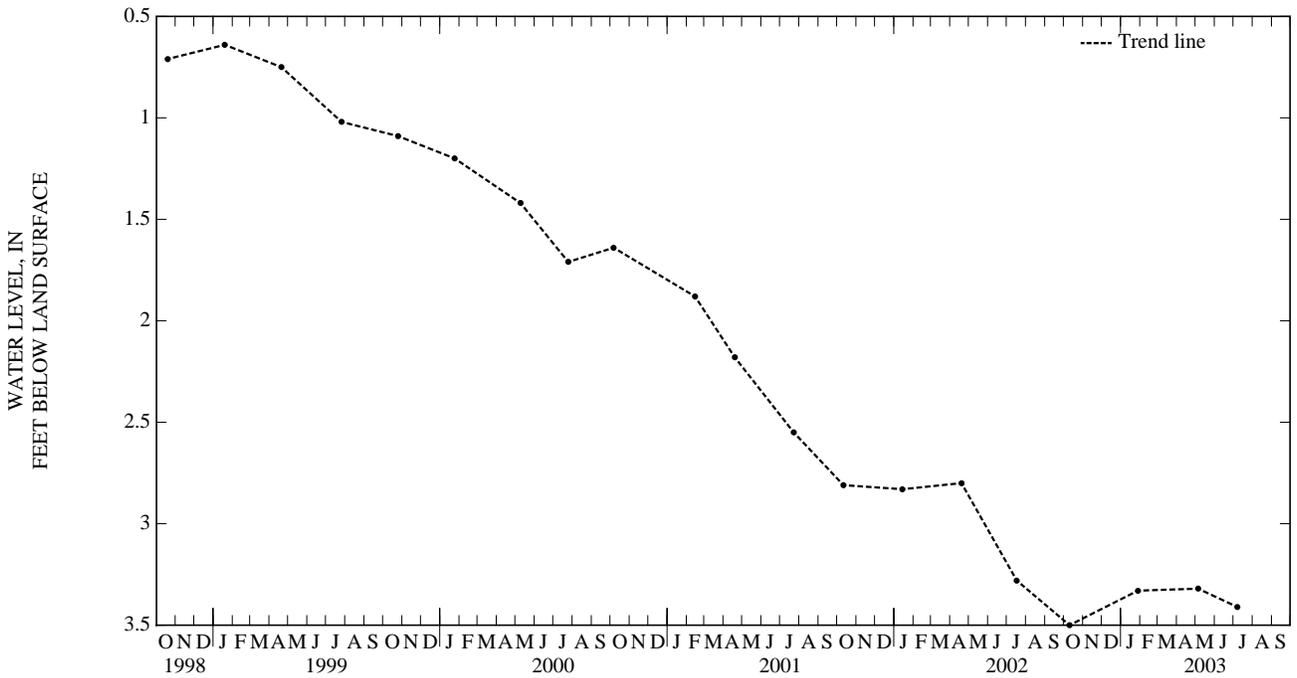
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.37 ft above land-surface datum, July 26, 1979; lowest measured, 3.50 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	3.50	JAN 28	3.33	MAY 05	3.32	JUL 07	3.41
WATER YEAR 2003 HIGHEST		3.32	MAY 05, 2003 LOWEST		3.50	OCT 10, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

364227076074706. Local number, 61B 12 SOW 091E.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,630 ft, diameter 2 in. from 1,630 to 1,830 ft, depth 1,830 ft, screened 1,820 to 1,830 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

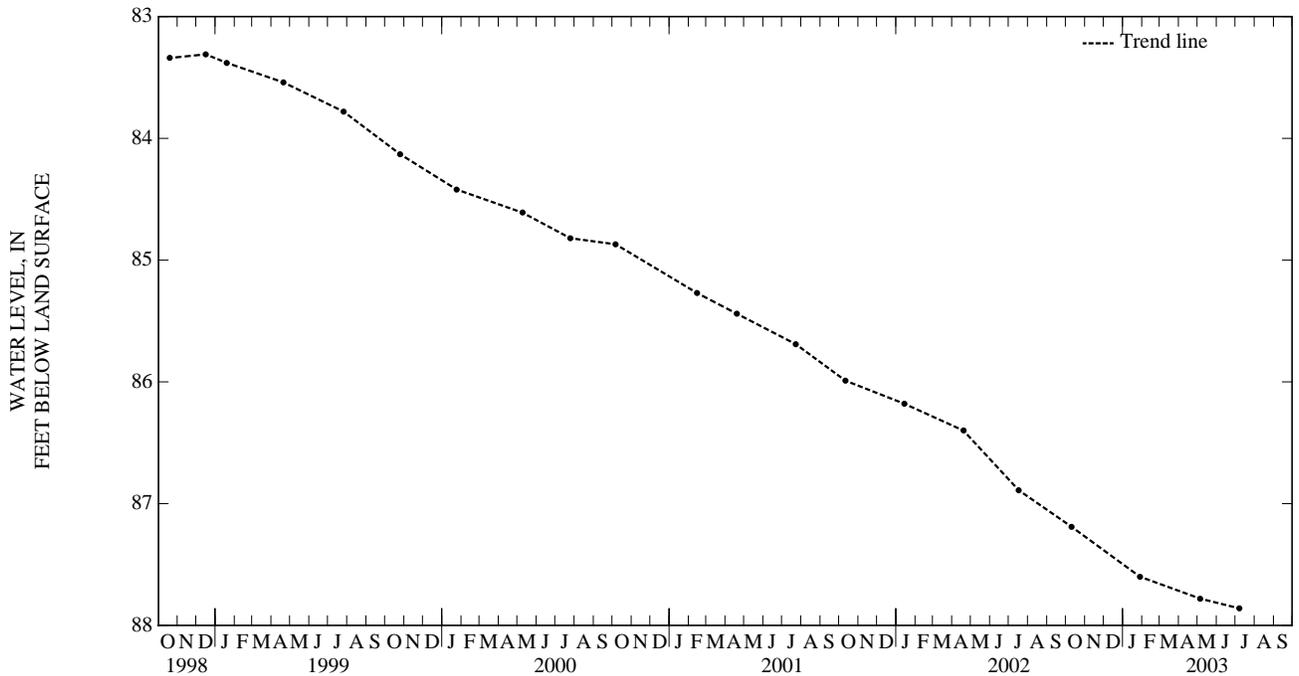
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Low water-level drawdown after April 1998 is the result of pumping of the well. Cause of nonrecovery to pre-pumpage level is unknown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.50 ft below land-surface datum, June 21, 1989; lowest measured, 87.86 ft below land-surface datum, July 7, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	87.19	JAN 28	87.60	MAY 05	87.78	JUL 07	87.86
WATER YEAR 2003 HIGHEST 87.19		OCT 10, 2002		LOWEST 87.86		JUL 07, 2003	



CITY OF CHESAPEAKE—Continued

364227076074707. Local number, 61B 13 SOW 091F.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,270 ft, diameter 2 in. from 1,270 to 1,390 ft, depth 1,390 ft, screened 1,370 to 1,380 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. July 6, 1995 to Feb. 13, 1997, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L. Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1989 to current year.

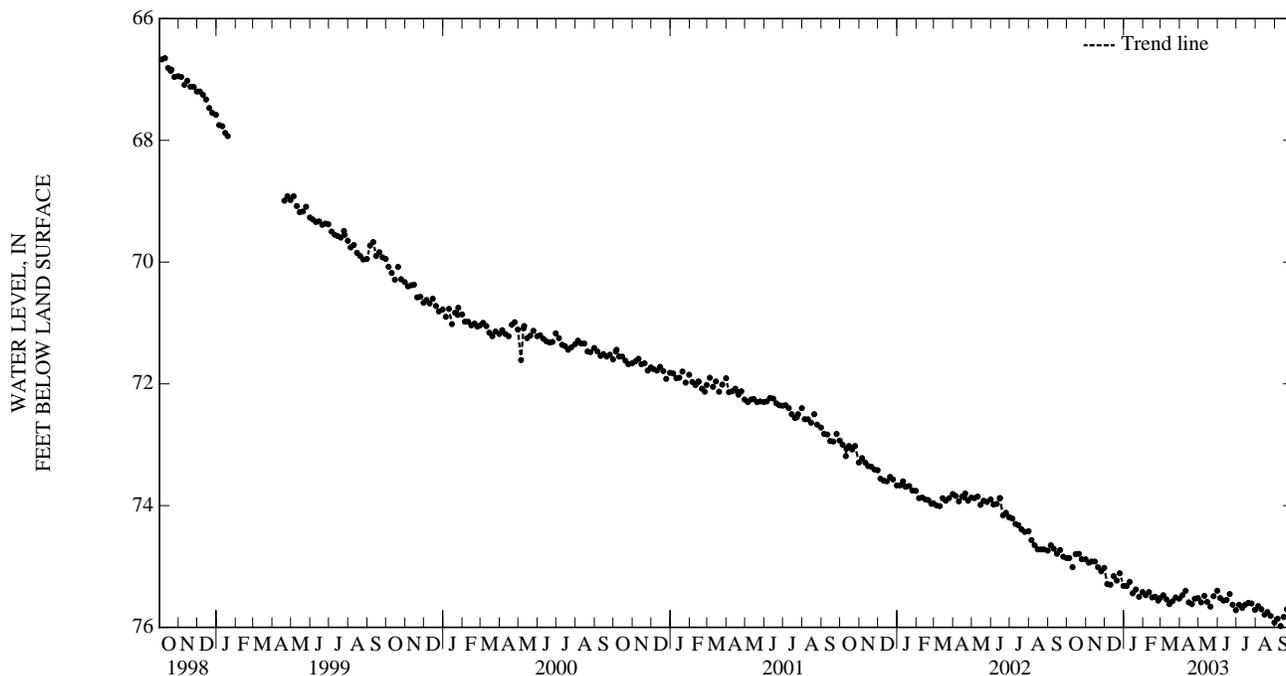
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.00 ft below land-surface datum, Aug. 10, 1989; lowest measured, 75.98 ft below land-surface datum, Sept. 10, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 74.56 ft below land-surface datum, Oct. 16; lowest instantaneous water level, 75.98 ft below land-surface datum, Sept. 10.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.86	74.94	75.29	75.32	75.47	75.47	75.47	75.59	75.52	75.63	75.65	75.86
10	75.01	74.92	75.30	75.25	75.42	75.54	75.40	75.48	75.56	75.68	75.70	75.98
15	74.80	74.92	75.16	75.44	75.51	75.62	75.59	75.58	75.55	75.63	75.79	75.83
20	74.79	75.01	75.23	75.38	75.50	75.57	75.62	75.66	75.45	75.60	75.75	75.70
25	74.88	75.08	75.11	75.50	75.56	75.51	75.53	75.49	75.63	75.61	75.81	75.76
EOM	74.88	75.02	75.32	75.42	75.52	75.53	75.52	75.40	75.72	75.71	75.92	75.87

WATER YEAR 2003 HIGHEST 74.79 OCT 20, 2002 LOWEST 75.98 SEP 10, 2003



GROUND-WATER LEVELS

CITY OF CHESAPEAKE—Continued

364227076074708. Local number, 61B 14 SOW 091G.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 987 ft, diameter 2 in. from 987 to 1,110 ft, depth 1,110 ft, screened 1,090 to 1,100 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. July 6, 1995 to Feb. 13, 1997, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--March 1989 to current year.

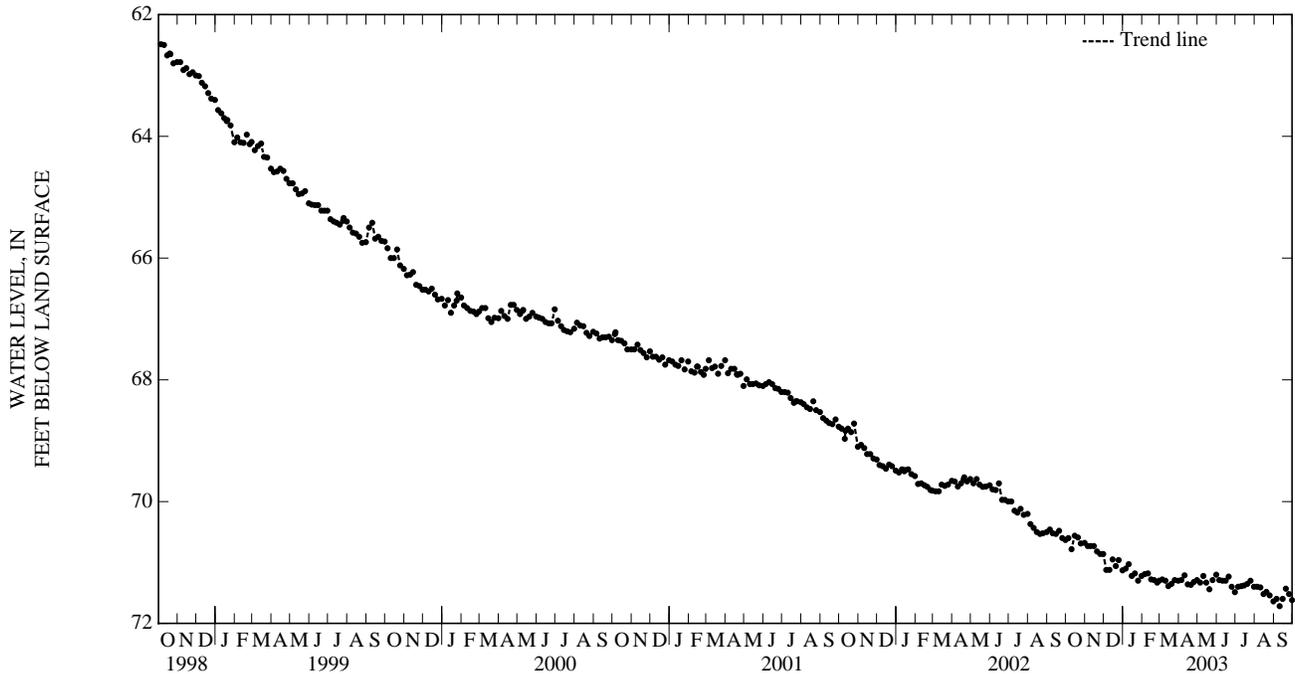
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 51.30 ft below land-surface datum, Mar. 22, 1989; lowest measured, 71.73 ft below land-surface datum, Sept. 11, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 70.36 ft below land-surface datum, Oct. 16; lowest instantaneous water level, 71.73 ft below land-surface datum, Sept. 11.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	70.60	70.73	71.12	71.10	71.19	71.28	71.29	71.33	71.29	71.40	71.40	71.60
10	70.78	70.73	71.12	71.03	71.18	71.30	71.21	71.22	71.30	71.39	71.41	71.72
15	70.56	70.73	70.95	71.22	71.28	71.39	71.36	71.33	71.30	71.38	71.52	71.60
20	70.59	70.82	71.06	71.18	71.29	71.35	71.37	71.44	71.23	71.35	71.48	71.43
25	70.69	70.86	70.96	71.30	71.33	71.29	71.32	71.29	71.40	71.30	71.54	71.52
EOM	70.68	70.86	71.13	71.22	71.30	71.30	71.29	71.20	71.49	71.40	71.64	71.62

WATER YEAR 2003 HIGHEST 70.56 OCT 15, 2002 LOWEST 71.72 SEP 10, 2003



CITY OF CHESAPEAKE—Continued

364227076074709. Local number, 61B 15 SOW 091H.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 700 ft, diameter 2 in. from 674 to 790 ft, depth 790 ft, screened 759 to 769 ft.

INSTRUMENTATION.--Occasional measurement with manometer or chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with manometer.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

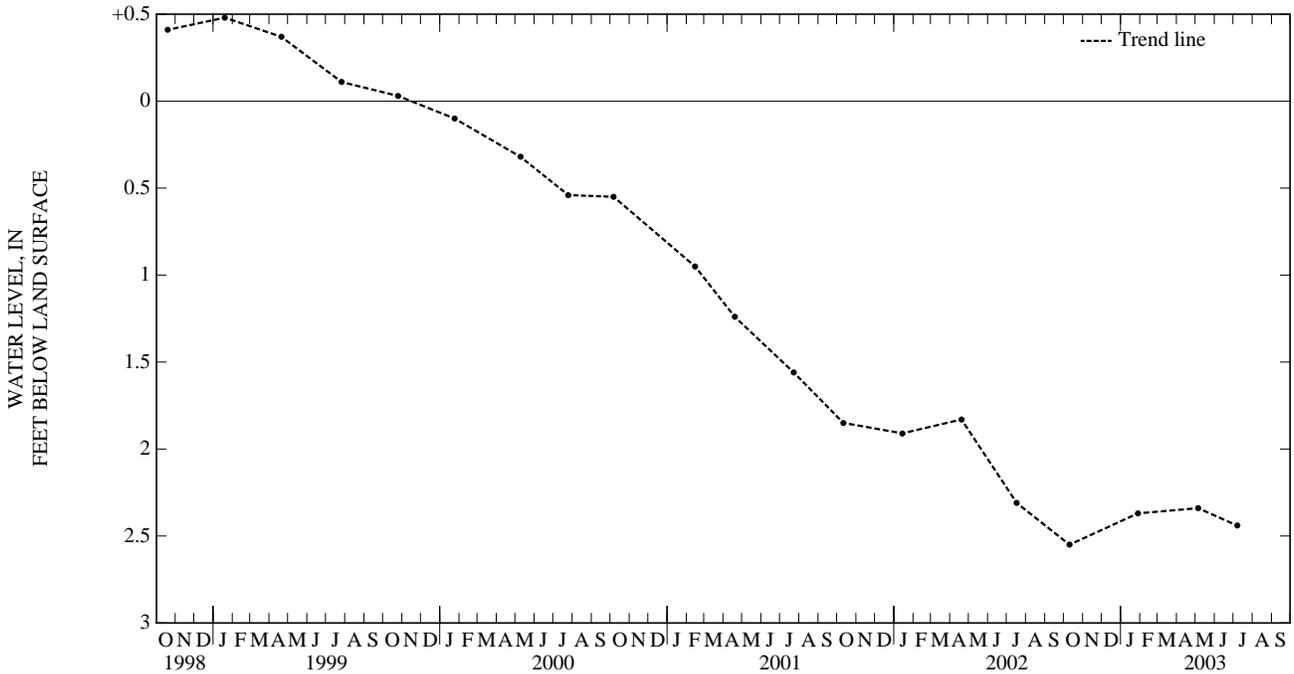
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Flowing well.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.75 ft above land-surface datum, Apr. 20, 1989; lowest measured, 2.55 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	2.55	JAN 28	2.37	MAY 05	2.34	JUL 07	2.44
WATER YEAR 2003 HIGHEST		2.34	MAY 05, 2003 LOWEST		2.55	OCT 10, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

364227076074710. Local number, 61B 16 SOW 091J.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 602 ft, diameter 2 in. from 586 to 690 ft, depth 690 ft, screened 670 to 680 ft.

INSTRUMENTATION.--Occasional measurement with manometer or chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with manometer.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

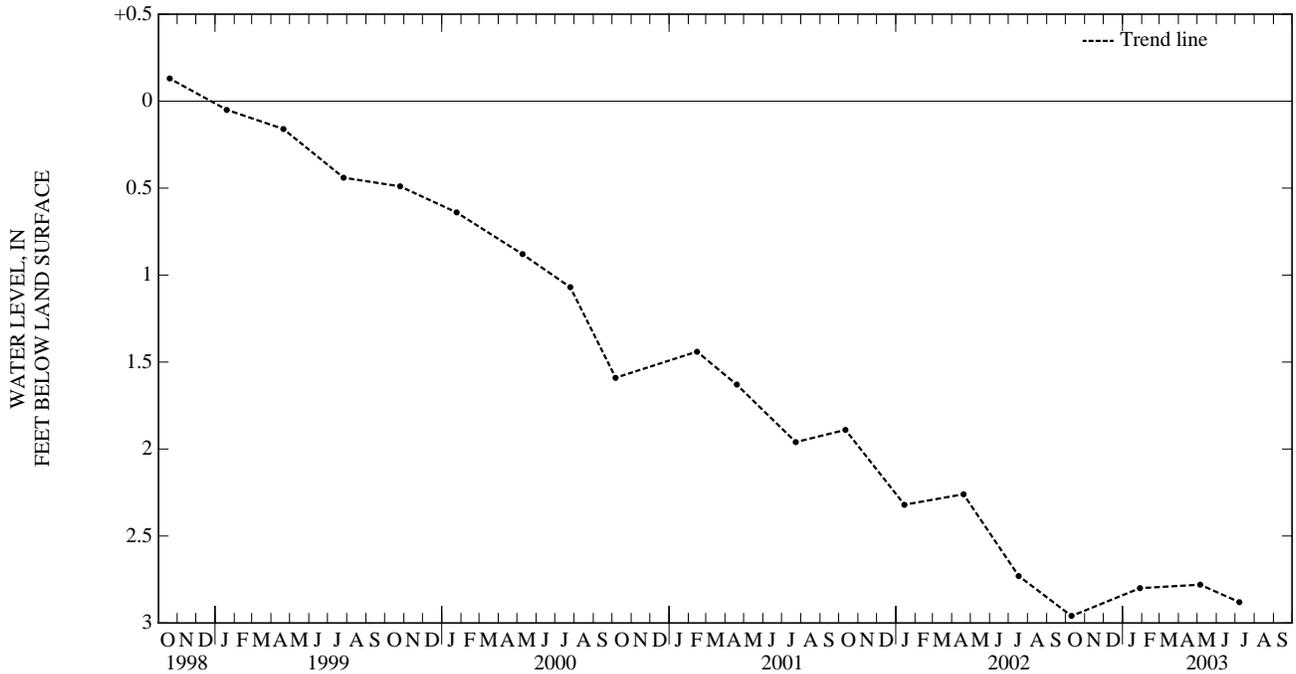
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.31 ft above land-surface datum, Mar. 13, 1989; lowest measured, 2.96 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	2.96	JAN 28	2.80	MAY 05	2.78	JUL 07	2.88
WATER YEAR 2003 HIGHEST		2.78	MAY 05, 2003 LOWEST		2.96	OCT 10, 2002	



CITY OF CHESAPEAKE—Continued

364227076074711. Local number, 61B 17 SOW 091K.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 78 ft, diameter 2 in. from 78 to 108 ft, depth 108 ft, screened 88 to 98 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

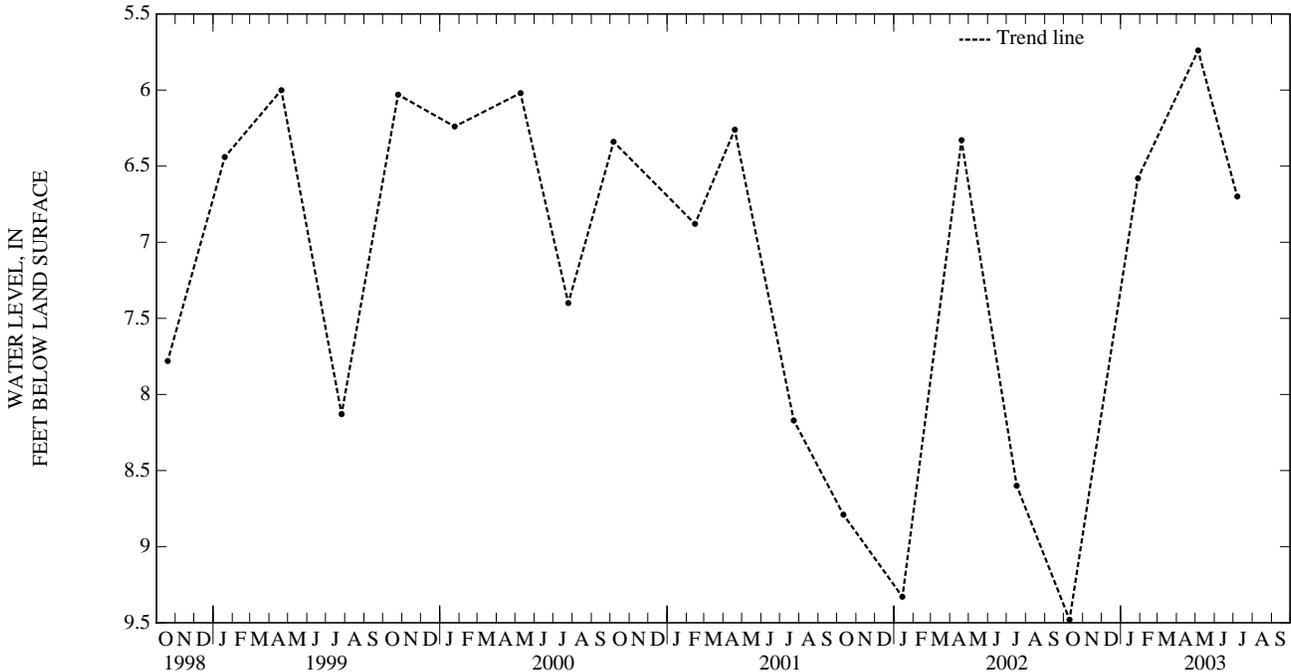
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land-surface datum, Jan. 30, 1991; lowest measured, 9.48 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	9.48	JAN 28	6.58	MAY 05	5.74	JUL 07	6.70
WATER YEAR 2003 HIGHEST		5.74	MAY 05, 2003 LOWEST		9.48	OCT 10, 2002	



GROUND-WATER LEVELS
CITY OF CHESAPEAKE—Continued

364227076074713. Local number, 61B 19 SOW 091M.

LOCATION.--Lat 36°42'28", long 76°07'46", NAD83, Hydrologic Unit 03010205, 300 ft south of Lockheed Avenue, 0.7 mi east of intersection of State Highway 165 and Lockheed Avenue, and 3.8 mi east of Fentress. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 6, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

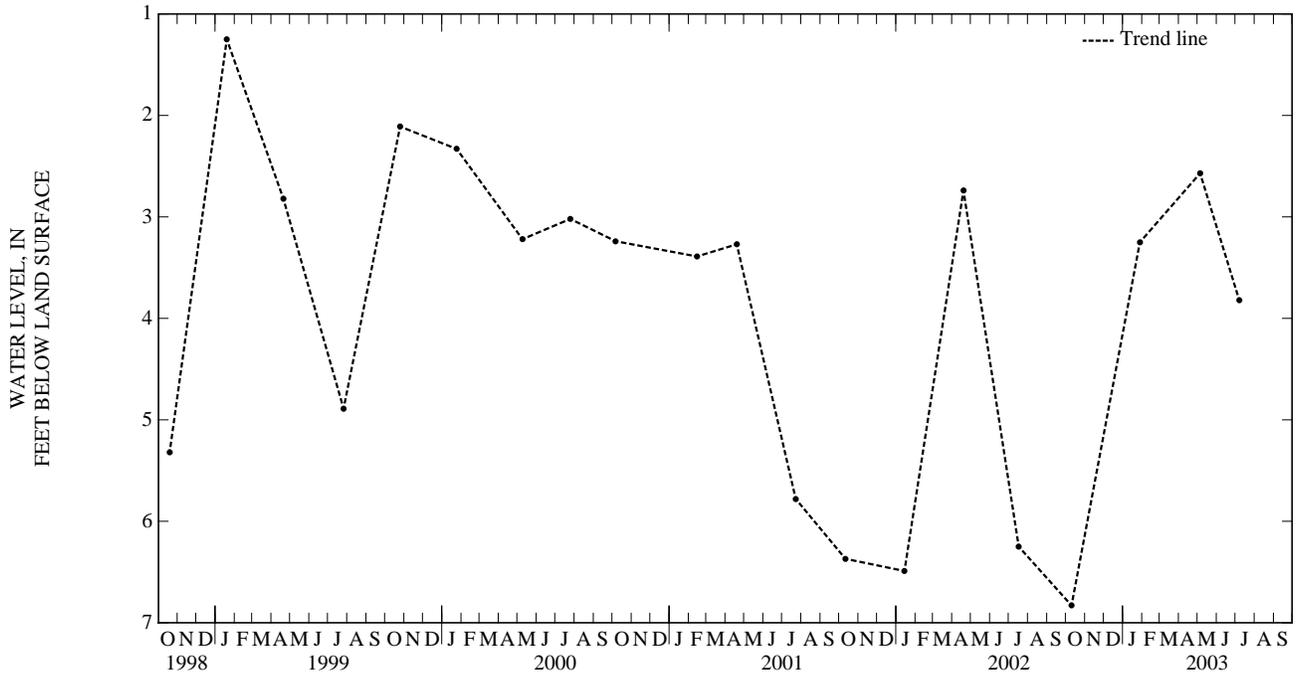
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.09 ft below land-surface datum, Feb. 26, 1992; lowest measured, 6.83 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	6.83	JAN 28	3.25	MAY 05	2.57	JUL 07	3.82
WATER YEAR 2003 HIGHEST		2.57	MAY 05, 2003 LOWEST		6.83	OCT 10, 2002	



CHESTERFIELD COUNTY

372519077264701. Local number, 51H 92.

LOCATION.--Lat 37°25'20", long 77°26'46", NAD83, Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley, 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 53 ft, screened 51 to 53 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1985, to Jan. 23, 1991, digital recorder 60-minute punch. Prior to Oct. 1, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 103.00 ft above NGVD of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to June 12, 2001; top of casing, 0.17 ft below land-surface datum thereafter.

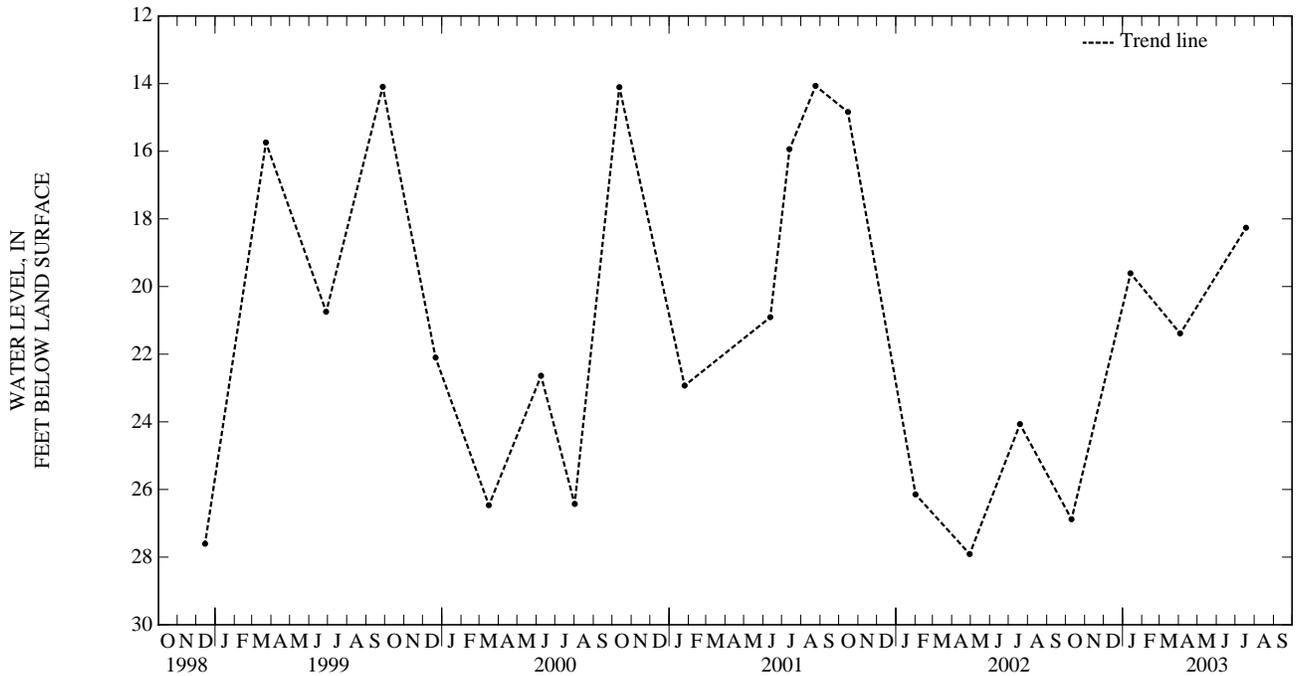
REMARKS.--Water level after Sept. 20, 1996 affected by local pumpage.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.95 ft below land-surface datum, June 14, 1989; lowest measured, 27.91 ft below land-surface datum, Apr. 29, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	26.88	JAN 13	19.61	APR 03	21.39	JUL 18	18.26
WATER YEAR 2003 HIGHEST		18.26	JUL 18, 2003 LOWEST		26.88	OCT 10, 2002	



GROUND-WATER LEVELS
CHESTERFIELD COUNTY—Continued

372519077264704. Local number, 51H 95.

LOCATION.--Lat 37°25'20", long 77°26'46", NAD83, Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highways 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 4.7 ft, screened 2.7 to 4.7 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Jan. 23, 1991, digital recorder 60-minute punch and monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 102.88 ft above NGVD of 1929. Measuring point: Top of casing, 1.9 ft above land-surface datum prior to June 12, 2001; top of casing, 0.14 ft below land-surface datum thereafter.

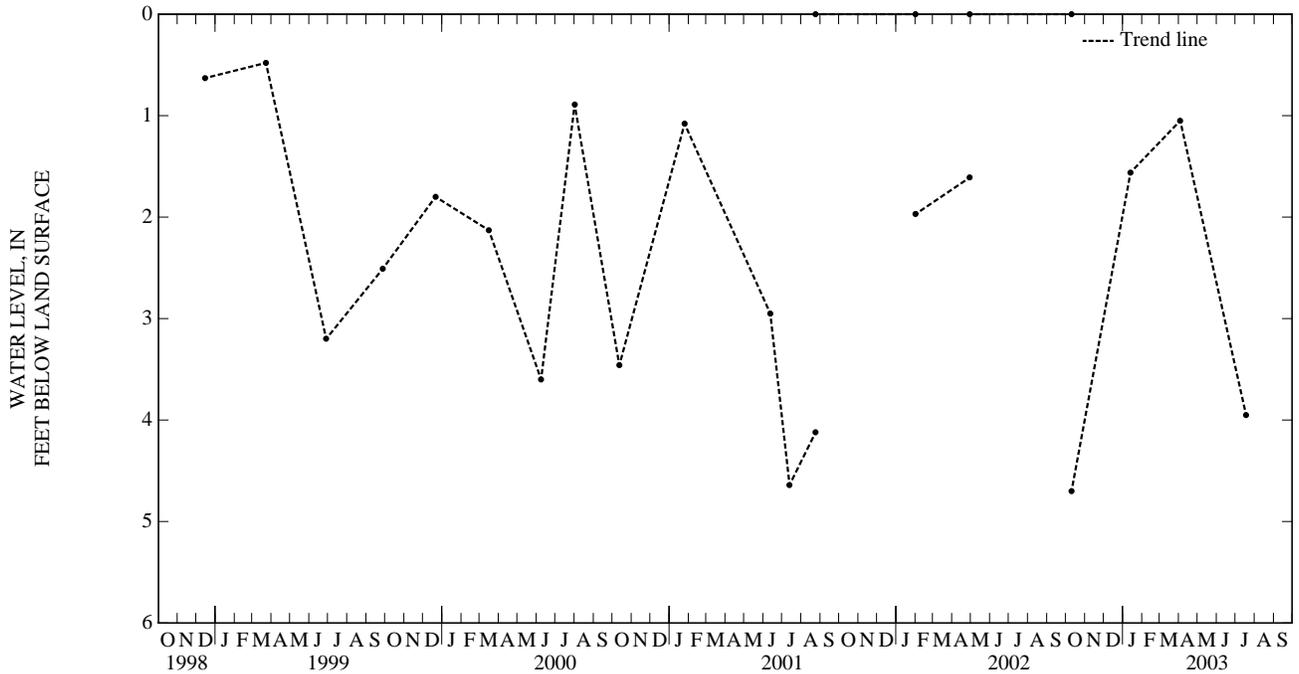
REMARKS.--Upper limit of recorded water-level data is limited by well construction. Water level affected by pumping and sampling at different times during the year.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.02 ft below land-surface datum, Jan. 11, 12, 1990; well was observed to be dry on Oct. 15, 2001 and July 19, 2002; lowest water level measured, 4.70 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	4.70	JAN 13	1.56	APR 03	1.05	JUL 18	3.95
WATER YEAR 2003 HIGHEST		1.05	APR 03, 2003 LOWEST		4.70	OCT 10, 2002	



CHESTERFIELD COUNTY—Continued

372519077264605. Local number, 51H130.

LOCATION.--Lat 37°25'20", long 77°26'45", NAD83, Hydrologic Unit 02080206, 500 ft north of Alcott Road at Bensley and 0.3 mi southwest of the intersection of U.S. Highway 1 and 301 (Jefferson Davis Highway) and Alcott Road. Owner: U.S. Geological Survey.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 96 ft, cased to 71 ft, open hole 71 to 96 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1995, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 102.70 ft above NGVD of 1929. Measuring point: Top of casing, 1.64 ft above land-surface datum prior to June 12, 2001; top of casing, 0.34 ft below land-surface datum thereafter.

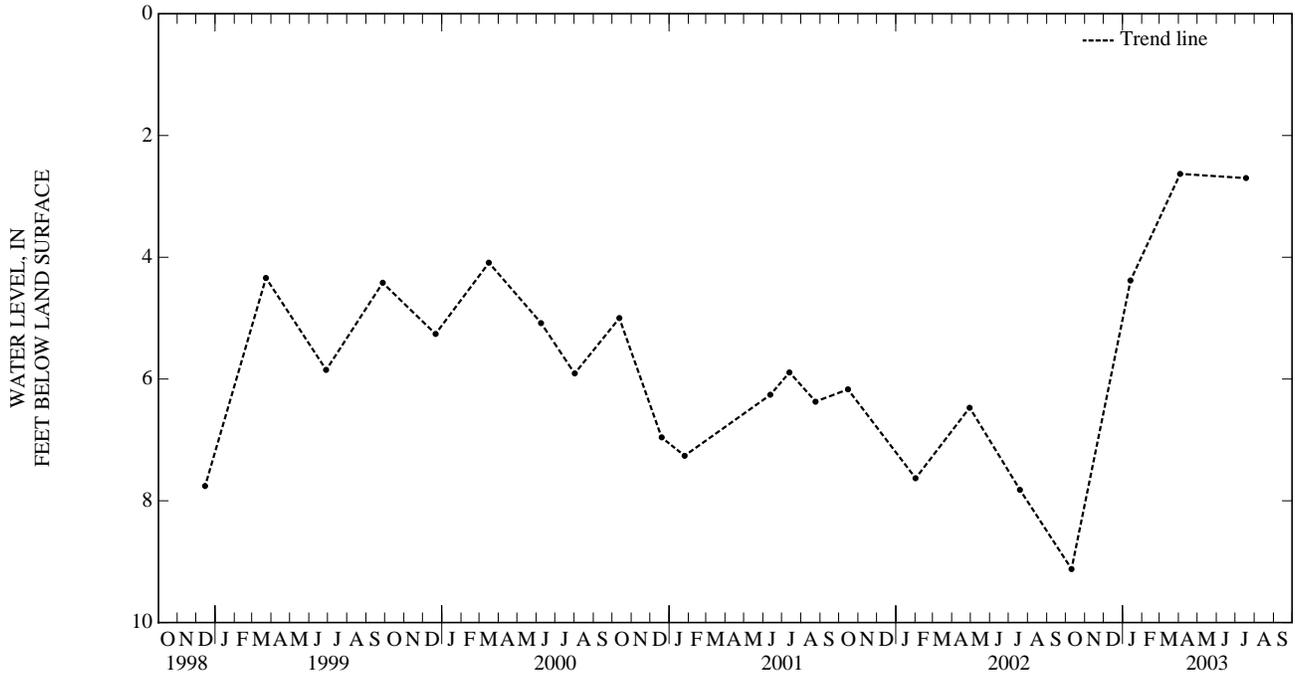
REMARKS.--Water level affected by pumping and sampling at different times during the year.

PERIOD OF RECORD.--May 1985 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.64 ft above land-surface datum, June 1, 1989; lowest measured, 9.12 ft below land-surface datum, Oct. 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	9.12	JAN 13	4.38	APR 03	2.63	JUL 18	2.70
WATER YEAR 2003 HIGHEST		2.63	APR 03, 2003 LOWEST		9.12	OCT 10, 2002	



GROUND-WATER LEVELS
CHESTERFIELD COUNTY—Continued

372031077200001. Local number, 52G 22.

LOCATION.--Lat 37°20'32", long 77°19'59", NAD83, Hydrologic Unit 02080206, at Virginia Department of Transportation salt storage facility, 200 ft east of intersection of State Highway 10 and Interstate 295. Owner: U.S. Geological Survey.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 16.77 ft, screened 11.77 ft to 16.77 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Unpublished digital recorder data Nov. 13, 1995, to Apr. 2, 1996.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.59 ft above land-surface datum.

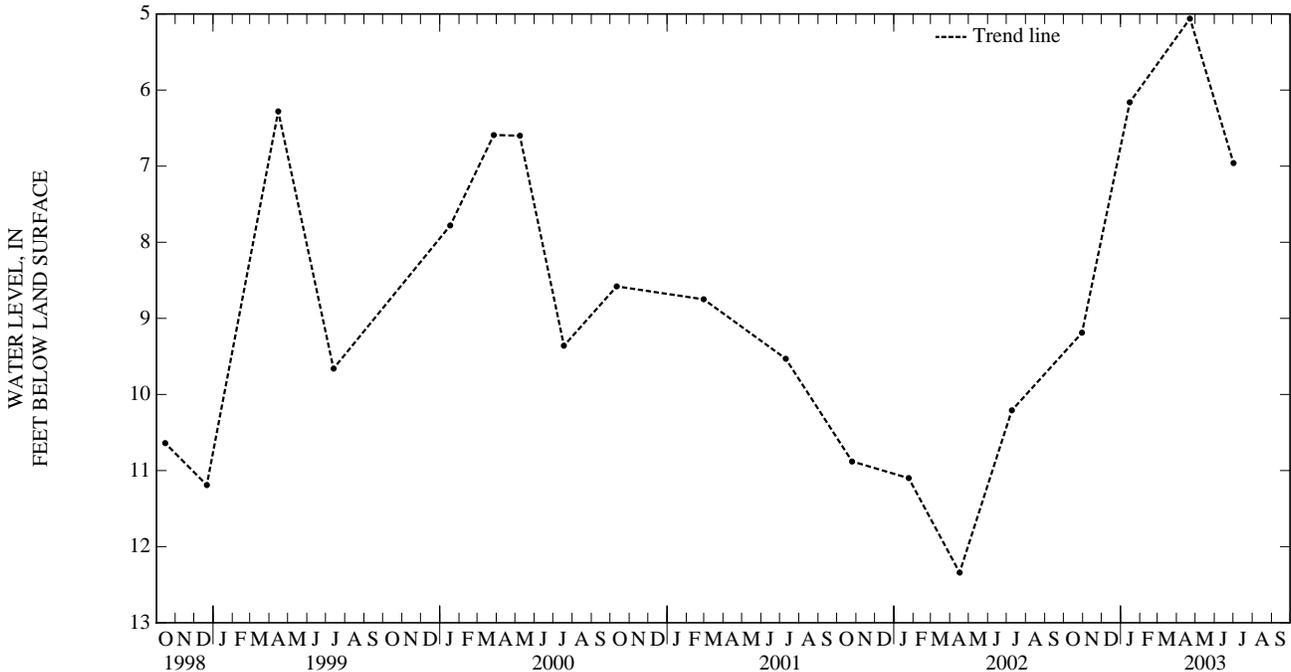
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Well drilled as part of Fall Zone ground-water study.

PERIOD OF RECORD.--August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.06 ft below land-surface datum, Apr. 22, 2003; lowest measured, 13.39 ft below land-surface datum, Oct. 21, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	9.19	JAN 15	6.16	APR 22	5.06	JUL 01	6.96
WATER YEAR 2003 HIGHEST		5.06	APR 22, 2003		LOWEST		9.19
						OCT 30, 2002	



CHESTERFIELD COUNTY—Continued

372031077200003. Local number, 52G 24.

LOCATION.--Lat 37°20'32", long 77°19'59", NAD83, Hydrologic Unit 02080206, at Virginia Department of Transportation salt storage facility, 200 ft east of intersection of State Highway 10 and Interstate 295. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 64.79 ft, screened 59.79 ft to 64.79 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Unpublished digital recorder data Mar. 5, 1996, to Apr. 2, 1996.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.35 ft above land-surface datum.

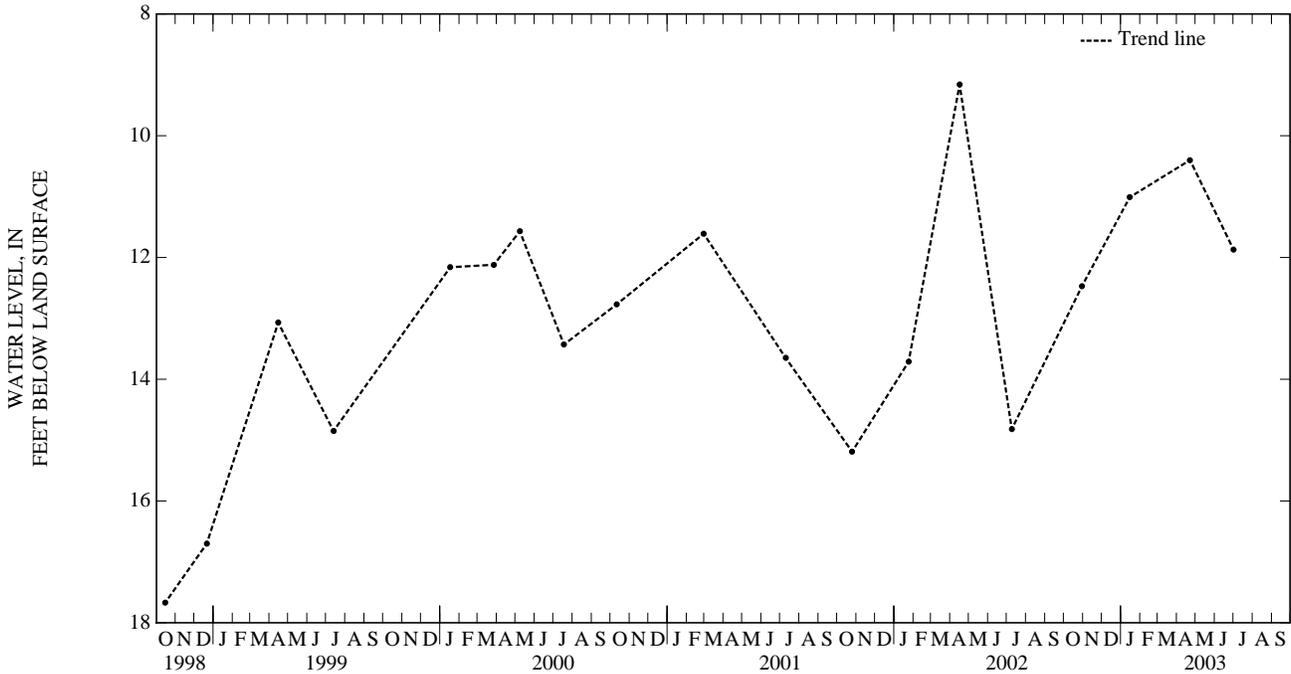
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Well drilled as part of Fall Zone ground-water study.

PERIOD OF RECORD.--August 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.16 ft below land-surface datum, Apr. 16, 2002; lowest measured, 17.67 ft below land-surface datum, Oct. 15, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	12.47	JAN 15	11.01	APR 22	10.40	JUL 01	11.87
WATER YEAR 2003 HIGHEST		10.40	APR 22, 2003 LOWEST		12.47	OCT 30, 2002	



GROUND-WATER LEVELS

CLARKE COUNTY

390348078035501. Local number, 46W175.

LOCATION.--Lat 39°03'48", long 78°03'54", NAD83, Hydrologic Unit 02070007, 1.5 mi east of the intersection of U.S. Highways 17/50 and 340 at Blandy Experimental Farm. Owner: University of Virginia.

AQUIFER.--Conococheague Limestone of Middle Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 80.4 ft, cased to 24 ft, open hole 24 to 80.4 ft.

INSTRUMENTATION.--Electronic data logger 60-minute record interval. Prior to February 28, 2000, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 600 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 3.7 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

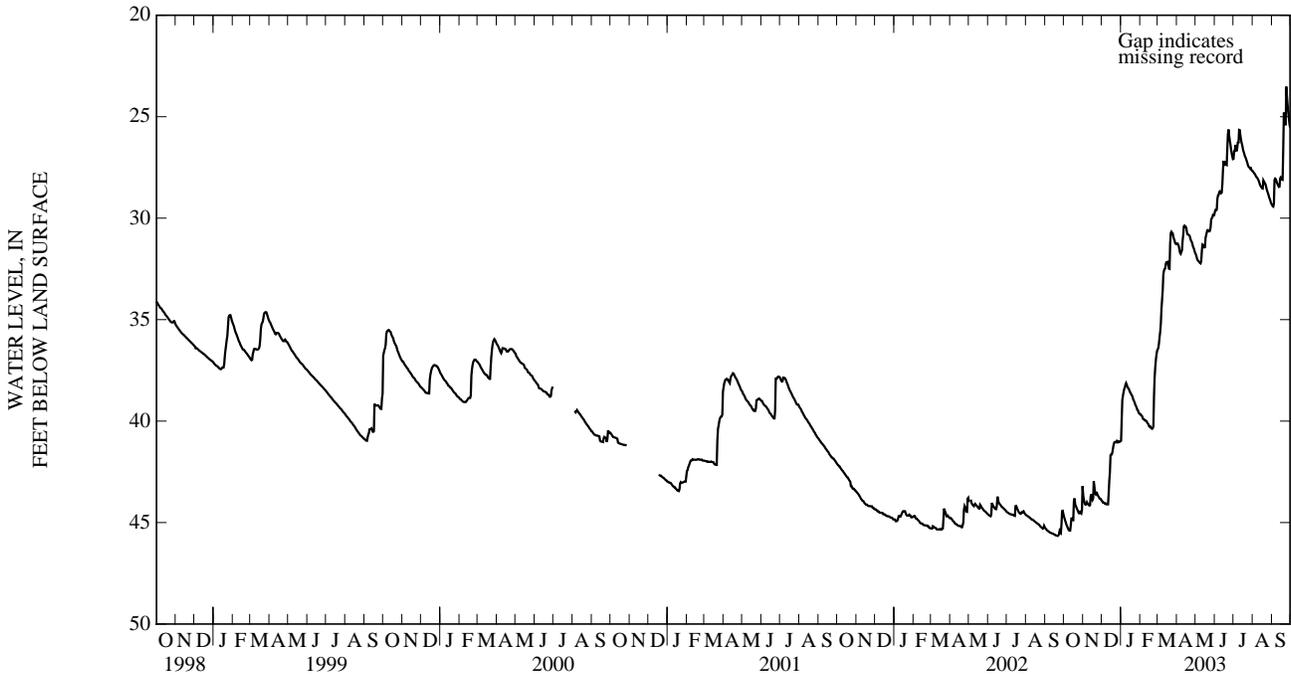
PERIOD OF RECORD.--July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.87 ft below land-surface datum, Sept. 23, 2003; lowest recorded, 45.66 ft below land-surface datum, Sept. 21, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 22.87 ft below land-surface datum, Sept. 23; lowest instantaneous water level, 45.40 ft below land-surface datum, Oct. 10, 11.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	45.10	44.12	44.03	38.57	39.87	35.59	31.57	32.09	29.06	26.54	27.86	28.11
10	45.40	44.14	44.10	38.20	39.98	32.78	31.12	32.12	28.72	25.65	28.12	28.33
15	44.87	43.79	41.68	38.56	40.25	32.17	30.42	31.44	27.18	26.40	28.48	27.99
20	44.19	43.55	41.15	38.88	40.38	32.50	30.83	30.59	27.38	26.99	28.25	24.80
25	44.54	43.69	40.99	39.26	37.34	30.74	31.19	30.47	26.17	27.45	28.73	24.01
EOM	43.20	43.88	40.99	39.64	36.53	31.28	31.70	29.84	27.09	27.67	29.30	25.53



GROUND-WATER LEVELS
CITY OF COLONIAL HEIGHTS

371644077244601. Local number, 51G 1.

LOCATION.--Lat 37°16'45", long 77°24'45", NAD83, Hydrologic Unit 02080207, 200 ft west of U.S. Highways 1 and 301, 0.5 mi south of the intersection of State Highway 144 (Ashby Avenue) and U.S. Highways 1 and 301 (Boulevard) in Colonial Heights. Owner: Dean Whittington.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 100 ft, cased to 50 ft, open hole 50 to 100 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

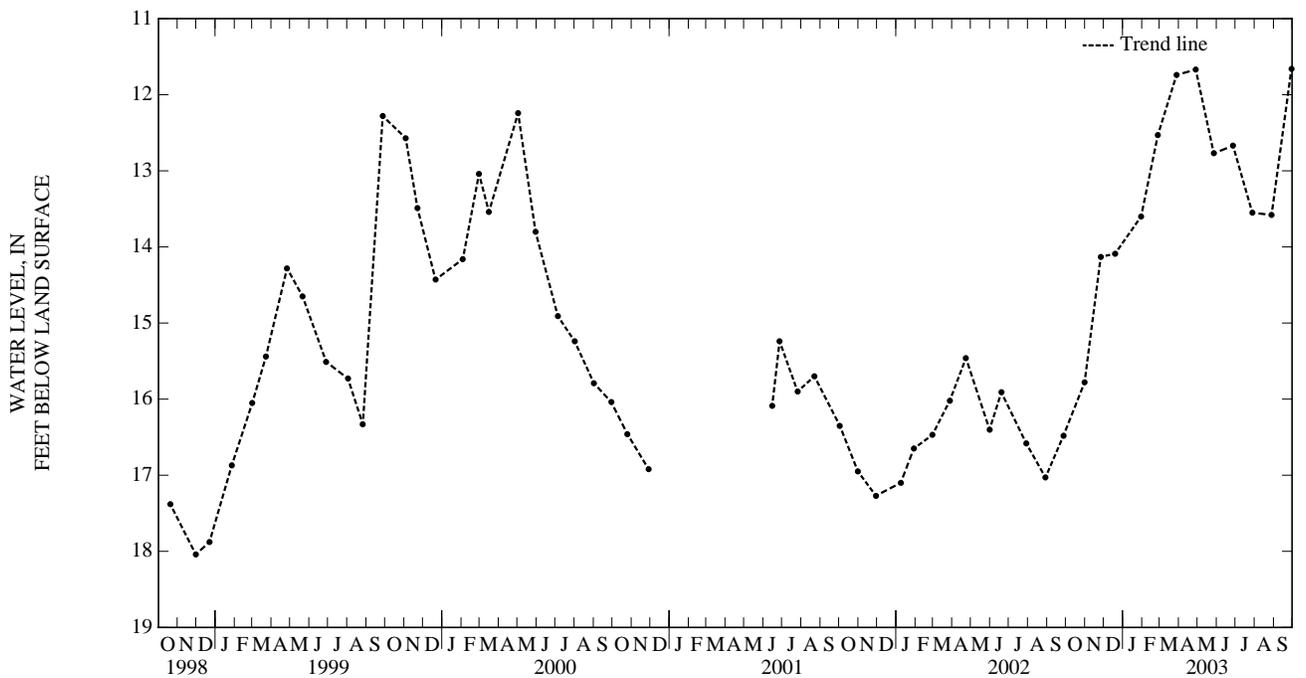
DATUM.--Elevation of land-surface datum is 57.30 ft above NGVD of 1929. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--October 1939 to November 2000, June 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.73 ft below land-surface datum, Jan. 26, 1978, Mar. 31, 1998; lowest measured, 19.26 ft below land-surface datum, Dec. 3, 1963.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	15.78	DEC 19	14.09	FEB 26	12.53	APR 28	11.67	JUN 27	12.67	AUG 28	13.58
NOV 26	14.13	JAN 30	13.60	MAR 28	11.74	MAY 27	12.77	JUL 28	13.55	SEP 29	11.66
WATER YEAR 2003 HIGHEST 11.66 SEP 29, 2003 LOWEST 15.78 OCT 31, 2002											



GROUND-WATER LEVELS

ESSEX COUNTY

380024076585801. Local number, 55N 2.

LOCATION.--Lat 38°00'24", long 76°58'57", NAD83, Hydrologic unit 02080104, 250 feet north east of U.S. Highway 17, 1.6 mi north west of State Highway 624, 1.2 mi southeast of Champlain on the north bound side of U.S. Highway 17. Owner: Ray Ellis.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 516 ft, casing 0 to 494, 514 to 516, screened 494 to 514.

INSTRUMENTATION.--Occasional measurement with chalk tape by USGS personal.

DATUM.--Elevation of land surface datum is 141 ft above NGVD of 1929, from topographic map. Measuring point: Top of sanitary seal, 1.96 ft above land surface datum.

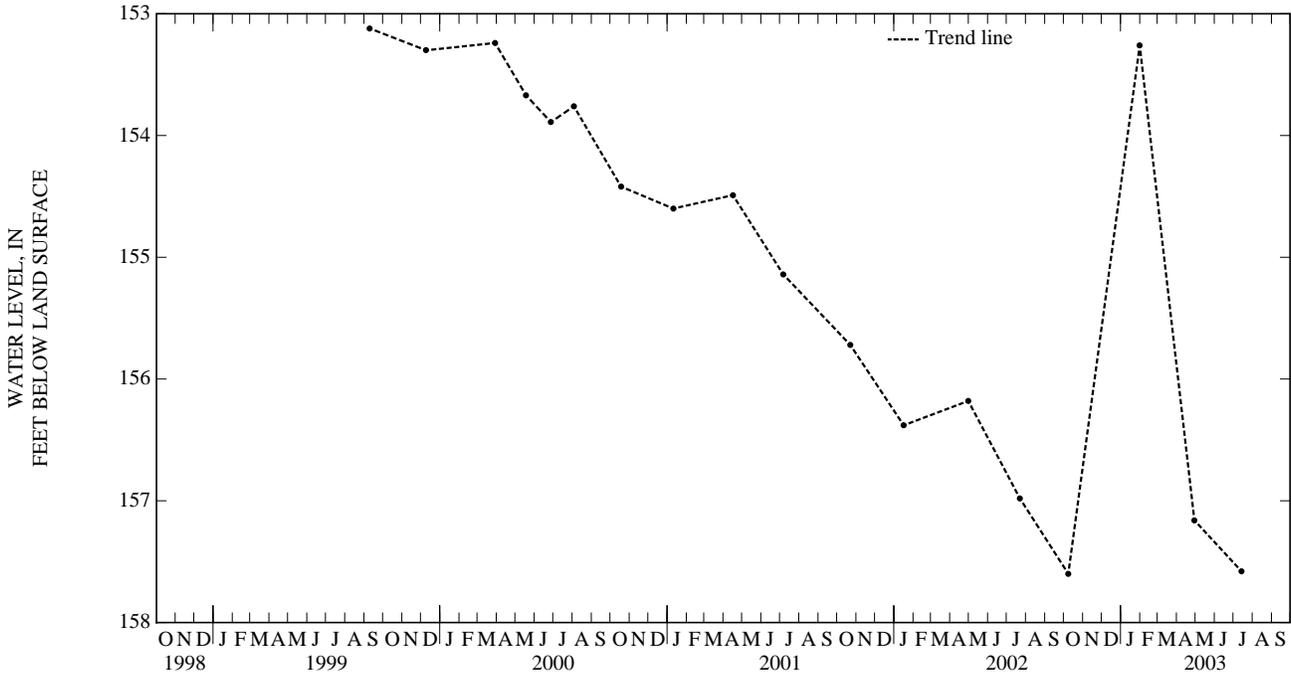
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 153.12 ft below land-surface datum, Sept. 9, 1999; lowest measured, 157.60 ft below land-surface datum Oct. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	157.60	JAN 31	153.26	APR 29	157.16	JUL 14	157.58
WATER YEAR 2003 HIGHEST		153.26 JAN 31, 2003		LOWEST		157.60 OCT 08, 2002	



FAIRFAX COUNTY

385638077220101. Local number, 52V 2.

LOCATION.--Lat 38°56'58", long 77°22'00", NAD83, Hydrologic Unit 02070008, at U.S. Geological Survey National Center in Reston. Owner: U.S. Geological Survey.

AQUIFER.--Manassas Sandstone of Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 8 in., depth 205 ft, cased to 35 ft, open hole 35 to 205 ft.

INSTRUMENTATION.--Satellite data collection platform 15-minute record interval. Sept. 1, 1996 to to Sept. 13, 1999, electronic data logger 15-minute record interval. Prior to Sept. 1, 1996, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 390 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

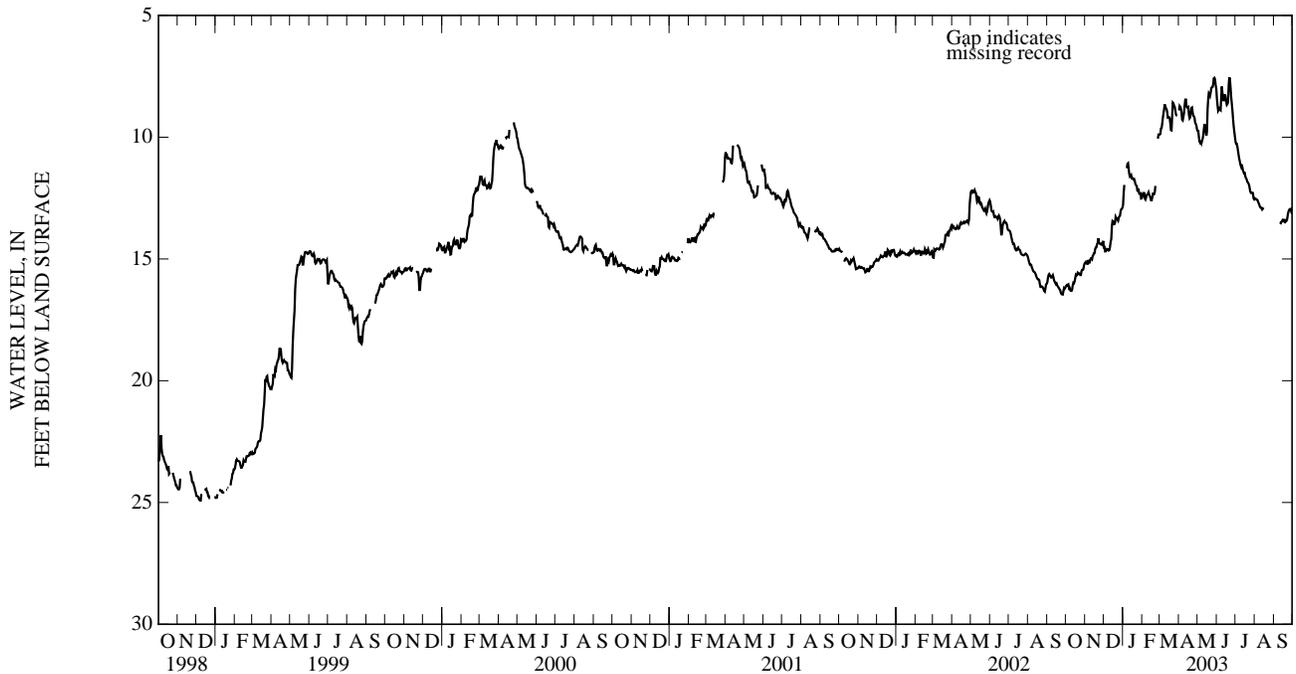
PERIOD OF RECORD.--October 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.47 ft below land-surface datum, Mar. 30, 1984; lowest recorded, 24.92 ft below land-surface datum, Dec. 7-8, 1998.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 7.44 ft below land-surface datum, June 21, 22; lowest instantaneous water level, 16.31 ft below land-surface datum, Oct. 9, 10.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.06	15.20	14.65	---	12.52	9.44	8.96	10.23	8.76	10.56	12.57	---
10	16.31	14.98	14.63	11.31	12.32	8.76	8.72	9.93	8.20	11.21	12.88	13.50
15	15.92	14.77	13.44	11.70	12.59	9.19	8.78	9.94	8.32	11.49	12.89	13.39
20	15.56	14.40	13.27	11.82	12.34	9.72	8.99	8.23	7.86	11.83	---	13.46
25	15.66	14.38	13.30	12.21	---	8.74	9.14	7.94	8.63	12.25	---	13.00
EOM	15.19	14.26	12.89	12.51	9.89	---	9.68	8.00	9.98	12.55	---	13.15



GROUND-WATER LEVELS

CITY OF FRANKLIN

364033076562604. Local number, 55B 67 SOW 145D.

LOCATION.--Lat 36°40'34", long 76°56'25", NAD83, Hydrologic Unit 03010202, at P. D. Camp Community College in Franklin. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 34 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.15 ft above land-surface datum.

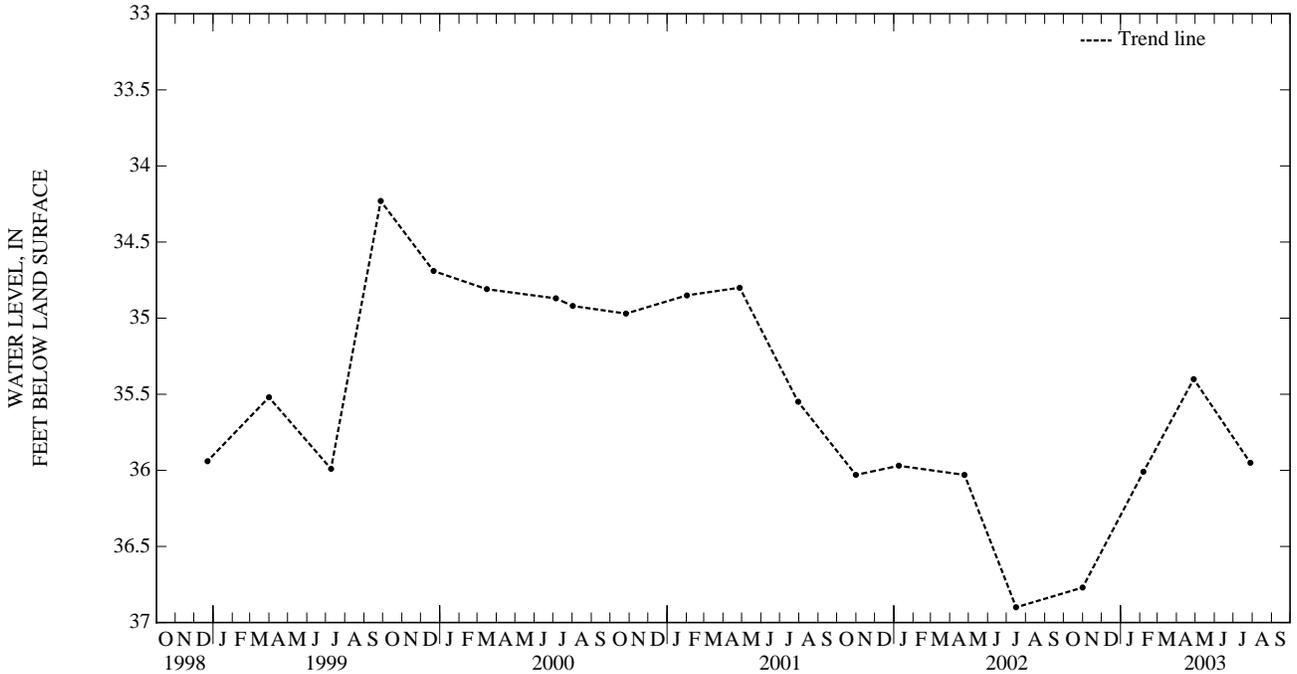
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.51 ft below land-surface datum, Mar. 19, 1985; lowest measured, 36.90 ft below land-surface datum, July 16, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	36.77	FEB 06	36.01	APR 28	35.40	JUL 28	35.95
WATER YEAR 2003 HIGHEST		35.40	APR 28, 2003		LOWEST		36.77
OCT 31, 2002							



FREDERICK COUNTY

390546078191701. Local number, 44W 2.

LOCATION.--Lat 39°05'45.72", long 78°19'17.45", NAD83, Hydrologic Unit 02070006, 180 ft northeast of the intersection of Fromans Road and Cedar Creek Grade and 65 ft southeast of Cedar Creek Grade. Owner: Jacques E. Billmyer.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 300 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

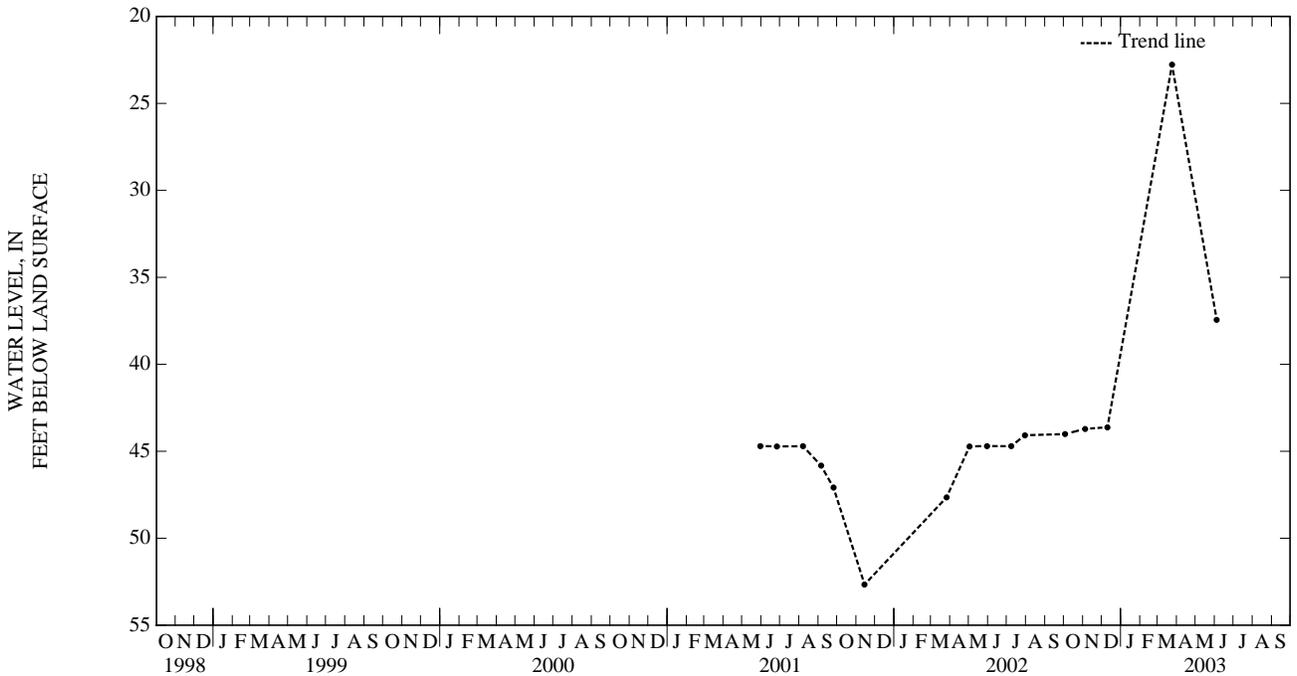
DATUM.--Elevation of land-surface datum is 827.78 ft above NGVD of 1929. Measuring point: Top of casing, 0.9 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.78 ft below land-surface datum, Mar. 24, 2003; lowest measured, 52.66 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	44.01	NOV 04	43.71	DEC 10	43.62	MAR 24	22.78	JUN 04	37.45
WATER YEAR 2003 HIGHEST		22.78	MAR 24, 2003		LOWEST		44.01	OCT 03, 2002	



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390558078190001. Local number, 44W 4.

LOCATION.--Lat 39°05'58.44", long 78°18'59.87", NAD83, Hydrologic Unit 02070006, 0.39 mi. northeast of the intersection of Fromans Road and Cedar Creek Grade and 385 ft southeast of Cedar Creek Grade. Owner: Dwight Rinard.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 300 ft, cased to 60 ft, open hole 60 to 300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

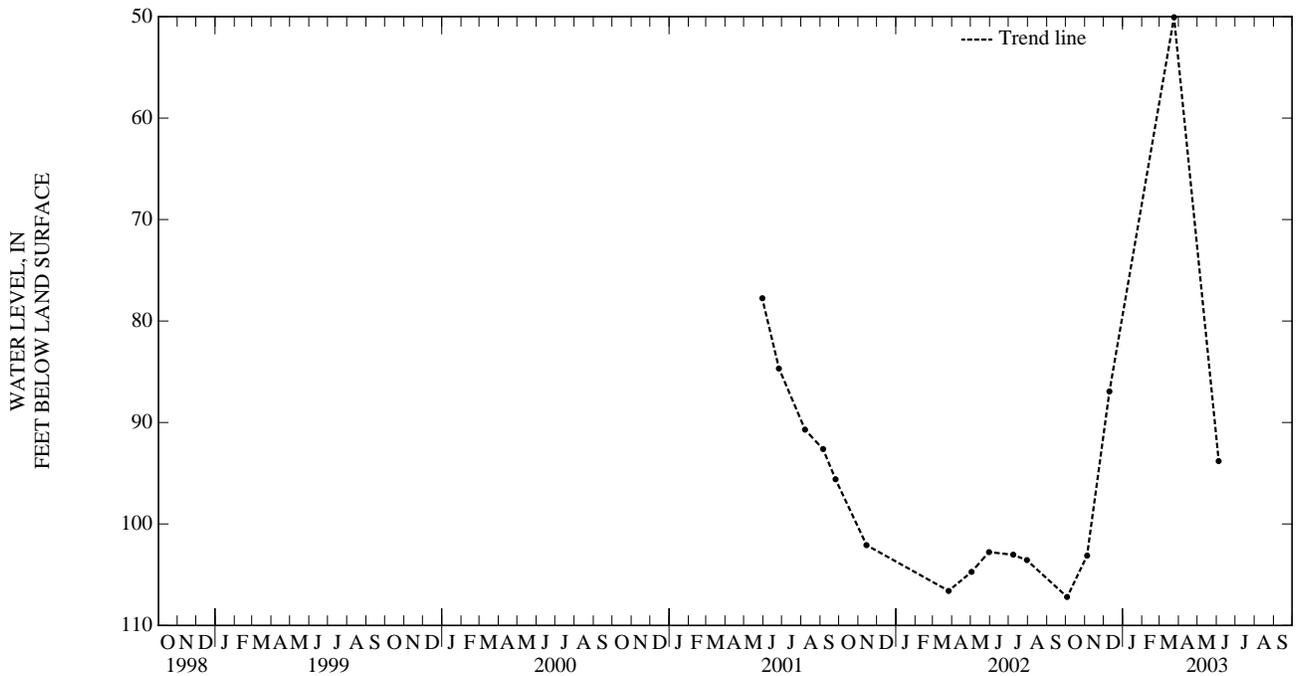
DATUM.--Elevation of land-surface datum is 845 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 50.07 ft below land-surface datum, Mar. 24, 2003; lowest measured, 107.20 ft below land-surface datum, Oct. 3, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	107.20	NOV 04	103.12	DEC 10	86.95	MAR 24	50.07	JUN 04	93.82
WATER YEAR 2003		HIGHEST	50.07	MAR 24, 2003	LOWEST	107.20	OCT 03, 2002		



FREDERICK COUNTY—Continued

390514078191901. Local number, 44W 5.

LOCATION.--Lat 39°05'14.27", long 78°19'18.84", NAD83, Hydrologic Unit 02070006, 0.38 mi. north of the intersection of Middle Road and Cedar Creek Grade and 100 ft west of Cedar Creek Grade. Owner: Cedar Creek Primitive Baptist Church.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 98 ft, cased to 24 ft, open hole 24 to 98 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

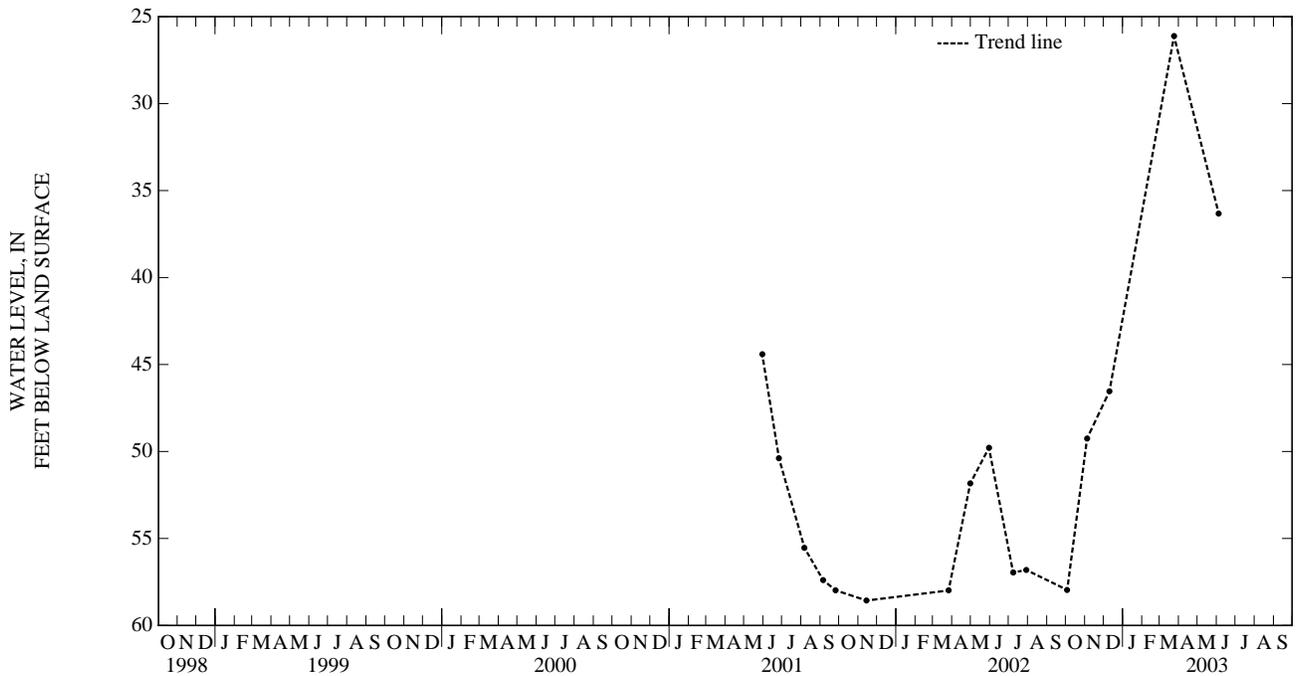
DATUM.--Elevation of land-surface datum is 730 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.25 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.12 ft below land-surface datum, Mar. 24, 2003; lowest measured, 58.57 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	57.96	NOV 04	49.25	DEC 10	46.54	MAR 24	26.12	JUN 04	36.33
WATER YEAR 2003 HIGHEST		26.12	MAR 24, 2003 LOWEST		57.96	OCT 03, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390456078191501. Local number, 44W 6.

LOCATION.--Lat 39°04'55.92", long 78°19'14.61", NAD83, Hydrologic Unit 02070006, 400 ft northeast of the intersection of Middle Road and Cedar Creek Grade and 45 ft west of Middle Road. Owner: Cedar Creek Presbyterian Church.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

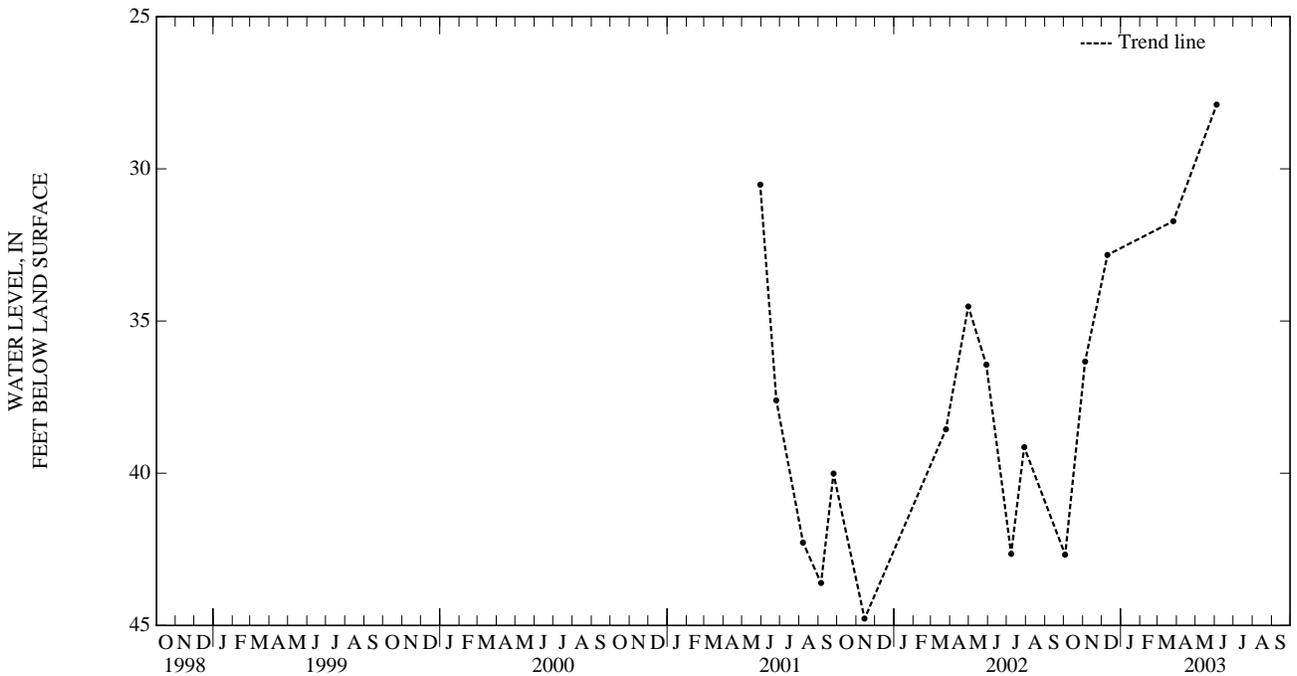
DATUM.--Elevation of land-surface datum is 725 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.25 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 27.89 ft below land-surface datum, June 4, 2003; lowest measured, 44.78 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	42.68	NOV 04	36.33	DEC 10	32.83	MAR 26	31.72	JUN 04	27.89
WATER YEAR 2003 HIGHEST		27.89	JUN 04, 2003 LOWEST		42.68	OCT 03, 2002			



FREDERICK COUNTY—Continued

390421078191701. Local number, 44W 7.

LOCATION.--Lat 39°04'20.97", long 78°19'16.68", NAD83, Hydrologic Unit 02070006, 0.13 mi. east of the intersection of Chapel Road and Mine Bank Road and 30 ft south of Chapel Road. Owner: Hites Chapel United Methodist Church.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

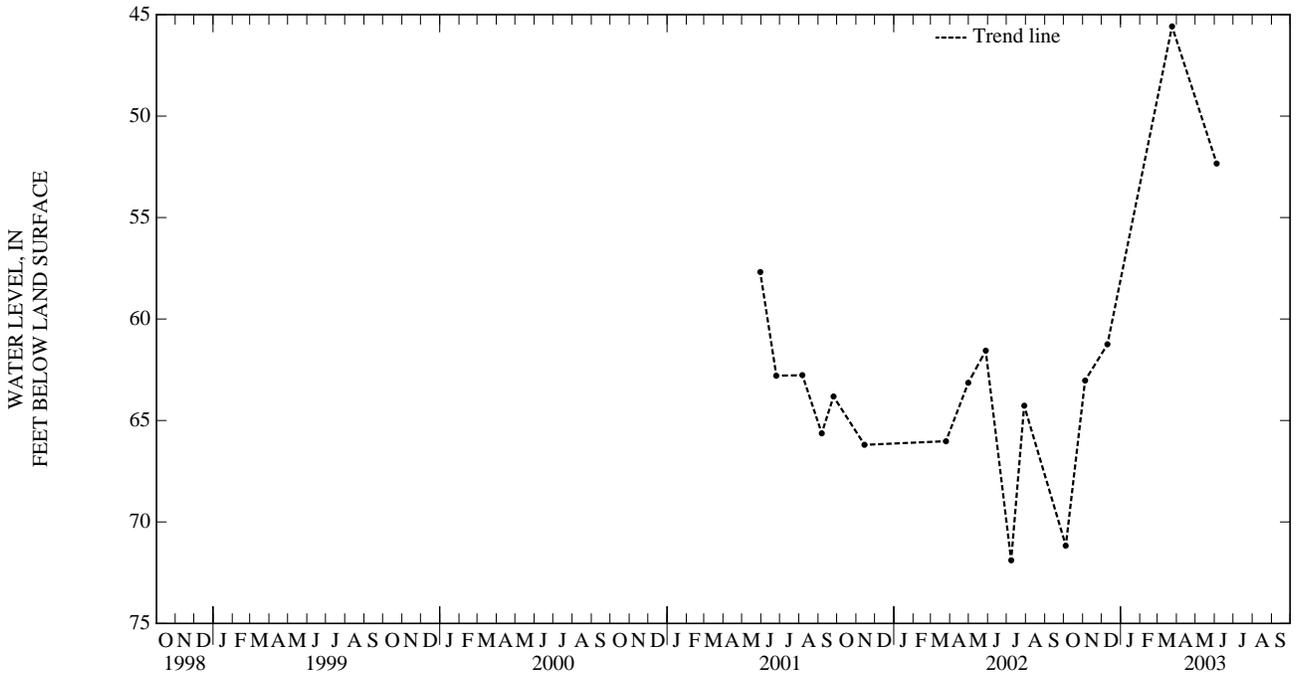
DATUM.--Elevation of land-surface datum is 765 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.58 ft below land-surface datum, Mar. 24, 2003; lowest measured, 71.89 ft below land-surface datum, July 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	71.17	NOV 04	63.03	DEC 10	61.25	MAR 24	45.58	JUN 04	52.34
WATER YEAR 2003		HIGHEST	45.58	MAR 24, 2003	LOWEST	71.89	OCT 04, 2002		



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390226078170601. Local number, 44W 8.

LOCATION.--Lat 39°02'26.08", long 78°17'06.00", NAD83, Hydrologic Unit 02070006, 300 ft northwest of the intersection of Chapel Road and Veterans Road and 25 ft west of Chapel Road. Owner: Middletown Baptist Church.

AQUIFER.--Rockdale Run Formation of the Beekmantown Group of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 155 ft, cased to 81.5 ft, open hole 81.5 to 155 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval.

DATUM.--Elevation of land-surface datum is 735 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

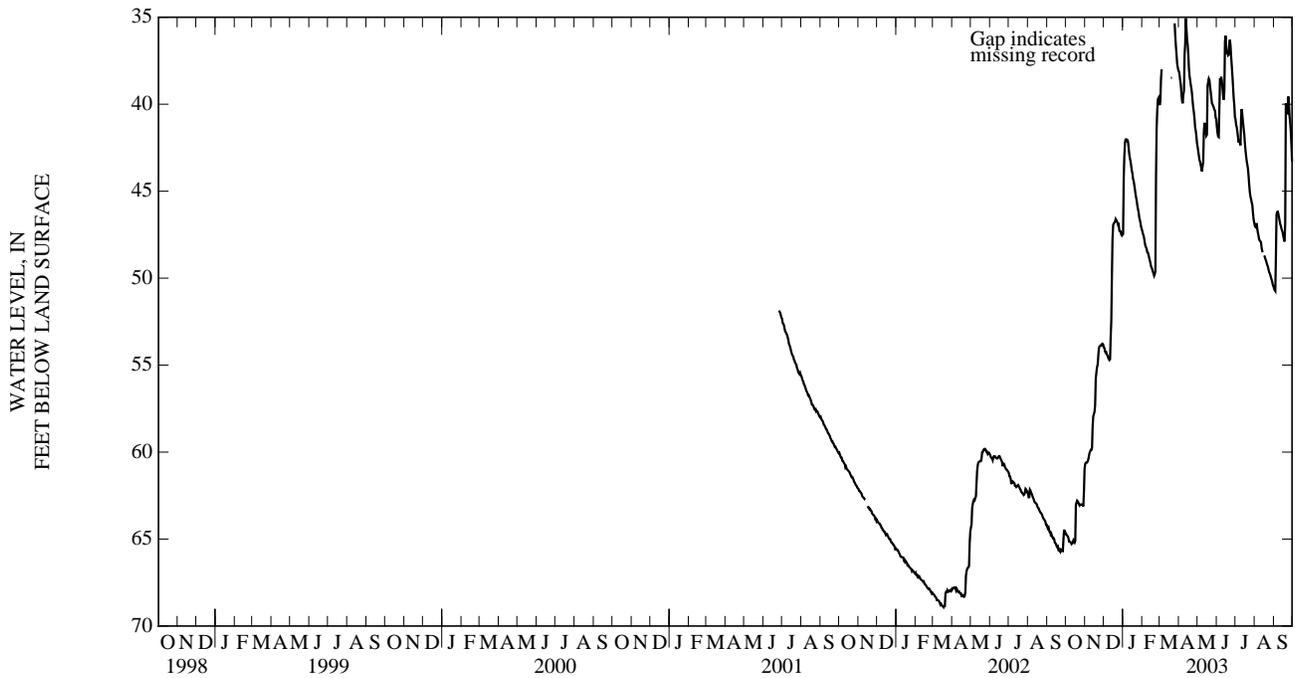
PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, not determined, greater than 34.46 ft below land-surface datum, occurred during period of missing record, March 5-24, 2003; lowest recorded, 68.93 ft below land-surface datum, Mar. 18, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, not determined, greater than 34.46 ft below land-surface datum, occurred during period of missing record, March 5-24; lowest instantaneous water level, 68.93 ft below land-surface datum, Mar. 18.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	64.94	60.53	54.27	42.03	47.98	---	39.44	43.31	40.24	41.90	47.15	46.35
10	65.29	59.87	54.71	42.54	48.54	---	37.10	43.29	39.08	40.73	47.87	46.71
15	65.20	57.81	47.73	43.82	49.33	---	36.60	41.81	36.07	41.70	---	47.40
20	62.83	55.12	46.60	44.89	49.86	---	38.91	38.61	37.16	43.48	49.11	39.96
25	63.03	53.90	46.92	46.03	40.32	35.35	40.49	40.01	37.83	45.31	49.72	40.03
EOM	60.95	53.82	47.49	47.17	39.90	38.06	42.24	40.84	40.74	46.79	50.47	43.29



FREDERICK COUNTY—Continued

390228078170301. Local number, 44W 9.

LOCATION.--Lat 39°02'27.51", long 78°17'02.92", NAD83, Hydrologic Unit 02070006, 440 ft north of the intersection of Chapel Road and Veterans Road and 210 ft east of Chapel Road. Owner: Harold G. Nichols.

AQUIFER.--Rockdale Run Formation of the Beekmantown Group of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

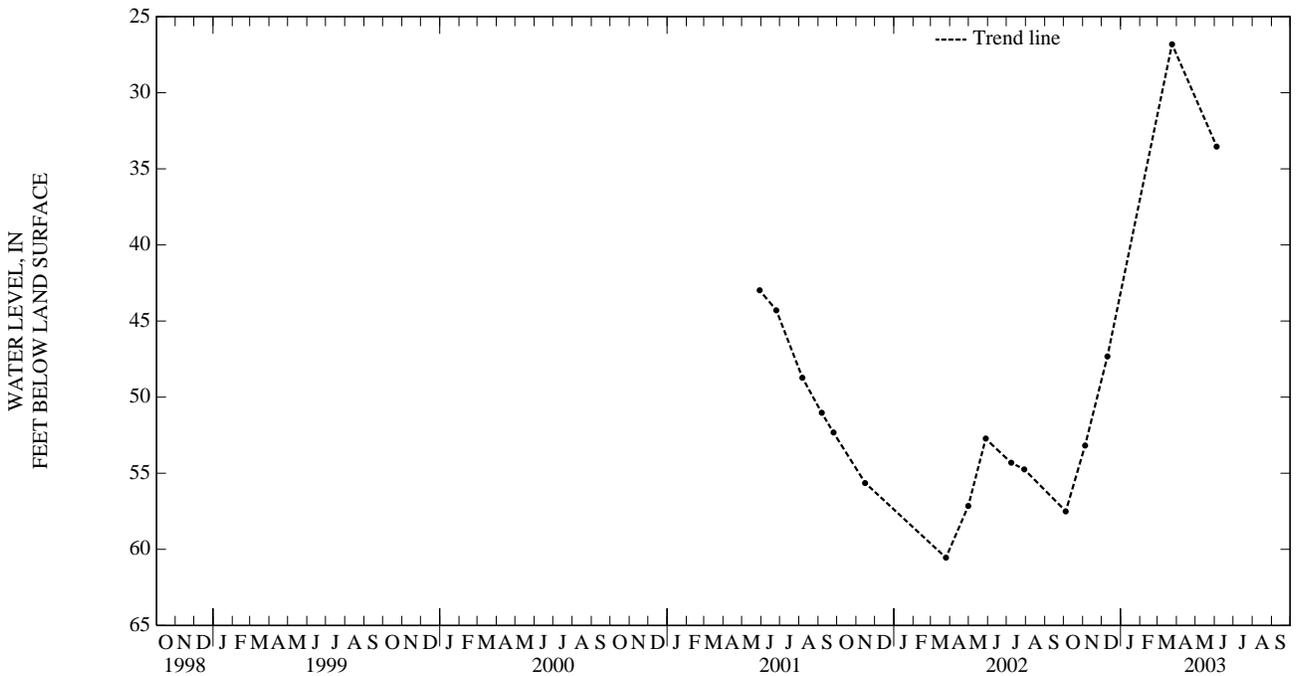
DATUM.--Elevation of land-surface datum is 730 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.35 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.81 ft below land-surface datum, Mar. 24, 2003; lowest measured, 60.55 ft below land-surface datum, Mar. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	57.50	NOV 04	53.18	DEC 10	47.32	MAR 24	26.81	JUN 04	33.54
WATER YEAR 2003 HIGHEST		26.81	MAR 24, 2003		LOWEST		60.55	OCT 04, 2002	



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390359078163201. Local number, 44W 10.

LOCATION.--Lat 39°03'59.35", long 78°16'32.17", NAD83, Hydrologic Unit 02070006, 250 ft south of the intersection of Hités Road and Clark Road and 10 ft west of Hités Road. Owner: Eugene Snow.

AQUIFER.--Rockdale Run Formation of the Beekmantown Group of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 136 ft, cased to 45 ft, open hole 45 to 136 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 835 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.9 ft above land-surface datum.

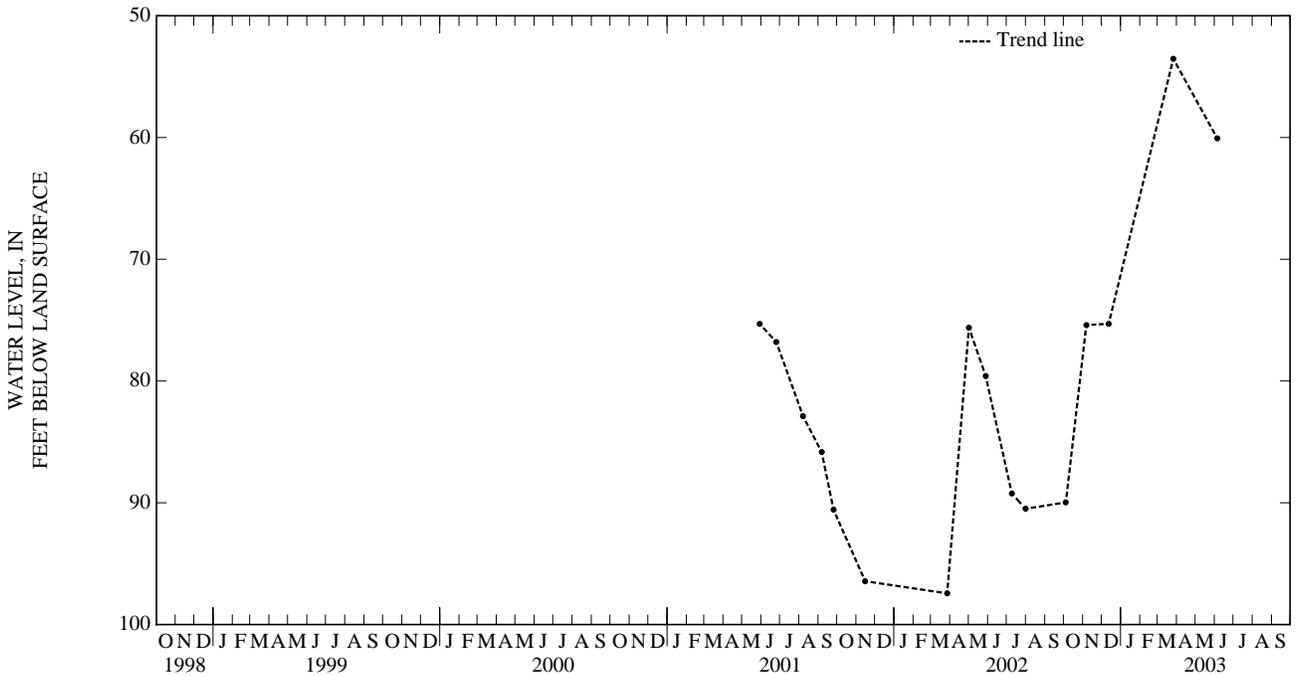
REMARKS.--Water level of Sept. 25, 2001 result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.53 ft below land-surface datum, Mar. 26, 2003; lowest measured, 97.44 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	89.97	NOV 06	75.40	DEC 12	75.30	MAR 26	53.53	JUN 05	60.08
WATER YEAR 2003 HIGHEST		53.53	MAR 26, 2003		LOWEST		97.44	OCT 04, 2002	



FREDERICK COUNTY—Continued

390444078154601. Local number, 44W 11.

LOCATION.--Lat 39°04'44.01", long 78°15'46.37", NAD83, Hydrologic Unit 02070006, 0.26 mi. east of the intersection of Hités Road and Carson Lane and 60 ft south of Carson Lane. Owner: Najeeb Anwar.

AQUIFER.--Rockdale Run Formation of the Beekmantown Group of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

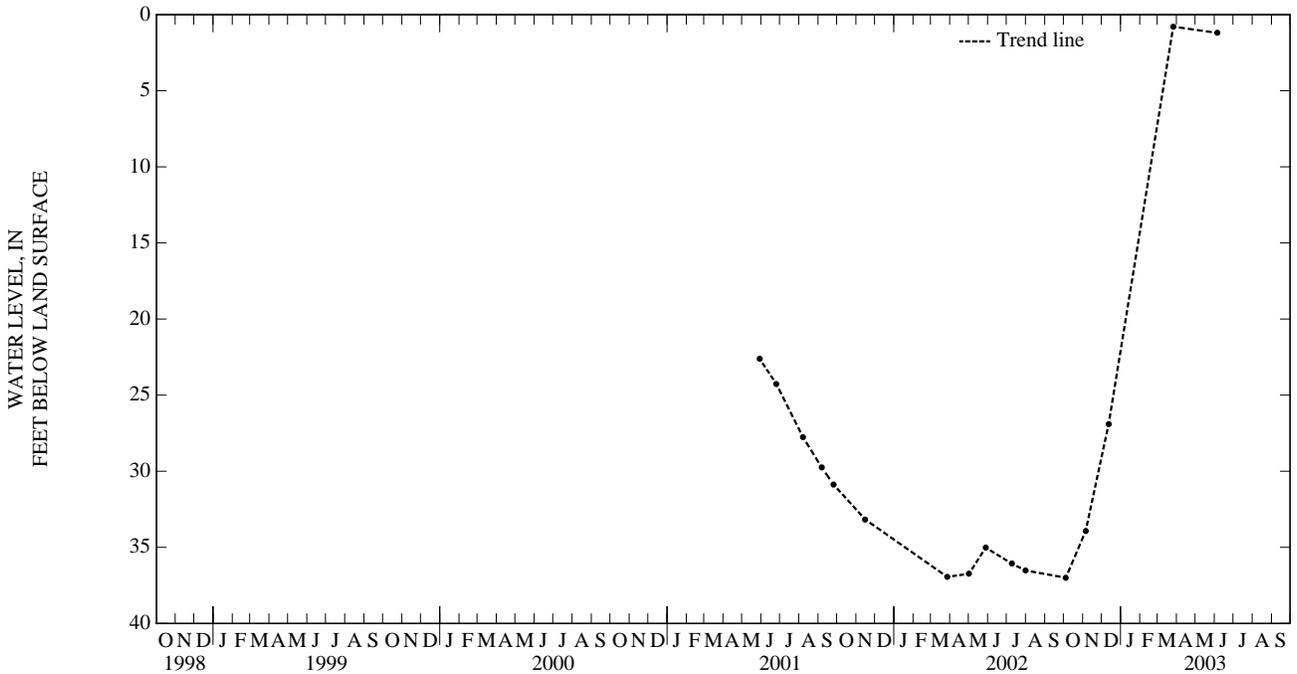
DATUM.--Elevation of land-surface datum is 780 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.79 ft below land-surface datum, Mar. 26, 2003; lowest measured, 39.49 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	37.00	NOV 05	33.92	DEC 12	26.90	MAR 26	.79	JUN 05	1.20
WATER YEAR 2003 HIGHEST		.79 MAR 26, 2003		LOWEST		37.00 OCT 04, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390631078155301. Local number, 44W 12.

LOCATION.--Lat 39°06'30.90", long 78°15'52.87", NAD83, Hydrologic Unit 02070006, 280 ft southeast of the intersection of Middle Road and Carters Lane and 180 ft south of Carters Lane. Owner: Relief United Methodist Church.

AQUIFER.--Stonehenge Limestone of the Beekmantown Group of Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

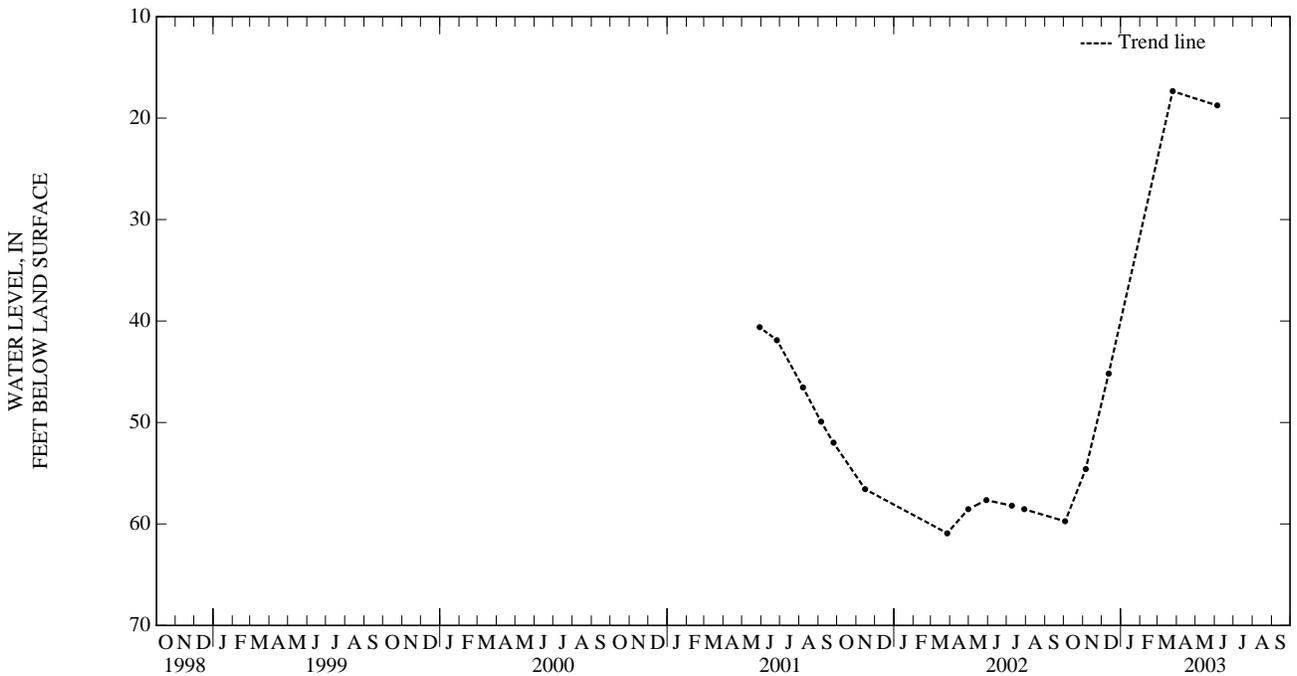
DATUM.--Elevation of land-surface datum is 835 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.35 ft below land-surface datum, Mar. 25, 2003; lowest measured, 60.91 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	59.74	NOV 05	54.60	DEC 12	45.18	MAR 25	17.35	JUN 05	18.76
WATER YEAR 2003 HIGHEST		17.35	MAR 25, 2003 LOWEST		60.91	OCT 03, 2002			



FREDERICK COUNTY—Continued

390647078170201. Local number, 44W 13.

LOCATION.--Lat 39°06'46.73", long 78°17'02.08", NAD83, Hydrologic Unit 02070006, 1.0 mi. west of the intersection of Middle Road and Laurel Grove Road and 750 ft south of Laurel Grove Road. Owner: Alson H. Smith, Jr. Agricultural Research and Extension Center.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 285 ft, cased to 135 ft, open hole 135 to 285 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

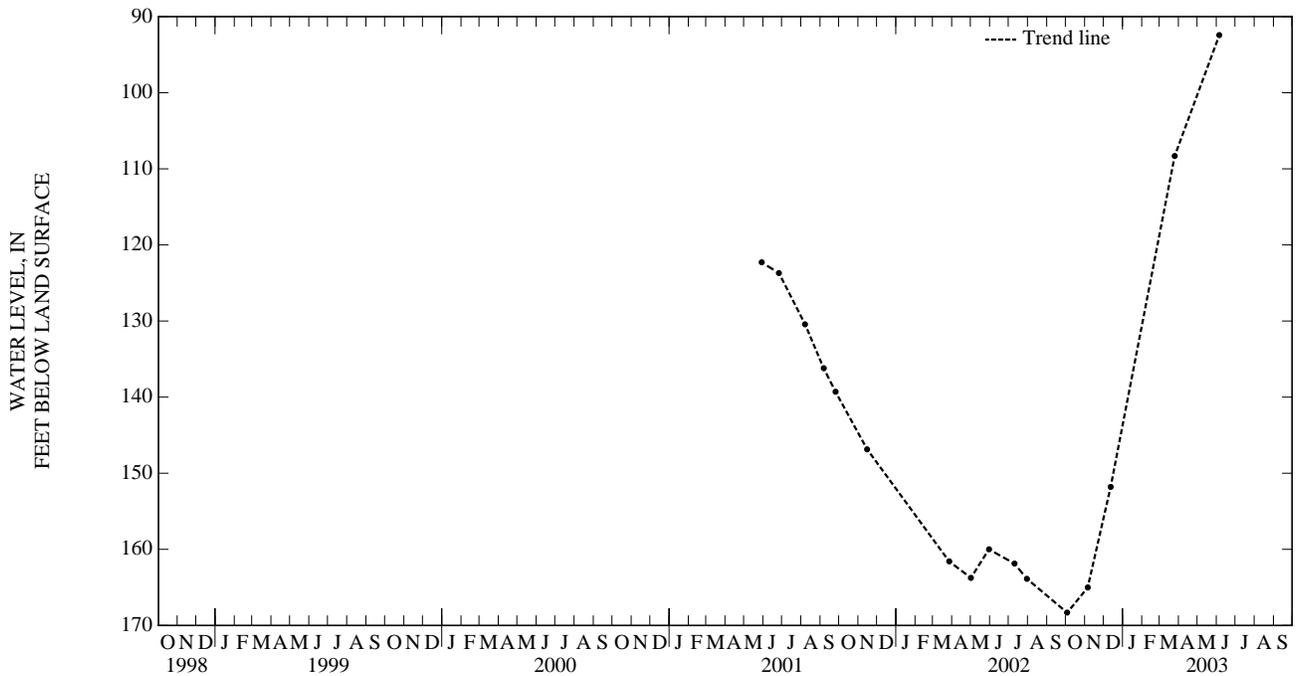
DATUM.--Elevation of land-surface datum is 930 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.42 ft below land-surface datum, June 5, 2003; lowest measured, 168.33 ft below land-surface datum, Oct. 3, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	168.33	NOV 05	165.02	DEC 12	151.79	MAR 25	108.33	JUN 05	92.42
WATER YEAR 2003 HIGHEST		92.42 JUN 05, 2003		LOWEST		168.33 OCT 03, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390101078174801. Local number, 44W 14.

LOCATION.--Lat 39°01'01.20", long 78°17'48.31", NAD83, Hydrologic Unit 02070006, 0.28 mi. northeast of the intersection of Belle Grove Road and U.S. Highway 11 and 30 ft east of U.S. Highway 11. Owner: Joyce Brinklow.

AQUIFER.--Stickley Run Member of the Martinsburg Formation of Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 515 ft, cased to 55 ft, open hole 55 to 515 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

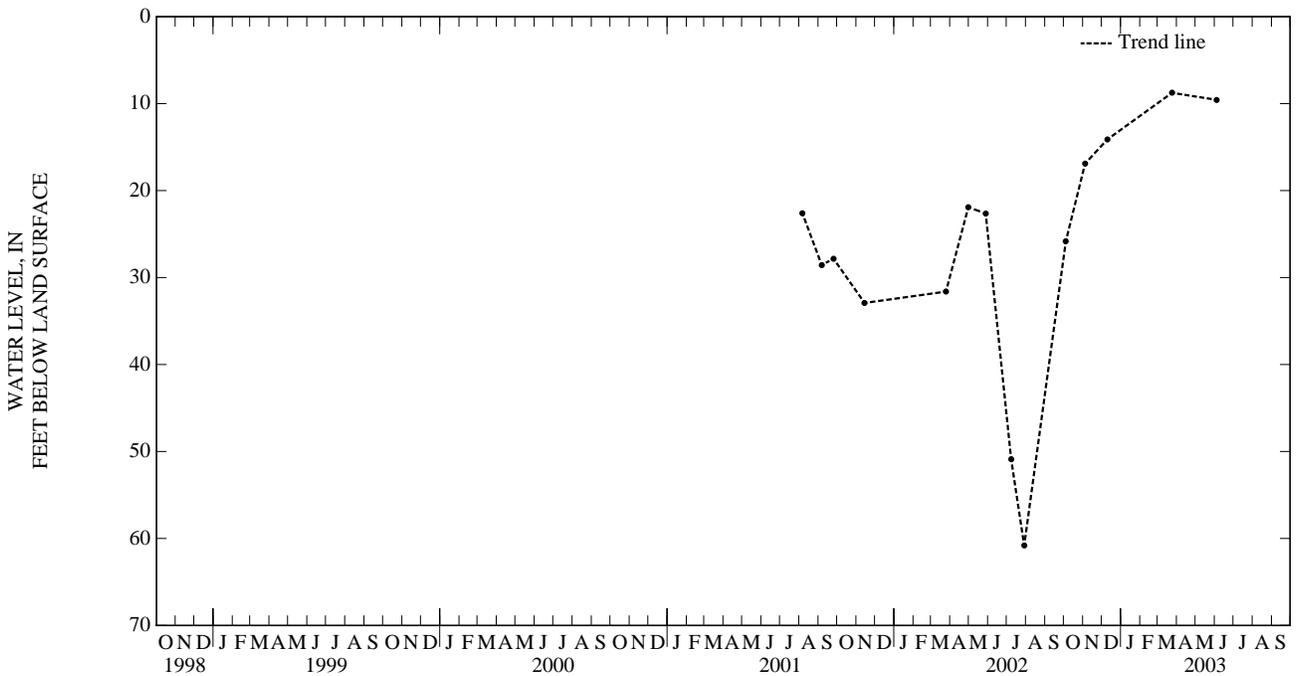
DATUM.--Elevation of land-surface datum is 730 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.76 ft below land-surface datum, Mar. 24, 2003; lowest measured, 60.82 ft below land-surface datum, July 29, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	25.84	NOV 04	16.90	DEC 10	14.11	MAR 24	8.76	JUN 04	9.57
WATER YEAR 2003 HIGHEST		8.76	MAR 24, 2003 LOWEST		25.84	OCT 04, 2002			



FREDERICK COUNTY—Continued

390405078151101. Local number, 44W 16.

LOCATION.--Lat 39°04'05.23", long 78°15'10.68", NAD83, Hydrologic Unit 02070007, 0.75 mi. northwest of the intersection of Vaucluse Road and U.S. Highway 11 and 0.4 mi. north of Vaucluse Road. Owner: Jason McDonald.

AQUIFER.--Stonehenge Limestone of the Beekmantown Group of Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 240 ft, cased to 72 ft, open hole 72 to 240 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

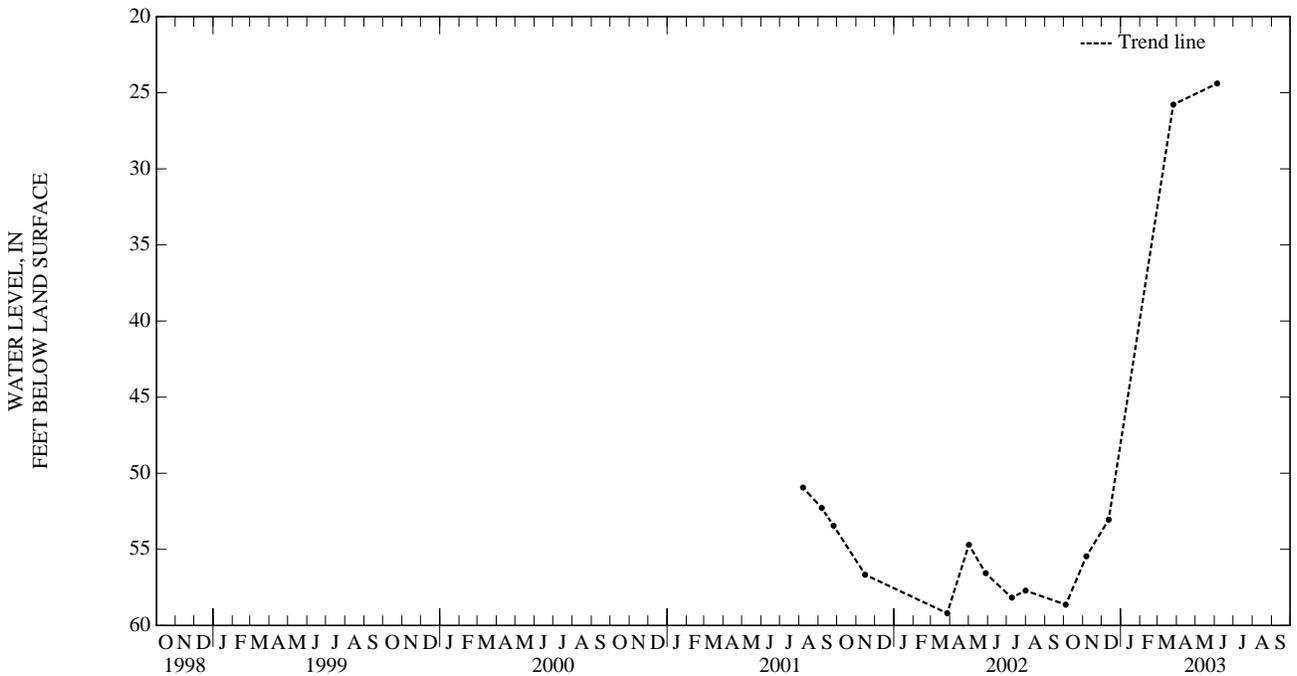
DATUM.--Elevation of land-surface datum is 765 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.39 ft below land-surface datum, June 5, 2003; lowest measured, 59.20 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	58.64	NOV 06	55.46	DEC 12	53.06	MAR 26	25.78	JUN 05	24.39
WATER YEAR 2003 HIGHEST		24.39 JUN 05, 2003		LOWEST		58.64 OCT 04, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390134078174701. Local number, 44W 17.

LOCATION.--Lat 39°01'33.95", long 78°17'47.13", NAD83, Hydrologic Unit 02070006, 600 ft southwest of the intersection of McCune Road and Meadow Mills Road and 200 ft southeast of Meadow Mills Road. Owner: George McFarland.

AQUIFER.--Pinesburg Station Dolomite of the Beekmantown Group of Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 145 ft, cased to 60 ft, open hole 60 to 145 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

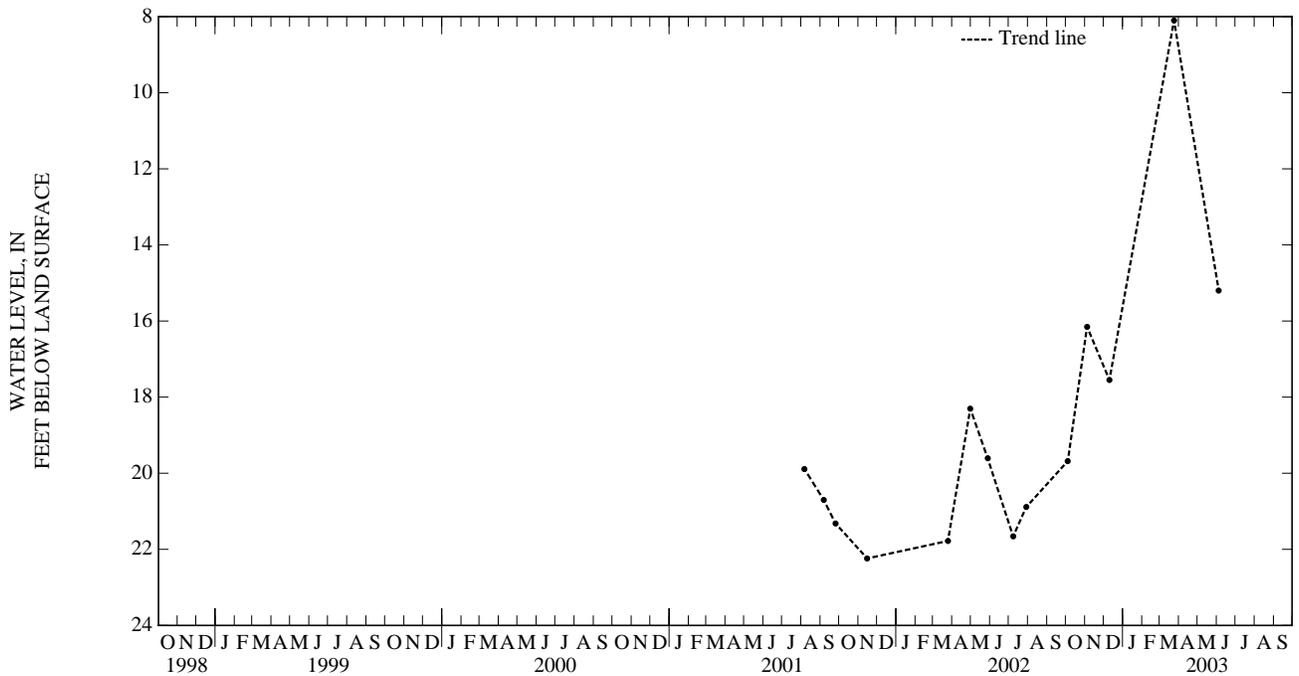
DATUM.--Elevation of land-surface datum is 645 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.10 ft below land-surface datum, Mar. 24, 2003; lowest measured, 22.24 ft below land-surface datum, Nov. 15, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	19.68	NOV 04	16.15	DEC 10	17.55	MAR 24	8.10	JUN 04	15.20
WATER YEAR 2003 HIGHEST		8.10 MAR 24, 2003		LOWEST		19.68 OCT 04, 2002			



FREDERICK COUNTY—Continued

390551078155801. Local number, 44W 18.

LOCATION.--Lat 39°05'50.88", long 78°15'57.64", NAD83, Hydrologic Unit 02070006, 0.47 mi. north of the intersection of Germany Road and Marlboro Road and 0.16 mi. west of Germany Road. Owner: Michael Anderson.

AQUIFER.--Conococheague Limestone of Upper Cambrian and Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 140 ft, cased to 79 ft, open hole 79 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 875 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.45 ft above land-surface datum.

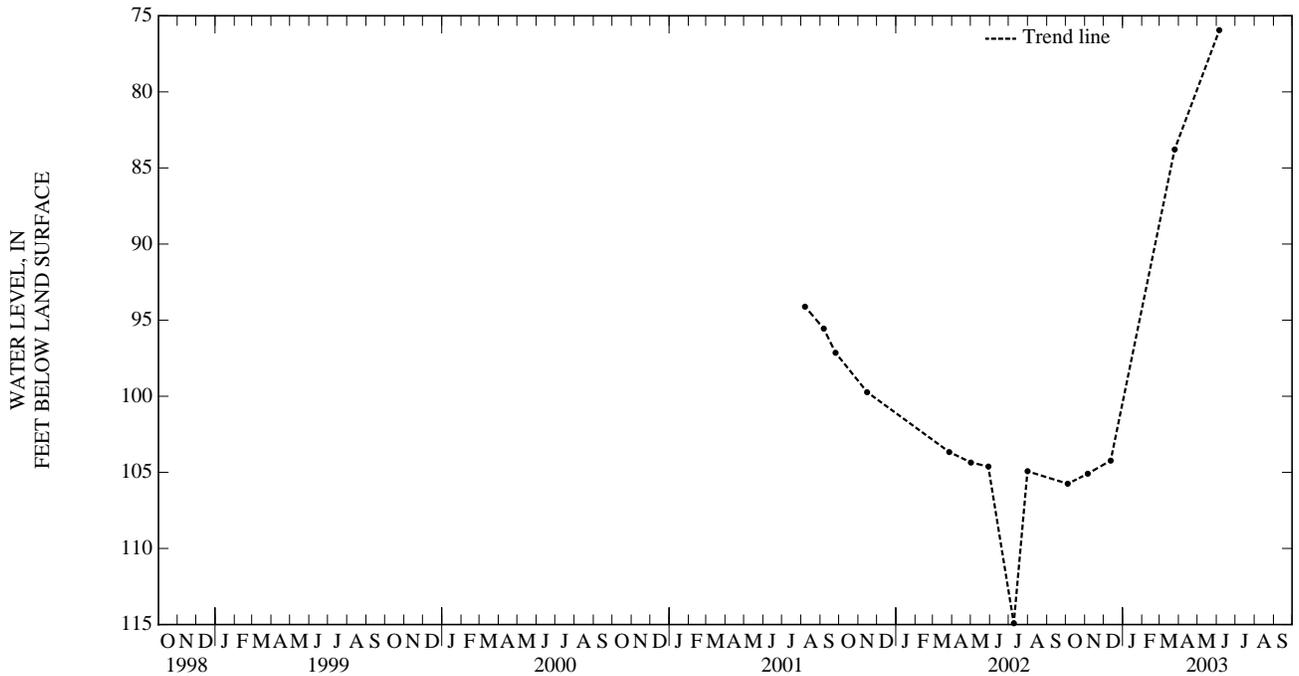
REMARKS.--Water level of July 9, 2002 result of well having been recently pumped.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.95 ft below land-surface datum, June 5, 2003; lowest measured, 105.75 ft below land-surface datum, Oct. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	105.75	NOV 05	105.09	DEC 12	104.23	MAR 25	83.78	JUN 05	75.95
WATER YEAR 2003 HIGHEST		75.95	JUN 05, 2003		LOWEST		105.75	OCT 04, 2002	



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390422078191801. Local number, 44W 19.

LOCATION.--Lat 39°04'22.12", long 78°19'18.08", NAD83, Hydrologic Unit 02070006, 550 ft east of the intersection of Chapel Road and Minebank Road and 20 ft north of Chapel Road. Owner: Ray West.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 760 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

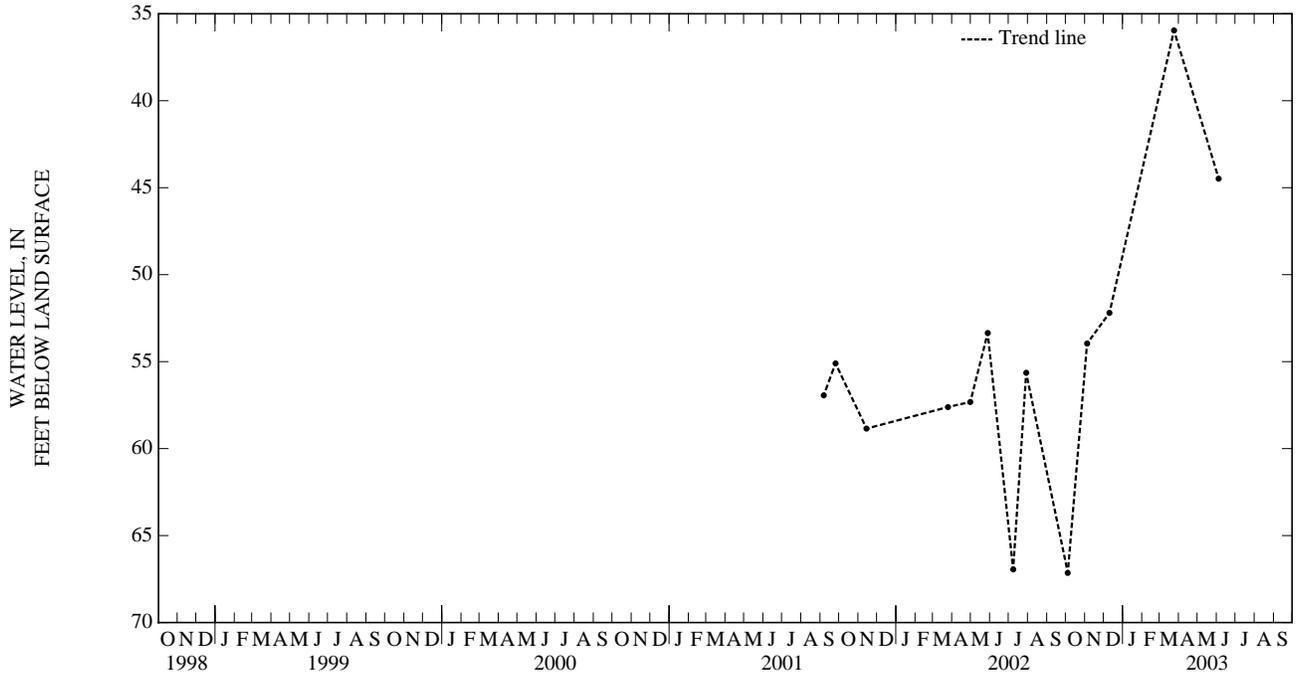
REMARKS.--Water levels of Nov. 14, 2001 and July 8, 2002 result of well having been recently pumped.

PERIOD OF RECORD.--September 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.96 ft below land-surface datum, Mar. 24, 2003; lowest measured, 57.61 ft below land-surface datum, Mar. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	67.14	NOV 04	53.96	DEC 10	52.20	MAR 24	35.96	JUN 04	44.49
WATER YEAR 2003 HIGHEST		35.96	MAR 24, 2003		LOWEST		53.96	NOV 04, 2002	



FREDERICK COUNTY—Continued

390730078160801. Local number, 44X 2.

LOCATION.--Lat 39°07'30.36", long 78°16'08.21", NAD83, Hydrologic Unit 02070006, 0.8 mi. northwest of the intersection of Barley Lane and Middle Road and 300 ft north of Barley Lane. Owner: Sam Dillender.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 360 ft, cased to 99 ft, open hole 99 to 360 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 950 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

REMARKS.--Water levels of Aug. 7, 2001 and July 31, 2002 result of well having been recently pumped.

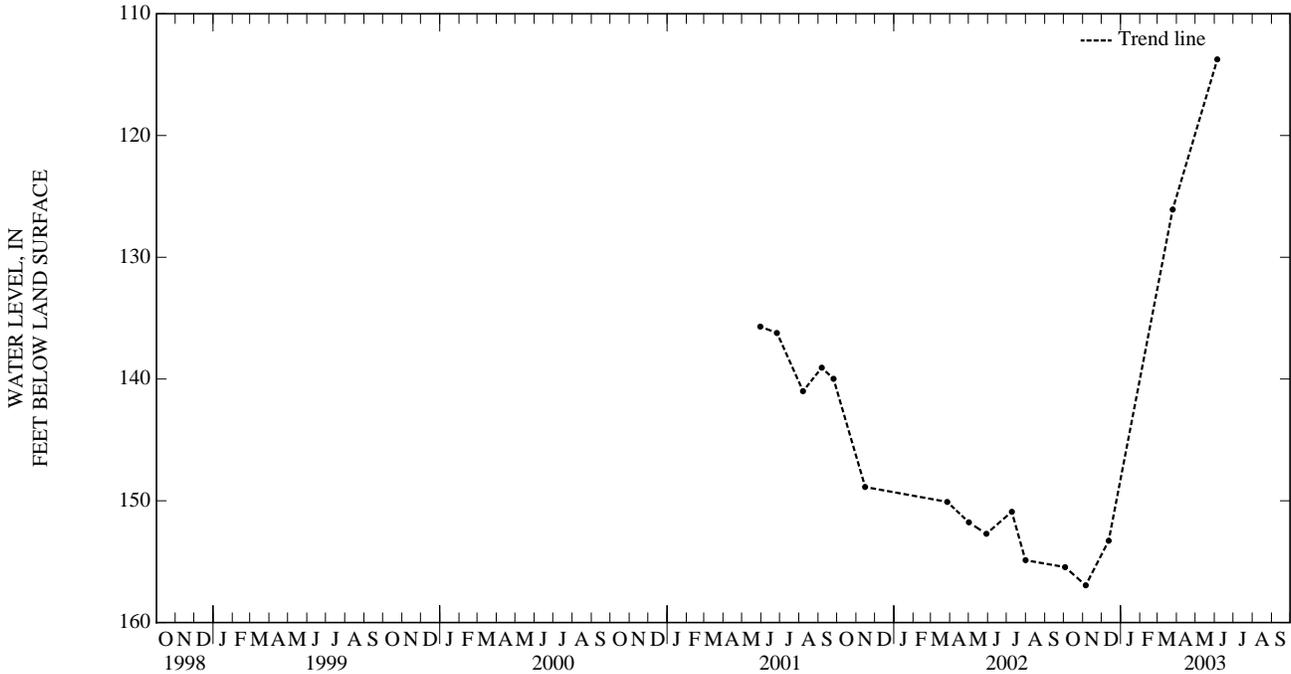
PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.74 ft below land-surface datum, June 5, 2003; lowest measured, 155.45 ft below land-surface datum, Oct. 3, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 03	155.45	NOV 05	156.95	DEC 12	153.28	MAR 25	126.08	JUN 05	113.74

WATER YEAR 2003 HIGHEST 113.74 JUN 05, 2003 LOWEST 155.45 OCT 03, 2002



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390849078154201. Local number, 44X 5.

LOCATION.--Lat 39°08'49.11", long 78°15'42.36", NAD83, Hydrologic Unit 02070004, 850 ft southeast of the intersection of Cedar Creek Grade and Perry Road. Owner: Marker-Miller Orchards.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 1200 ft, cased to 40 ft, open hole 40 to 1200 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 920 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

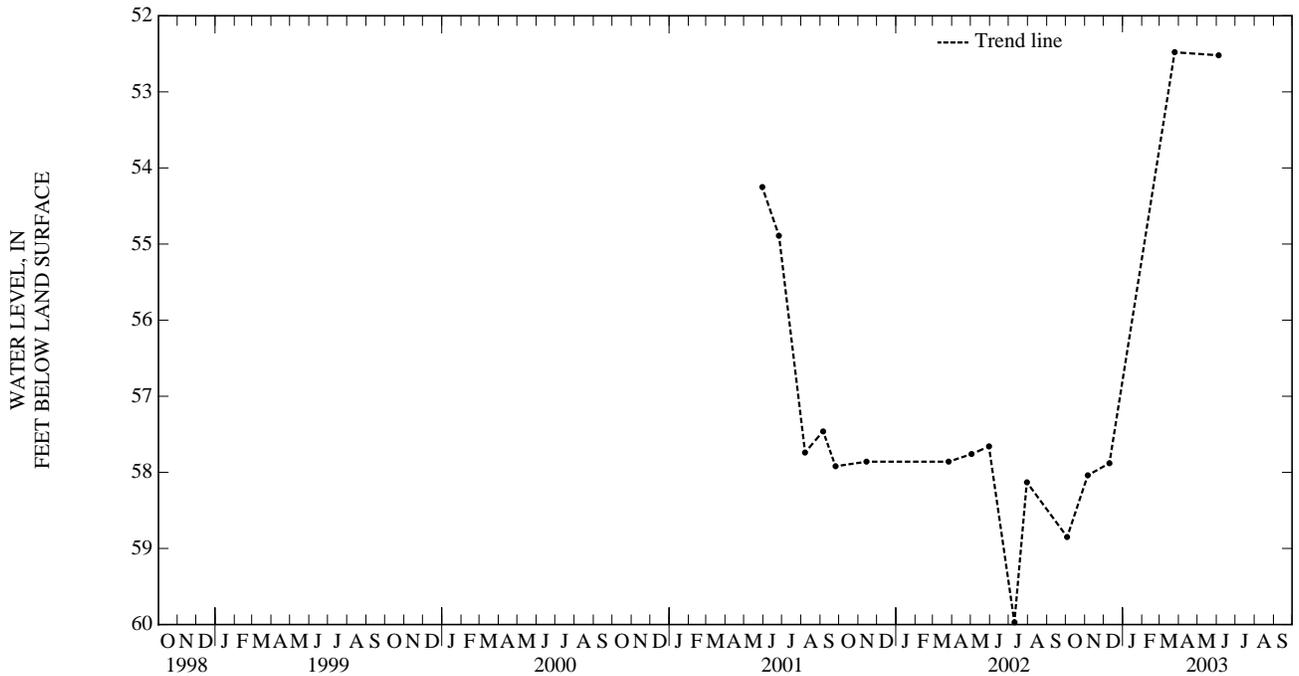
REMARKS.--Water level of Sept. 25, 2001 result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 52.48 ft below land-surface datum, Mar. 25, 2003; lowest measured, 59.97 ft below land-surface datum, July 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	58.85	NOV 05	58.04	DEC 10	57.88	MAR 25	52.48	JUN 04	52.52
WATER YEAR 2003 HIGHEST		52.48	MAR 25, 2003		LOWEST		59.97	JUL 10, 2002	



FREDERICK COUNTY—Continued

390846078164201. Local number, 44X 6.

LOCATION.--Lat 39°08'46.34", long 78°16'41.60", NAD83, Hydrologic Unit 02070006, 0.40 mi. northwest of the intersection of Cedar Creek Grade and West Oaks Lane and 0.18 mi. southwest of West Oaks Lane. Owner: Snapp Brothers Orchard.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 160 ft, cased to 99 ft, open hole 99 to 160 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

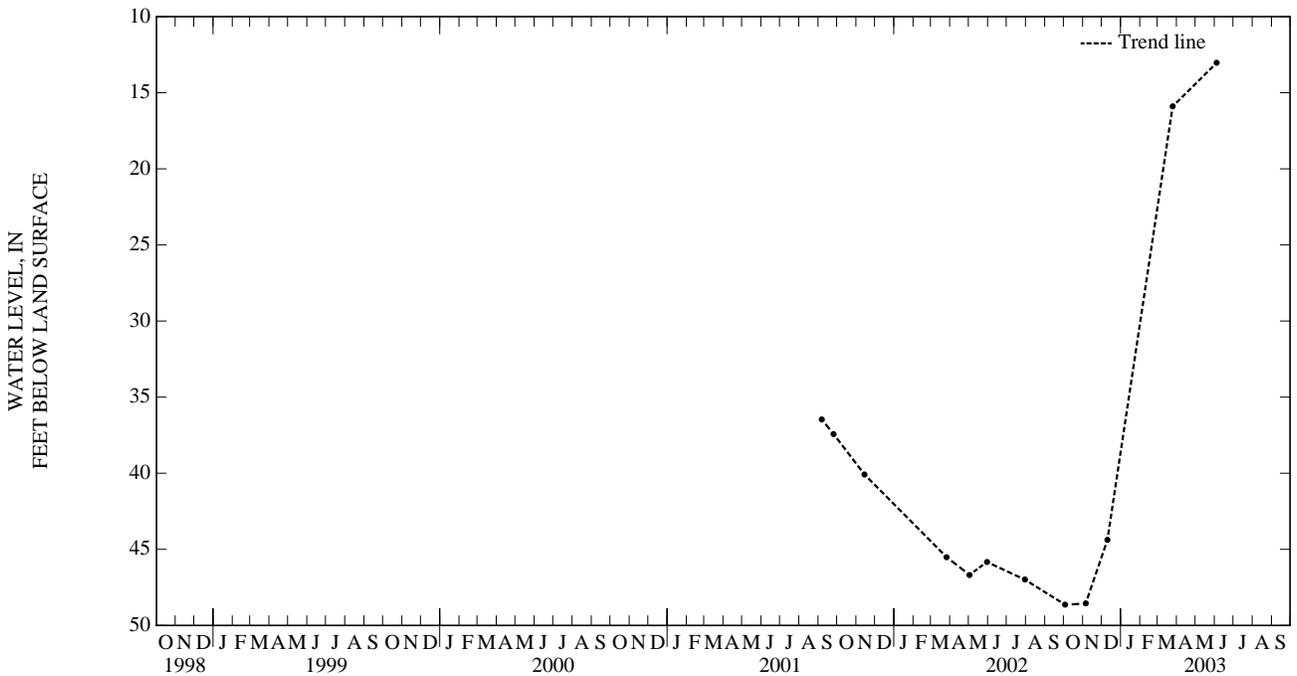
DATUM.--Elevation of land-surface datum is 920 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

PERIOD OF RECORD.--September 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.03 ft below land-surface datum, June 4, 2003; lowest measured, 48.64 ft below land-surface datum, Oct. 3, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	48.64	NOV 05	48.56	DEC 10	44.38	MAR 25	15.90	JUN 04	13.03
WATER YEAR 2003 HIGHEST		13.03	JUN 04, 2003 LOWEST		48.64	OCT 03, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390542078145901. Local number, 45W 16.

LOCATION.--Lat 39°05'42.07", long 78°14'59.01", NAD83, Hydrologic Unit 02070007, 0.20 mi. northwest of the intersection of Marlboro Road and Carters Lane and 0.14 mi. north of Marlboro Road. Owner: Harold G. Nichols.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

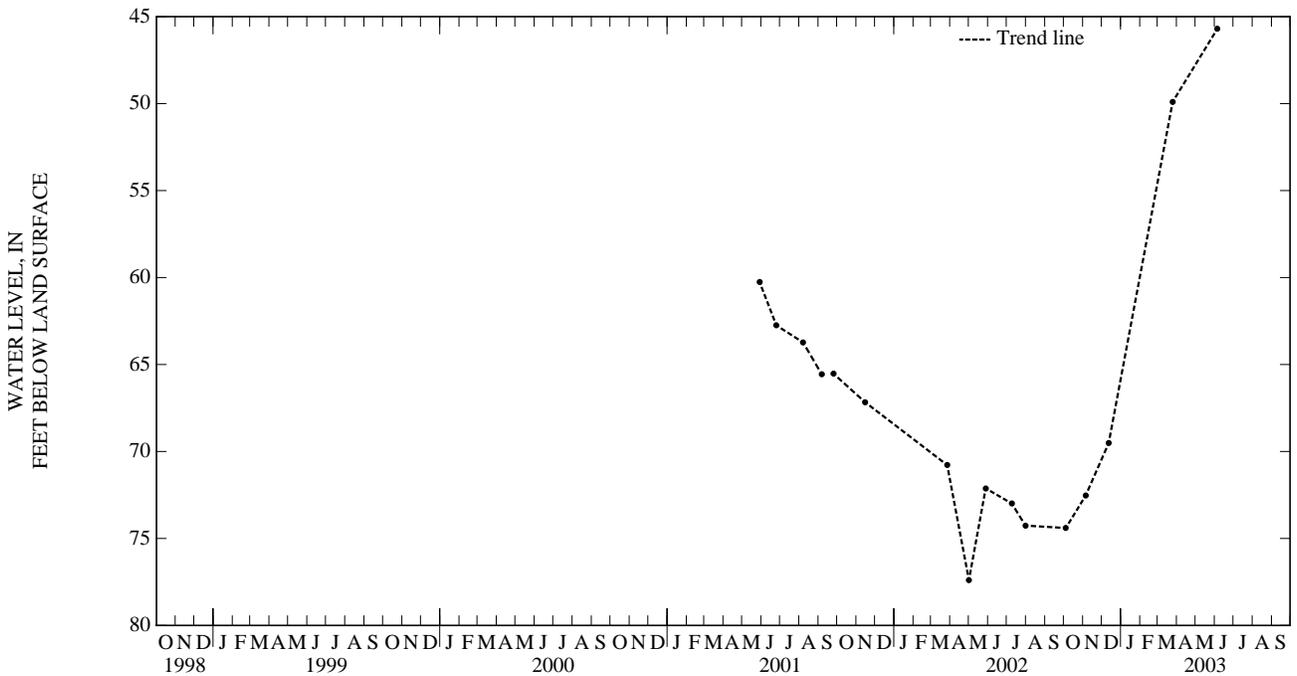
DATUM.--Elevation of land-surface datum is 835 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.70 ft below land-surface datum, June 5, 2003; lowest measured, 77.39 ft below land-surface datum, May 1, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	74.40	NOV 05	72.53	DEC 12	69.52	MAR 25	49.90	JUN 05	45.70
WATER YEAR 2003 HIGHEST		45.70 JUN 05, 2003		LOWEST		74.40 OCT 04, 2002			



FREDERICK COUNTY—Continued

390605078134701. Local number, 45W 17.

LOCATION.--Lat 39°06'04.78", long 78°13'47.19", NAD83, Hydrologic Unit 02070007, 1.18 mi. southwest of the intersection of Springdale Road and Baltimore & Ohio Railroad and 0.28 mi. southeast of Springdale Road. Owner: Long Creek Farm.

AQUIFER.--Pinesburg Station Dolomite and Rockdale Run Formation of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 400 ft, cased to 60 ft, open hole 60 to 400 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 785 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

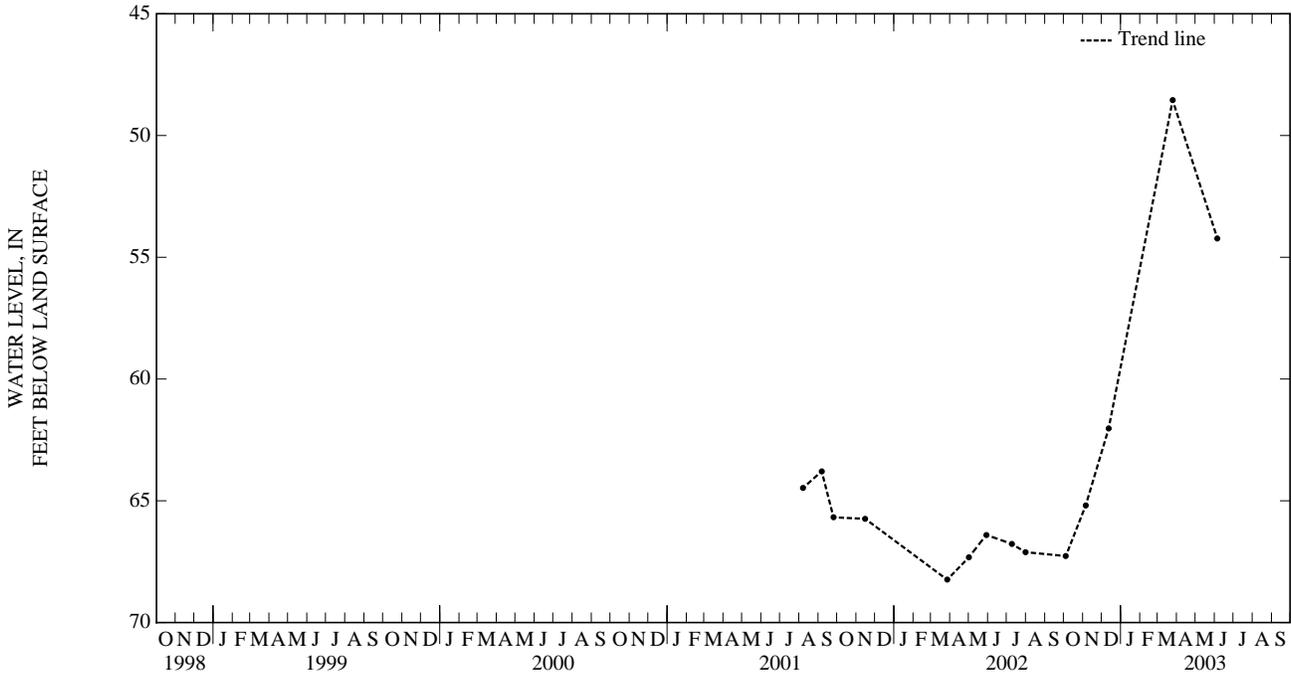
REMARKS.--Water levels of Sept. 25, 2001, Mar. 27 and May 1, 2002 are the result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 48.55 ft below land-surface datum, Mar. 25, 2003; lowest measured, 67.27 ft below land-surface datum, Oct. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 04	67.27	NOV 05	65.19	DEC 12	62.03	MAR 25	48.55	JUN 05	54.23
WATER YEAR 2003 HIGHEST		48.55	MAR 25, 2003 LOWEST		67.27	OCT 04, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390927078144801. Local number, 45X 3.

LOCATION.--Lat 39°09'27.33", long 78°14'48.08", NAD83, Hydrologic Unit 02070004, 90 ft north of the intersection of Cedar Creek Grade and Miller Road and 20 ft west of Miller Road. Owner: Second Opequon Presbyterian Church.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

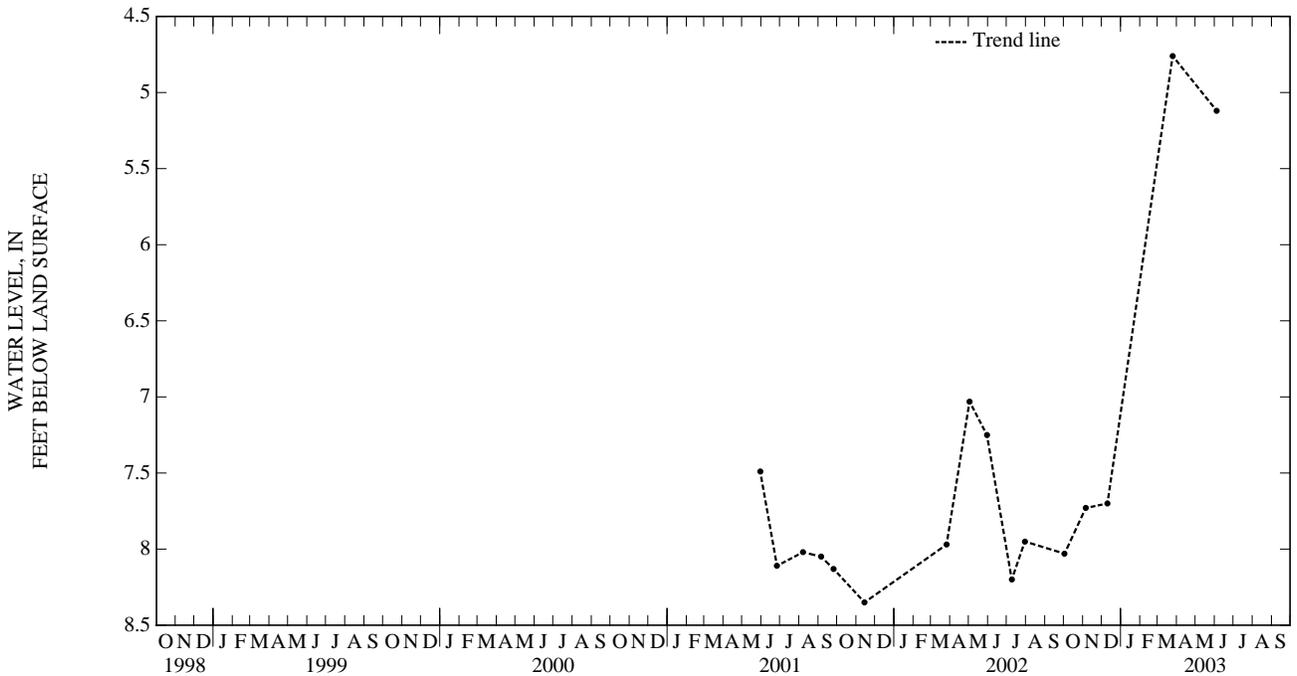
DATUM.--Elevation of land-surface datum is 834.48 ft above NGVD of 1929. Measuring point: Top of 6 in. protector casing, 0.8 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.76 ft below land-surface datum, Mar. 25, 2003; lowest measured, 8.35 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	8.03	NOV 05	7.73	DEC 10	7.70	MAR 25	4.76	JUN 04	5.12
WATER YEAR 2003 HIGHEST		4.76	MAR 25, 2003 LOWEST		8.03	OCT 02, 2002			



FREDERICK COUNTY—Continued

391139078141501. Local number, 45X 4.

LOCATION.--Lat 39°11'38.62", long 78°14'14.74", NAD83, Hydrologic Unit 02070004, 0.33 mi. west of the intersection of U.S. Highway 50 and Poorhouse Road and 150 ft south of U.S. Highway 50. Owner: Round Hill United Methodist Church.

AQUIFER.--Martinsburg Formation of Middle to Upper Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 920 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

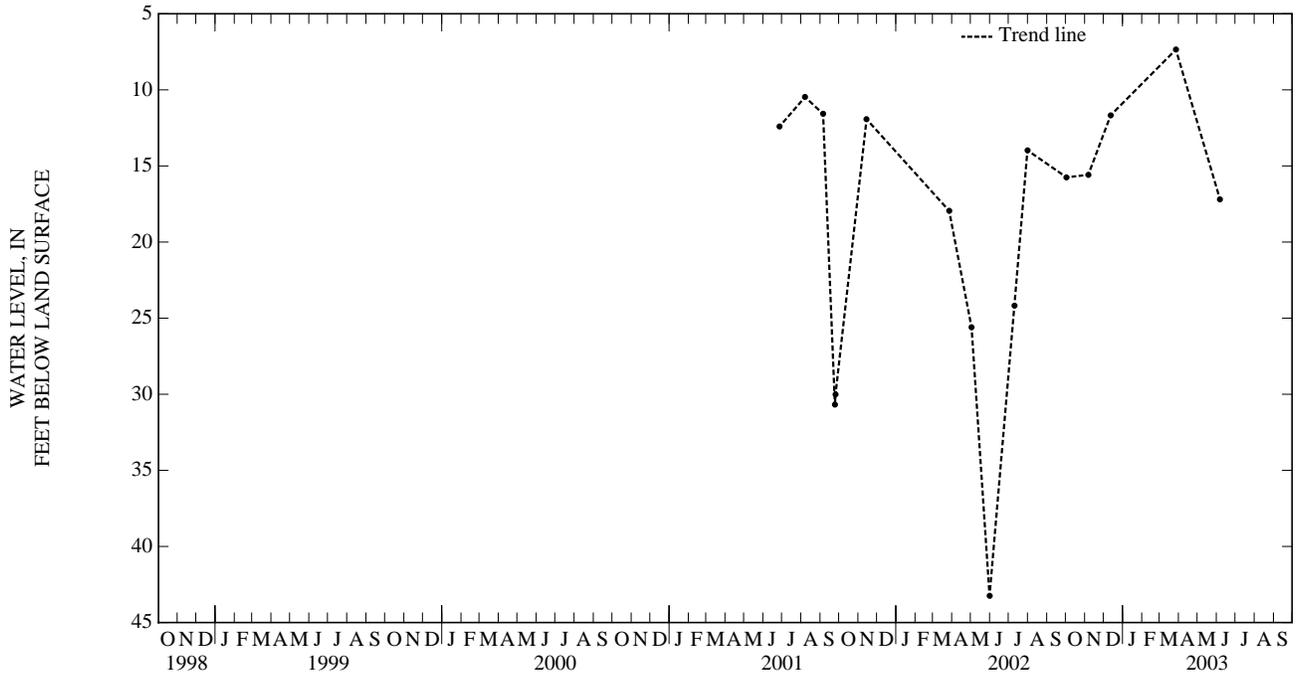
REMARKS.--Water levels of Sept. 24, 25, 2001 and May 2, 31, 2002 are the result of well having been recently pumped.

PERIOD OF RECORD.--June 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.35 ft below land-surface datum, Mar. 27, 2003; lowest measured, 24.17 ft below land-surface datum, July 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	15.75	NOV 06	15.58	DEC 12	11.67	MAR 27	7.35	JUN 06	17.20
WATER YEAR 2003 HIGHEST		7.35	MAR 27, 2003 LOWEST		24.17	JUN 06, 2003			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391339078120701. Local number, 45X 9.

LOCATION.--Lat 39°13'39.42", long 78°12'07.18", NAD83, Hydrologic Unit 02070004, 910 ft northwest of the intersection of Burnt Church Road and U.S. Highway 522 and 170 ft north of Burnt Church Road. Owner: Burnt Presbyterian Church.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

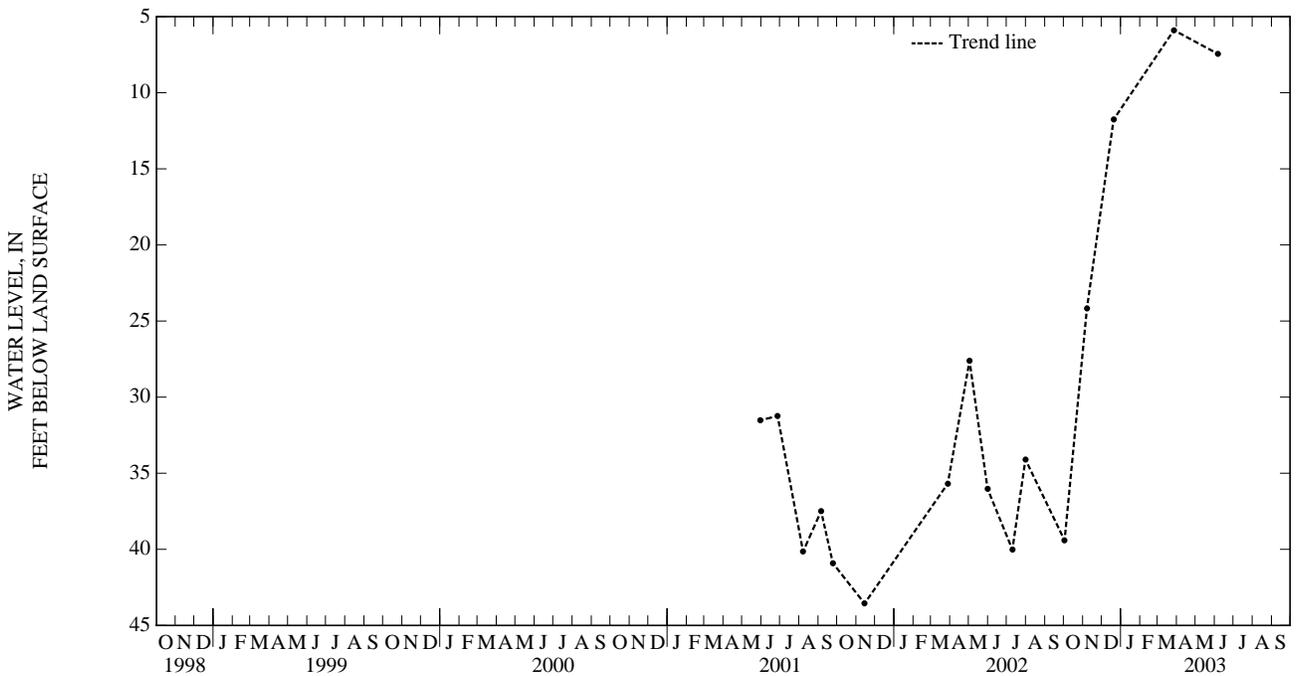
DATUM.--Elevation of land-surface datum is 925 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.28 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.89 ft below land-surface datum, Mar. 27, 2003; lowest measured, 43.56 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	39.41	NOV 07	24.17	DEC 20	11.76	MAR 27	5.89	JUN 06	7.45
WATER YEAR 2003 HIGHEST		5.89	MAR 27, 2003 LOWEST		39.41	OCT 02, 2002			



FREDERICK COUNTY—Continued

391233078133801. Local number, 45X 11.

LOCATION.--Lat 39°12'32.80", long 78°13'38.48", NAD83, Hydrologic Unit 02070004, 0.80 mi. southwest of the intersection of Poorhouse Road and Indian Hollow Road and 60 ft east of Poorhouse Road. Owner: Charles W. Racey.

AQUIFER.--Martinsburg Formation of Middle to Upper Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 300 ft, cased to 59 ft, open hole 59 to 300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

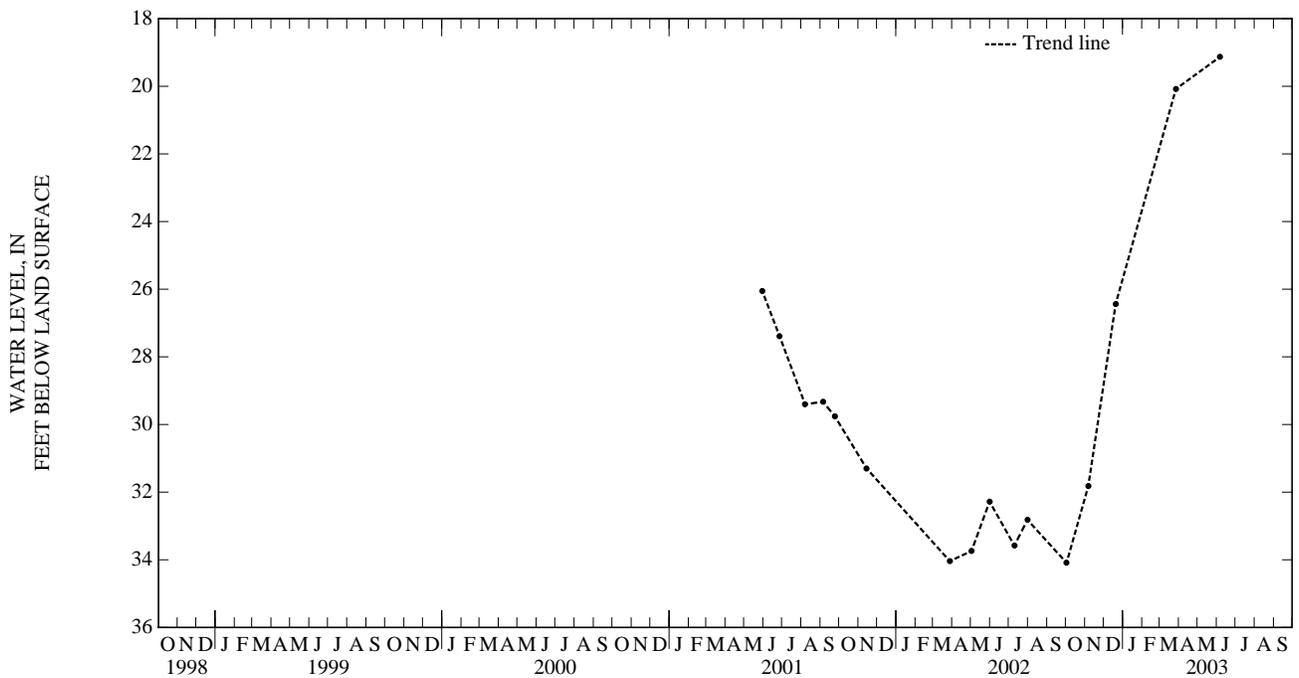
DATUM.--Elevation of land-surface datum is 945 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.13 ft below land-surface datum, June 6, 2003; lowest measured, 34.09 ft below land-surface datum, Oct. 2, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	34.09	NOV 06	31.82	DEC 20	26.44	MAR 27	20.08	JUN 06	19.13
WATER YEAR 2003 HIGHEST		19.13 JUN 06, 2003		LOWEST		34.09 OCT 02, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390754078133201. Local number, 45X 12.

LOCATION.--Lat 39°07'54.05", long 78°13'32.05", NAD83, Hydrologic Unit 02070004, 750 ft west of the northern intersection of Middle Road and Old Middle Road and 330 ft northwest of Middle Road. Owner: Terry Livermore.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 180 ft, cased to 59 ft, open hole 59 to 180 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

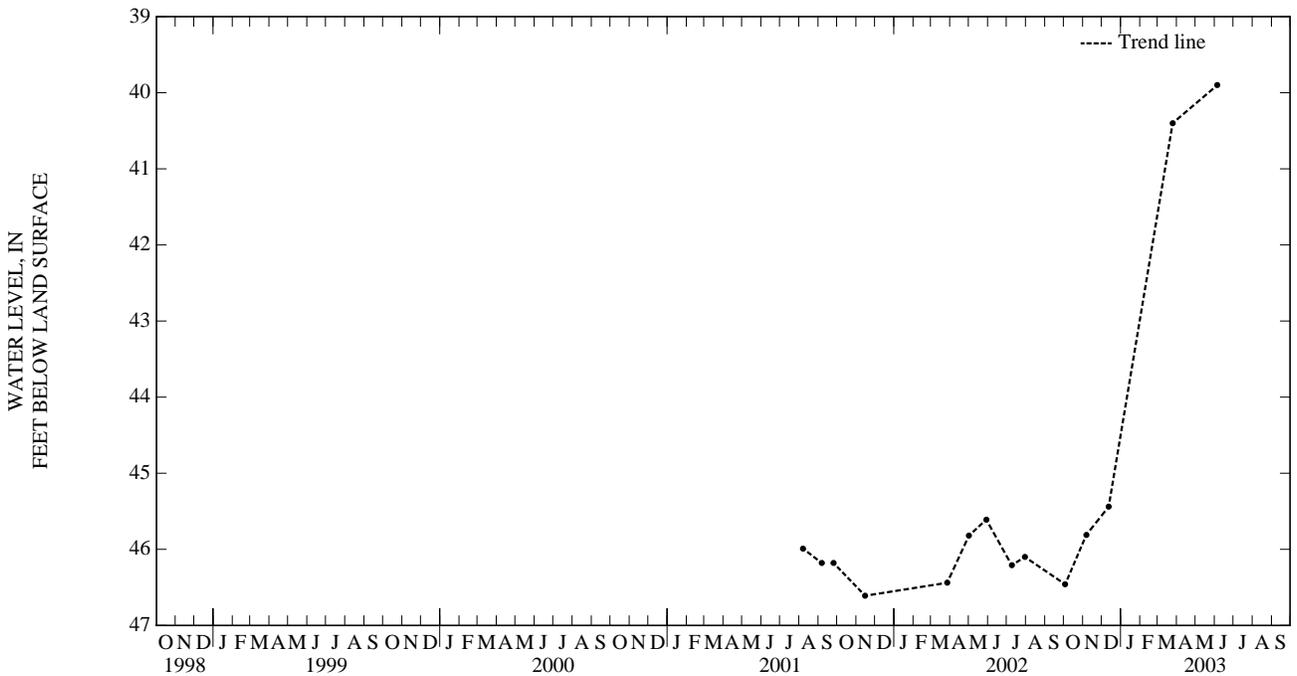
DATUM.--Elevation of land-surface datum is 800 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.90 ft below land-surface datum, June 5, 2003; lowest measured, 46.61 ft below land-surface datum, Nov. 15, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	46.46	NOV 06	45.81	DEC 12	45.44	MAR 25	40.40	JUN 05	39.90
WATER YEAR 2003 HIGHEST		39.90 JUN 05, 2003		LOWEST		46.46 OCT 03, 2002			



FREDERICK COUNTY—Continued

390748078143301. Local number, 45X 13.

LOCATION.--Lat 39°07'48.18", long 78°14'32.78", NAD83, Hydrologic Unit 02070004, 0.7 mi. west of the southern intersection of Middle Road and Old Middle Road and 0.3 mi. northwest of Middle Road. Owner: Scott Gregory.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 250 ft, cased to 30 ft, open hole 30 to 250 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

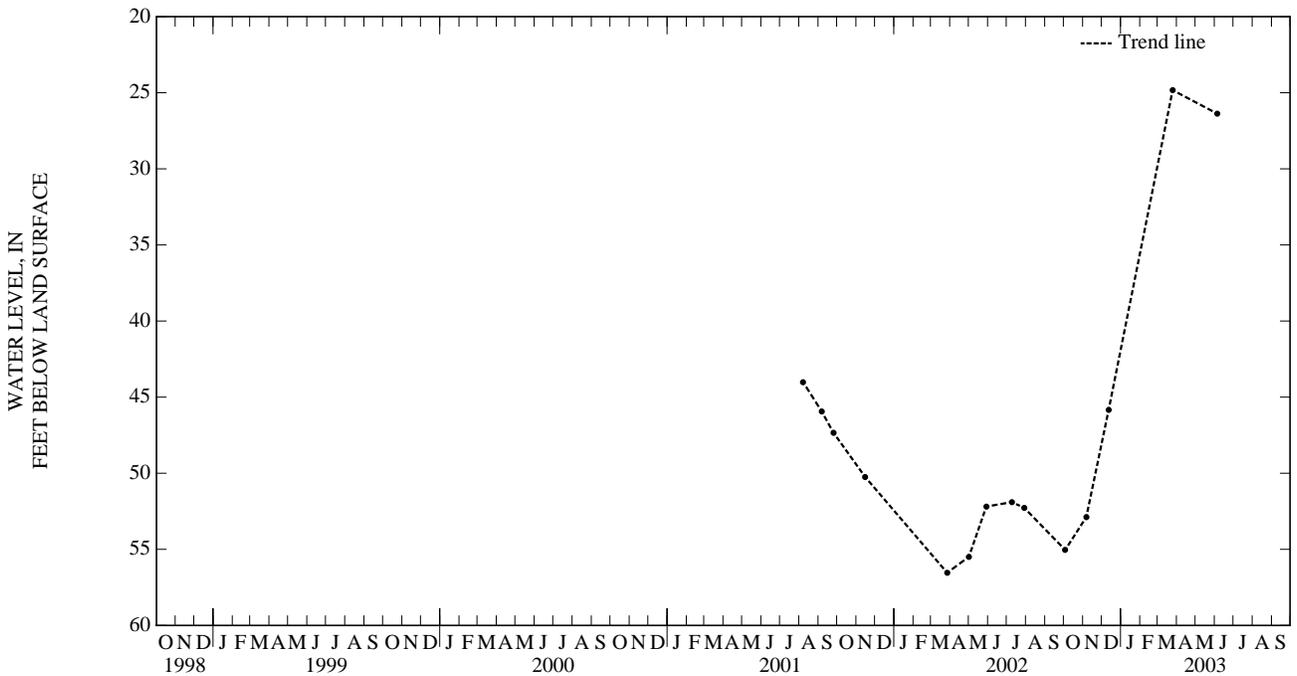
DATUM.--Elevation of land-surface datum is 860 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.83 ft below land-surface datum, Mar. 25, 2003; lowest measured, 56.54 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	55.04	NOV 06	52.88	DEC 12	45.83	MAR 25	24.83	JUN 05	26.38
WATER YEAR 2003 HIGHEST		24.83	MAR 25, 2003 LOWEST		56.54	OCT 03, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

390930078134601. Local number, 45X 14.

LOCATION.--Lat 39°09'30.20", long 78°13'45.62", NAD83, Hydrologic Unit 02070004, 0.55 mi. west of the intersection of Cedar Creek Grade and Merriman Road and 280 ft southeast of Cedar Creek Grade. Owner: Ron Leffler.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 250 ft, cased to 84 ft, open hole 84 to 250 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

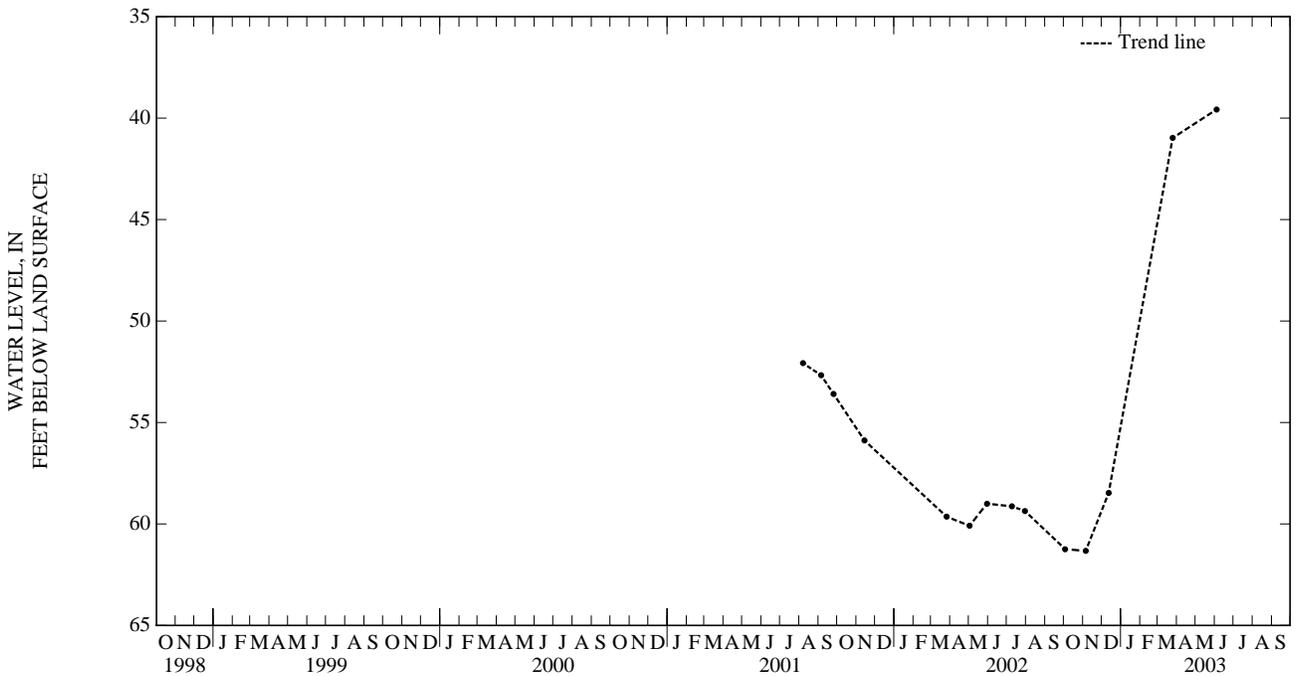
DATUM.--Elevation of land-surface datum is 850 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.57 ft below land-surface datum, June 4, 2003; lowest measured, 61.33 ft below land-surface datum, Nov. 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	61.24	NOV 05	61.33	DEC 12	58.47	MAR 25	40.98	JUN 04	39.57
WATER YEAR 2003 HIGHEST		39.57 JUN 04, 2003		LOWEST		61.33 NOV 05, 2002			



FREDERICK COUNTY—Continued

390928078140001. Local number, 45X 15.

LOCATION.--Lat 39°09'28.14", long 78°13'59.75", NAD83, Hydrologic Unit 02070004, 0.76 mi. west of the intersection of Cedar Creek Grade and Merriman Road and 325 ft south of Cedar Creek Grade. Owner: Edith B. Miller.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 120 ft, cased to 99 ft, open hole 99 to 120 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

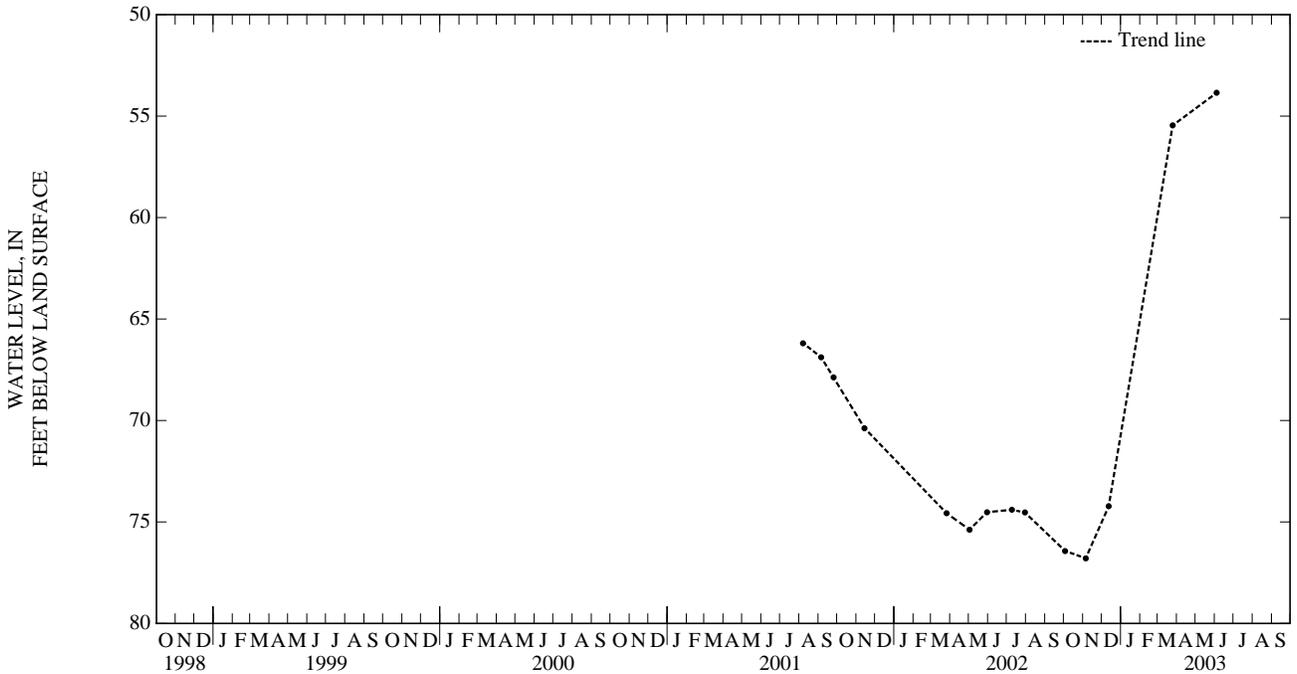
DATUM.--Elevation of land-surface datum is 865 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.85 ft below land-surface datum, June 4, 2003; lowest measured, 76.79 ft below land-surface datum, Nov. 5, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 03	76.43	NOV 05	76.79	DEC 12	74.23	MAR 25	55.46	JUN 04	53.85
WATER YEAR 2003 HIGHEST		53.85	JUN 04, 2003 LOWEST		76.79	NOV 05, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391605078083601. Local number, 45Y 1.

LOCATION.--Lat 39°16'05.35", long 78°08'36.08", NAD83, Hydrologic Unit 02070004, 0.6 mi. northwest of the intersection of Branson Spring Road and Welltown Road. Owner: D.K. Russell & Sons, Inc.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Dug domestic water well, depth 24.22 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

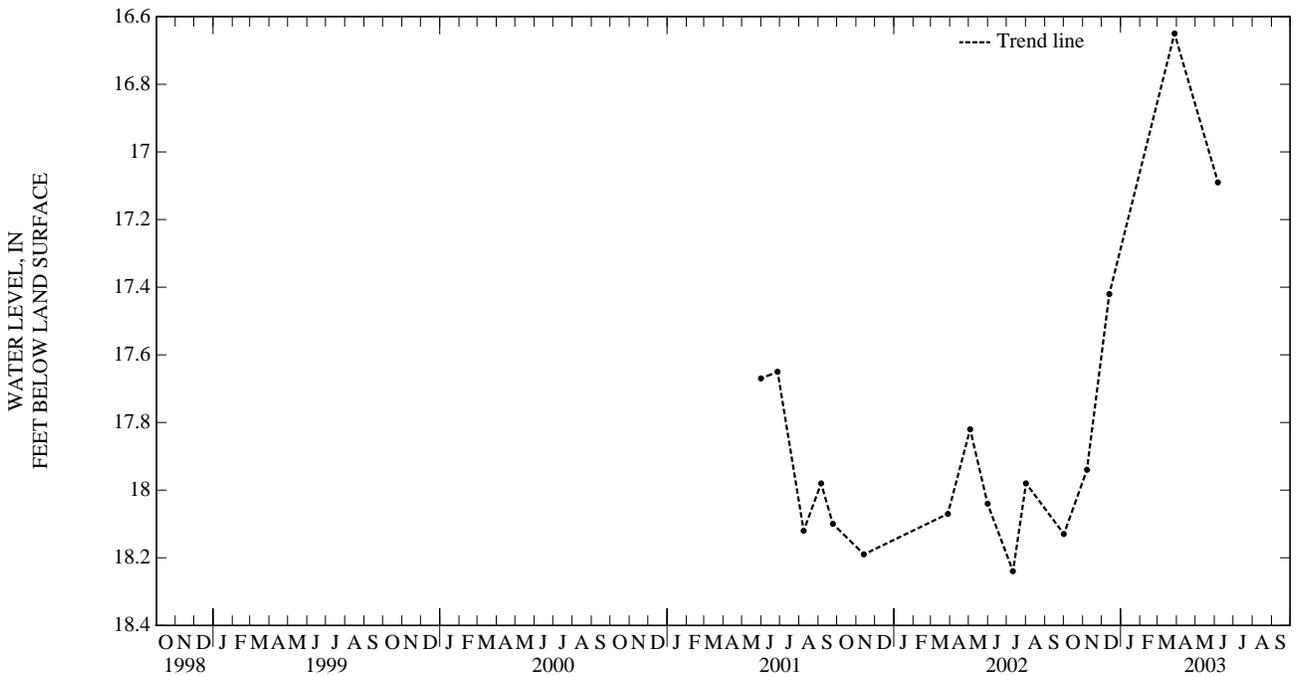
DATUM.--Elevation of land-surface datum is 820 ft above NGVD of 1929, from topographic map. Measuring point: Top of concrete slab cover, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.65 ft below land-surface datum, Mar. 28, 2003; lowest measured, 18.24 ft below land-surface datum, July 11, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	18.13	NOV 07	17.94	DEC 13	17.42	MAR 28	16.65	JUN 06	17.09
WATER YEAR 2003 HIGHEST		16.65	MAR 28, 2003 LOWEST		18.13	OCT 01, 2002			



FREDERICK COUNTY—Continued

391524078080701. Local number, 45Y 2.

LOCATION.--Lat 39°15'24.46", long 78°08'07.07", NAD83, Hydrologic Unit 02070004, 0.23 mi. northwest of the intersection of Hiatt Road and Welltown Road and 370 ft west of Welltown Road. Owner: D.K. Russell & Sons, Inc.

AQUIFER.--Pinesburg Station Dolomite and Rockdale Run Formation of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 100 ft, cased to 19 ft, open hole 19 to 100 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 730 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

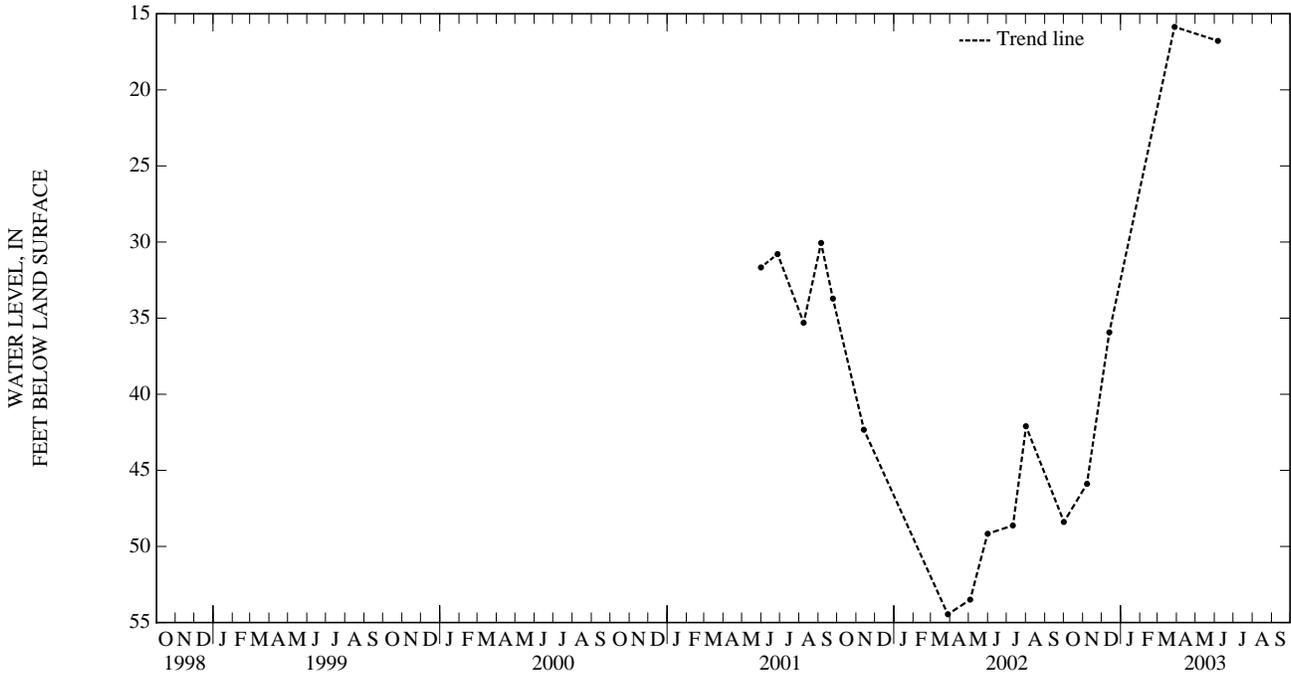
REMARKS.--Water level of Aug. 8, 2001 result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.86 ft below land-surface datum, Mar. 28, 2003; lowest measured, 54.46 ft below land-surface datum, Mar. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	48.39	NOV 07	45.89	DEC 13	35.94	MAR 28	15.86	JUN 06	16.78
WATER YEAR 2003 HIGHEST		15.86	MAR 28, 2003		LOWEST		48.39	OCT 01, 2002	



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391550078080301. Local number, 45Y 3.

LOCATION.--Lat 39°15'50.47", long 78°08'03.46", NAD83, Hydrologic Unit 02070004, 150 ft northwest of the intersection of Branson Spring Road and Welltown Road and 40 ft north of Branson Spring Road. Owner: Galilee Christian Church.

AQUIFER.--Pinesburg Station Dolomite and Rockdale Run Formation of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

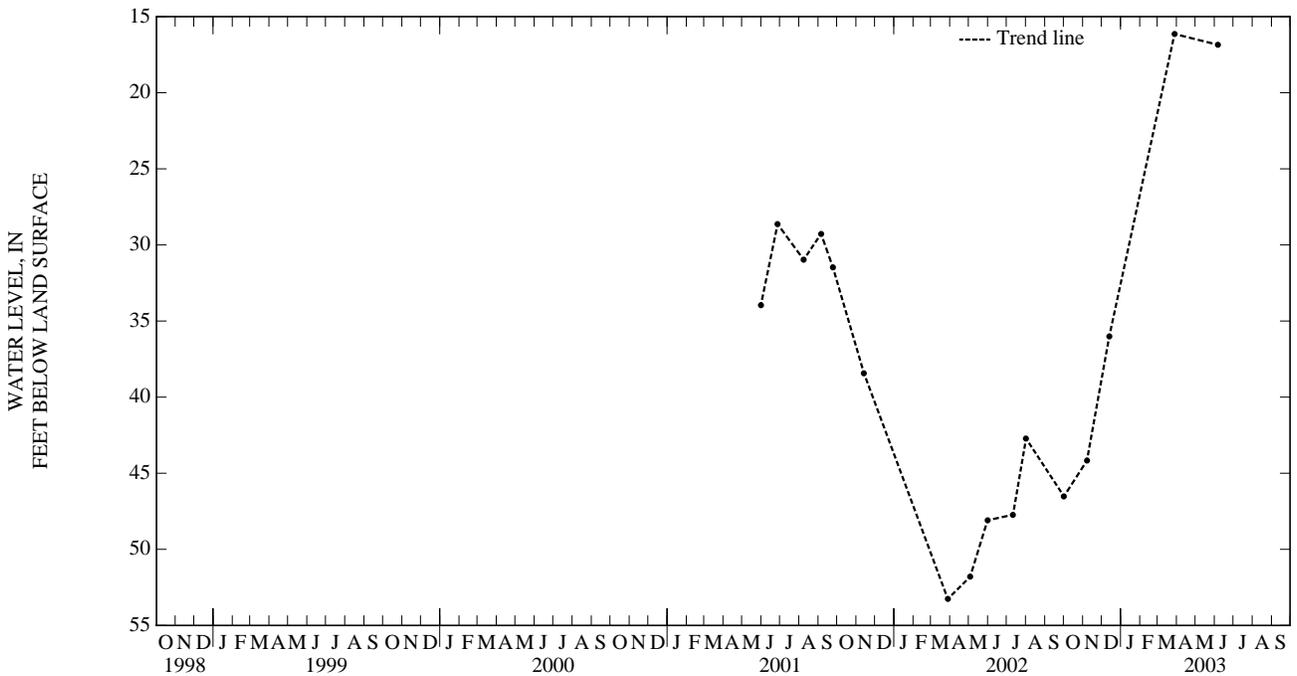
DATUM.--Elevation of land-surface datum is 750 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.14 ft below land-surface datum, Mar. 28, 2003; lowest measured, 53.26 ft below land-surface datum, Mar. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	46.52	NOV 07	44.17	DEC 13	36.00	MAR 28	16.14	JUN 06	16.85
WATER YEAR 2003		HIGHEST	16.14	MAR 28, 2003	LOWEST	46.52	OCT 01, 2002		



FREDERICK COUNTY—Continued

391757078095401. Local number, 45Y 4.

LOCATION.--Lat 39°17'57.22", long 78°09'53.97", NAD83, Hydrologic Unit 02070004, 0.39 mi. northwest of the intersection of White Hall Road and Warm Springs Road and 0.24 mi. southwest of White Hall Road, just north of driveway to Old Stone Church. Owner: Martha Wolfe and Bill Shabb.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Dug unused water well, diameter , depth 20.47 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

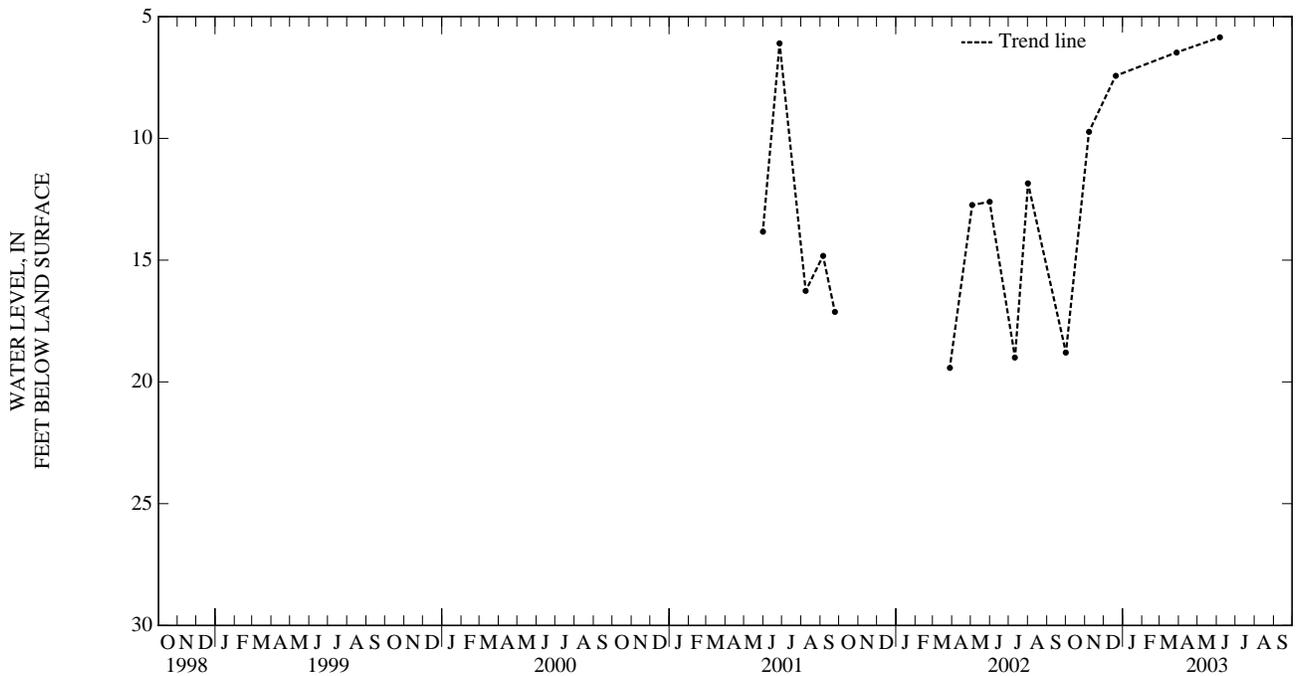
DATUM.--Elevation of land-surface datum is 770 ft above NGVD of 1929, from topographic map. Measuring point: Top of concrete slab at land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.85 ft below land-surface datum, June 26, 2003; well was observed to be dry on Nov. 13, 2001 and Feb. 27, 2002; lowest water level measured, 19.42 ft below land-surface datum, Mar. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	18.80	NOV 07	9.73	DEC 20	7.43	MAR 28	6.47	JUN 06	5.85
WATER YEAR 2003		HIGHEST	5.85 JUN 06, 2003	LOWEST	18.80 OCT 01, 2002				



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391757078095402. Local number, 45Y 5.

LOCATION.--Lat 39°17'56.81", long 78°09'54.25", NAD83, Hydrologic Unit 02070004, 0.39 mi. northwest of the intersection of White Hall Road and Warm Springs Road and 0.24 mi. southwest of White Hall Road, just south of driveway to Old Stone Church. Owner: Martha Wolfe and Bill Shabb.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 200 ft, cased to 40 ft, open hole 40 to 200 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval.

DATUM.--Elevation of land-surface datum is 770 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing 2.2 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

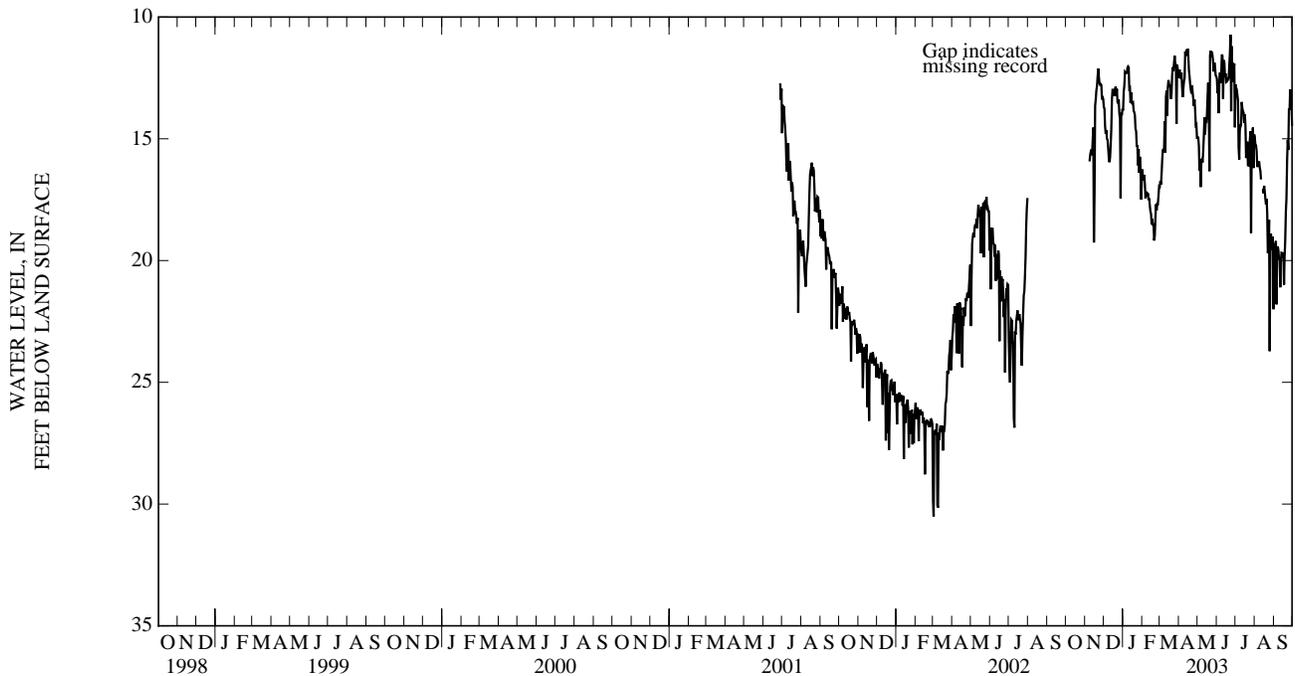
PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.34 ft below land-surface datum, June 23, 2003; lowest recorded, 30.51 ft below land-surface datum, Mar. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 10.34 ft, June 23; lowest instantaneous water level, 23.72 ft, Aug. 25.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	14.65	12.30	16.83	15.86	12.29	15.82	12.59	13.42	16.16	21.80
10	---	15.52	15.96	12.06	17.24	15.58	12.51	15.50	11.59	14.39	16.31	19.88
15	---	19.26	12.99	13.53	18.09	12.59	11.30	14.35	12.32	14.34	17.23	19.90
20	---	12.84	12.86	14.04	19.18	13.14	12.98	16.33	12.48	15.12	17.47	18.01
25	---	12.78	13.39	16.09	17.67	11.59	13.65	11.60	11.20	14.70	23.72	13.76
EOM	---	13.36	13.77	16.82	16.95	12.50	15.00	12.43	14.53	14.82	22.00	14.47



FREDERICK COUNTY—Continued

391738078085501. Local number, 45Y 6.

LOCATION.--Lat 39°17'37.96", long 78°08'55.00", NAD83, Hydrologic Unit 02070004, 905 ft north of the intersection of White Hall Road and Apple Pie Ridge Road and 450 ft west of Apple Pie Ridge Road. Owner: White Hall United Methodist Church.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 905 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.55 ft above land-surface datum.

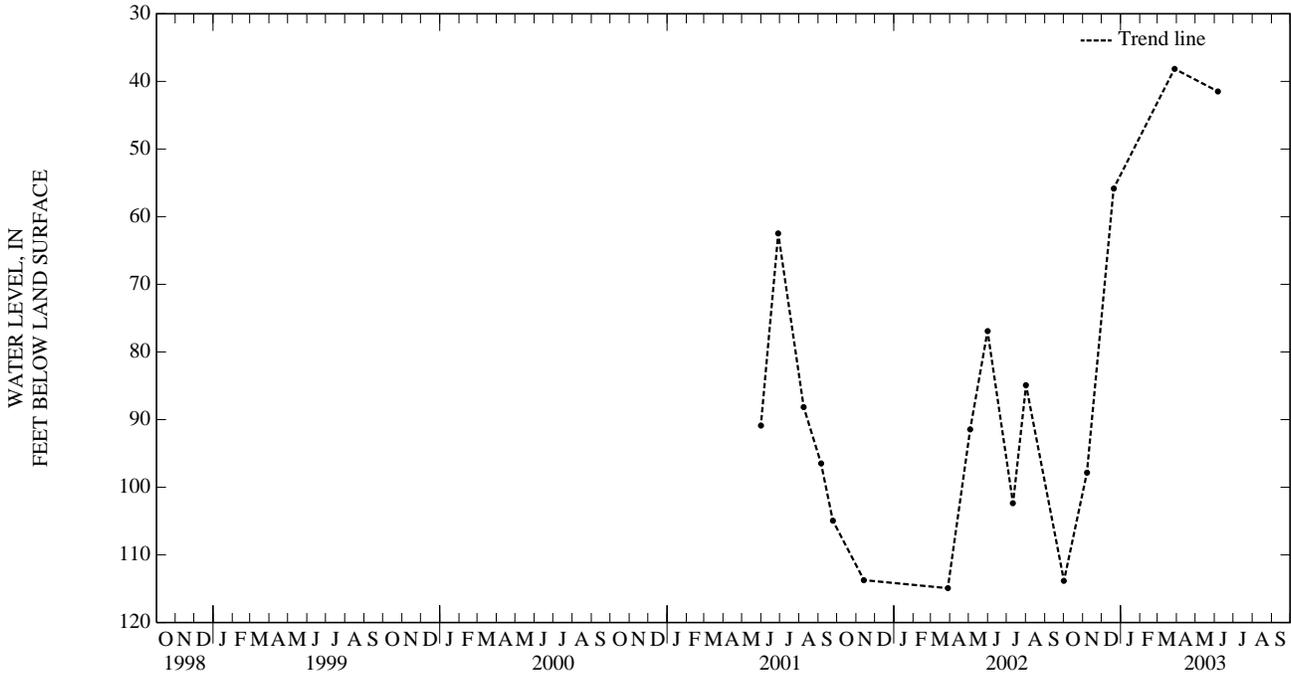
REMARKS.--Water level of Sept. 24, 2001 result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 38.14 ft below land-surface datum, Mar. 28, 2003; lowest measured, 114.92 ft below land-surface datum, Mar. 28, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	113.83	NOV 07	97.85	DEC 20	55.82	MAR 28	38.14	JUN 06	41.49
WATER YEAR 2003 HIGHEST		38.14	MAR 28, 2003		LOWEST		113.83	OCT 01, 2002	



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391858078075601. Local number, 45Y 8.

LOCATION.--Lat 39°18'58.11", long 78°07'55.50", NAD83, Hydrologic Unit 02070004, 350 ft southwest of the intersection of Winding Hill Road and Apple Pie Ridge Road and 90 ft northwest of Apple Pie Ridge Road. Owner: Todd Esparza.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth 220 ft, cased to 19 ft, open hole 19 to 220 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

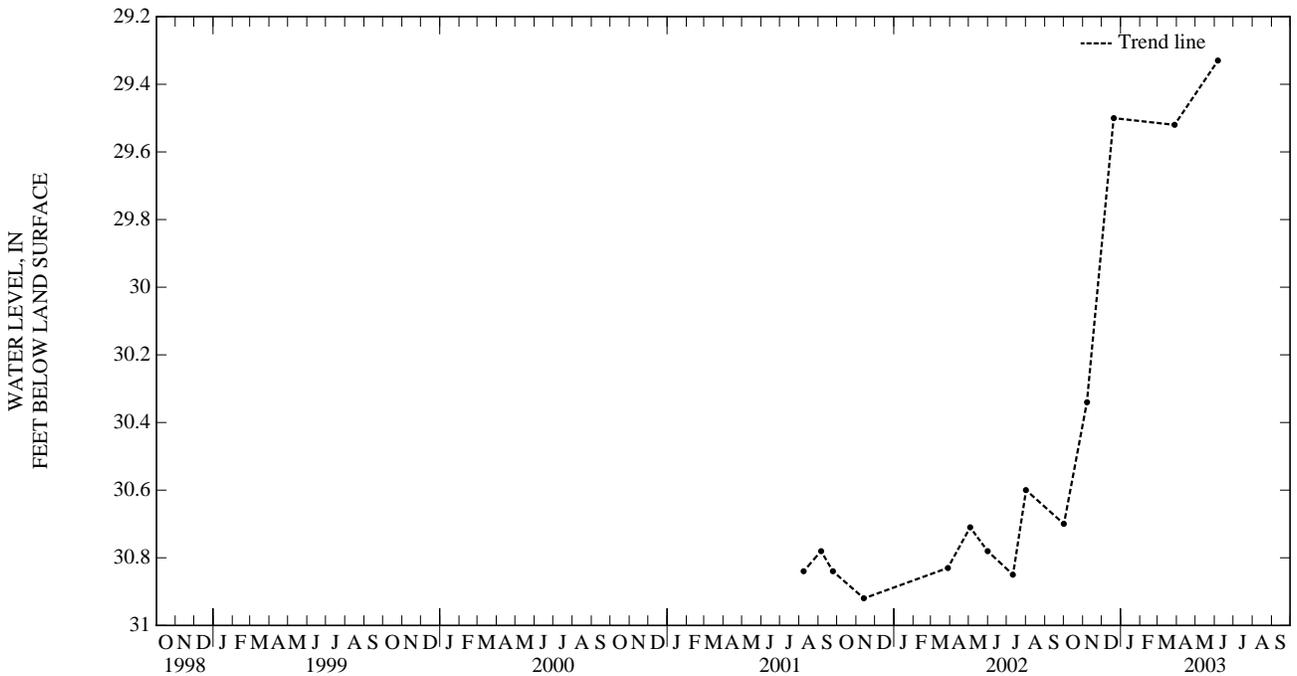
DATUM.--Elevation of land-surface datum is 845 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

PERIOD OF RECORD.--August 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 29.33 ft below land-surface datum, June 6, 2003; lowest measured, 30.92 ft below land-surface datum, Nov. 13, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	30.70	NOV 07	30.34	DEC 20	29.50	MAR 28	29.52	JUN 06	29.33
WATER YEAR 2003 HIGHEST		29.33	JUN 06, 2003 LOWEST		30.70	OCT 01, 2002			



GROUND-WATER LEVELS
 FREDERICK COUNTY—Continued

391413078071201. Local number, 46X110.

LOCATION.--Lat 39°14'13.36", long 78°07'12.40", NAD83, Hydrologic Unit 02070004, 0.6 mi southwest of the intersection of Stephenson Road and Martinsburg Pike and 0.4 mi northwest of Martinsburg Pike. Owner: O. L. Payne.

AQUIFER.--Pinesburg Station Dolomite and Rockdale Run Formation of Lower to Middle Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Electronic pressure transducer data logger 15-minute interval.

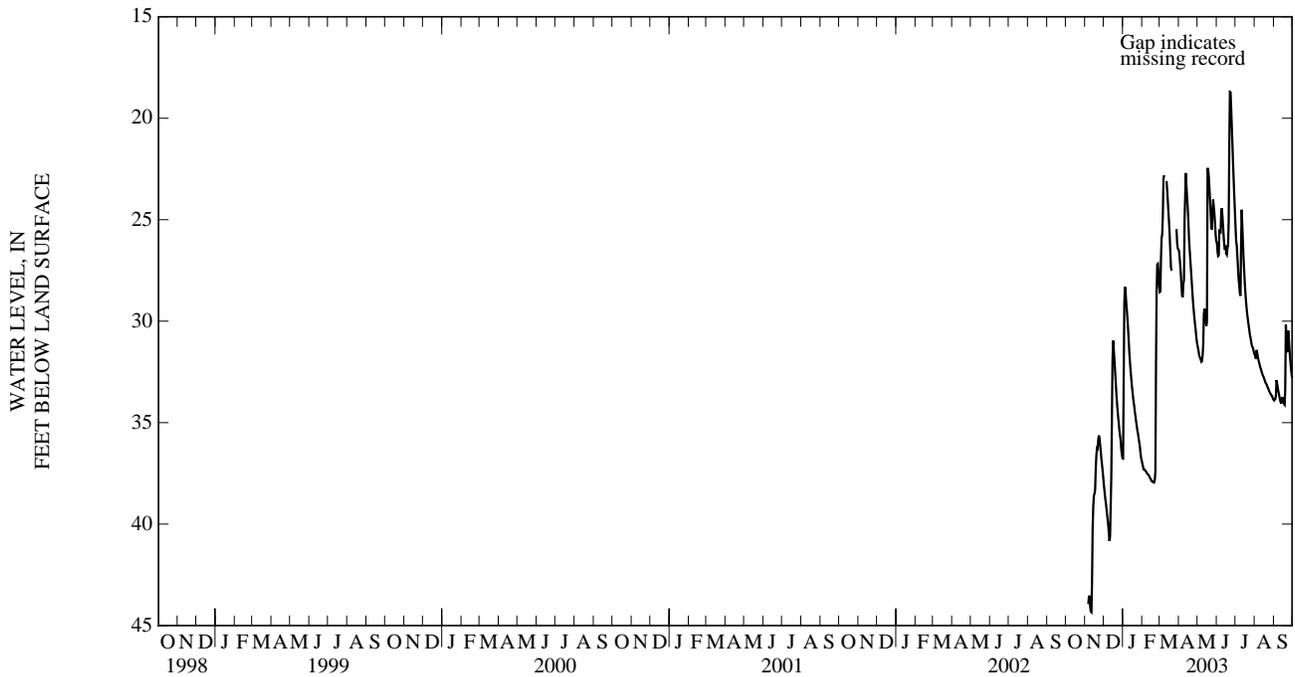
DATUM.--Elevation of land-surface datum is 665 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.75 ft above land-surface datum.

PERIOD OF RECORD.--November 2002 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 17.97 ft below land-surface datum, June 23, 2003; lowest recorded, 44.44 ft below land-surface datum, Nov. 5, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
 DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	39.16	28.58	37.35	25.71	28.24	31.80	25.55	27.39	31.58	32.90
10	---	44.31	40.83	30.93	37.55	---	24.89	31.15	24.84	26.03	32.29	33.78
15	---	38.60	31.93	33.14	37.83	24.62	24.38	30.24	26.27	27.57	32.73	33.81
20	---	36.25	32.92	34.49	37.95	27.52	27.36	23.44	25.03	29.71	33.12	30.18
25	---	36.08	34.99	35.54	27.20	---	29.58	24.57	20.40	30.80	33.50	30.98
EOM	---	37.69	36.76	36.86	28.27	26.47	31.07	26.07	24.60	31.58	33.86	32.79



FREDERICK COUNTY—Continued

391716078070901. Local number, 46Y 1.

LOCATION.--Lat 39°17'16.31", long 78°07'09.34", NAD83, Hydrologic Unit 02070004, 210 ft east of the intersection of Welltown Road and Rest Church Road and 60 ft south of Rest Church Road. Owner: Woodbine Assembly of God.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 735 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.25 ft above land-surface datum.

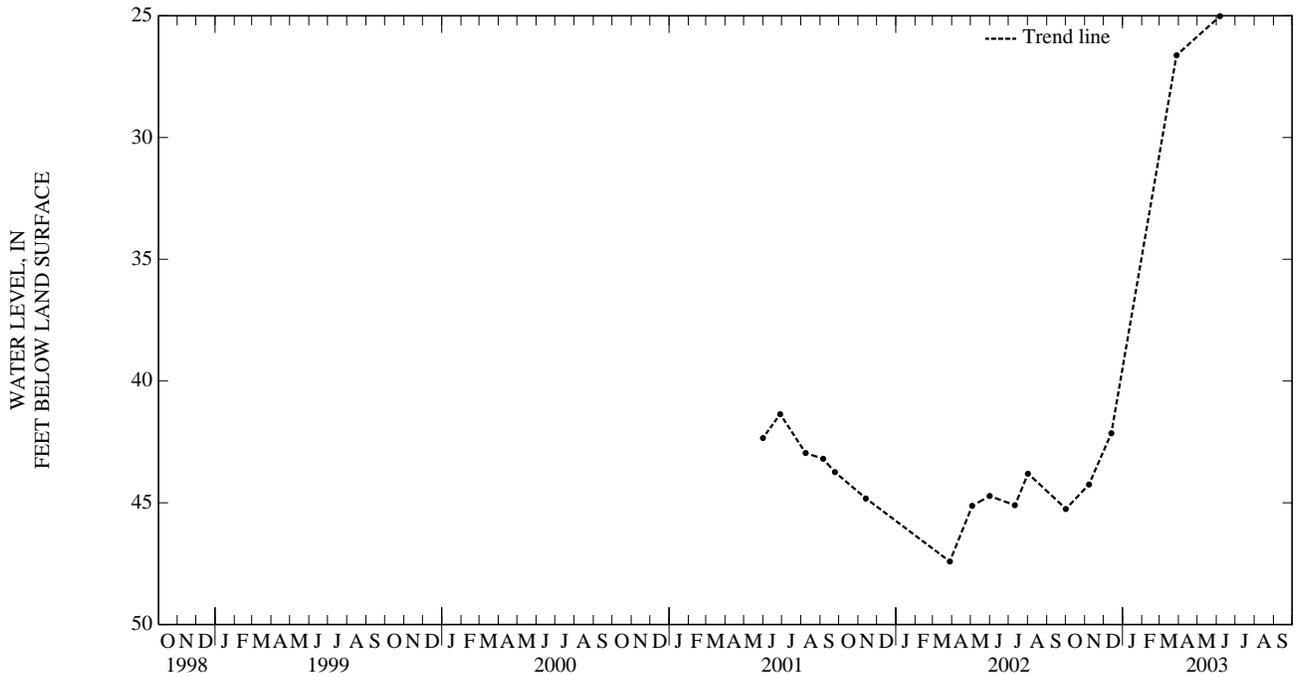
REMARKS.--Water level of Mar. 28, 2002 result of well having been recently pumped.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.02 ft below land-surface datum, June 6, 2003; lowest measured, 45.25 ft below land-surface datum, Oct. 1, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	45.25	NOV 07	44.25	DEC 13	42.15	MAR 28	26.62	JUN 06	25.02
WATER YEAR 2003 HIGHEST		25.02	JUN 06, 2003 LOWEST		45.25	OCT 01, 2002			



GROUND-WATER LEVELS

GLOUCESTER COUNTY

372621076404201. Local number, 57H 20 SOW 192A.

LOCATION.--Lat 37°26'22", long 76°40'41", NAD83, Hydrologic Unit 02080107, 80 ft north of State Highway 684 (Starvation Road), 1.1 mi northeast of intersection of State Highways 617 and 684. Owner: St. Laurent Paper Products Corporation (formerly Chesapeake Corporation).

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. 200 ft, diameter 2 in. 200 to 910 ft, depth 910 ft, screened 900 to 910 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of inner casing, 1.5 ft above land-surface datum.

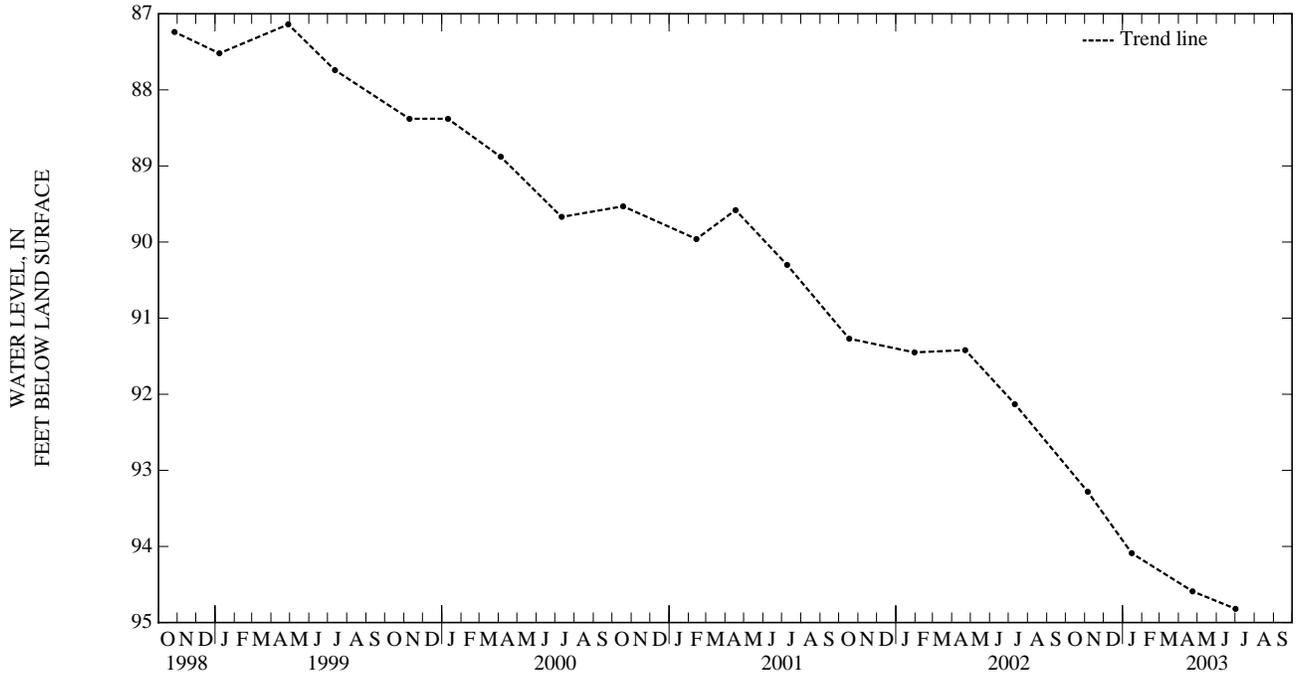
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.59 ft below land-surface datum, June 24, 1994; lowest measured, 94.82 ft below land-surface datum, July 1, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	93.28	JAN 15	94.09	APR 23	94.59	JUL 01	94.82
WATER YEAR 2003 HIGHEST 93.28		NOV 05, 2002		LOWEST 94.82		JUL 01, 2003	



GLOUCESTER COUNTY—Continued

372621076404202. Local number, 57H 21 SOW 192B.

LOCATION.--Lat 37°26'22", long 76°40'41", NAD83, Hydrologic Unit 02080107, 80 ft north of State Highway 684 (Starvation Road), 1.1 mi northeast of intersection of State Highways 617 and 684. Owner: St. Laurent Paper Products Corporation (formerly Chesapeake Corporation).

AQUIFER.--Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. 200 ft, diameter 2 in. 200 to 480 ft, depth 480 ft, screened 470 to 480 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of inner casing, 1.6 ft above land-surface datum.

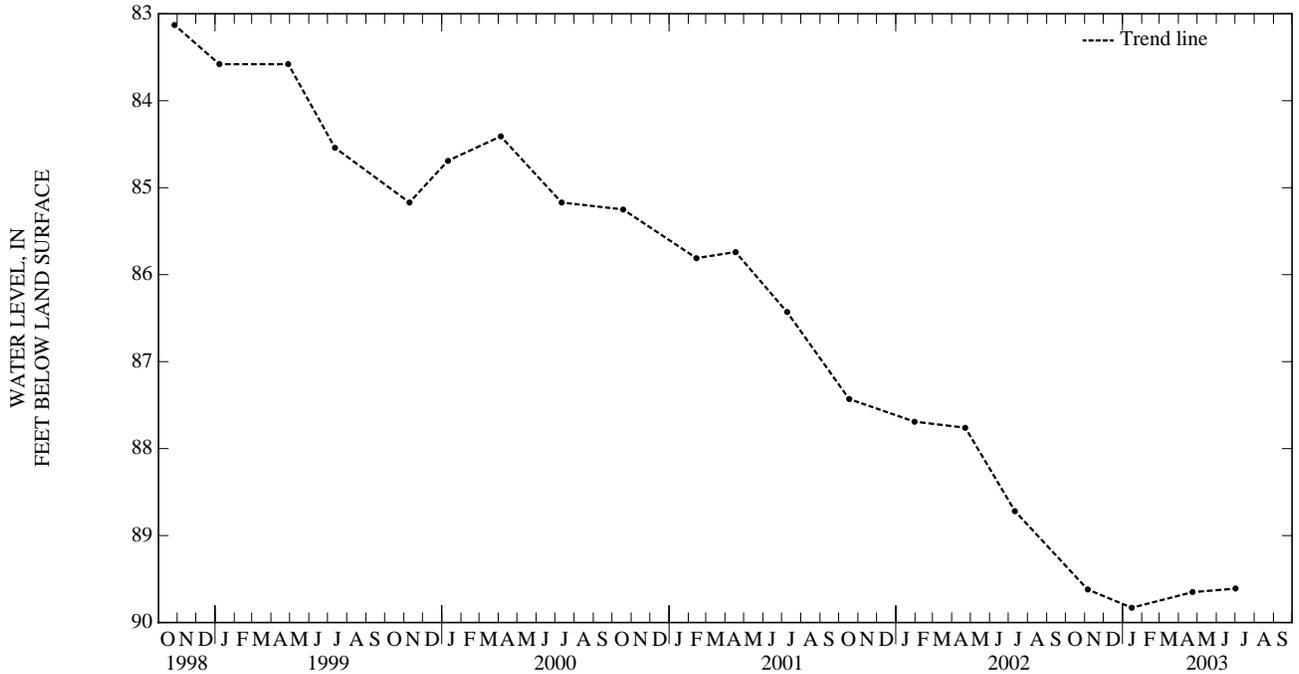
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 77.63 ft below land-surface datum, June 24, 1994; lowest measured, 89.83 ft below land-surface datum, Jan. 15, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	89.62	JAN 15	89.83	APR 23	89.65	JUL 01	89.61
WATER YEAR 2003 HIGHEST		89.61	JUL 01, 2003		LOWEST		89.83
						JAN 15, 2003	



GROUND-WATER LEVELS
GLOUCESTER COUNTY—Continued

372621076404203. Local number, 57H 22 SOW 192C.

LOCATION.--Lat 37°26'22", long 76°40'41", NAD83, Hydrologic Unit 02080107, 80 ft north of State Highway 684 (Starvation Road), 1.1 mi northeast of intersection of State Highways 617 and 684. Owner: St. Laurent Paper Products Corporation (formerly Chesapeake Corporation).

AQUIFER.--Aquia aquifer of Pleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. 200 ft, diameter 2 in. 200 to 370 ft, depth 370 ft, screened 350 to 370 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 6 ft above NGVD of 1929, from topographic map. Measuring point: Top of inner casing, 1.7 ft above land-surface datum.

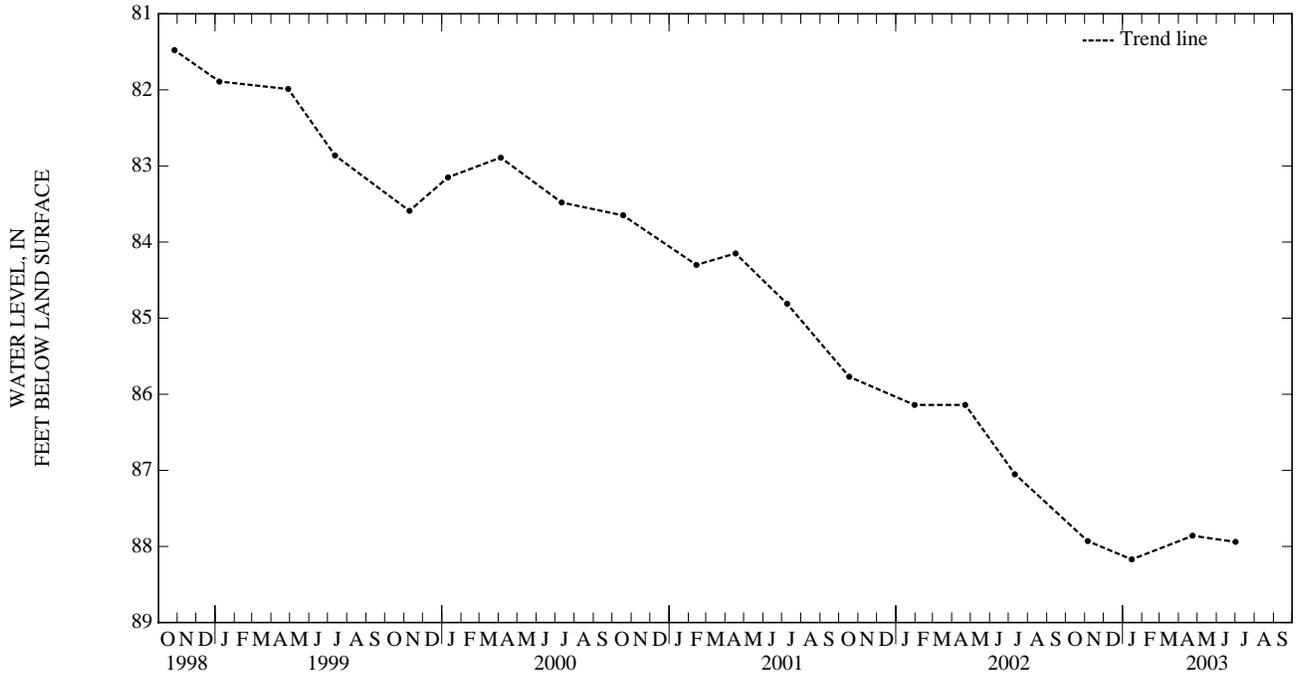
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.78 ft below land-surface datum, June 24, 1994; lowest measured, 88.17 ft below land-surface datum, Jan. 15, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	87.93	JAN 15	88.17	APR 23	87.86	JUL 01	87.94
WATER YEAR 2003 HIGHEST		87.86	APR 23, 2003 LOWEST		88.17	JAN 15, 2003	



GLOUCESTER COUNTY—Continued

372331076312602. Local number, 58H 6 SOW 168A.

LOCATION.--Lat 37°23'32", long 76°31'25", NAD83, Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,300 ft, screened 1,290 to 1,300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. June 11, 1985, to July 7, 1995, bimonthly measurement with chalked tape. Prior to June 11, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

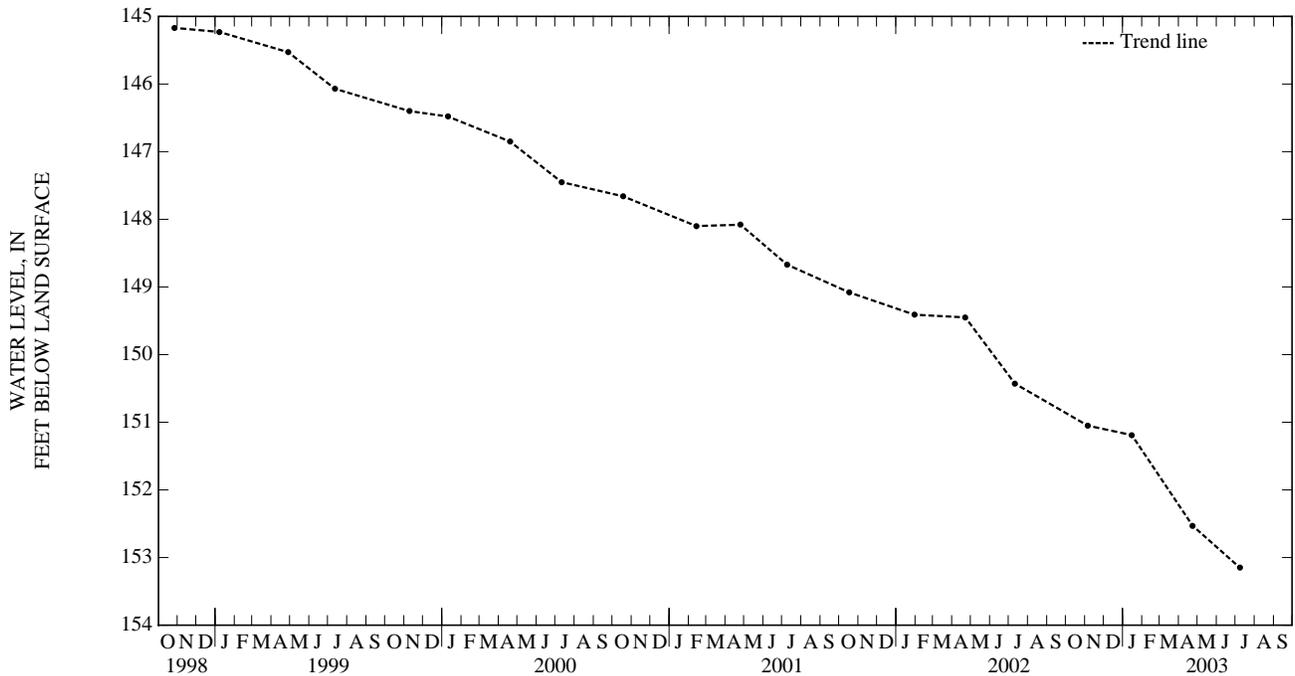
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--August 1982 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.26 ft below land-surface datum, Feb. 14, 1983; lowest measured, 153.15 ft below land-surface datum, July 8, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	151.05	JAN 15	151.19	APR 23	152.53	JUL 08	153.15
WATER YEAR 2003 HIGHEST 151.05 NOV 05, 2002		LOWEST 153.15 JUL 08, 2003					



GROUND-WATER LEVELS
GLOUCESTER COUNTY—Continued

372331076312603. Local number, 58H 7 SOW 168B.

LOCATION.--Lat 37°23'32", long 76°31'25", NAD83, Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 186 ft, diameter 2 in. from 186 to 960 ft, depth 960 ft, screened 950 to 960 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 7, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

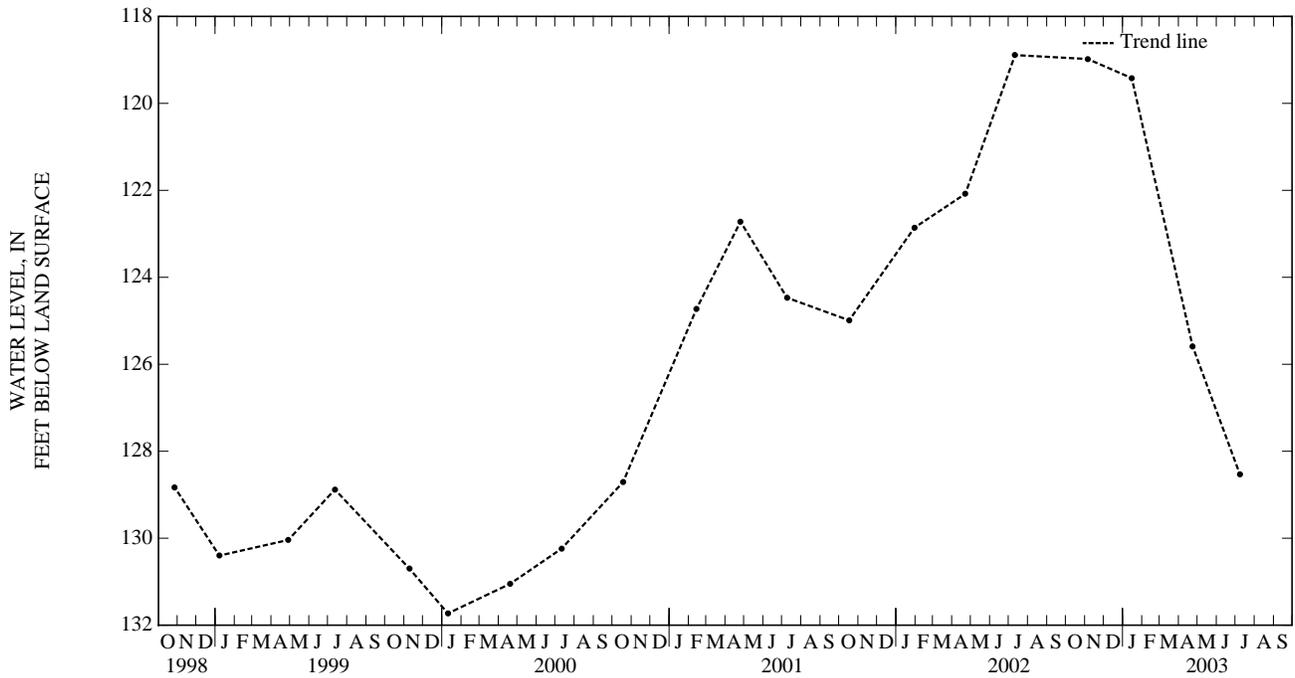
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Low water level in June 1996 is the result of the well being pumped for water-quality sampling.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.55 ft below land-surface datum, Nov. 20, 1985; lowest measured, 158.32 ft below land-surface datum, July 8, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	118.98	JAN 15	119.42	APR 23	125.59	JUL 08	128.53
WATER YEAR 2003 HIGHEST 118.98		NOV 05, 2002		LOWEST 128.53		JUL 08, 2003	



GLOUCESTER COUNTY—Continued

372331076312604. Local number, 58H 8 SOW 168C.

LOCATION.--Lat 37°23'32", long 76°31'25", NAD83, Hydrologic Unit 02080102, at entrance to Gloucester County landfill, 0.3 mi east of U.S. Highway 17, and 1.4 mi south of Gloucester. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 40 ft, screened 30 to 40 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 7, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 75 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

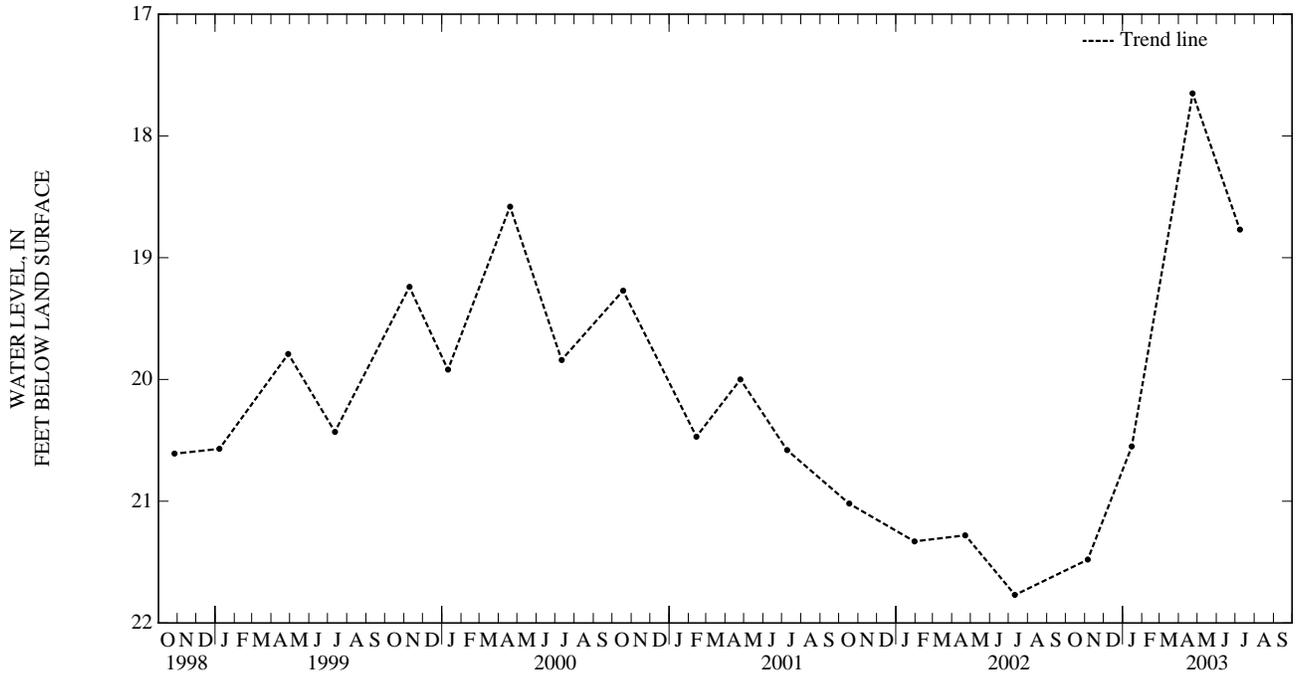
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.00 ft below land-surface datum, Apr. 20, 1993; lowest measured, 21.81 ft below land-surface datum, Sept. 23, 1985.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 05	21.48	JAN 15	20.55	APR 23	17.65	JUL 08	18.77
WATER YEAR 2003 HIGHEST		17.65	APR 23, 2003 LOWEST		21.48	NOV 05, 2002	



GROUND-WATER LEVELS

HANOVER COUNTY

375316077274701. Local number, 51M 11.

LOCATION.--Lat 37°53'17", long 77°27'46", NAD83, Hydrologic Unit 02080106, 900 ft east of U.S. Highway 1 on a private dirt road at the North Anna River and 9.9 mi north of Ashland on U.S. Highway 1. Owner: Weyerhaeuser Inc.

AQUIFER.--Newark Supergroup of late Triassic age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 175 ft, cased to 20 ft, open hole 20 to 175 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

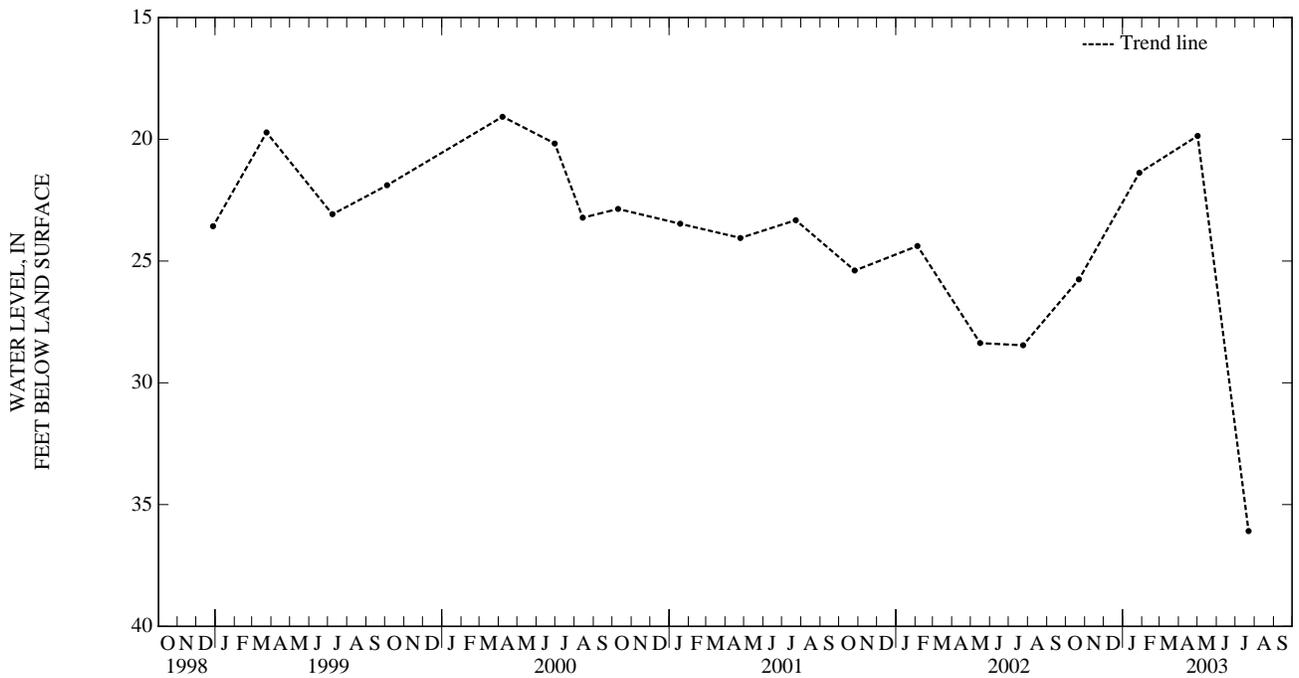
REMARKS.--Water level of July 22, 2003 result of well being pumped.

PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.17 ft below land-surface datum, Mar. 30, 1993; lowest measured, 28.46 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	25.75	JAN 27	21.38	MAY 01	19.86	JUL 22	36.09
WATER YEAR 2003 HIGHEST		19.86	MAY 01, 2003 LOWEST		25.75	OCT 22, 2002	



HANOVER COUNTY—Continued

373506077171401. Local number, 52J 56.

LOCATION.--Lat 37°35'07", long 77°17'13", NAD83, Hydrologic Unit 02080206, 150 ft north of State Highway 156 at the Cold Harbor Visitor Center, 1.0 mi southwest of the intersection of State Highways 156 and 619, and 4.9 mi east of Mechanicsville. Owner: U.S. National Park Service.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 265 ft, screened 210 to 220 and 255 to 270 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 172 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.55 ft above land-surface datum.

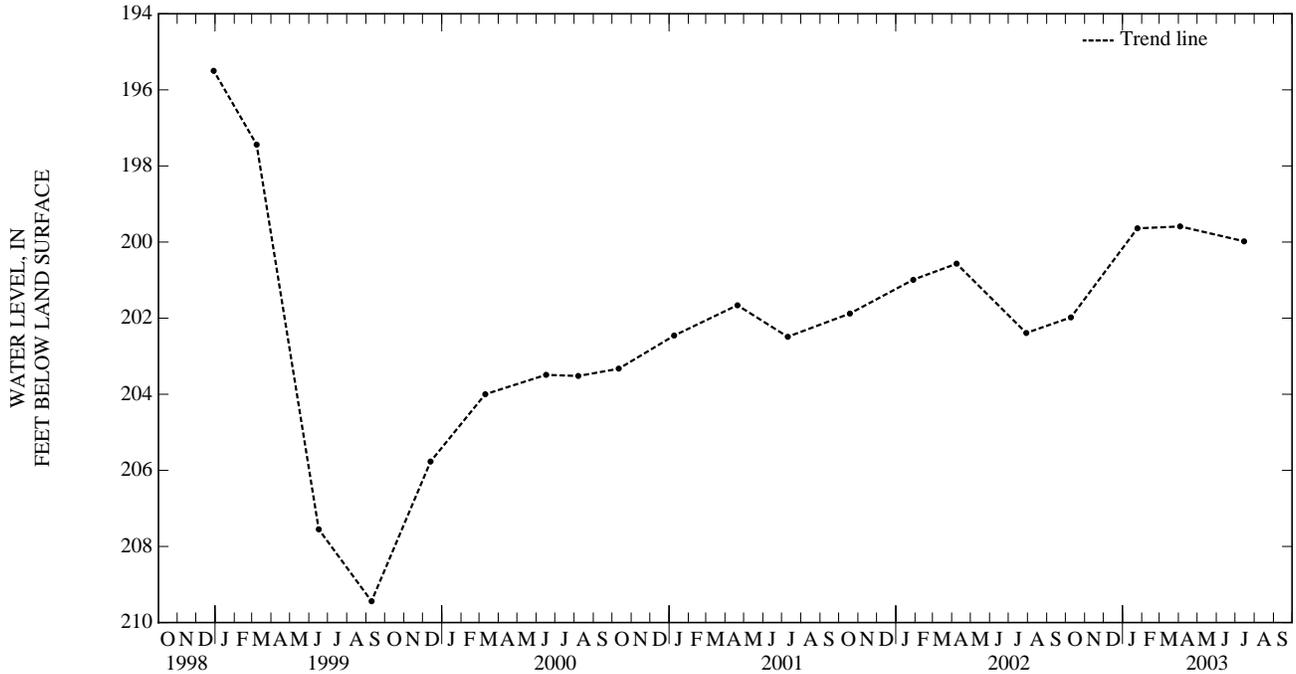
REMARKS.--Well was published as 373507077171201, local number 52J 10, from 1988 to 1999. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 177.20 ft below land-surface datum, Dec. 13, 1995; lowest measured, 209.44 ft below land-surface datum, Sept. 9, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	201.98	JAN 24	199.64	APR 03	199.59	JUL 15	199.98
WATER YEAR 2003 HIGHEST		199.59 APR 03, 2003		LOWEST		201.98 OCT 09, 2002	



GROUND-WATER LEVELS

HANOVER COUNTY—Continued

373737077083201. Local number, 53K 19 SOW 080.

LOCATION.--Lat 37°37'38", long 77°08'31", NAD83, Hydrologic Unit 02080106, 500 ft northeast of State Highway 606, 0.15 mi west of intersection of State Highways 606 and 629, and 4.6 mi east of Old Church. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 30 in., depth 35 ft, cased to 35 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 3, 1985 to July 11, 1995, bimonthly measurement with chalked tape. May 20, 1978, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to May 20, 1978, continuous strip- chart recorder.

DATUM.--Elevation of land-surface datum is 130 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

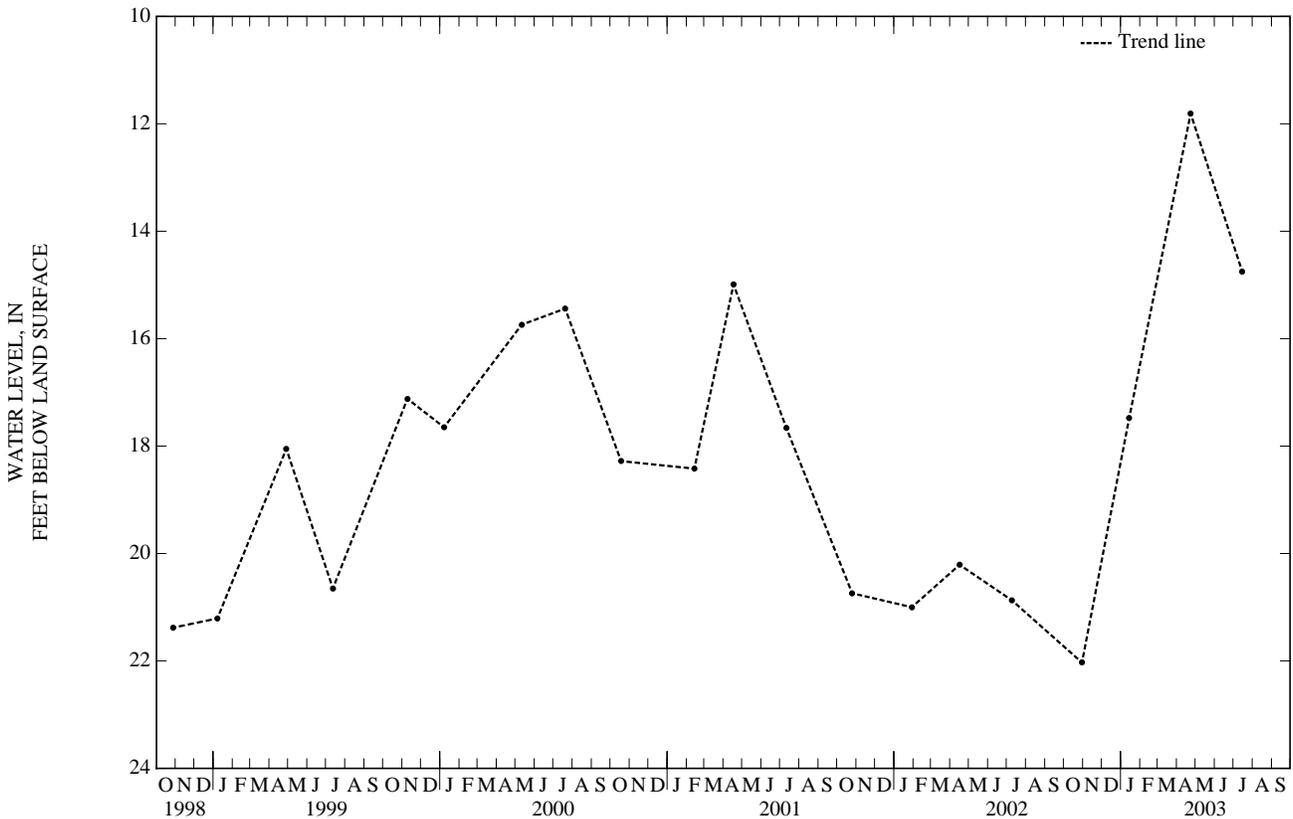
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--January 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.05 ft below land-surface datum, Jan. 25, 1978; lowest measured, 22.85 ft below land-surface datum, Aug. 3, 1984.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	22.03	JAN 14	17.48	APR 23	11.81	JUL 15	14.75
WATER YEAR 2003 HIGHEST		11.81	APR 23, 2003		LOWEST		22.03
OCT 30, 2002							



HENRICO COUNTY

373607077331401. Local number, 50J 1 SOW 023.

LOCATION.--Lat 37°36'08", long 77°33'13", NAD83, Hydrologic Unit 02080205, 200 ft north of Three Chopt Road, 1.0 mi southeast of intersection of Three Chopt Road and Parham Road in Richmond. Owner: E. L. Gilman.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in., depth 300 ft, cased to 68 ft, open hole 68 to 300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 17, 1995, bimonthly measurement with chalked tape. June 5, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to June 5, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 275 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.88 ft above land-surface datum.

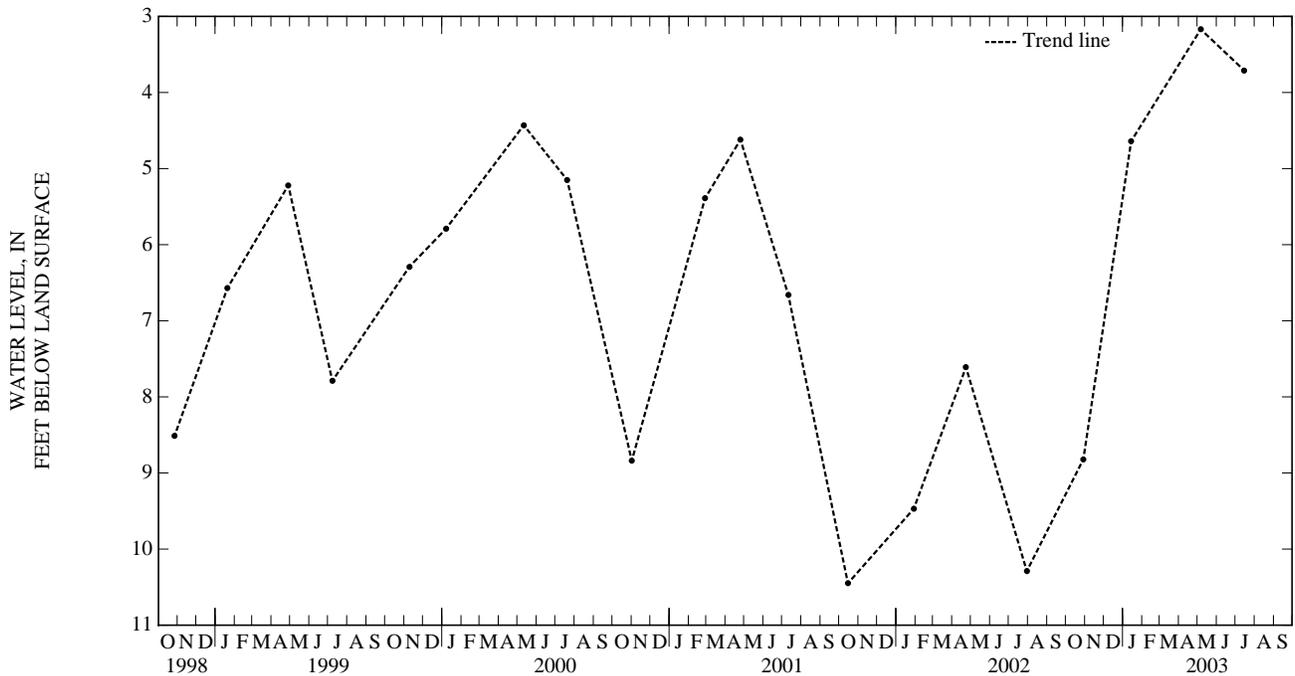
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.48 ft below land-surface datum, June 5, 1970; lowest recorded, 10.45 ft below land-surface datum, Oct. 15, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.82	JAN 14	4.64	MAY 06	3.17	JUL 15	3.71
WATER YEAR 2003 HIGHEST		3.17	MAY 06, 2003 LOWEST		8.82	OCT 29, 2002	



GROUND-WATER LEVELS
HENRICO COUNTY—Continued

373428077233001. Local number, 51J 13.

LOCATION.--Lat 37°34'29", long 77°23'29", NAD83, Hydrologic Unit 02080206, 1,600 ft east of the intersection of U.S. Highway 360 (Mechanicsville Turnpike) and Laburnum Avenue and 500 ft south of Laburnum Avenue at water tower. Owner: Henrico County.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 167 ft, diameter 6 in. from 167 to 275 ft, depth 275 ft, screened 167 to 186 ft, 213 to 226 ft, 248 to 258 ft.

INSTRUMENTATION.--Weekly measurements by Henrico County personnel. Prior to Apr. 2, 1992, USGS digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 168 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum prior to Apr. 8, 1992; 0.2 ft thereafter.

REMARKS.--Water level affected by local pumpage and regional drawdown.

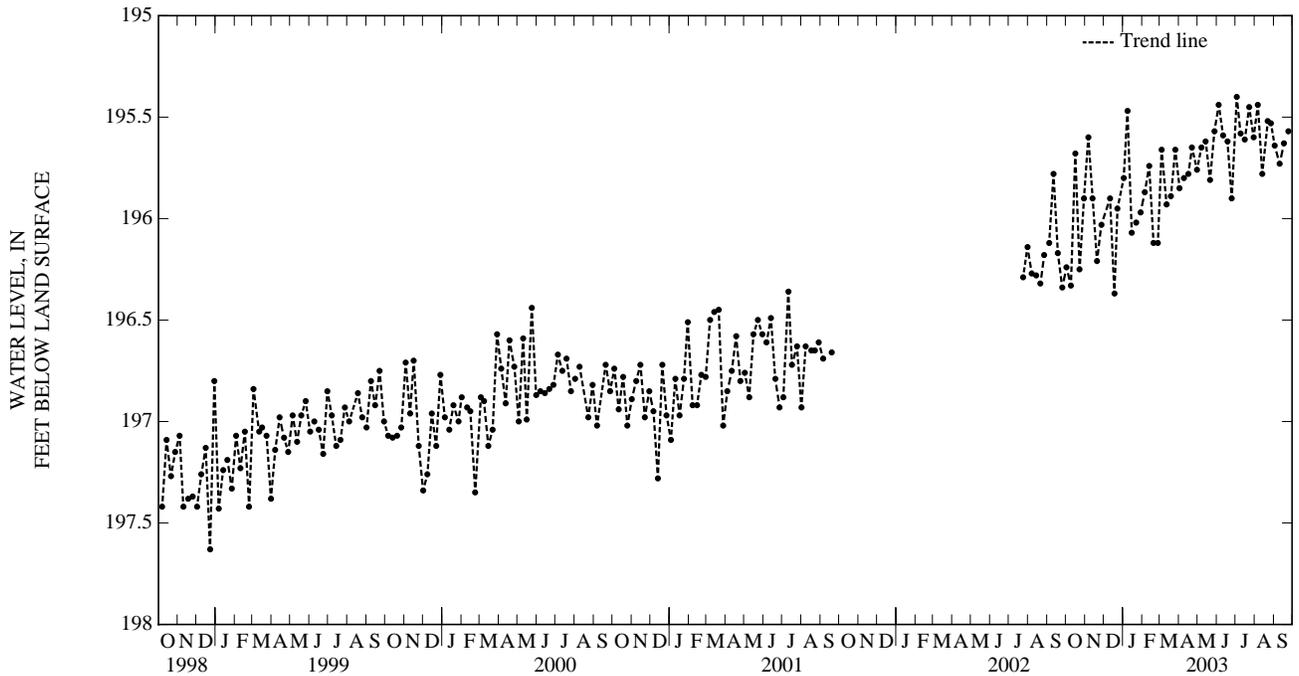
PERIOD OF RECORD.--January 1988 to September 2001, October 2002 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 190.85 ft below land-surface datum, Apr. 7, 1988; lowest measured, 197.63 ft below land-surface datum, Dec. 23, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL										
OCT 02	196.24	DEC 11	195.90	FEB 12	195.74	APR 16	195.78	JUN 18	195.62	AUG 22	195.52
09	196.33	18	196.37	19	196.12	22	195.65	25	195.90	27	195.53
16	195.68	23	195.95	26	196.12	30	195.76	JUL 03	195.40	SEP 02	195.64
23	196.25	JAN 02	195.80	MAR 04	195.66	MAY 07	195.65	09	195.58	10	195.73
30	195.90	08	195.47	12	195.93	14	195.62	16	195.61	17	195.63
NOV 06	195.60	15	196.07	19	195.89	21	195.81	23	195.45	24	195.57
13	195.90	22	196.02	26	195.66	28	195.57	30	195.60		
20	196.21	29	195.97	APR 02	195.85	JUN 04	195.44	AUG 06	195.44		
27	196.03	FEB 05	195.87	09	195.80	11	195.59	13	195.78		

WATER YEAR 2003 HIGHEST 195.40 JUL 03, 2003 LOWEST 196.37 DEC 18, 2002



HENRICO COUNTY—Continued

373817077282501. Local number, 51K 14 SOW 137.

LOCATION.--Lat 37°38'18", long 77°28'24", NAD83, Hydrologic Unit 02080206, 50 ft east of entrance to J. Sargeant Reynolds Community College, 0.9 mi west of intersection of Parham Road and U.S. Highway 1, and 0.9 mi west of Yellow Tavern. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Petersburg Granite of Mississippian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 280 ft, cased to 35 ft, open hole 35 to 280 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 17, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 180 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Sept. 9, 1980; 1.5 ft thereafter.

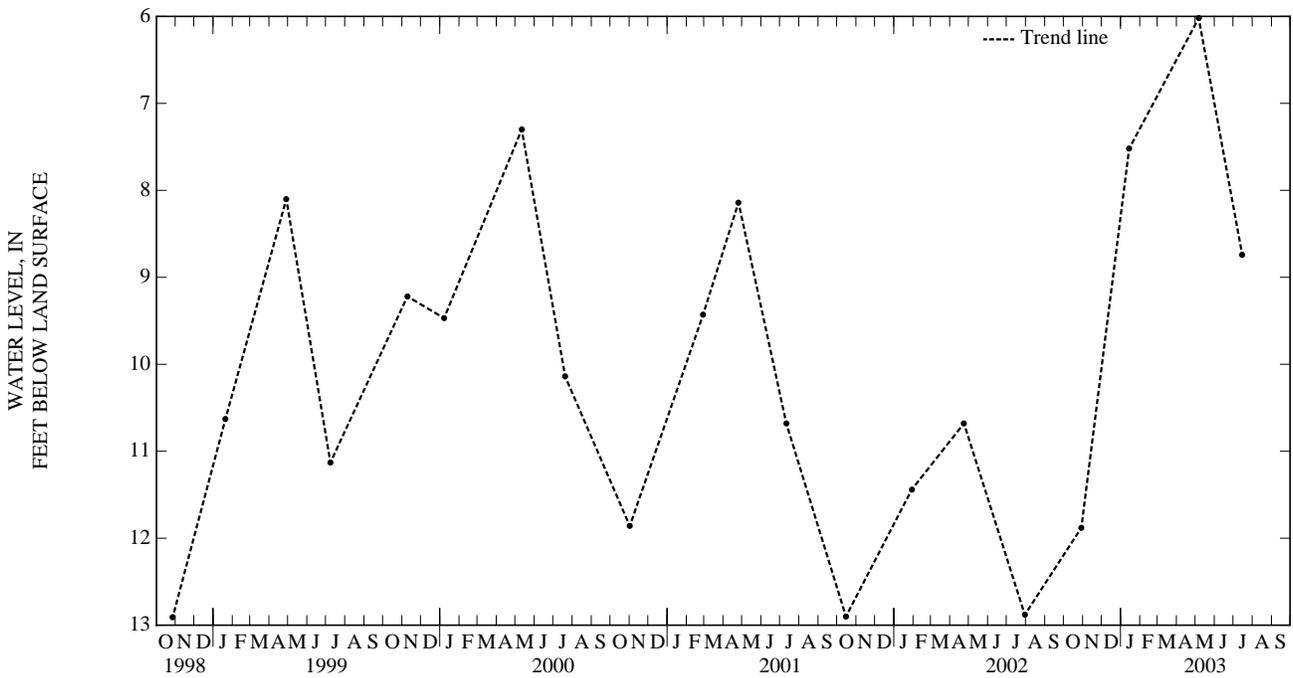
REMARKS.--Well was published as 373817077282501, local number 51K 4, from 1980 to 2000. Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.37 ft below land-surface datum, Apr. 30, 1987; lowest measured, 12.91 ft below land-surface datum, Oct. 27, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	11.88	JAN 14	7.52	MAY 06	6.02	JUL 15	8.74
WATER YEAR 2003 HIGHEST		6.02	MAY 06, 2003 LOWEST		11.88	OCT 29, 2002	



GROUND-WATER LEVELS
HENRICO COUNTY—Continued

372936077211101. Local number, 52H 3 SOW 136.

LOCATION.--Lat 37°29'37", long 77°21'10", NAD83, Hydrologic Unit 02080206, 100 ft west of Laburnum Avenue, 0.9 mi north of intersection of Laburnum Avenue and Darbytown Road, and 2.4 mi southwest of Sandston. Owner: Nabisco Incorporated.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 209 ft, screened 149 to 159 ft, 199 to 209 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 25, 1985, to July 17, 1995, bimonthly measurement with chalked tape. Prior to Mar. 25, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 150 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

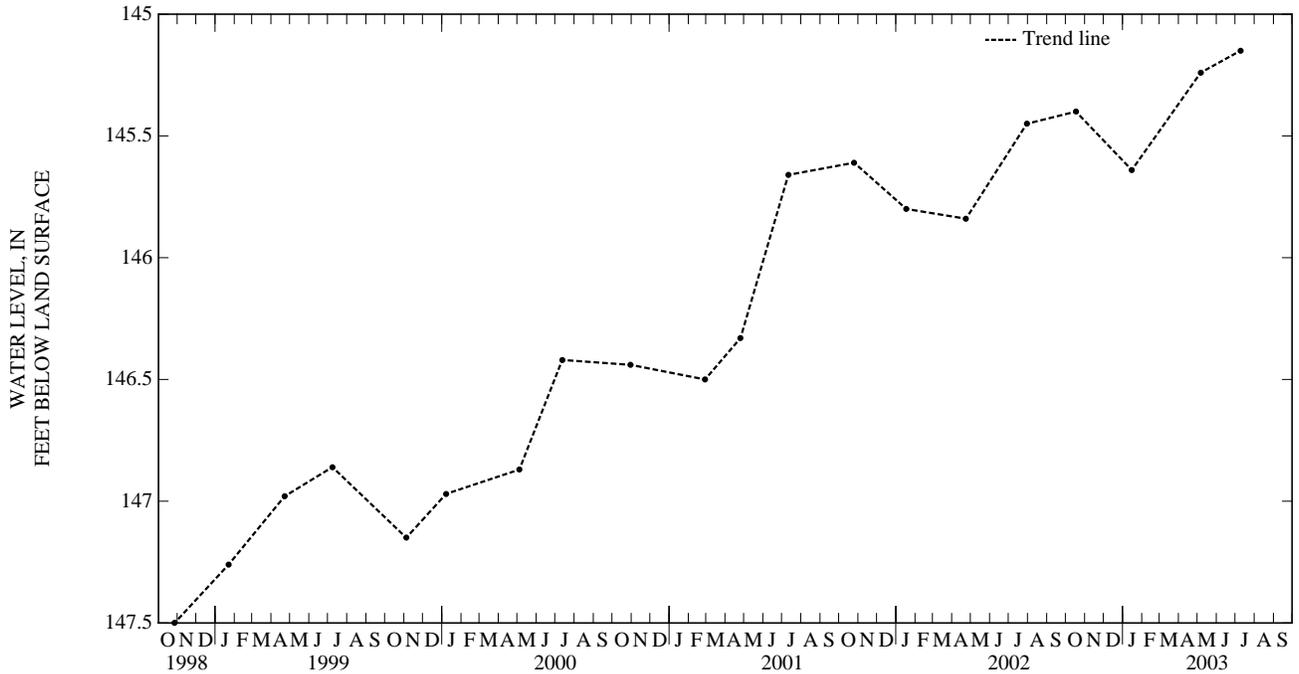
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1974 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 131.42 ft below land-surface datum, Dec. 2, 1974; lowest measured, 147.53 ft below land-surface datum, Apr. 29, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	145.40	JAN 15	145.64	MAY 06	145.24	JUL 09	145.15
WATER YEAR 2003 HIGHEST		145.15	JUL 09, 2003 LOWEST		145.64	JAN 15, 2003	



GROUND-WATER LEVELS
HENRICO COUNTY—Continued

372538077221501. Local number, 52H 16.

LOCATION.--Lat 37°25'39", long 77°22'14", NAD83, Hydrologic Unit 02080206, at Richmond National Battlefields Park - Fort Harrison Unit, 800 ft east of visitors center. Owner: U.S. Geological Survey.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 34.25 ft, screened 24.25 ft to 34.25 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Unpublished digital recorder data Nov. 13, 1995, to May 8, 1996.

DATUM.--Elevation of land-surface datum is 135 ft above NGVD of 1929. Measuring point: Top of casing, 1.43 ft above land-surface datum.

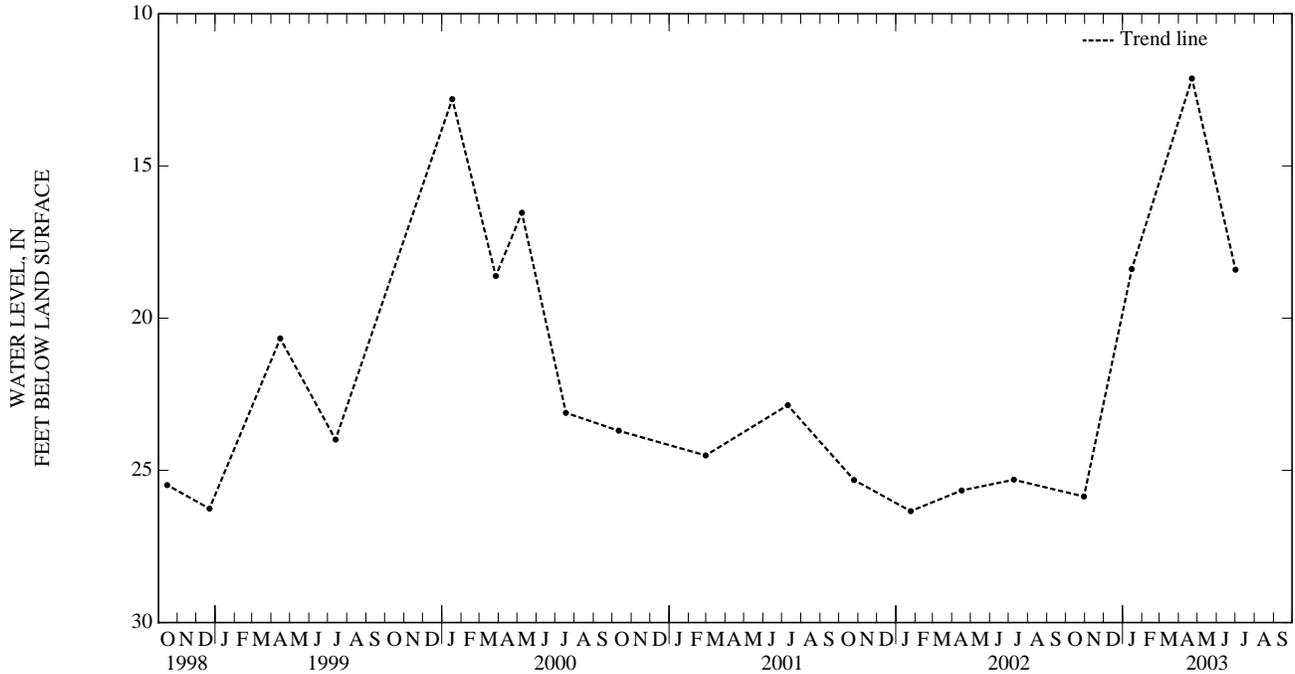
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--November 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.13 ft below land-surface datum, Apr. 22, 2003; lowest measured, 26.34 ft below land-surface datum, Jan. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	25.86	JAN 15	18.39	APR 22	12.13	JUL 01	18.41
WATER YEAR 2003 HIGHEST		12.13 APR 22, 2003		LOWEST		25.86 OCT 30, 2002	



GROUND-WATER LEVELS
HENRICO COUNTY—Continued

372538077221502. Local number, 52H 17.

LOCATION.--Lat 37°25'39", long 77°22'14", NAD83, Hydrologic Unit 02080206, at Richmond National Battlefields Park - Fort Harrison Unit, 800 ft east of visitors center. Owner: U.S. Geological Survey.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 78.90 ft, screened 73.90 ft to 78.90 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Unpublished digital recorder data Apr. 3, 1996, to May 8, 1996.

DATUM.--Elevation of land-surface datum is 135 ft above NGVD of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.

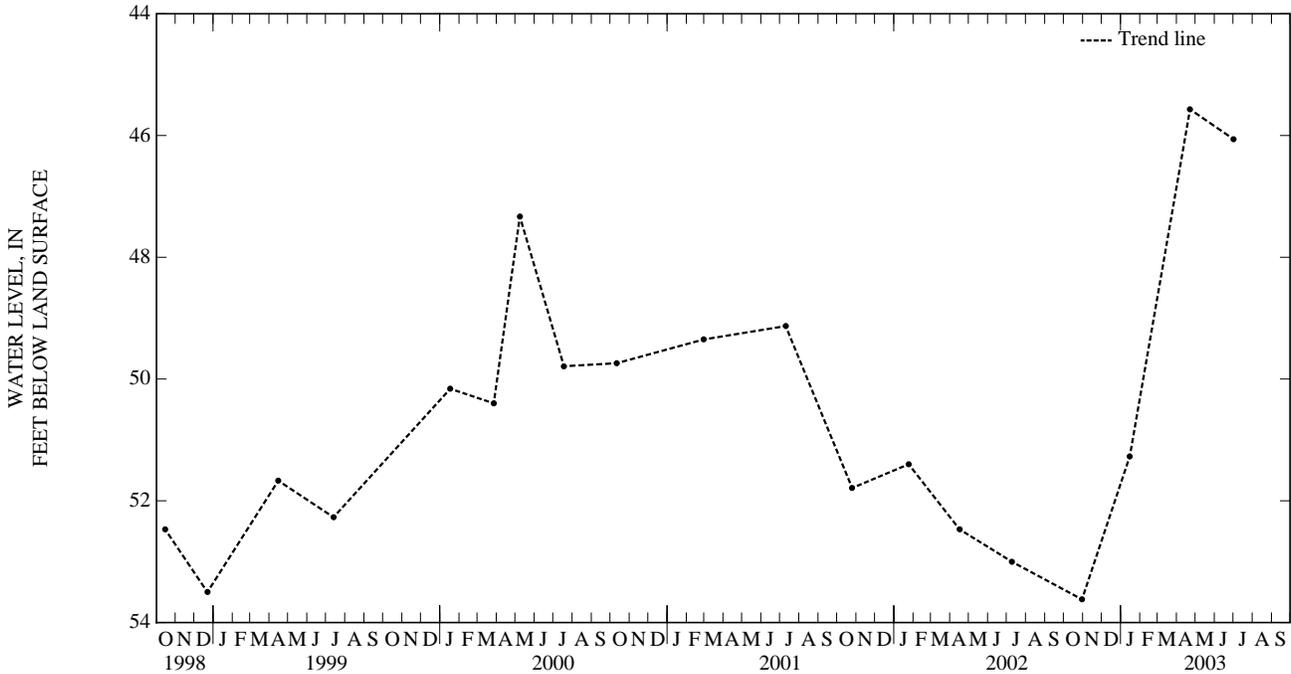
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--November 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.57 ft below land-surface datum, Apr. 22, 2003; lowest measured, 54.44 ft below land-surface datum, Oct. 21 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	53.62	JAN 15	51.27	APR 22	45.57	JUL 01	46.06
WATER YEAR 2003 HIGHEST		45.57 APR 22, 2003		LOWEST		53.62 OCT 30, 2002	



ISLE OF WIGHT COUNTY

364059076544901. Local number, 55B 16.

LOCATION.--Lat 36°41'00", long 76°54'48", NAD83, Hydrologic Unit 03010202, off U.S. Highways 258 and 58, 200 ft west of the intersection of U.S. Highways 258 and 58 and Lynn Road, and 0.3 mi east of Franklin. Owner: International Paper Company, formerly Union Camp Corporation.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

INSTRUMENTATION.--Electronic data logger, 60-minute record interval. May 27, 1988 to Nov. 3, 1999, digital recorder 60-minute punch. Prior to May 27, 1988, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 25 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.45 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

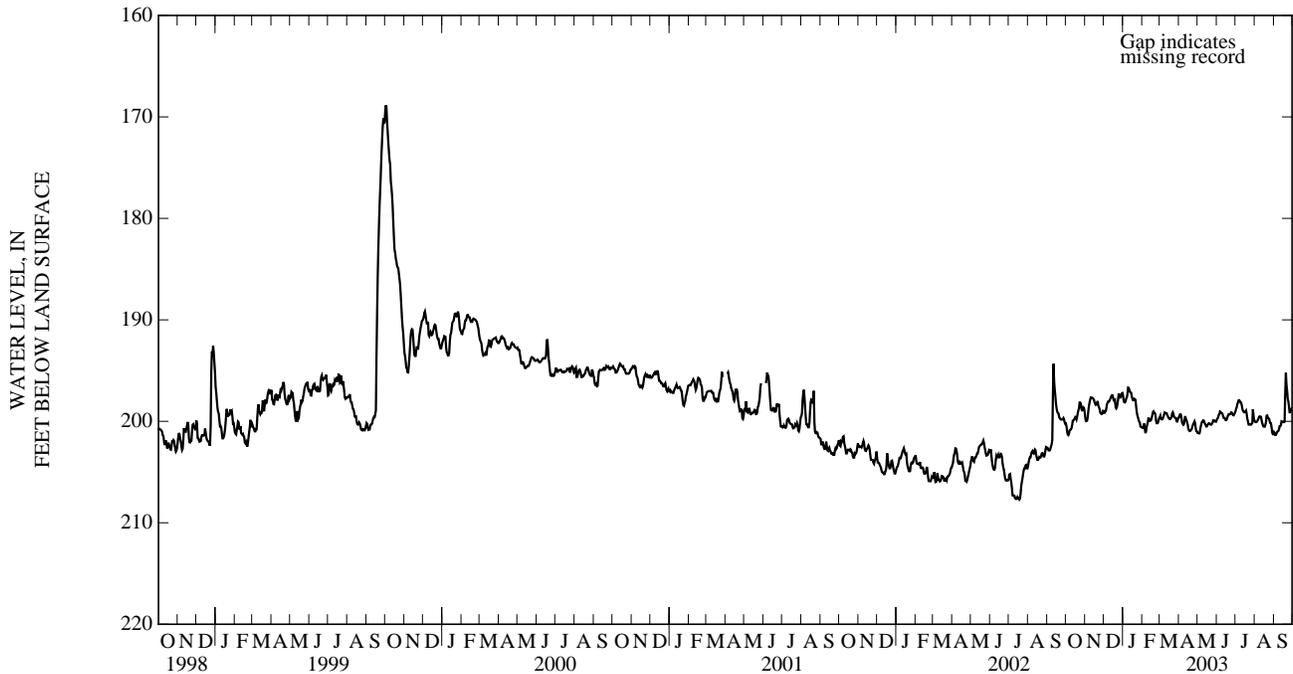
PERIOD OF RECORD.--June 1960 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 99.00 ft below land-surface datum, Dec. 27, 1960; lowest recorded, 216.72 ft below land-surface datum, May 23, 1992.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 192.61 ft below land-surface datum, Sept. 20; lowest instantaneous water level, 201.36 ft below land-surface datum, Oct. 5.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	201.36	199.62	198.74	198.02	200.79	199.81	199.70	200.89	199.31	198.10	199.98	201.20
10	200.66	197.65	197.99	196.70	199.98	199.18	199.85	199.91	199.27	198.17	199.56	200.48
15	199.71	197.87	197.43	197.54	199.86	199.64	200.32	200.51	199.88	199.11	200.51	200.05
20	199.20	198.24	198.64	197.81	199.18	199.58	200.88	200.19	199.30	199.77	199.45	195.22
25	198.26	199.09	197.26	199.62	200.19	199.63	200.14	200.13	199.15	200.32	200.01	198.51
EOM	199.02	198.88	197.21	200.59	199.70	199.66	201.00	200.03	199.18	199.87	201.27	198.71



GROUND-WATER LEVELS
ISLE OF WIGHT COUNTY—Continued

364125076544801. Local number, 55B 36.

LOCATION.--Lat 36°41'26", long 76°54'47", NAD83, Hydrologic Unit 03010202, on Lynn Road, 0.45 mi north of intersection with U.S. Highways 258 and 58, and 0.7 mi northeast of Franklin. Owner: International Paper Company, formerly Union Camp Corporation.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 860 ft, screened 720 to 725 ft, 800 to 805 ft, 855 to 860 ft.

INSTRUMENTATION.--Occasional measurements with chalked tape by USGS personnel. October 1986 to August 1993, continuous strip-chart recorder. September 1983 to October 1986, occasional measurement with chalked tape. October 1982 to September 1983, continuous strip-chart recorder. November 1972 to October 1982, occasional measurement with chalked tape. July 1969 to November 1972, continuous strip-chart recorder. Prior to July 1969, continuous strip-chart recorder and occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 37 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 4.56 ft above land-surface datum.

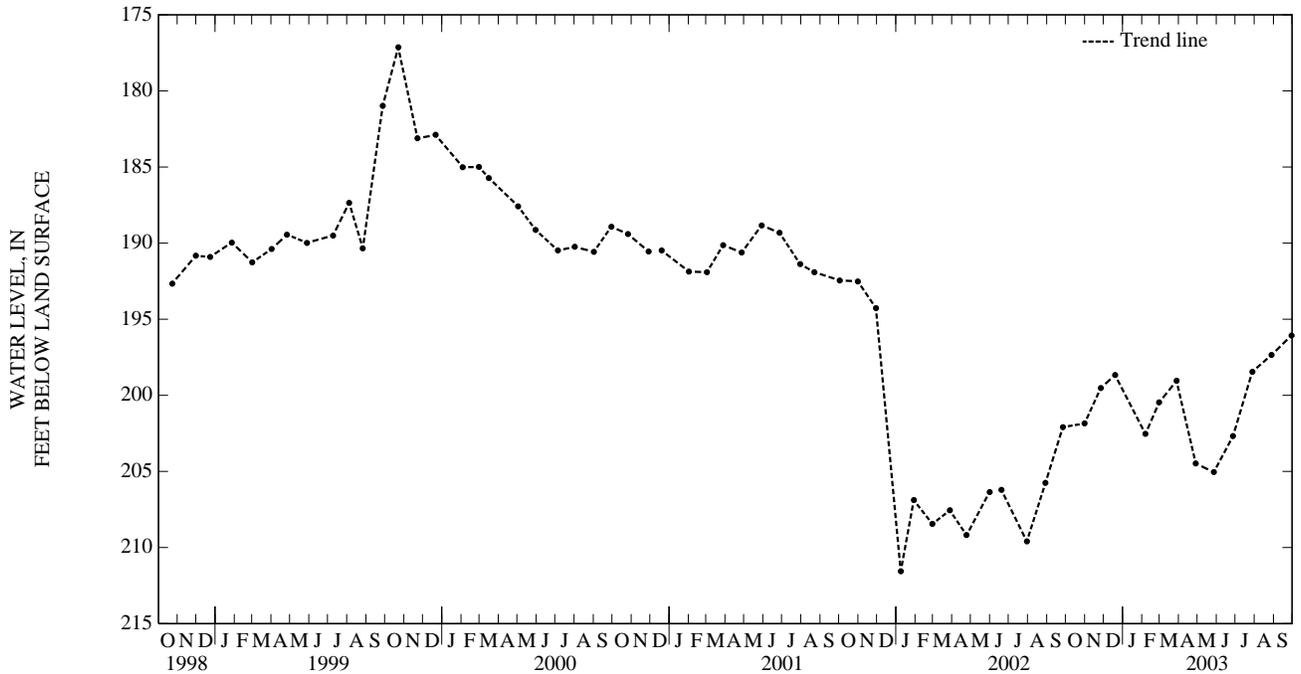
REMARKS.--Water level affected by local pumpage and regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--March 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 156.65 ft below land-surface datum, Dec. 27, 1969; lowest measured, 219.29 ft below land-surface datum, May 18, 1978.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	201.85	DEC 19	198.67	FEB 28	200.47	APR 28	204.48	JUN 27	202.68	AUG 28	197.35
NOV 26	199.52	FEB 06	202.54	MAR 28	199.05	MAY 27	205.05	JUL 28	198.45	SEP 29	196.07
WATER YEAR 2003 HIGHEST 196.07		SEP 29, 2003		LOWEST 205.05		MAY 27, 2003					



ISLE OF WIGHT COUNTY—Continued

364101076544803. Local number, 55B 62 SOW 096B.

LOCATION.--Lat 36°41'02", long 76°54'47", NAD83, Hydrologic Unit 03010202, 200 ft northwest of intersection of U.S. Highways 58 and 258 and Lynn Road, 0.3 mi east of Franklin. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 30.77 ft, screened 25 to 30 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1987 to Oct. 8, 1995, digital recorder 60-minute punch. Prior to Oct. 1, 1987, occasional measurement with chalked tape.

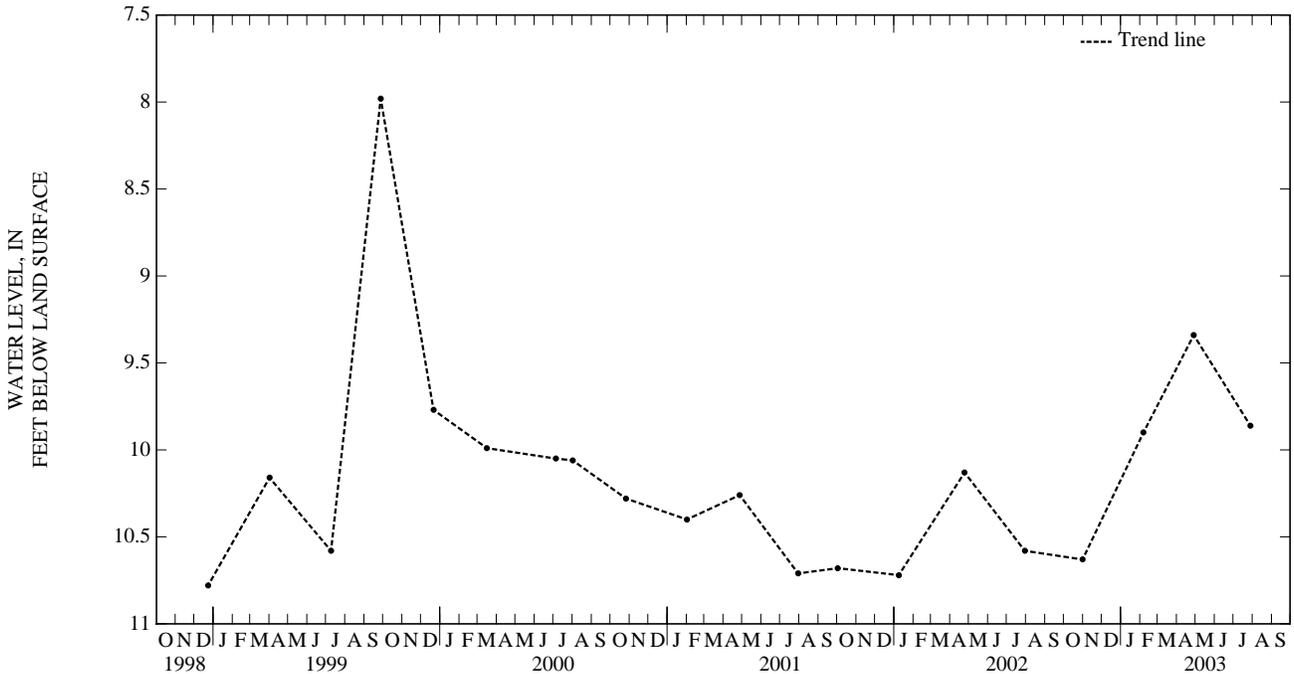
DATUM.--Elevation of land-surface datum is 27 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum.

PERIOD OF RECORD.--May 1979, October 1980 to September 1981, October 1982 to September 1983, October 1984 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.98 ft below land-surface datum, Sept. 27, 1999; lowest measured, 15.38 ft below land-surface datum, Oct. 17, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	10.63	FEB 06	9.90	APR 28	9.34	JUL 28	9.86
WATER YEAR 2003 HIGHEST		9.34 APR 28, 2003		LOWEST		10.63 OCT 31, 2002	



GROUND-WATER LEVELS
ISLE OF WIGHT COUNTY—Continued

364814076440701. Local number, 57C 25 SOW 149A.

LOCATION.--Lat 36°48'15", long 76°44'06", NAD83, Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 26 ft, screened 16 to 26 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1985, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

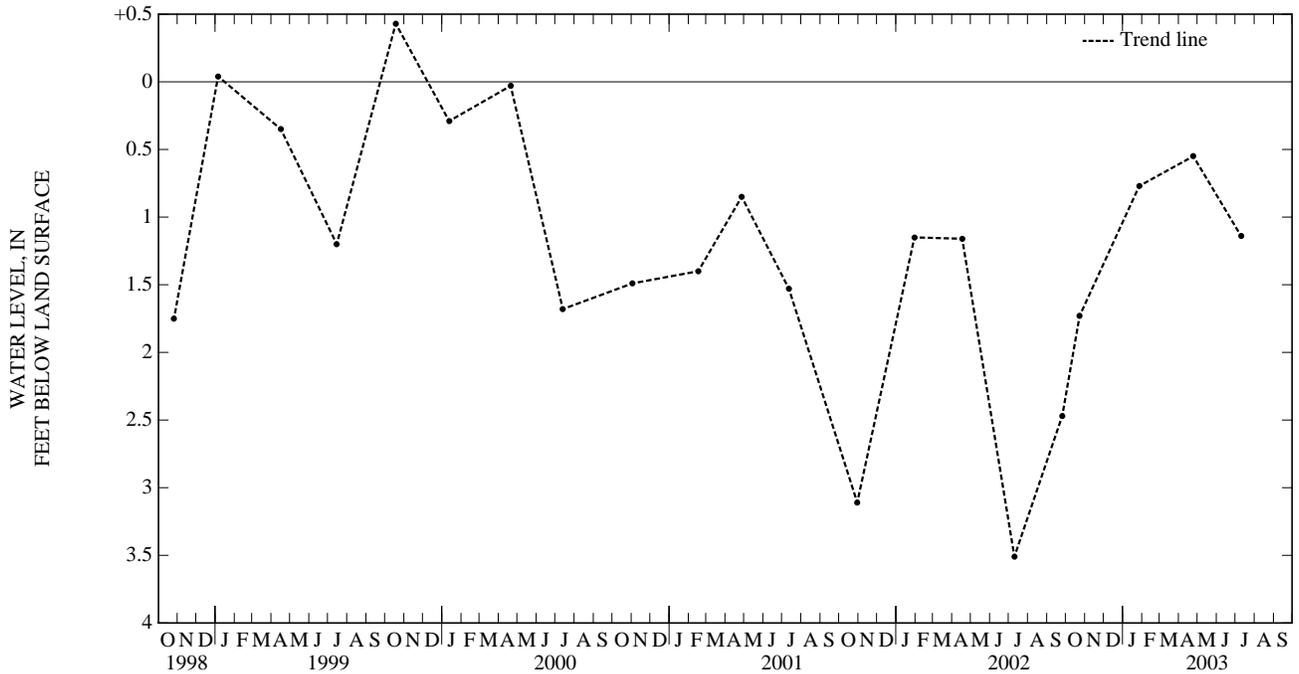
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.43 ft above land-surface datum, Oct. 18, 1999; lowest measured, 3.51 ft below land-surface datum, July 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	1.73	JAN 27	.77	APR 24	.55	JUL 10	1.14
WATER YEAR 2003 HIGHEST		.55	APR 24, 2003 LOWEST		1.73	OCT 23, 2002	



ISLE OF WIGHT COUNTY—Continued

364814076440702. Local number, 57C 26 SOW 149B.

LOCATION.--Lat 36°48'15", long 76°44'06", NAD83, Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 380 ft, screened 370 to 380 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

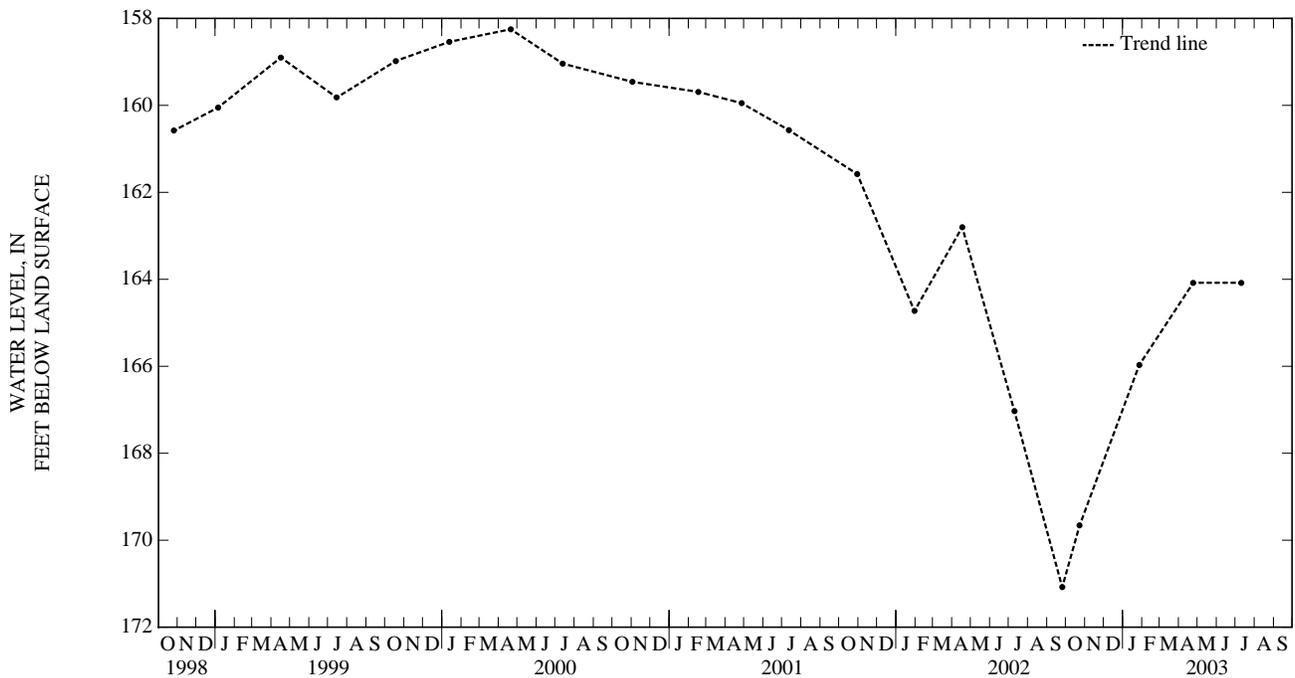
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 144.42 ft below land-surface datum, Feb. 25, 1986; lowest measured, 171.08 ft below land-surface datum, Sept. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	169.66	JAN 27	165.97	APR 24	164.08	JUL 10	164.08
WATER YEAR 2003 HIGHEST		164.08	APR 24, 2003 JUL 10, 2003		LOWEST		169.66
OCT 23, 2002							



ISLE OF WIGHT COUNTY—Continued

364814076440704. Local number, 57C 28 SOW 149D.

LOCATION.--Lat 36°48'15", long 76°44'06", NAD83, Hydrologic Unit 02080208, at Windsor Community Center in Windsor. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 807 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

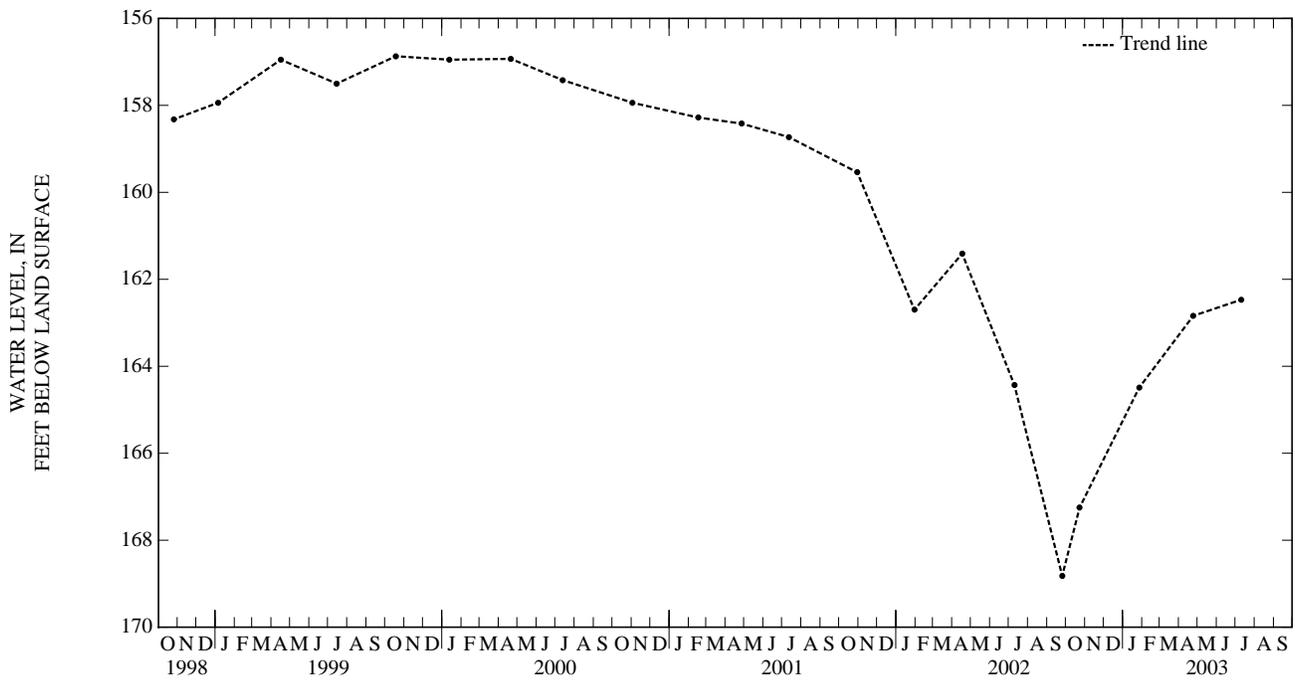
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--March 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 142.80 ft below land-surface datum, Feb. 25, 1986; lowest measured, 168.82 ft below land-surface datum, Sept. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	167.25	JAN 27	164.49	APR 24	162.84	JUL 10	162.47
WATER YEAR 2003 HIGHEST 162.47		JUL 10, 2003		LOWEST 167.25		OCT 23, 2002	



ISLE OF WIGHT COUNTY—Continued

365751076433501. Local number, 57D 21 SOW 143A.

LOCATION.--Lat 36°57'52", long 76°43'34", NAD83, Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 650 ft, screened 640 to 650 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

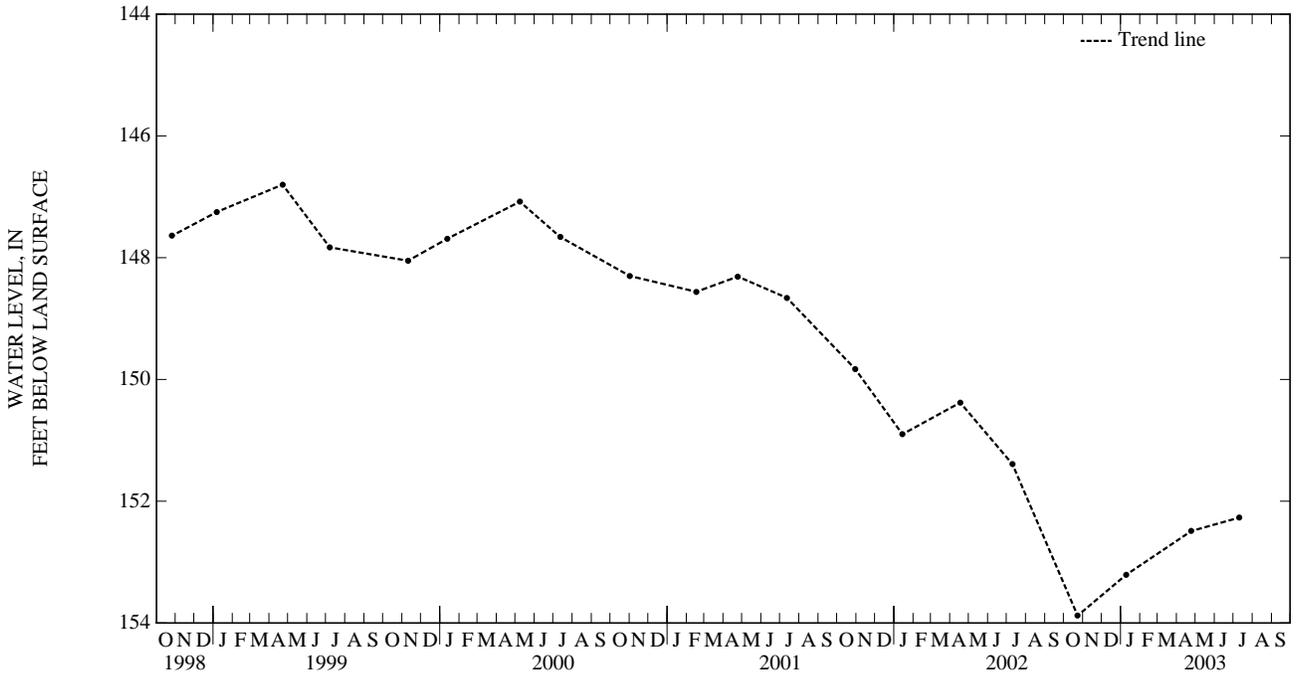
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 122.60 ft below land-surface datum, Aug. 27, 1980; lowest measured, 153.88 ft below land-surface datum, Oct. 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	153.88	JAN 09	153.21	APR 24	152.49	JUL 10	152.27
WATER YEAR 2003 HIGHEST		152.27	JUL 10, 2003 LOWEST		153.88	OCT 23, 2002	



GROUND-WATER LEVELS

ISLE OF WIGHT COUNTY—Continued

365751076433502. Local number, 57D 22 SOW 143B.

LOCATION.--Lat 36°57'52", long 76°43'34", NAD83, Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 350 ft, screened 340 to 350 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

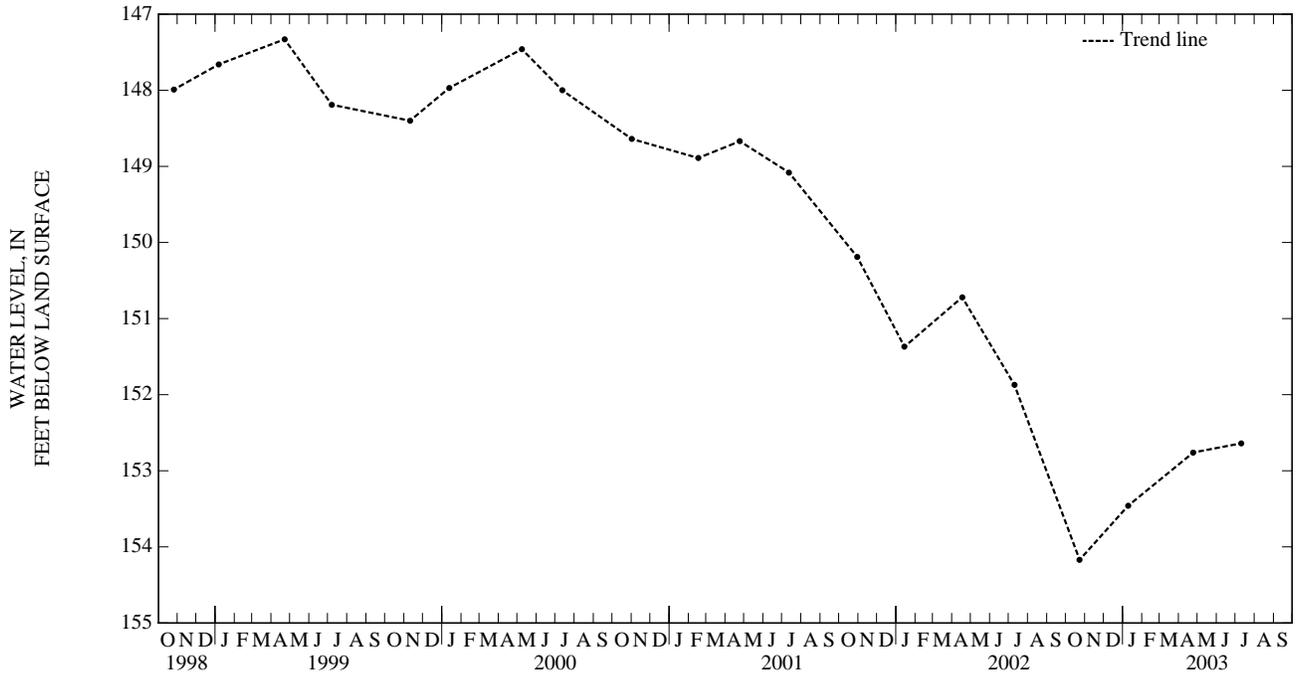
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.10 ft below land-surface datum, Apr. 24 and May 29, 1980; lowest measured, 154.17 ft below land-surface datum, Oct. 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	154.17	JAN 09	153.46	APR 24	152.76	JUL 10	152.64
WATER YEAR 2003 HIGHEST		152.64	JUL 10, 2003 LOWEST		154.17	OCT 23, 2002	



ISLE OF WIGHT COUNTY—Continued

365751076433503. Local number, 57D 23 SOW 143C.

LOCATION.--Lat 36°57'52", long 76°43'34", NAD83, Hydrologic Unit 03010202, 50 ft west of State Highway 652, 0.5 mi south of State Highway 682, and 1.8 mi southwest of Magnet. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 18 ft, screened 8 to 18 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 73 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

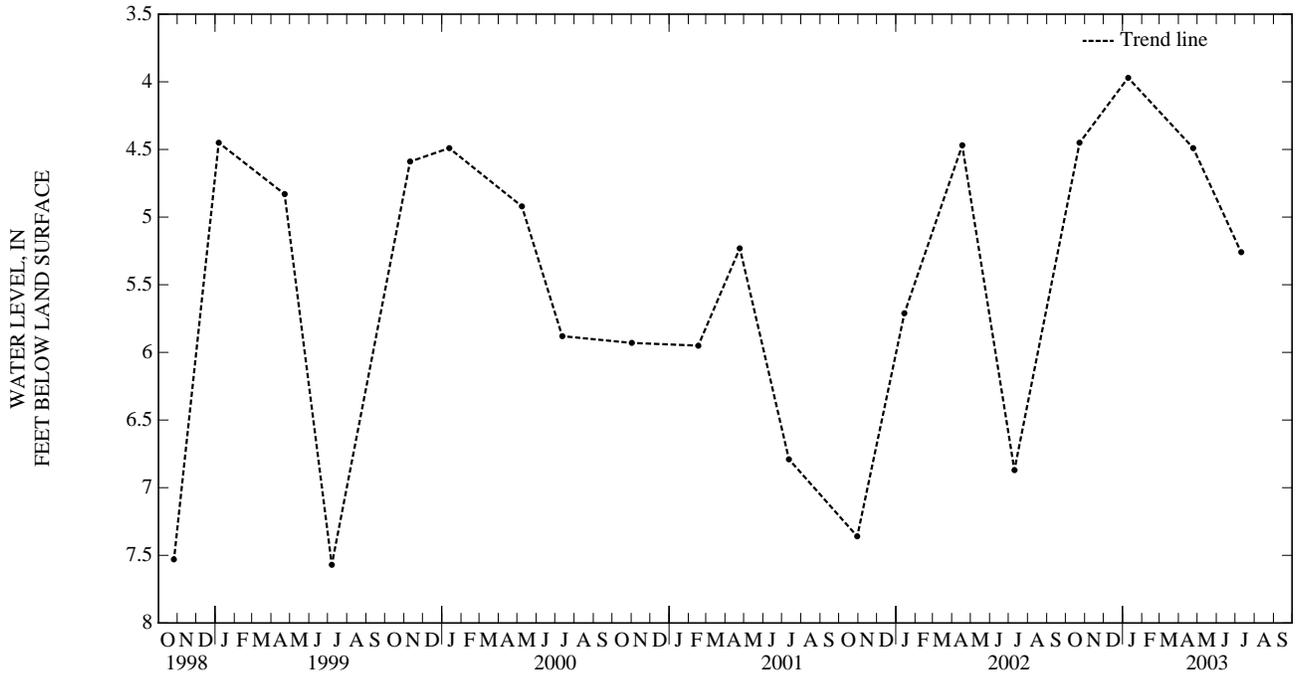
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.29 ft below land-surface datum, Feb. 23, 1987; lowest measured, 8.70 ft below land-surface datum, Aug. 11, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	4.45	JAN 09	3.97	APR 24	4.49	JUL 10	5.26
WATER YEAR 2003 HIGHEST		3.97 JAN 09, 2003		LOWEST		5.26 JUL 10, 2003	



GROUND-WATER LEVELS

ISLE OF WIGHT COUNTY—Continued

370236076425901. Local number, 57E 10 SOW 144B.

LOCATION.--Lat 37°02'54", long 76°43'11", NAD83, Hydrologic Unit 02080206, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 85 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

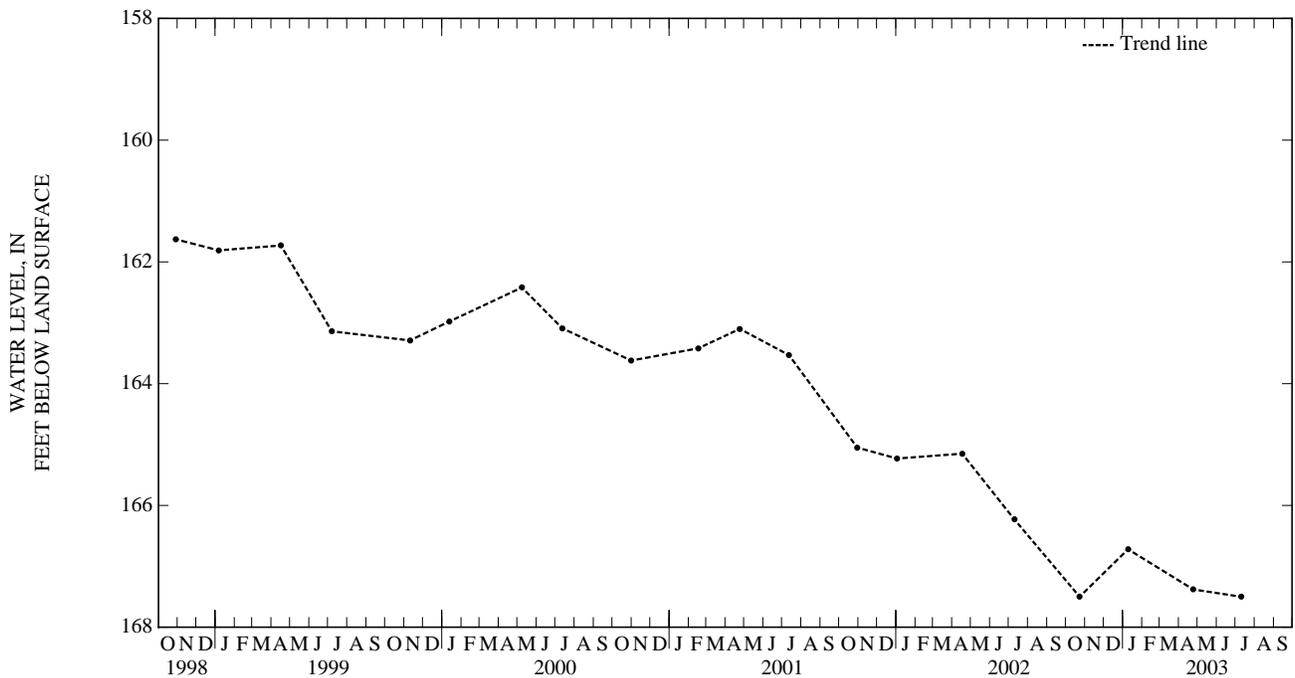
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.90 ft below land-surface datum, Apr. 24, July 24, 1980; lowest measured, 167.50 ft below land-surface datum, Oct. 23, 2002 and July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	167.50	JAN 09	166.72	APR 24	167.38	JUL 10	167.50
WATER YEAR 2003 HIGHEST		166.72 JAN 09, 2003		LOWEST		167.50 OCT 23, 2002 JUL 10, 2003	



ISLE OF WIGHT COUNTY—Continued

370253076431201. Local number, 57E 14 SOW 144A.

LOCATION.--Lat 37°02'54", long 76°43'11", NAD83, Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 590 ft, diameter 3 in. from 590 to 600 ft, depth 600 ft, screened 590 to 600 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

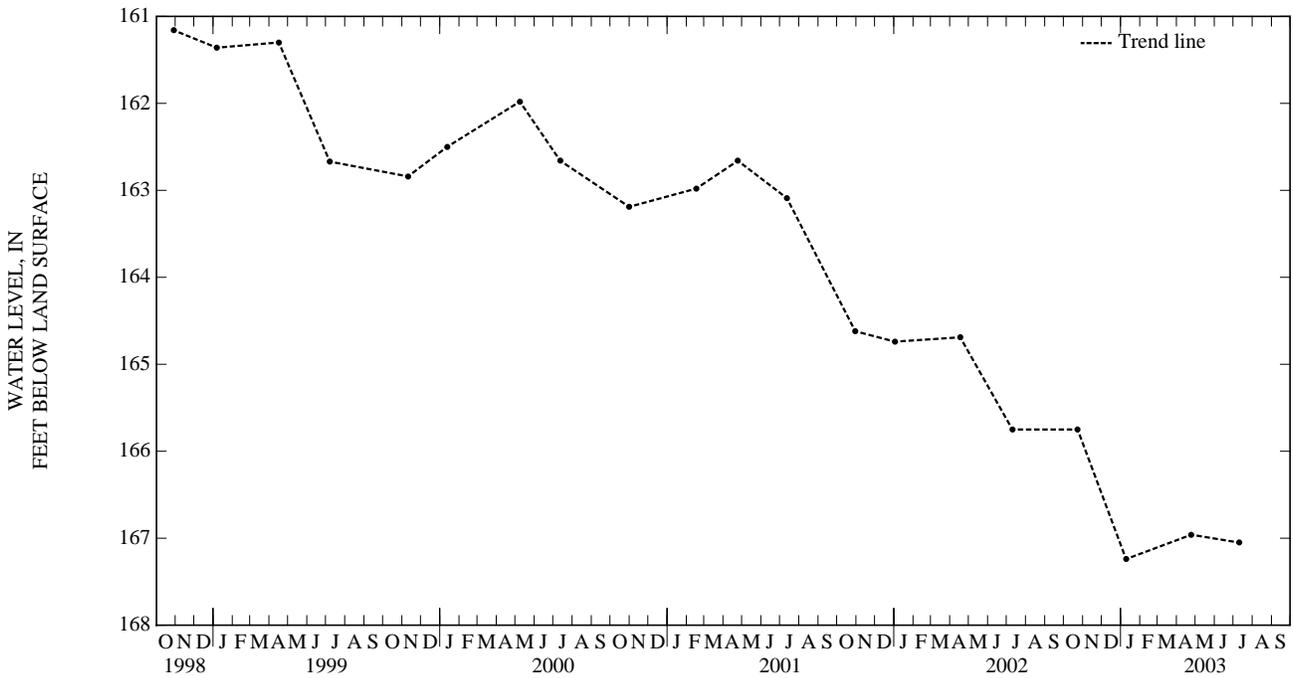
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 139.49 ft below land-surface datum, Apr. 24, 1980; lowest measured, 167.24 ft below land-surface datum, Jan. 9, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	165.75	JAN 09	167.24	APR 24	166.96	JUL 10	167.05
WATER YEAR 2003 HIGHEST 165.75		OCT 23, 2002		LOWEST 167.24		JAN 09, 2003	



GROUND-WATER LEVELS

ISLE OF WIGHT COUNTY—Continued

370253076431202. Local number, 57E 15 SOW 144C.

LOCATION.--Lat 37°02'54", long 76°43'11", NAD83, Hydrologic Unit 02080208, 0.5 mi east of State Highway 627, 1.0 mi north of State Highway 621, and 2.5 mi southwest of Rushmere. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 86 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

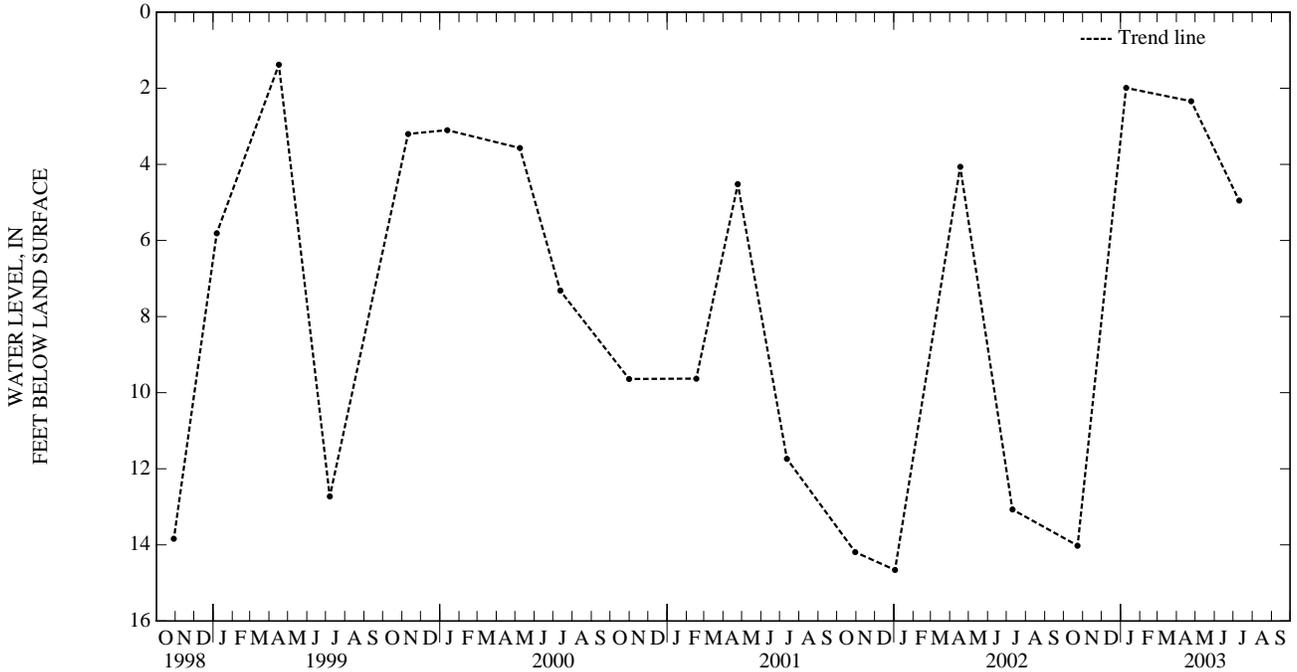
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.88 ft below land-surface datum, Feb. 17, 1994; lowest measured, 14.66 ft below land-surface datum, Jan. 2, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	14.02	JAN 09	1.99	APR 24	2.34	JUL 10	4.95
WATER YEAR 2003 HIGHEST		1.99 JAN 09, 2003		LOWEST		14.02 OCT 23, 2002	



JAMES CITY COUNTY

372546076532901. Local number, 55H 20.

LOCATION.--Lat 37°25'47", long 76°53'28", NAD83, Hydrologic Unit 02080206, 100 ft north of State Highway 603, 700 ft east of the pumping station at Diascund Creek Reservoir, and 0.6 mi northwest of the intersection of U.S. Highway 60 and State Highway 603 in James City County. Owner: City of Newport News.

AQUIFER.--Lower and middle Potomac aquifers of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 735 ft, depth 735 ft, screened 515 to 540 ft, 600 to 620 ft, 630 to 655 ft, 665 to 685 ft, 720 to 730 ft.

INSTRUMENTATION.--Electronic data logger 60-minute record interval. Prior to Nov. 4, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 28 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 3.6 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown.

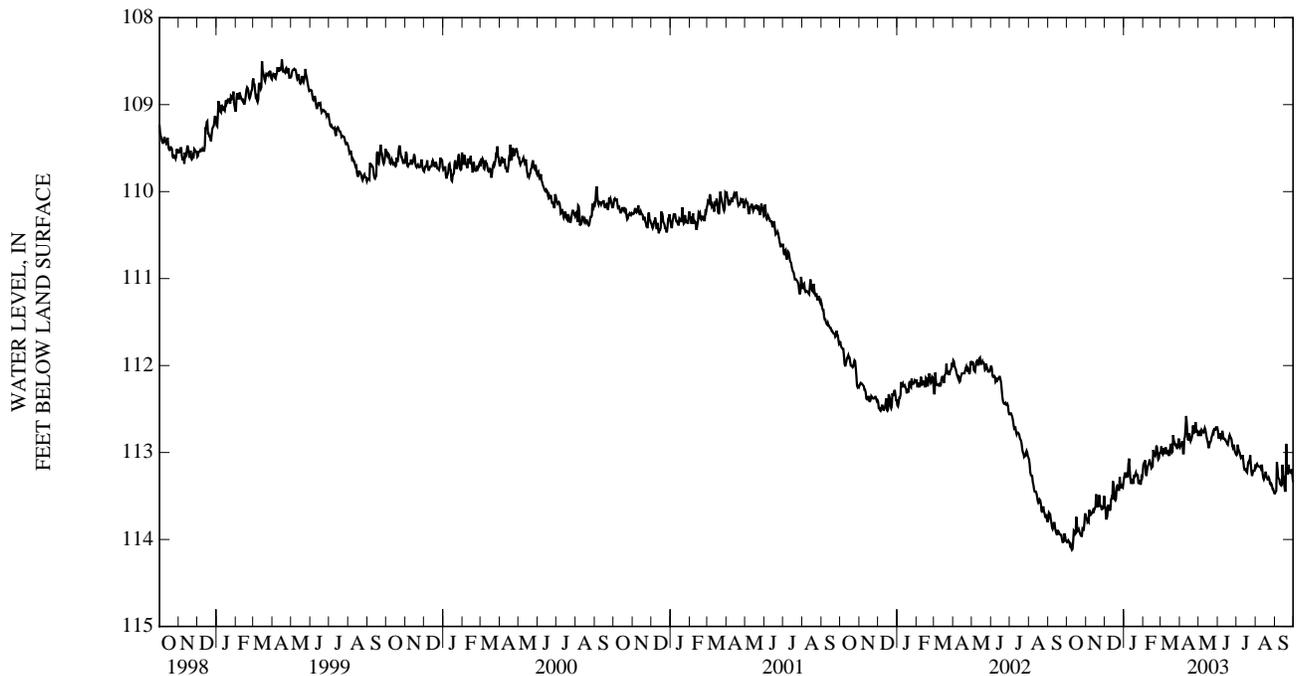
PERIOD OF RECORD.--May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 90.99 ft below land-surface datum, June 4, 1988; lowest recorded, 114.12 ft below land-surface datum, Oct. 9, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 112.17 ft below land-surface datum, Sept. 19; lowest instantaneous water level, 114.12 ft below land-surface datum, Oct. 9.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	114.03	113.80	113.73	113.28	113.24	112.96	112.88	112.80	112.78	112.98	113.16	113.19
10	114.11	113.69	113.65	113.19	113.12	113.01	112.71	112.76	112.84	113.06	113.15	113.37
15	113.93	113.64	113.38	113.34	113.17	113.02	112.84	112.86	112.88	113.20	113.29	113.28
20	113.88	113.62	113.39	113.23	113.04	112.99	112.83	112.88	112.80	113.11	113.31	113.14
25	113.96	113.62	113.28	113.35	113.08	112.92	112.76	112.78	112.94	113.22	113.37	113.22
EOM	113.71	113.50	113.34	113.24	113.00	112.92	112.80	112.71	113.02	113.16	113.47	113.34



GROUND-WATER LEVELS

JAMES CITY COUNTY—Continued

371311076463601. Local number, 56F 1 SOW 018.

LOCATION.--Lat 37°13'12", long 76°46'35", NAD83, Hydrologic Unit 02080206, 1,100 ft southwest of Colonial Parkway, 0.5 mi west of State Highway 682, and 0.6 mi north of Jamestown. Owner: U.S. Department of Interior, Colonial National Historical Park.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 346 ft, screened 336 to 346 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 7, 1995, bimonthly measurement with chalked tape. Sept. 30, 1980, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1980, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top edge of recorder shelf, 3.15 ft above land-surface datum.

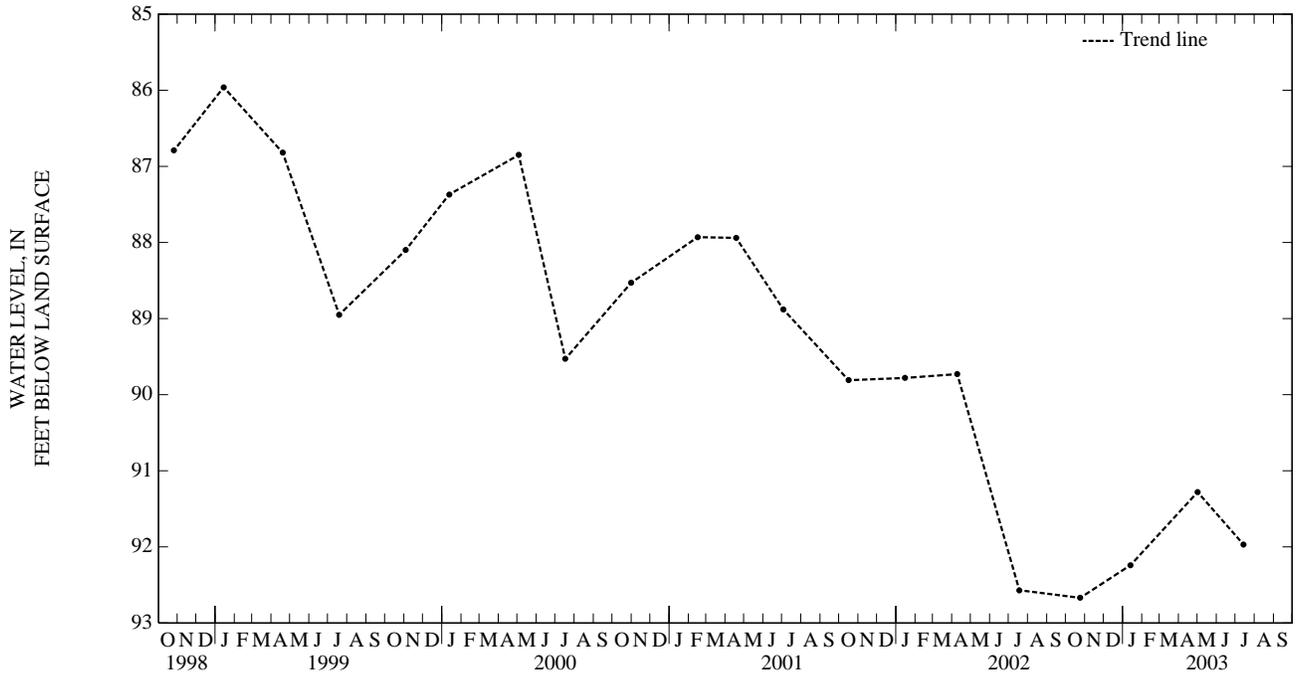
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--May 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.29 ft below land-surface datum, May 8, 1969; lowest measured, 92.67 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	92.67	JAN 13	92.24	MAY 01	91.28	JUL 14	91.97
WATER YEAR 2003 HIGHEST		91.28	MAY 01, 2003 LOWEST		92.67	OCT 24, 2002	



JAMES CITY COUNTY—Continued

372145076493201. Local number, 56G 57.

LOCATION.--Lat 37°21'46", long 76°49'31", NAD83, Hydrologic Unit 02080206, 1.75 mi south of the intersection of U.S. Highway 60 and State Highway 631 (Church Lane), off a dirt road at the end of State Highway 631, and 0.10 mi north of the pump station at Little Creek Reservoir. Owner: City of Newport News.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 12 in. to 300 ft, diameter 6 in. from 300 to 695 ft, depth 695 ft, screened 530 to 540 ft, 558 to 598 ft, 604 to 624 ft, 660 to 690 ft.

INSTRUMENTATION.--Electronic data logger 60-minute record interval. Prior to Nov.4, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 84 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 4.3 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown.

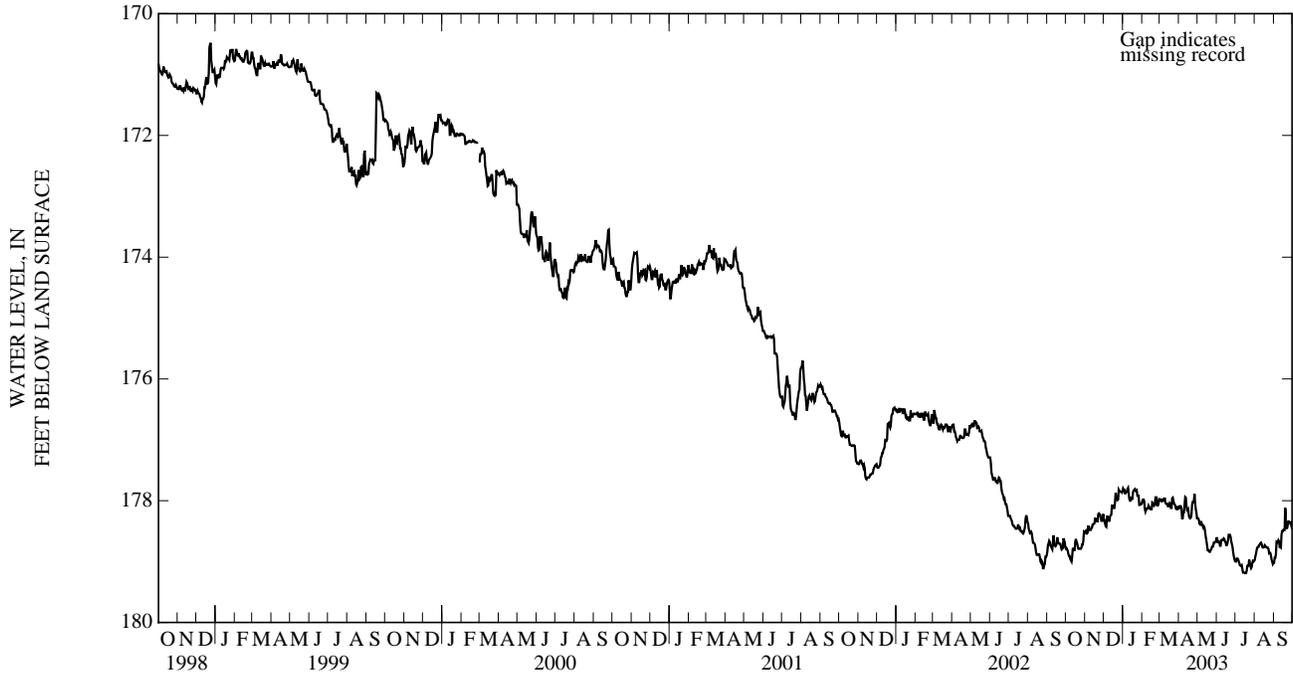
PERIOD OF RECORD.--May 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 155.79 ft below land-surface datum, May 25, 1988; lowest recorded, 179.19 ft below land-surface datum, July 16-18, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 177.63 ft below land-surface datum, Dec. 25; lowest instantaneous water level, 179.19 ft below land-surface datum, July 16-18.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	178.88	178.52	178.43	177.88	178.14	177.99	178.13	178.39	178.68	178.96	178.77	178.68
10	179.00	178.48	178.33	177.88	178.12	178.03	178.06	178.44	178.64	179.07	178.70	178.76
15	178.81	178.38	178.08	177.97	178.14	178.09	178.17	178.65	178.68	179.18	178.77	178.50
20	178.75	178.34	177.87	177.81	178.08	178.12	178.28	178.84	178.56	179.07	178.77	178.32
25	178.79	178.23	177.82	177.92	178.08	178.06	178.00	178.75	178.71	179.08	178.85	178.34
EOM	178.52	178.22	177.85	178.05	177.98	178.13	178.29	178.66	178.99	178.99	179.02	178.46



GROUND-WATER LEVELS

JAMES CITY COUNTY—Continued

372314076480401. Local number, 56H 22 SOW 135A.

LOCATION.--Lat 37°23'14", long 76°48'05", NAD83, Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of U.S. Highway 60 and State Highway 754, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 2 in., depth 645 ft, screened 625 to 645 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 105 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.50 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.50 ft below land-surface datum prior to May 5, 1997; 0.85 ft below land surface datum thereafter.

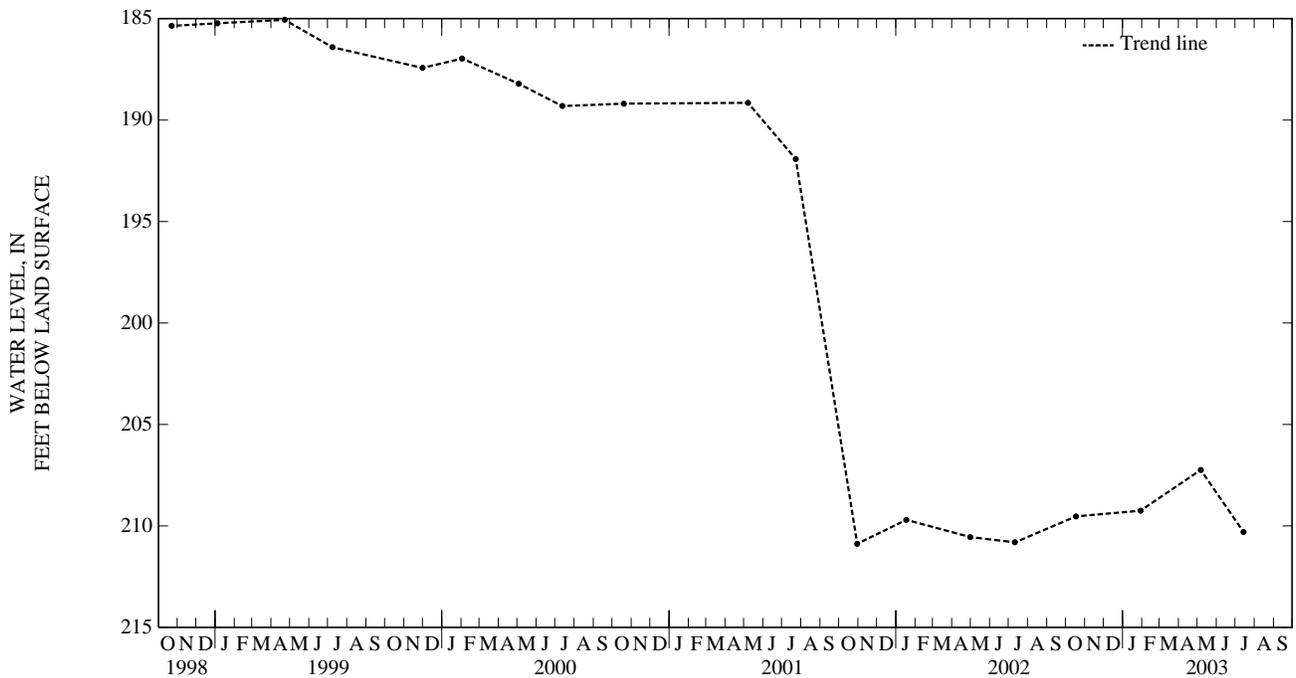
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown and occasional local pumpage.

PERIOD OF RECORD.--March 1979 to October 1995, May 1997 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 154.85 ft below land-surface datum, Apr. 5, 1979; lowest measured, 210.88 ft below land-surface datum, Oct. 30, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	209.53	JAN 29	209.25	MAY 06	207.24	JUL 14	210.30
WATER YEAR 2003 HIGHEST		207.24	MAY 06, 2003		LOWEST	210.30	JUL 14, 2003



JAMES CITY COUNTY—Continued

372506076511701. Local number, 56H 25 SOW 177A.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 929 ft, screened 888 to 908 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 28, 1995 to Sept. 30, 1999, occasional measurement with chalked tape by USGS personnel. Sept. 25, 1991 to Sept. 28, 1995, monthly measurement with chalked tape. Apr. 20, 1988 to Sept. 25, 1991, occasional measurement with chalked tape. Prior to Apr. 20, 1988, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum prior to Mar. 31, 1994; 1.00 ft thereafter.

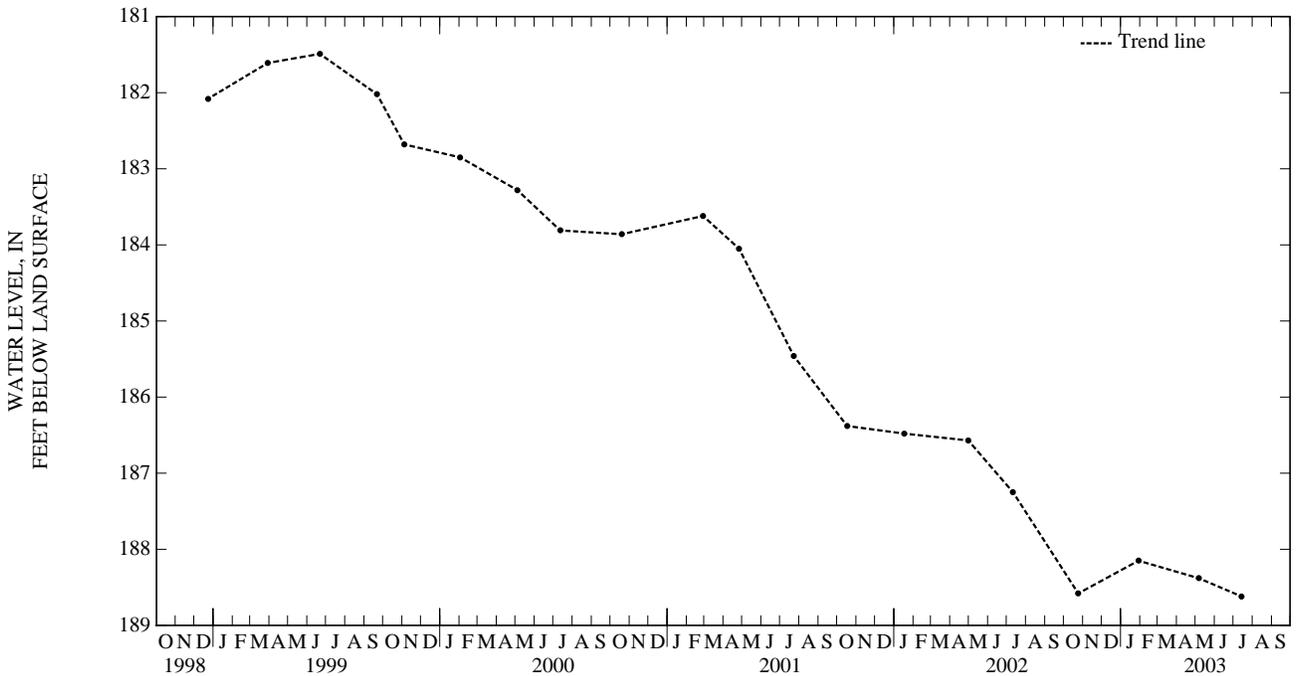
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 158.21 ft below land-surface datum, Mar. 19, 20, 1986; lowest measured, 188.62 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	188.58	JAN 29	188.15	MAY 06	188.38	JUL 14	188.62
WATER YEAR 2003 HIGHEST 188.15		JAN 29, 2003		LOWEST 188.62		JUL 14, 2003	



GROUND-WATER LEVELS

JAMES CITY COUNTY—Continued

372506076511702. Local number, 56H 26 SOW 177B.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 581 ft, screened 550 to 560 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 28, 1995 to Sept. 30, 1999, occasional measurement with chalked tape by USGS personnel. Sept. 25, 1991 to Sept. 28, 1995, monthly measurement with chalked tape. Prior to Sept. 25, 1991, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.15 ft above land-surface datum prior to Mar. 31, 1994; 0.65 ft thereafter.

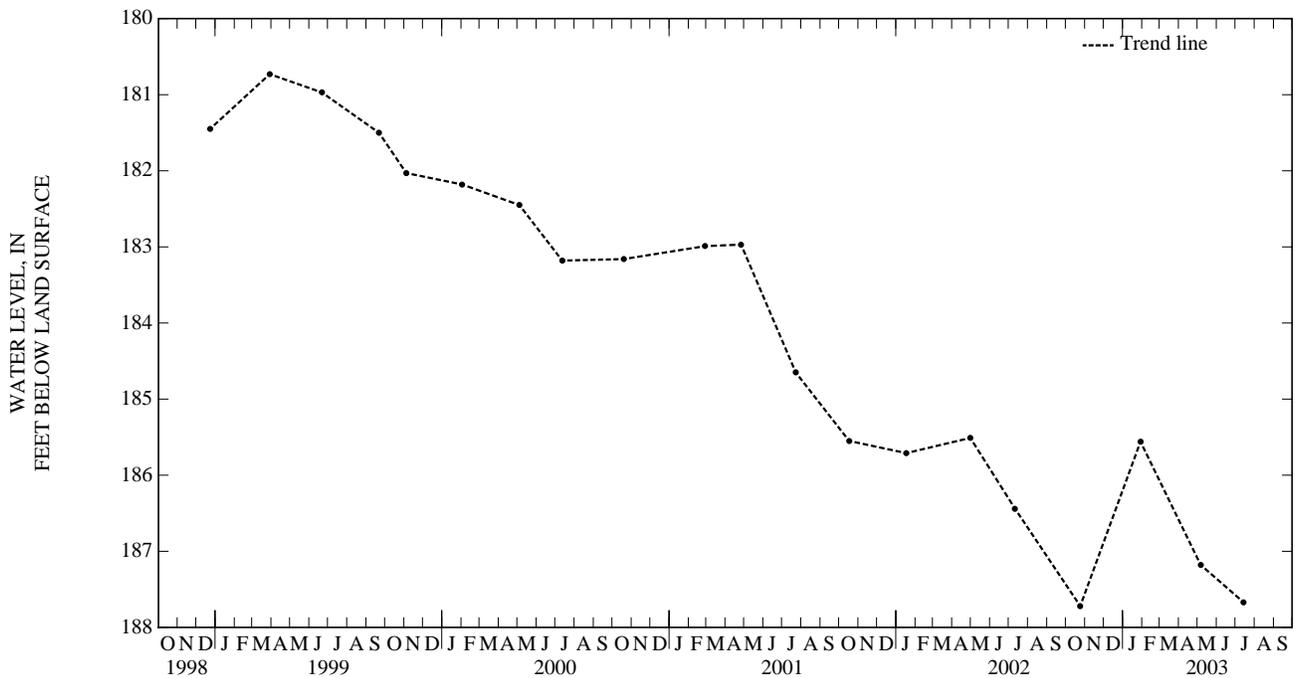
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records prior to October 1986 and fragmentary periods of continuous record for water years 1985-89 available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 157.61 ft below land-surface datum, June 1, 2, 1985; lowest measured, 187.72 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	187.72	JAN 29	185.56	MAY 06	187.18	JUL 14	187.67
WATER YEAR 2003 HIGHEST 185.56		JAN 29, 2003		LOWEST 187.72		OCT 24, 2002	



JAMES CITY COUNTY—Continued

372506076511703. Local number, 56H 27 SOW 177C.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 401 ft, screened 370 to 380 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 26, 1993 to Sept. 30, 1999, monthly measurement with chalked tape by USGS personnel. Prior to Aug. 26, 1993, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.95 ft above land-surface datum prior to Mar. 31, 1994; 1.35 ft thereafter.

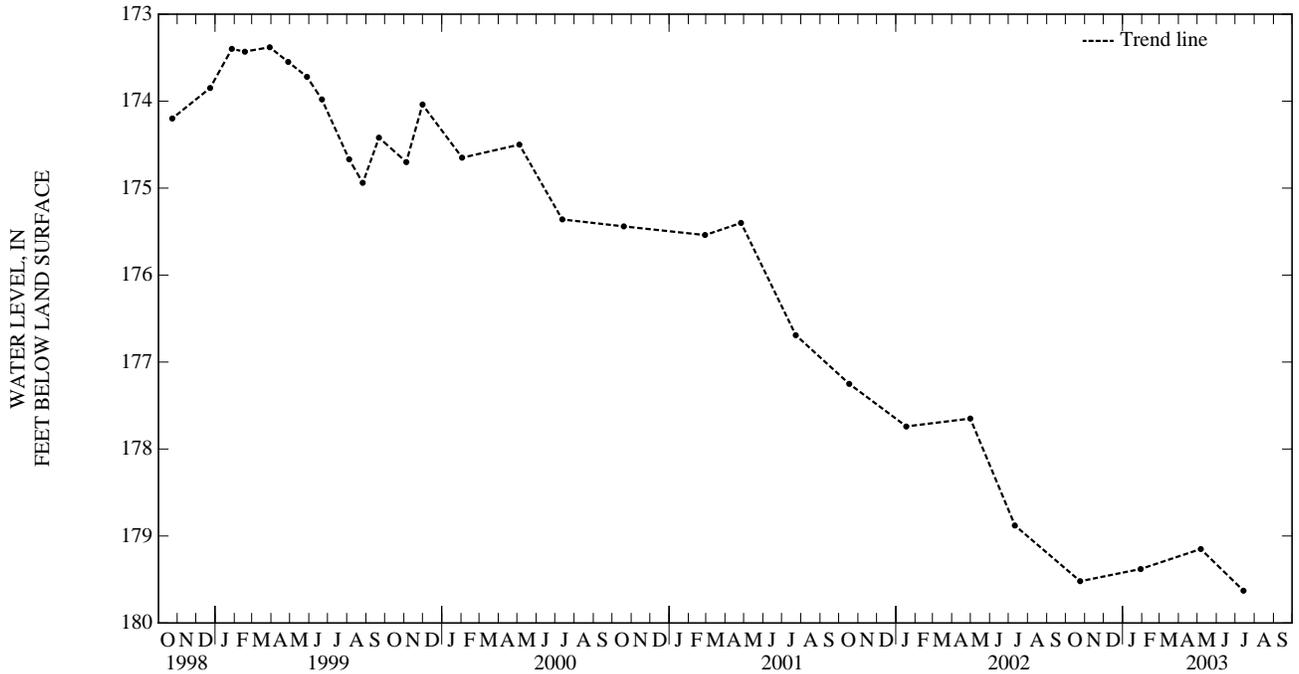
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 153.47 ft below land-surface datum, June 1, 2, 1985; lowest measured, 179.63 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	179.52	JAN 29	179.38	MAY 06	179.15	JUL 14	179.63
WATER YEAR 2003 HIGHEST		179.15 MAY 06, 2003		LOWEST		179.63 JUL 14, 2003	



GROUND-WATER LEVELS

JAMES CITY COUNTY—Continued

372506076511704. Local number, 56H 28 SOW 177D.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168, 0.7 mi north of the intersection of State Highways 168 and 601, and on the northwest side of State Highway 601 in James City County. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 321 ft, screened 290 to 300 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 28, 1995 to Sept. 30, 1999, occasional measurement with chalked tape by USGS personnel. Sept. 25, 1991 to Sept. 28, 1995, monthly measurement with chalked tape. Sept. 16, 1989 to Sept. 25, 1991, occasional measurement with chalked tape. Prior to Sept. 16, 1989, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum prior to Dec. 4, 1989; 0.9 ft thereafter.

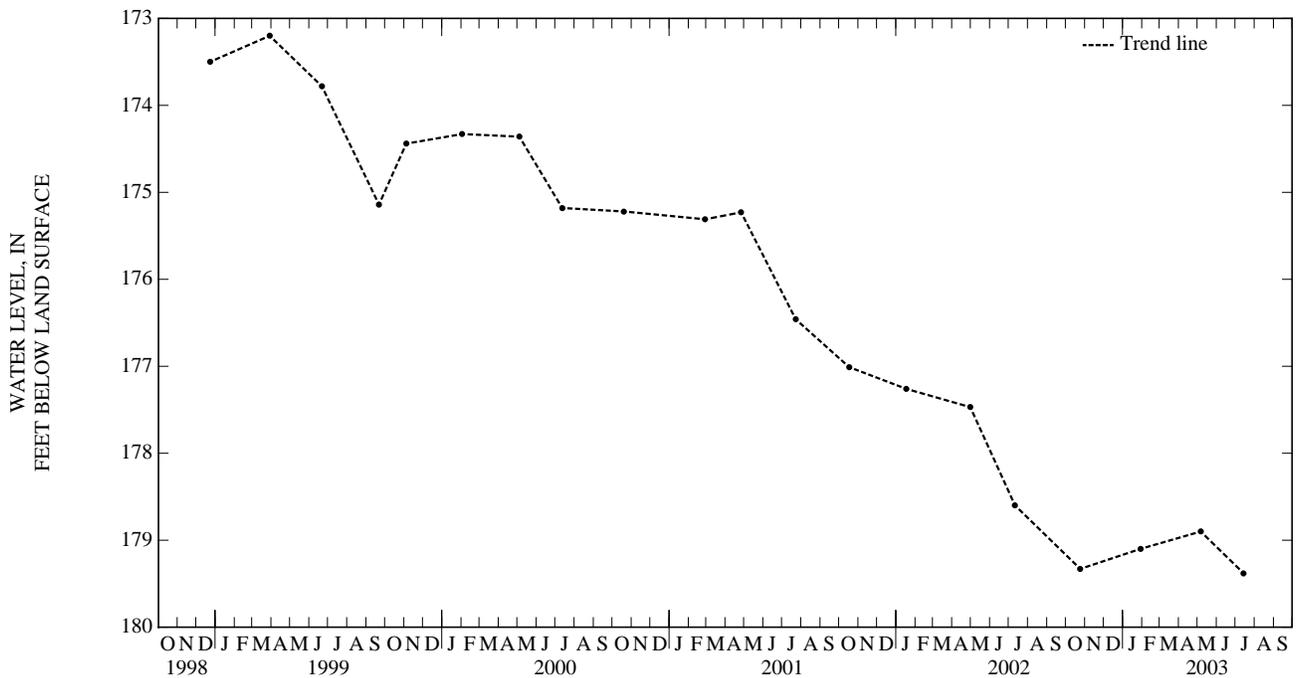
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 153.20 ft below land-surface datum, May 31, 1985; lowest measured, 179.38 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	179.33	JAN 29	179.10	MAY 06	178.90	JUL 14	179.38
WATER YEAR 2003 HIGHEST		178.90	MAY 06, 2003 LOWEST		179.38	JUL 14, 2003	



JAMES CITY COUNTY—Continued

372506076511705. Local number, 56H 29 SOW 177E.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 235 ft, screened 204 to 214 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 28, 1995 to Sept. 30, 1999, occasional measurement with chalked tape by USGS personnel. Sept. 25, 1991 to Sept. 28, 1995, monthly measurement with chalked tape. Sept. 21, 1989 to Sept. 25, 1991, occasional measurement with chalked tape. Prior to Sept. 21, 1989, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum prior to Dec. 4, 1989; 0.75 ft thereafter.

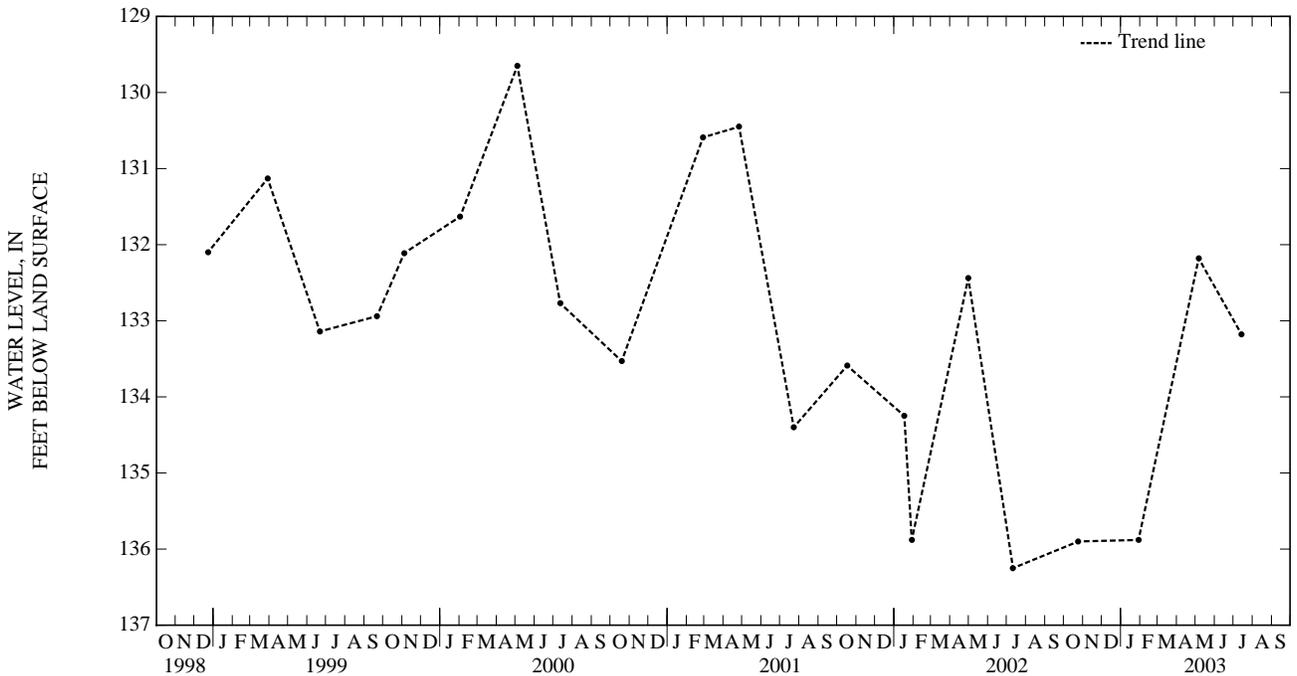
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.96 ft below land-surface datum, Feb. 27, 1986; lowest measured, 136.25 ft below land-surface datum, July 11, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	135.90	JAN 29	135.88	MAY 06	132.18	JUL 14	133.18
WATER YEAR 2003 HIGHEST		132.18	MAY 06, 2003 LOWEST		135.90	OCT 24, 2002	



GROUND-WATER LEVELS

JAMES CITY COUNTY—Continued

372506076511706. Local number, 56H 30 SOW 177F.

LOCATION.--Lat 37°24'52", long 76°51'32", NAD83, Hydrologic Unit 02080206, on the northwest side of State Highway 601 in James City County, 0.7 mi north of the intersection of State Highways 168 and 601, and 3.15 mi west of the intersection of U.S. Highway 60 and State Highway 168. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Divison personnel. Sept. 28, 1995 to Sept. 30, 1999, occasional measurement with chalked tape by USGS personnel. Sept. 25, 1991 to Sept. 28, 1995, monthly measurement with chalked tape. Sept. 20, 1989 to Sept. 25, 1991, occasional measurement with chalked tape. Prior to Sept. 20, 1989, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 103 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum prior to Dec. 4, 1989; 1.1 ft thereafter.

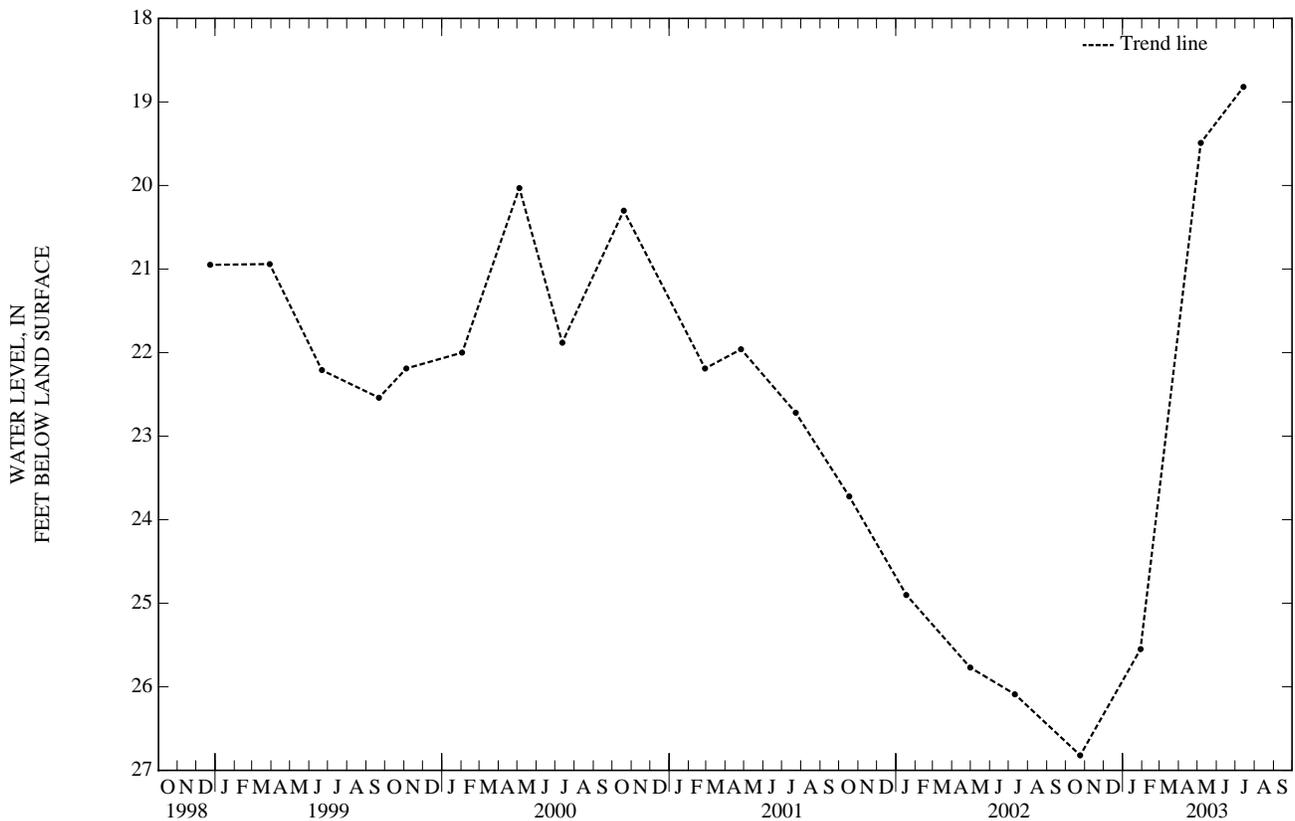
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Divison.

PERIOD OF RECORD.--April 1985 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.73 ft below land-surface datum, June 29, 1998; lowest measured, 26.82 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	26.82	JAN 29	25.55	MAY 06	19.49	JUL 14	18.82
WATER YEAR 2003 HIGHEST		18.82	JUL 14, 2003 LOWEST		26.82	OCT 24, 2002	



JAMES CITY COUNTY—Continued

372314076480402. Local number, 56H 31 SOW 135B.

LOCATION.--Lat 37°23'14", long 76°48'05", NAD83, Hydrologic Unit 02080107, 100 ft south of State Highway 754, 0.2 mi east of intersection of State Highway 754 and U.S. Highway 60, and 0.5 mi north of Toano. Owner: James City Service Authority.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 30 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 3, 1988; at land-surface datum Mar. 3, 1988, to Mar. 1, 1989; 0.2 ft below land-surface datum prior to May 5, 1997; 0.95 ft below land surface datum thereafter.

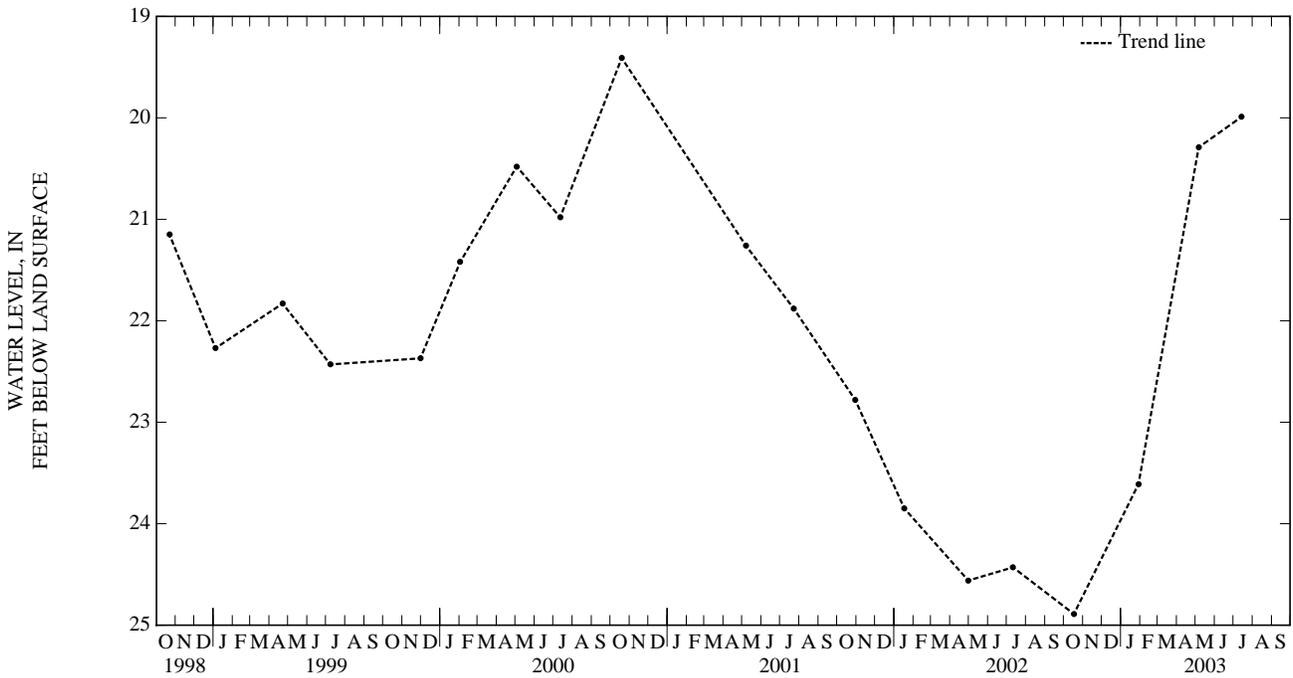
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--August 1979 to October 1995, May 1997 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 16.28 ft below land-surface datum, June 8, 1984; lowest measured, 24.89 ft below land-surface datum, Oct. 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	24.89	JAN 29	23.61	MAY 06	20.29	JUL 14	19.99
WATER YEAR 2003 HIGHEST		19.99	JUL 14, 2003 LOWEST		24.89	OCT 17, 2002	



GROUND-WATER LEVELS
 JAMES CITY COUNTY—Continued

372315076415001. Local number 57H 14 SOW 095.

LOCATION.--Lat 37°23'16", long 76°41'49", NAD83, Hydrologic Unit 02080107, 500 ft north of State Highway 606, 0.8 mi east of intersection of State Highway 606 and 646, and 3.3 mi east of Croaker. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 123 ft, screened 118 to 123 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Mar. 3, 1988; 1.4 ft thereafter.

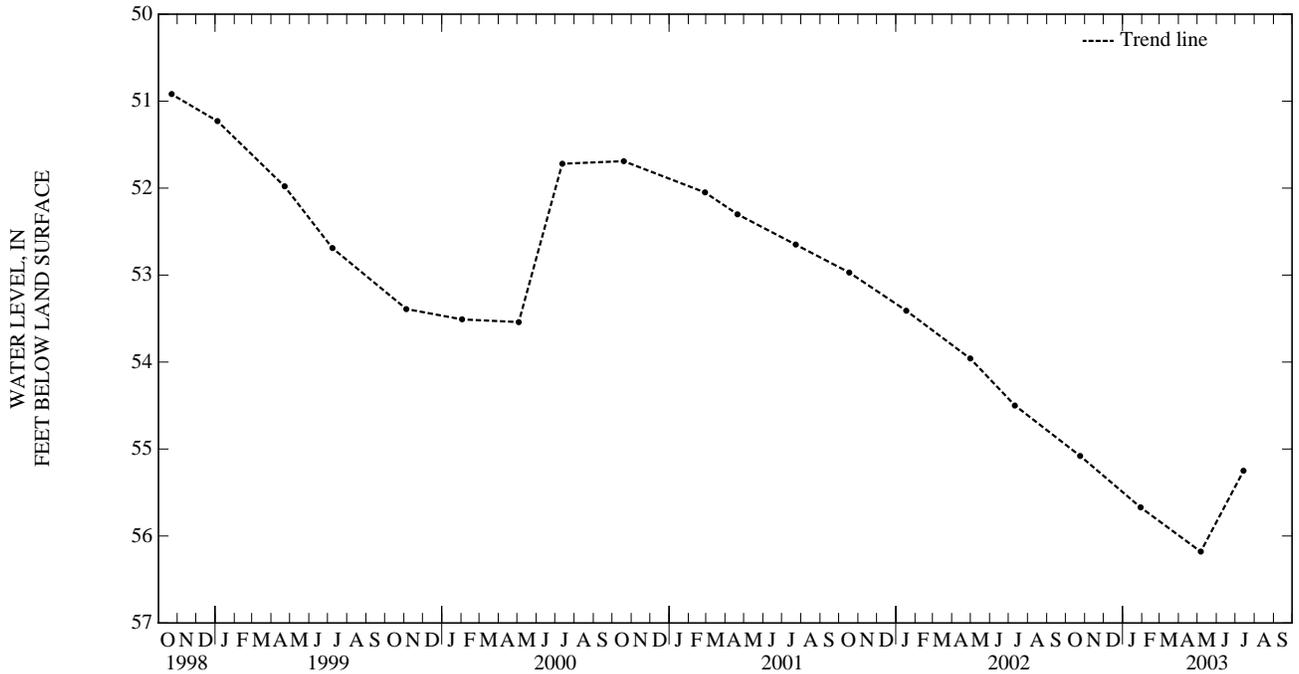
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--September 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 45.00 ft below land-surface datum, Sept. 21, 1978; lowest measured, 56.18 ft below land-surface datum, May 6, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	55.08	JAN 29	55.67	MAY 06	56.18	JUL 14	55.25
WATER YEAR 2003 HIGHEST 55.08		OCT 24, 2002		LOWEST 56.18		MAY 06, 2003	



KING AND QUEEN COUNTY

374328077012801. Local number, 54K 6 SOW 064.

LOCATION.--Lat 37°43'29", long 77°01'27", NAD83, Hydrologic Unit 02080105, 100 ft west of State Highway 629, 0.2 mi southeast of Walkerton, and 0.25 mi south of intersection of State Highways 629 and 634. Owner: C. L. Walker.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 66 ft, diameter 4 in. from 66 to 390 ft, depth 390 ft, screened 341 to 372 ft, 376 to 387 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 3, 1985, to July 11, 1995, bimonthly measurement with chalked tape. Apr. 30, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Jan. 5, 1974, to Apr. 30, 1979, continuous strip-chart recorder. Prior to Jan. 5, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.17 ft above land-surface datum prior to Nov. 18, 1985; 1.3 ft thereafter.

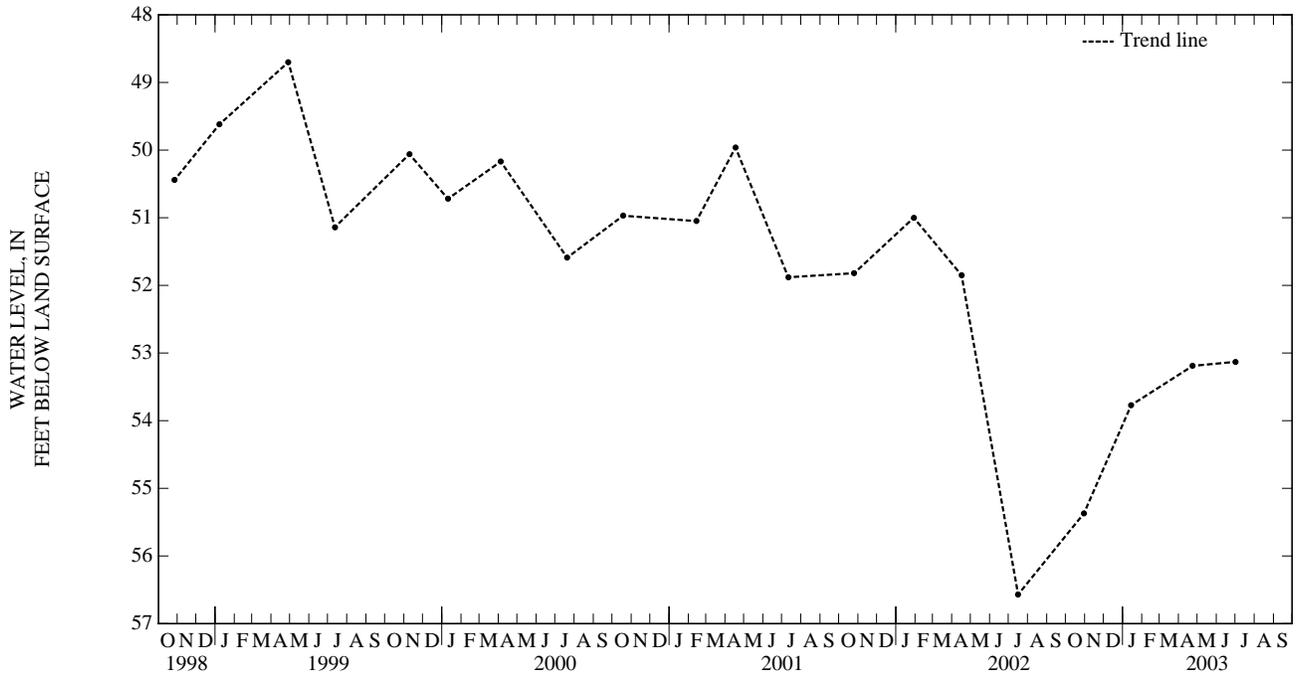
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--August 1972 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.82 ft below land-surface datum, Aug. 1, 1972; lowest measured, 56.57 ft below land-surface datum, July 16 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	55.37	JAN 14	53.77	APR 23	53.19	JUL 01	53.13
WATER YEAR 2003 HIGHEST		53.13	JUL 01, 2003 LOWEST		55.37	OCT 30, 2002	



GROUND-WATER LEVELS
KING AND QUEEN COUNTY—Continued

374739077052701. Local number, 54L 10.

LOCATION.--Lat 37°47'40", long 77°05'26", NAD83, Hydrologic Unit 02080105, at Virginia Department of Transportation wayside picnic table, 50 ft north of U.S. Highway 360 and 1 mi. east of Mattaponi River. Owner: U.S. Geological Survey.

AQUIFER.--Chickhominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 96.21 ft, screened 86.21 ft to 96.21 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to October 1998, monthly measurement with chalked tape.

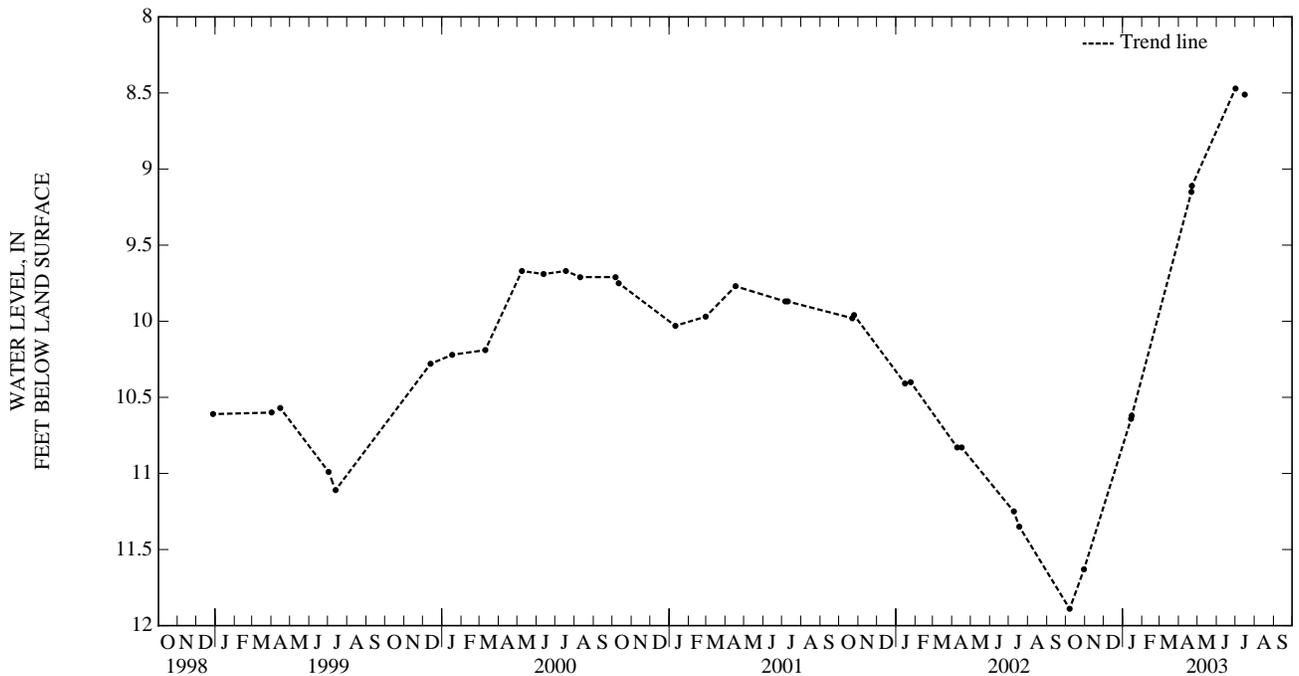
DATUM.--Elevation of land-surface datum is 52 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 3.06 ft above land-surface datum.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.89 ft below land-surface datum, Apr. 23, 1998; lowest measured, 11.89 ft below land-surface datum, Oct. 7, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	11.89	JAN 14	10.64	APR 21	9.15	JUL 01	8.47
30	11.63	15	10.62	22	9.11	16	8.51
WATER YEAR 2003 HIGHEST		8.47 JUL 01, 2003		LOWEST		11.89 OCT 07, 2002	



KING AND QUEEN COUNTY—Continued

373126076454101. Local number, 56J 11 SOW 073.

LOCATION.--Lat 37°31'27", long 76°45'40", NAD83, Hydrologic Unit 02080105, at West Point Airport, 1.7 mi southeast of West Point. Owner: Smurfit-Stone Container Corporation.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 1,254 ft, screened 1,233 to 1,248 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum; prior to Mar. 15, 1993, top of casing, 0.6 ft above land-surface datum.

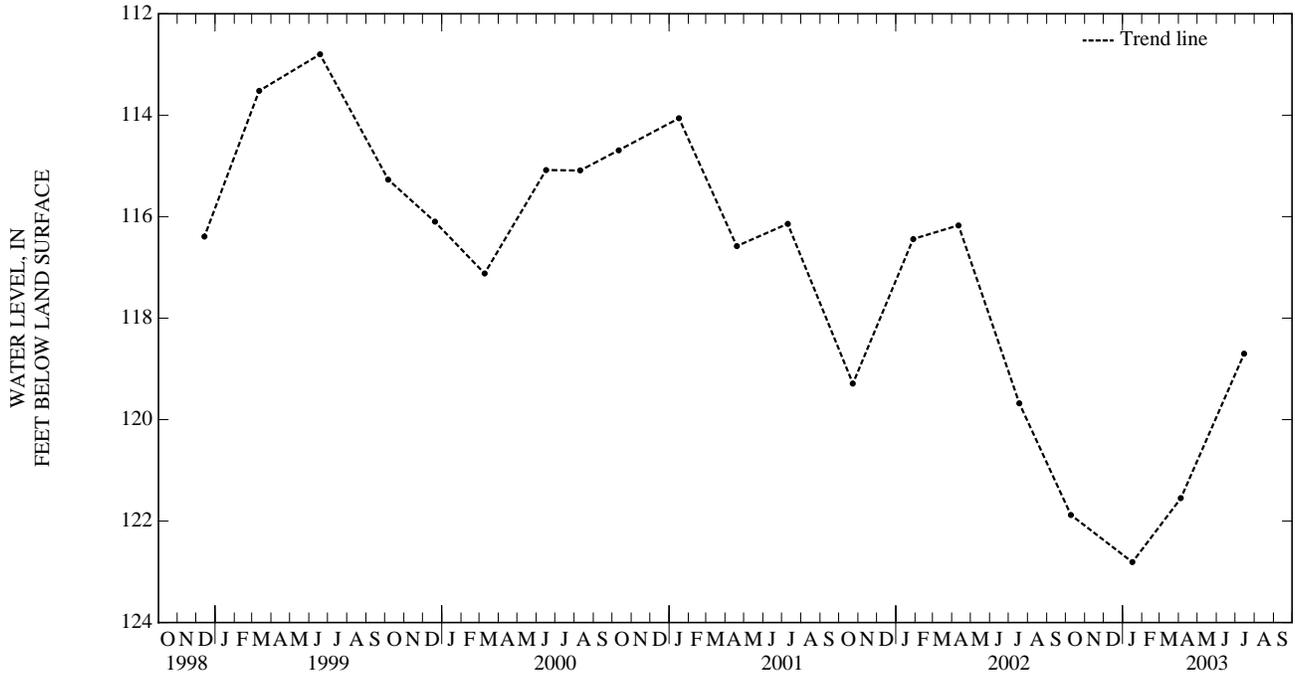
REMARKS.--Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 73.08 ft below land-surface datum, Apr. 25, 1975; lowest measured, 122.81 ft below land-surface datum, Jan. 16, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	121.88	JAN 16	122.81	APR 04	121.55	JUL 15	118.70
WATER YEAR 2003 HIGHEST 118.70		JUL 15, 2003		LOWEST 122.81		JAN 16, 2003	



GROUND-WATER LEVELS

KING AND QUEEN COUNTY—Continued

373008076425601. Local number, 57J 3 SOW 074.

LOCATION.--Lat 37°30'09", long 76°42'55", NAD83, Hydrologic Unit 02080107, off State Highway 606, 0.4 mi northeast of intersection of State Highways 606 and 605, and 2.8 mi south of Shacklefords. Owner: Smurfit-Stone Container Corporation.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in. to 200 ft, diameter 4 in. from 200 to 760 ft, depth 760 ft, screened 741 to 756 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 51 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.60 ft above land-surface datum; prior to Mar. 15, 1993, top of casing, 0.20 ft above land-surface datum.

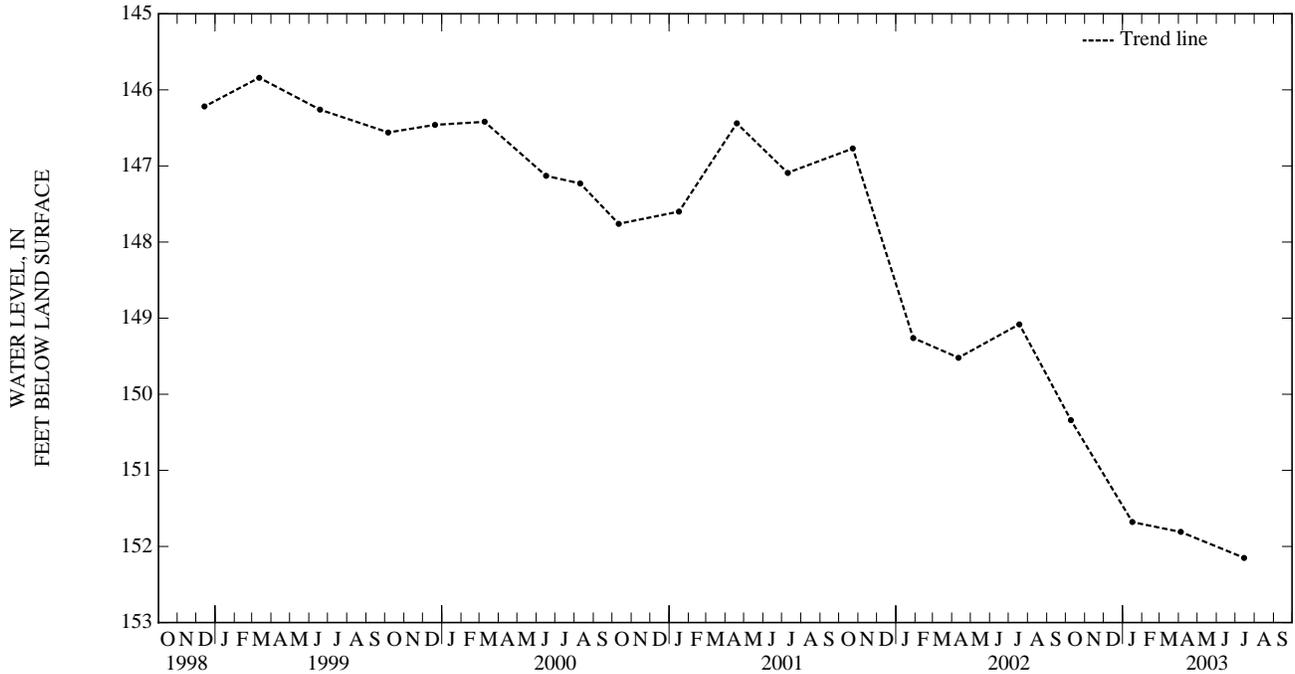
REMARKS.--Water level affected by regional drawdown.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 109.90 ft below land-surface datum, Jan. 26, 1975; lowest measured, 152.15 ft below land-surface datum, July 15, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	150.34	JAN 16	151.68	APR 04	151.81	JUL 15	152.15
WATER YEAR 2003 HIGHEST 150.34		OCT 09, 2002		LOWEST 152.15		JUL 15, 2003	



KING GEORGE COUNTY

382129077005801. Local number, 54Q 21.

LOCATION.--Lat 38°21'29", long 77°00'57", NAD83, Hydrologic Unit 02070011, 200 ft west of the Potomac River, 400 ft south of U.S. Highway 301, 750 ft east of Blandy Boulevard, and at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in. from 0 to 25 ft, diameter 4 in. from 0 to 197 ft, 217 to 219.25 ft, depth 219.25 ft, screened 197 to 217 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 26, 1994, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 20.46 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.65 ft above land-surface datum prior to Nov. 4, 1994; top of casing, 2.10 ft thereafter.

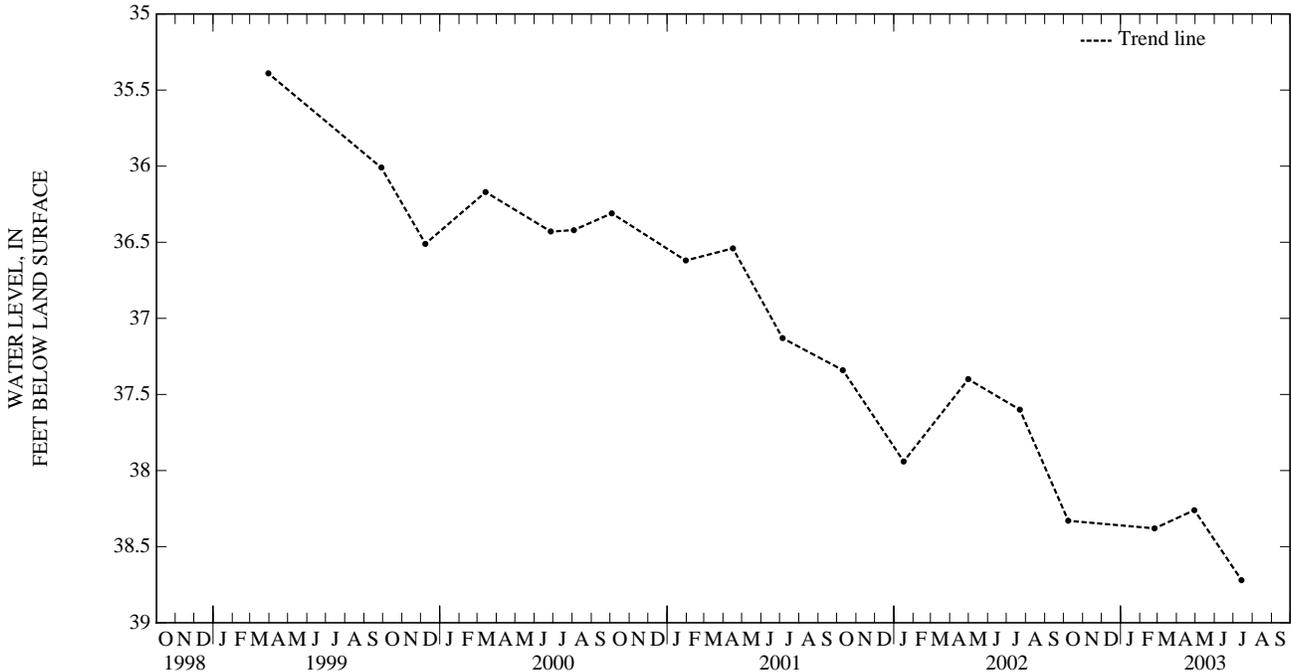
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 29.00 ft below land-surface datum, Mar. 4, 1993; lowest measured, 38.72 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	38.33	FEB 24	38.38	APR 29	38.26	JUL 14	38.72
WATER YEAR 2003 HIGHEST		38.26	APR 29, 2003 LOWEST		38.72	JUL 14, 2003	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381737077024601. Local number, 54Q 55.

LOCATION.--Lat 38°17'37", long 77°02'45", NAD83, Hydrologic Unit 02070011, 300 ft northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 49.9 ft, 59.9 to 70.4 ft, depth 70.4 ft, screened 49.9 to 59.9 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. March 1994 to September 1998, digital recorder--60-minute punch.

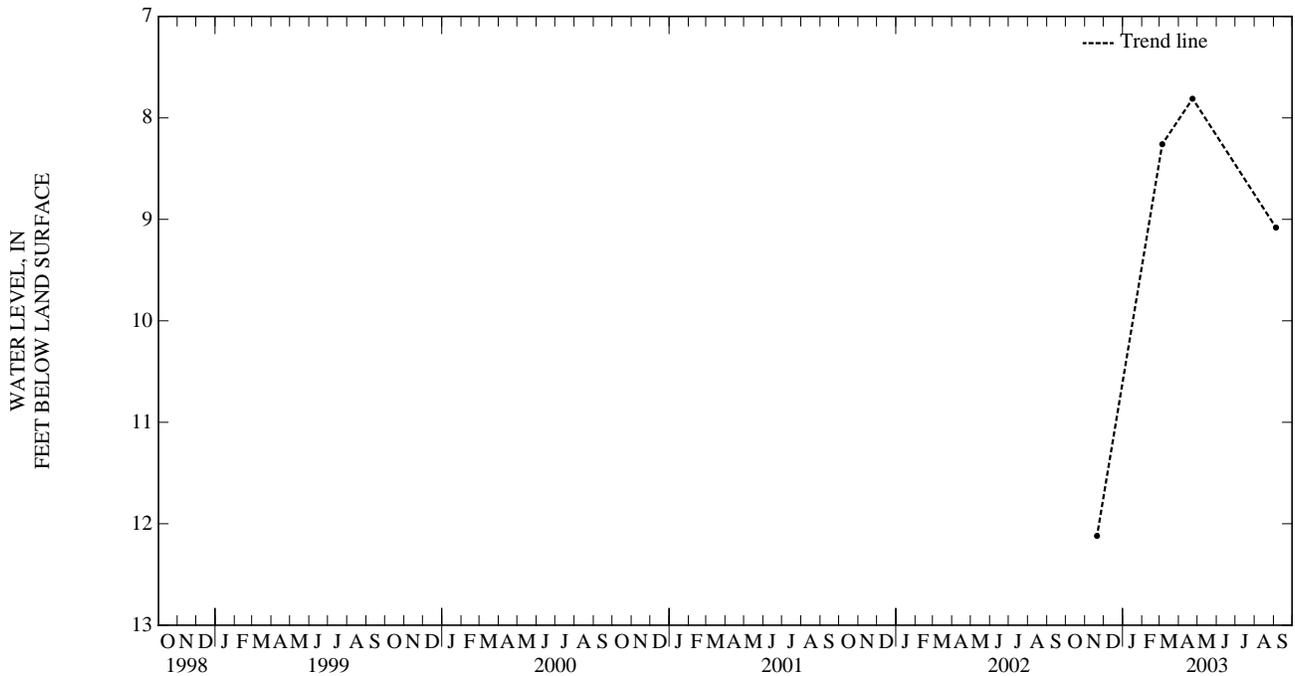
DATUM.--Elevation of land-surface datum is 24.44 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.25 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 7.24 ft below land-surface datum, Mar. 30, 1998, may have gone higher during period of missing record, Mar. 11 to Apr. 25, 1998; lowest recorded, 12.16 ft below land-surface datum, Oct. 4, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	12.12	MAR 05	8.26	APR 23	7.81	SEP 04	9.08
WATER YEAR 2003 HIGHEST		7.81	APR 23, 2003 LOWEST		12.12	NOV 20, 2002	



KING GEORGE COUNTY—Continued

381737077024602. Local number, 54Q 56.

LOCATION.--Lat 38°17'37", long 77°02'45", NAD83, Hydrologic Unit 02070011, 300 ft northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 22.2 ft, 22.2 to 24.7 ft, depth 24.7 ft, screened 12.2 to 22.2 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. March 1994 to September 1998, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 24.46 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

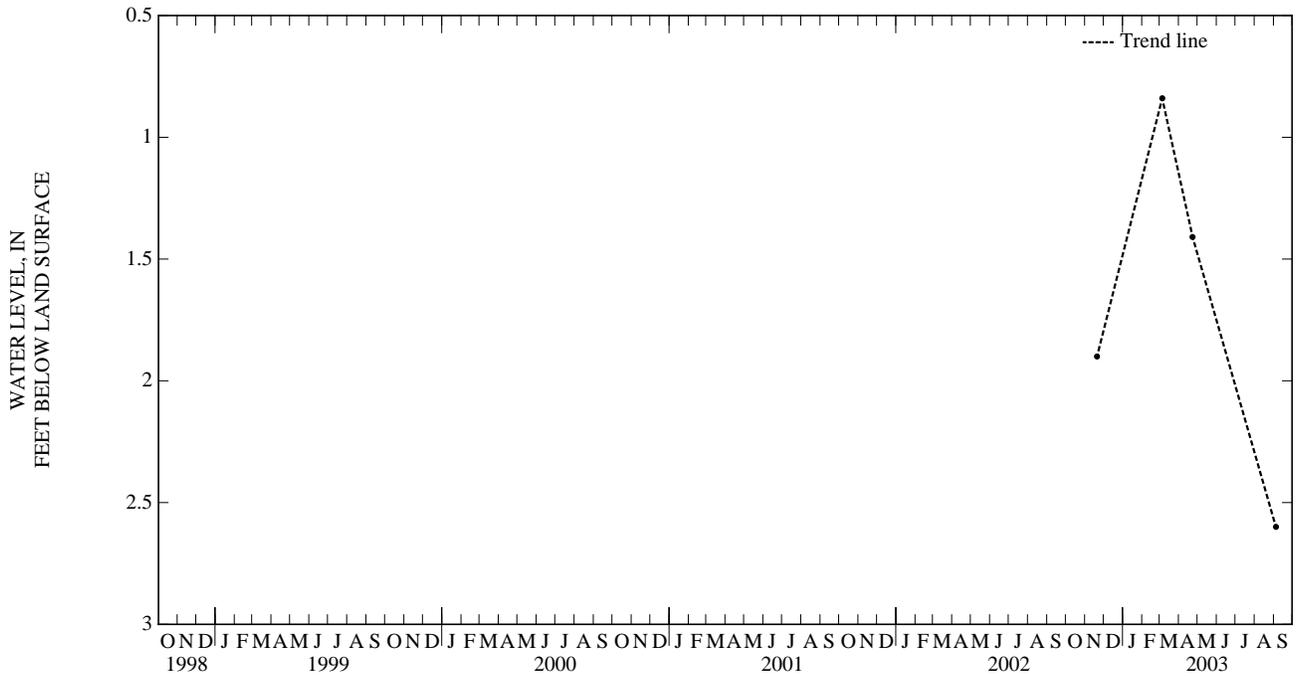
REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.37 ft below land-surface datum, Mar. 9, 1998; lowest recorded, 8.09 ft below land-surface datum, Sept. 15-17, 1995, Oct. 3-5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	1.90	MAR 05	.84	APR 23	1.41	SEP 04	2.60
WATER YEAR 2003 HIGHEST		.84	MAR 05, 2003 LOWEST		2.60	SEP 04, 2003	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381746077020001. Local number, 54Q 57.

LOCATION.--Lat 38°17'46", long 77°01'59", NAD83, Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 48.4 ft, 58.4 to 63.9 ft, depth 63.9 ft, screened 48.4 to 58.4 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. December 1995 to September 1998, digital recorder--60-minute punch. Prior to December 1995, monthly measurement with chalked tape by USGS personnel.

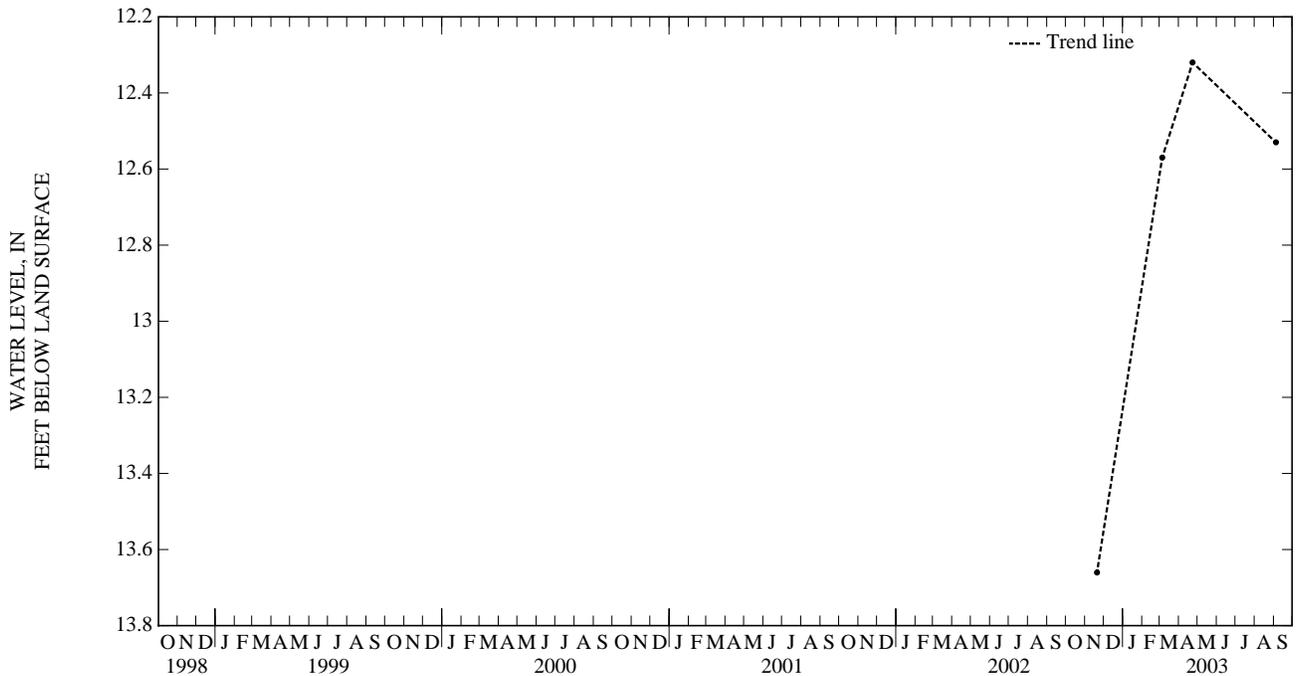
DATUM.--Elevation of land-surface datum is 17.77 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.69 ft above land-surface datum. Prior to Dec. 6, 1995, top of casing, 2.29 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.37 ft below land-surface datum, Mar. 21-22, 1998; lowest measured, 13.73 ft below land-surface datum, Sept. 25, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	13.66	MAR 05	12.57	APR 23	12.32	SEP 04	12.53
WATER YEAR 2003 HIGHEST		12.32	APR 23, 2003 LOWEST		13.66	NOV 20, 2002	



KING GEORGE COUNTY—Continued

381746077020002. Local number, 54Q 58.

LOCATION.--Lat 38°17'46", long 77°01'59", NAD83, Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.3 ft, 14.3 to 16.8 ft, depth 16.8 ft, screened 9.3 to 14.3 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. December 1995 to September 1998, digital recorder--60-minute punch. Prior to December 1995, monthly measurement with chalked tape by USGS personnel.

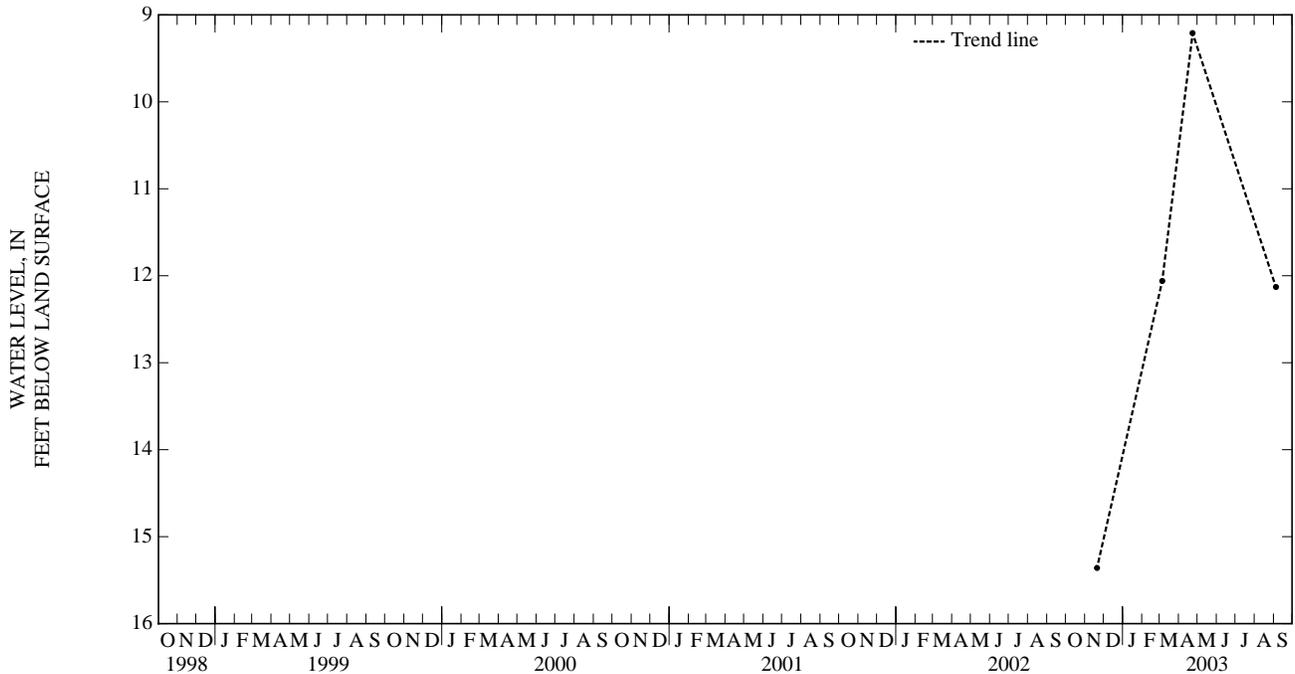
DATUM.--Elevation of land-surface datum is 17.89 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.67 ft above land-surface datum. Prior to Dec. 6, 1995, top of casing, 2.29 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.74 ft below land-surface datum, Mar. 22, 1998; lowest measured, 15.36 ft (below bottom of screen; may not reflect true water-level elevation in aquifer) below land-surface datum, Nov. 20, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	15.36	MAR 05	12.06	APR 23	9.21	SEP 04	12.13
WATER YEAR 2003 HIGHEST		9.21	APR 23, 2003 LOWEST		15.36	NOV 20, 2002	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381814077030301. Local number, 54Q 61.

LOCATION.--Lat 38°18'14", long 77°03'02", NAD83, Hydrologic Unit 02070011, 0.8 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Nanjemoy-Marlboro confining unit of Eocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 52.5 ft, 62.5 to 68.0 ft, depth 68.0 ft, screened 52.5 to 62.5 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. March 1994 to September 1998, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 23.94 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 3.1 ft above land-surface datum.

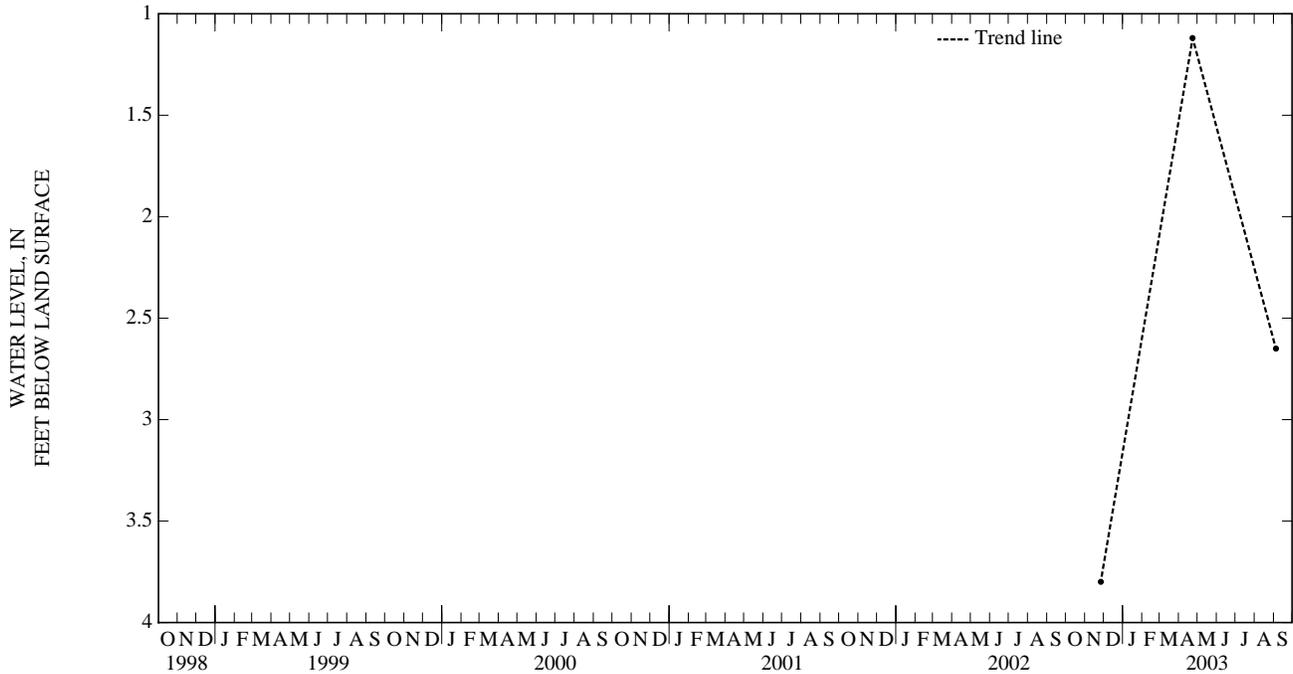
REMARKS.--Well occasionally sampled for water quality.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.05 ft below land-surface datum, Feb. 5, 1998; lowest recorded from natural causes, 9.32 ft below land-surface datum, Oct. 4, 5, 1995; lowest recorded, 12.85 ft (caused by pumpage for water-quality sampling) below land-surface datum, July 5, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	3.80	APR 23	1.12	SEP 04	2.65
WATER YEAR 2003 HIGHEST 1.12 APR 23, 2003 LOWEST 3.80 NOV 26, 2002					



KING GEORGE COUNTY—Continued

381814077030302. Local number, 54Q 62.

LOCATION.--Lat 38°18'14", long 77°03'02", NAD83, Hydrologic Unit 02070011, 0.8 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 5.0 ft, 10.0 to 12.5 ft, depth 12.5 ft, screened 5.0 to 10.0 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. March 1994 to September 1998, digital recorder--60-minute punch.

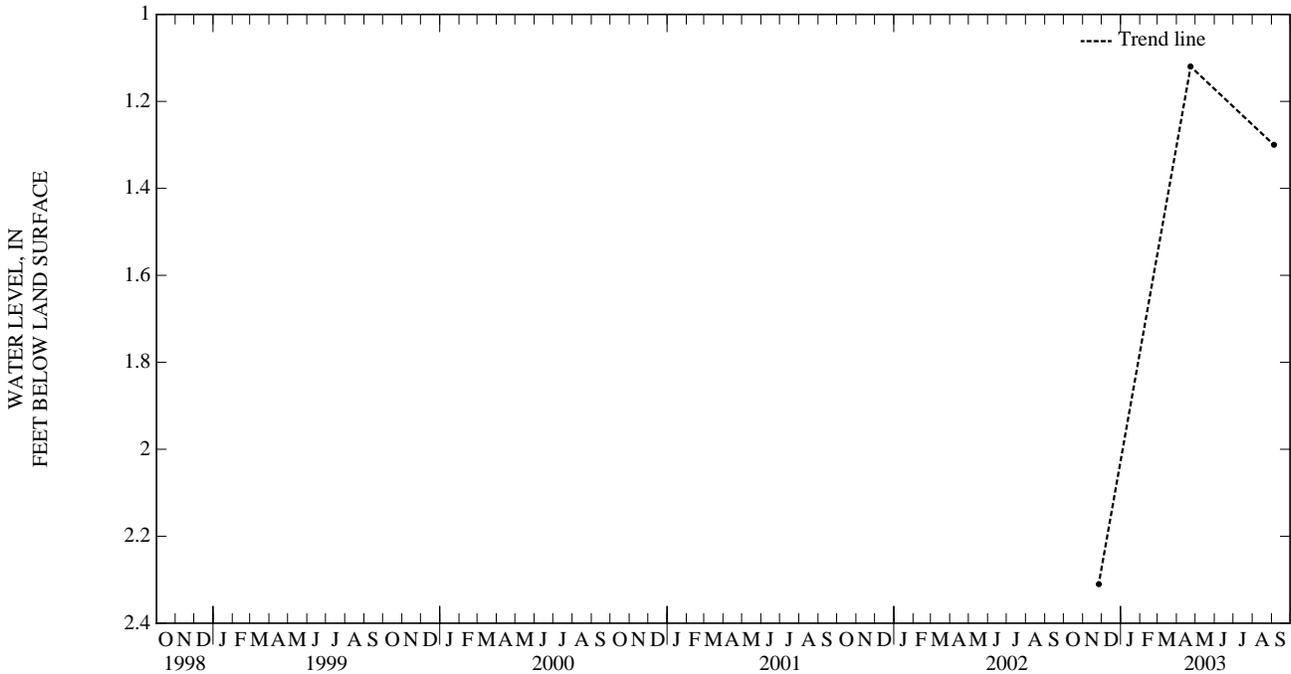
DATUM.--Elevation of land-surface datum is 23.83 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.07 ft below land-surface datum, Feb. 4-5, 1998; lowest recorded, 7.23 ft below land-surface datum, Oct. 4, 5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	2.31	APR 23	1.12	SEP 04	1.30
WATER YEAR 2003 HIGHEST		1.12	APR 23, 2003	LOWEST	
				2.31	NOV 26, 2002



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381835077015601. Local number, 54Q 65.

LOCATION.--Lat 38°18'35", long 77°01'55", NAD83, Hydrologic Unit 02070011, 0.2 mi southwest of Baber Point, 1.4 mi northeast of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 86.0 ft, 96.0 to 106.5 ft, depth 106.5 ft, screened 86.0 to 96.0 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. December 1996 to September 1998, digital recorder--60-minute punch. December 1995 to December 1996 occasional measurement with chalked tape by USGS personnel. Prior to December 1995, digital recorder--60-minute punch.

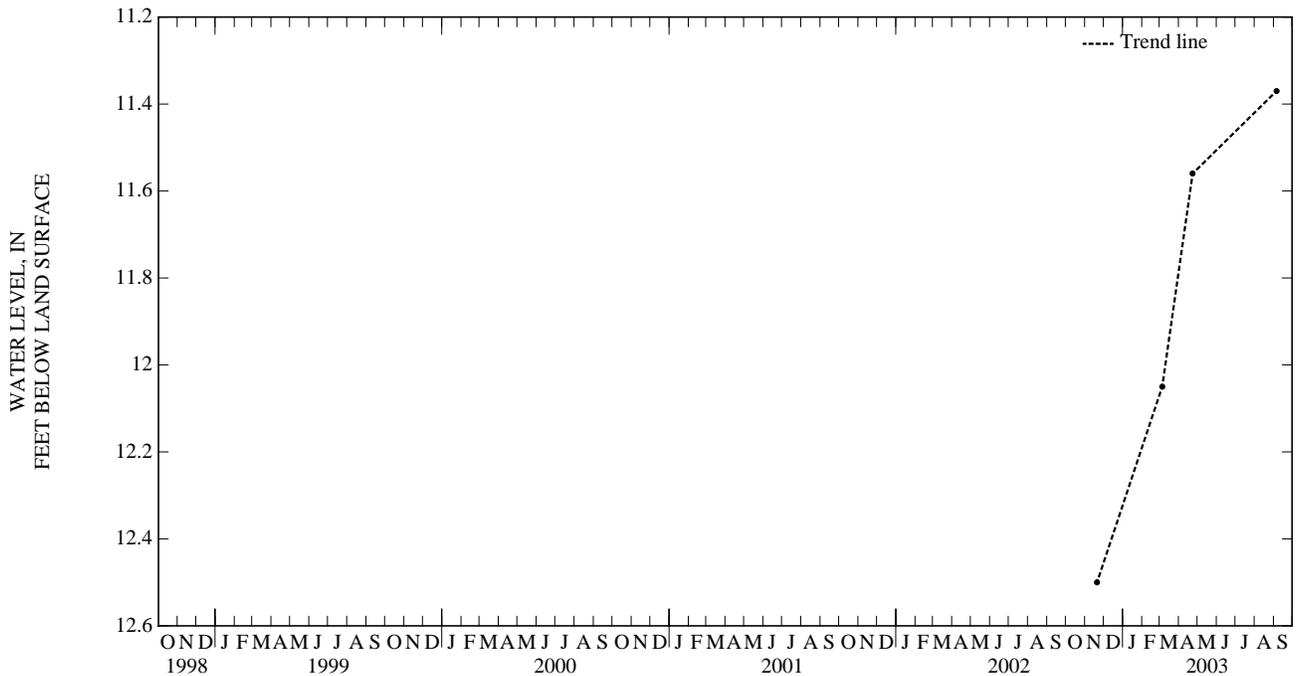
DATUM.--Elevation of land-surface datum is 14.15 ft above NGVD of 1929. Measuring point: Top of casing, 2.02 ft above land-surface datum. Prior to Dec. 6, 1995, and since Dec. 18, 1996, top of recorder shelf, 2.4 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.21 ft below land-surface datum, May 14, 1998; lowest recorded, 12.67 ft below land-surface datum, Feb. 6, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	12.50	MAR 05	12.05	APR 23	11.56	SEP 05	11.37
WATER YEAR 2003 HIGHEST		11.37	SEP 05, 2003 LOWEST		12.50	NOV 20, 2002	



KING GEORGE COUNTY—Continued

381835077015602. Local number, 54Q 66.

LOCATION.--Lat 38°18'35", long 77°01'55", NAD83, Hydrologic Unit 02070011, 0.2 mi southwest of Baber Point, 1.4 mi northeast of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 12.2 ft, 17.2 to 19.7 ft, depth 19.7 ft, screened 12.2 to 17.2 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. December 1996 to September 1998, digital recorder--60-minute punch. December 1995 to December 1996, occasional measurement with chalked tape by USGS personnel. Prior to December 1995, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 14.05 ft above NGVD of 1929. Measuring point: Top of casing, 2.03 ft above land-surface datum. Prior to Dec. 6, 1995, and since Dec. 18, 1996, top of recorder shelf, 2.5 ft above land-surface datum.

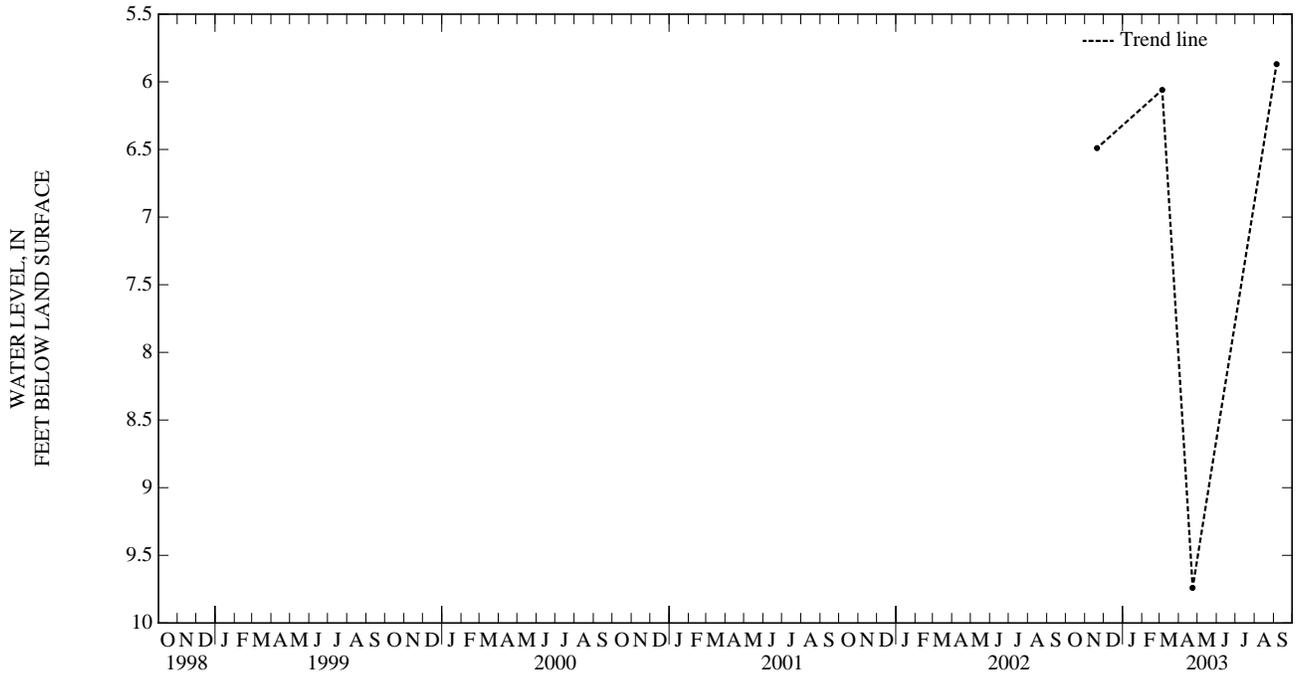
REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.25 ft below land-surface datum, Feb. 5, 1998; lowest recorded, 12.20 ft below land-surface datum, Sept. 21, 22, Oct. 4, 5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	6.49	MAR 05	6.06	APR 23	9.74	SEP 05	5.87
WATER YEAR 2003 HIGHEST		5.87	SEP 05, 2003 LOWEST		9.74	APR 23, 2003	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381857077032701. Local number, 54Q 69.

LOCATION.--Lat 38°18'57", long 77°03'26", NAD83, Hydrologic Unit 02070011, 400 ft southwest of Howland Point, 1.7 mi northwest of the main gage at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Confined aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 68.6 ft, 78.6 to 84.1 ft, depth 84.1 ft, screened 68.6 to 78.2 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to September 1996, digital recorder--60-minute punch.

DATUM.--Elevation of land-surface datum is 16.21 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.7 ft above land-surface datum. Top of casing, 2.35 ft above land-surface datum, since Oct. 1, 1996.

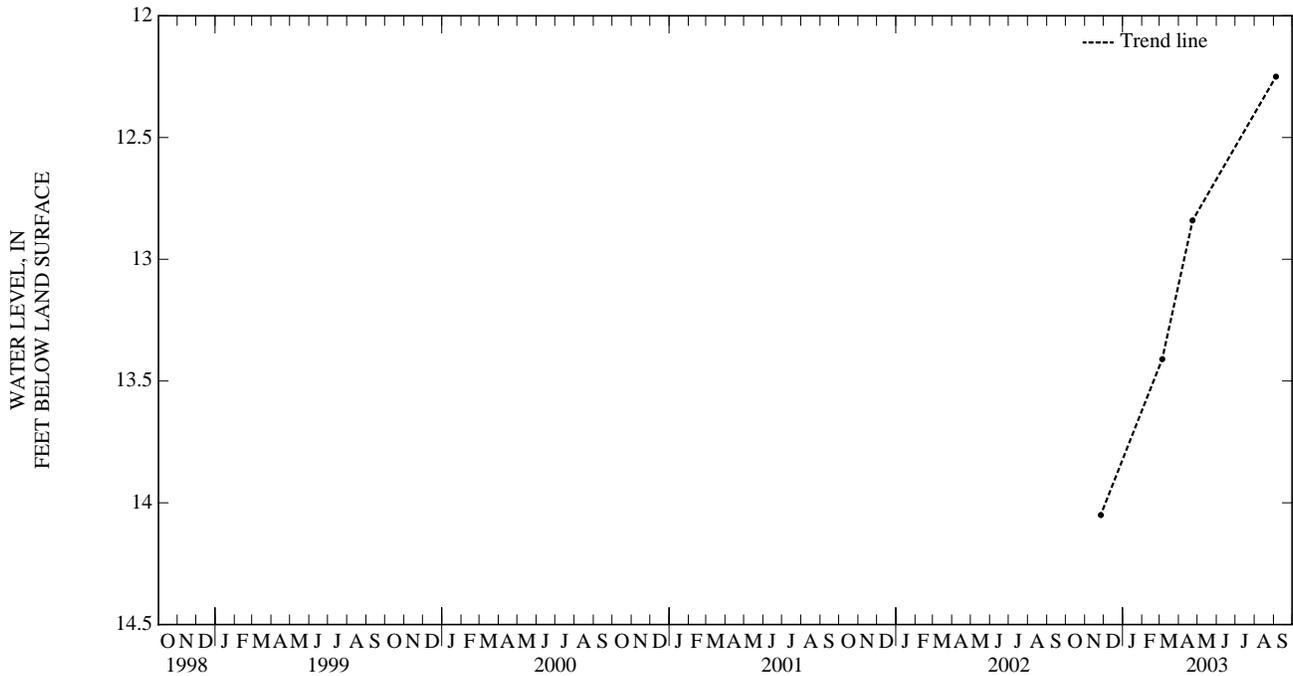
REMARKS.--Missing record due to recorder malfunction.

PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.73 ft below land-surface datum, Sept. 6, 1996; lowest recorded, 14.40 ft below land-surface datum, Feb. 6, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	14.05	MAR 05	13.41	APR 23	12.84	SEP 04	12.25
WATER YEAR 2003 HIGHEST		12.25 SEP 04, 2003		LOWEST		14.05 NOV 26, 2002	



KING GEORGE COUNTY—Continued

381857077032702. Local number, 54Q 70.

LOCATION.--Lat 38°18'57", long 77°03'26", NAD83, Hydrologic Unit 02070011, 400 ft southwest of Howland Point, 1.7 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 10.2 ft, 15.2 to 17.7 ft, depth 17.7 ft, screened 10.2 to 15.2 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to September 1998, digital recorder--60-minute punch.

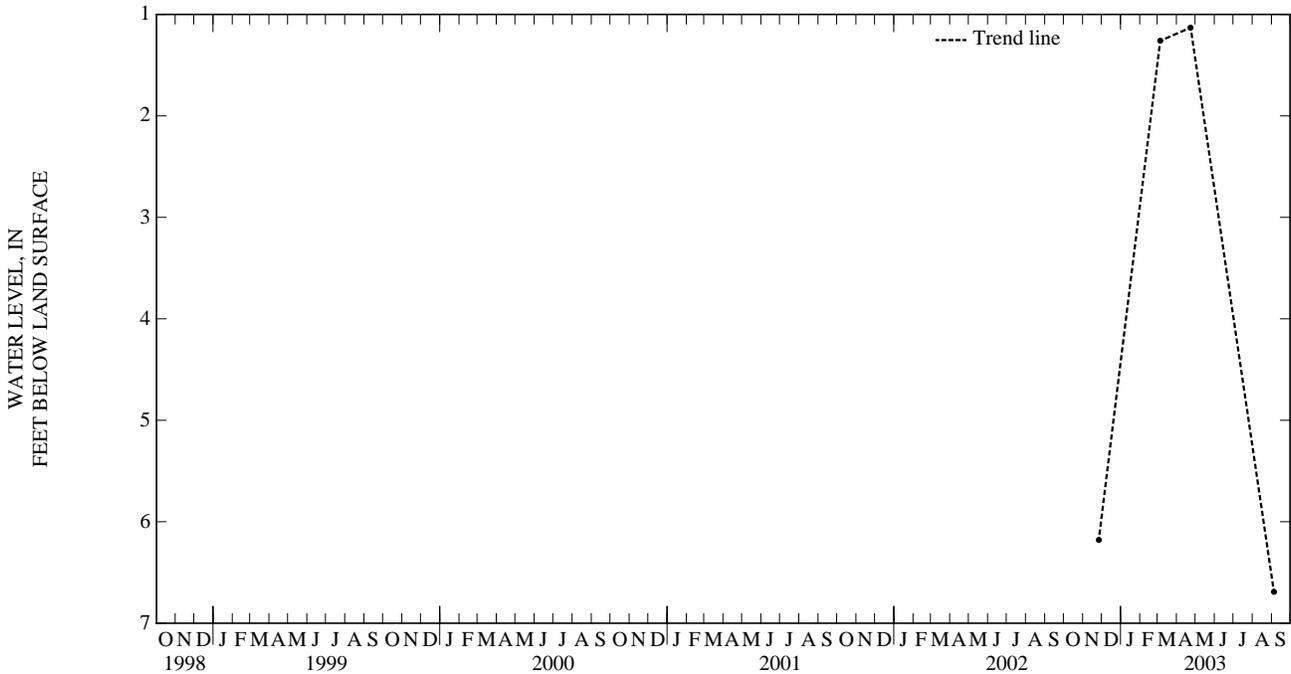
DATUM.--Elevation of land-surface datum is 16.17 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.79 ft below land-surface datum, Mar. 9, 1998; lowest recorded, 9.32 ft below land-surface datum, Sept. 19, 20, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	6.18	MAR 05	1.26	APR 23	1.13	SEP 04	6.69
WATER YEAR 2003 HIGHEST		1.13	APR 23, 2003 LOWEST		6.69	SEP 04, 2003	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381830077031801. Local number, 54Q 71.

LOCATION.--Lat 38°18'30", long 77°03'17", NAD83, Hydrologic Unit 02070011, 0.6 mi south of Howland Point, 1.2 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.7 ft, 19.7 to 20.2 ft, depth 20.2 ft, screened 9.7 to 19.7 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

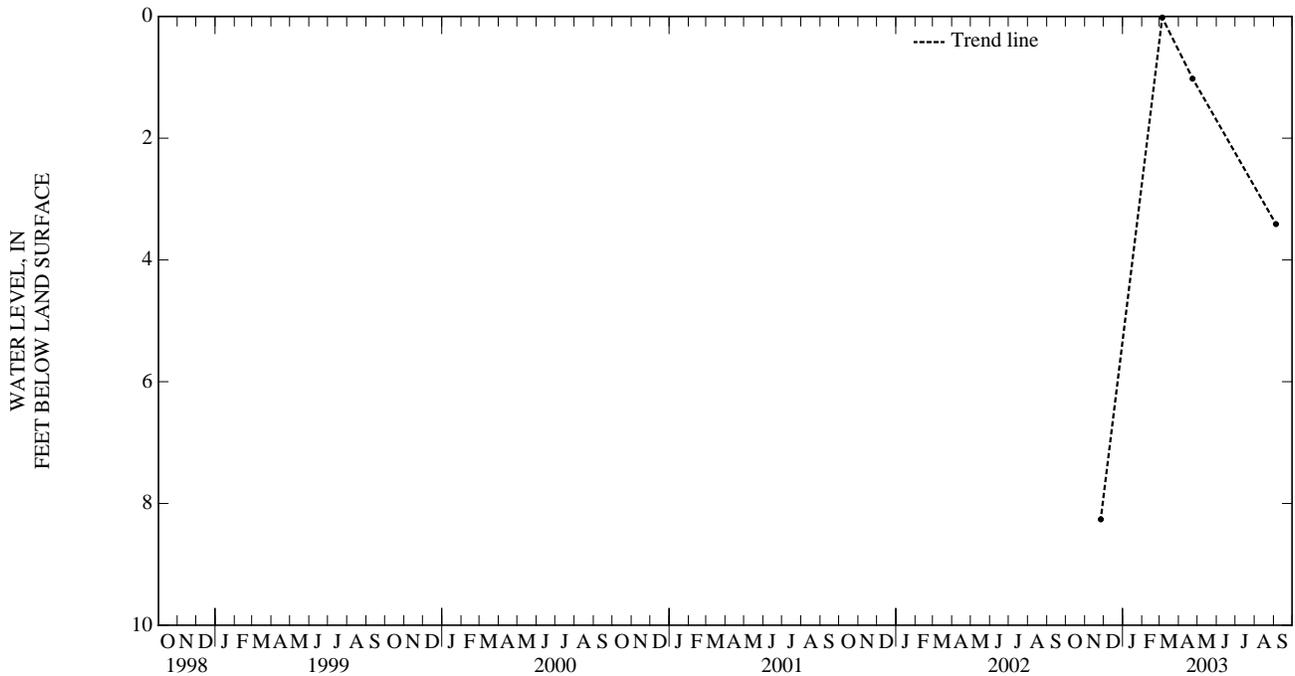
DATUM.--Elevation of land-surface datum is 21.24 ft above NGVD of 1929. Measuring point: Top of casing, 2.06 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, at land-surface datum, Mar. 29, 1994; lowest measured, 10.93 ft below land-surface datum, Sept. 25, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	8.26	MAR 05	.02	APR 23	1.02	SEP 04	3.41
WATER YEAR 2003 HIGHEST		.02	MAR 05, 2003 LOWEST		8.26	NOV 26, 2002	



KING GEORGE COUNTY—Continued

381759077025701. Local number, 54Q 72.

LOCATION.--Lat 38°17'59", long 77°02'56", NAD83, Hydrologic Unit 02070011, 0.5 mi northwest of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 8.1 ft, 13.1 to 15.6 ft, depth 15.6 ft, screened 8.1 to 13.1 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to March 1998, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 24.76 ft above NGVD of 1929. Measuring point: Top of casing, 1.87 ft above land-surface datum.

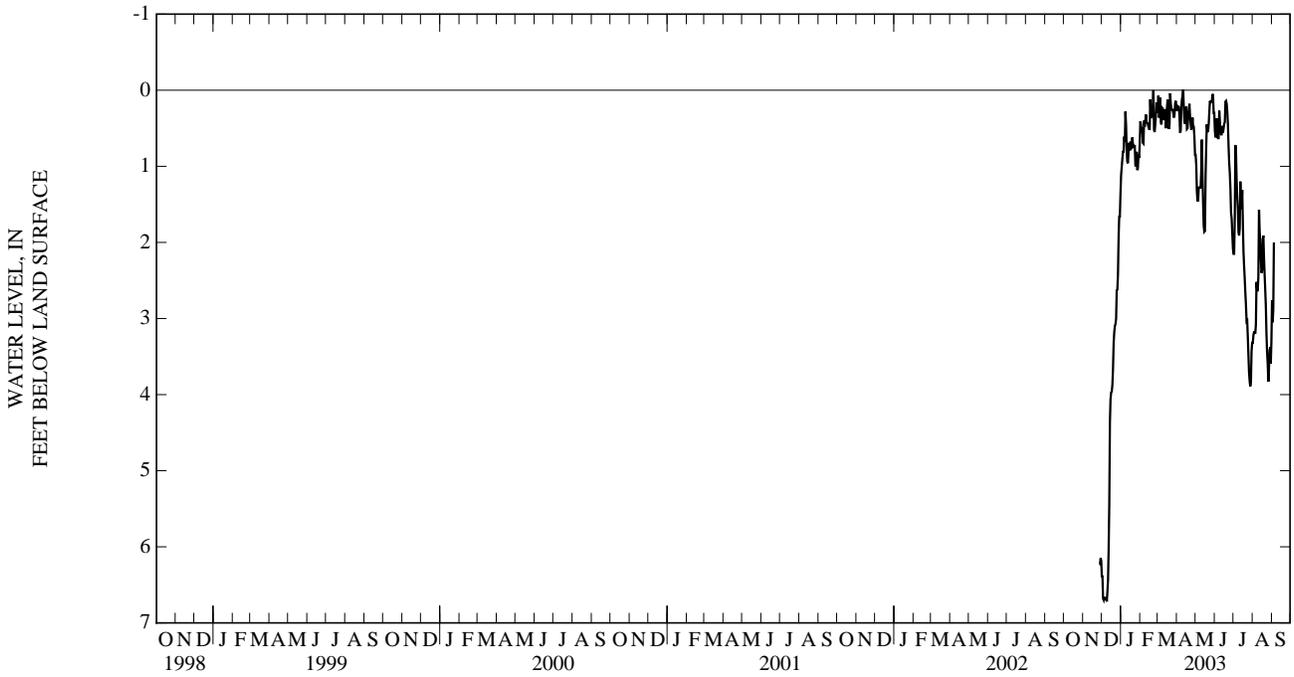
PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.33 ft above land-surface datum, Feb. 23, 2003; lowest measured, 12.01 ft below land-surface datum, Sept. 25, 1995.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 0.33 ft above land-surface datum, Feb. 23; lowest instantaneous water level, 6.72 ft below land-surface datum, Dec. 9.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	6.66	0.81	0.69	0.10	0.34	1.45	0.46	0.83	3.20	---
10	---	---	6.59	0.79	0.32	0.38	0.07	1.07	0.54	1.91	2.45	---
15	---	---	4.06	0.76	0.51	0.35	0.29	1.86	0.50	1.31	2.40	---
20	---	---	3.32	0.70	0.33	0.45	0.27	0.53	0.18	2.66	2.41	---
25	---	---	2.63	0.99	0.45	0.26	0.48	0.16	1.09	3.49	3.59	---
EOM	---	6.18	1.36	0.71	0.28	0.26	0.85	0.30	2.08	3.32	3.29	---



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381725077024501. Local number, 54Q 73.

LOCATION.--Lat 38°17'25", long 77°02'44", NAD83, Hydrologic Unit 02070011, 0.2 mi south of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 18.8 ft, 28.8 to 31.3 ft, depth 31.3 ft, screened 18.8 to 28.8 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

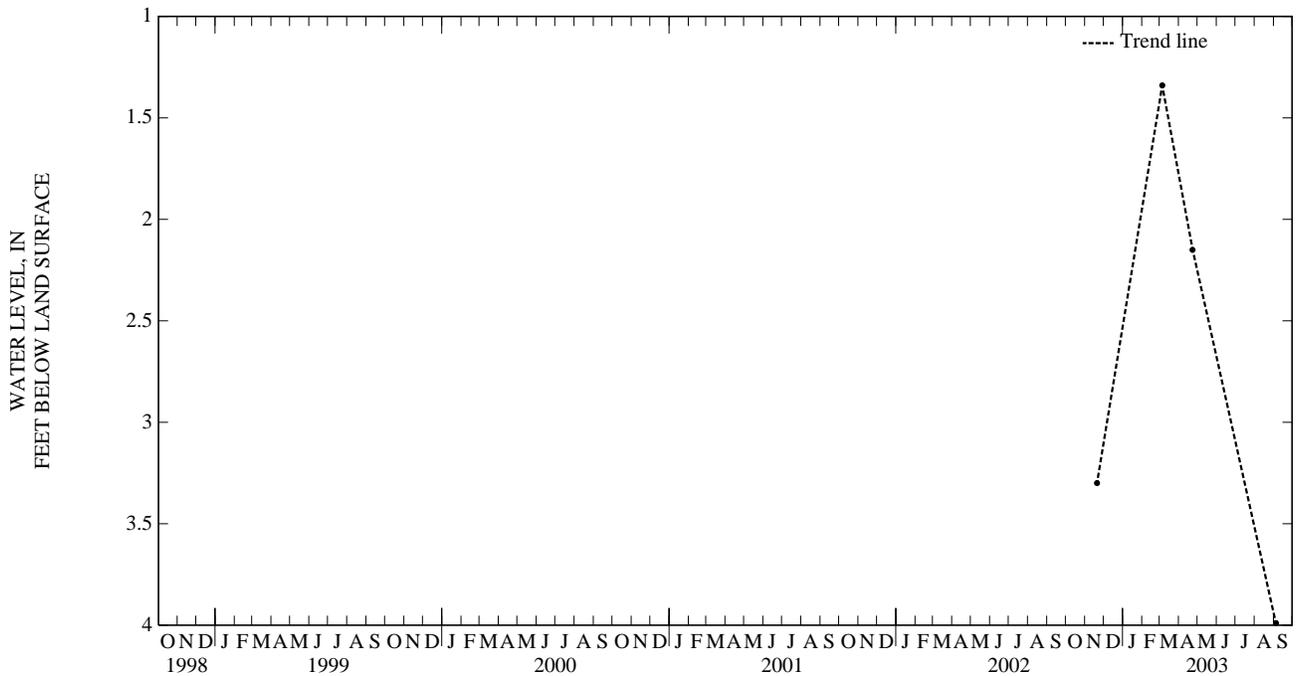
DATUM.--Elevation of land-surface datum is 25.14 ft above NGVD of 1929. Measuring point: Top of casing, 2.25 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.34 ft below land-surface datum, Mar. 29, 1994 and Mar. 5, 2003; lowest measured, 9.18 ft below land-surface datum, Sept. 25, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	3.30	MAR 05	1.34	APR 23	2.15	SEP 04	3.99
WATER YEAR 2003 HIGHEST		1.34	MAR 05, 2003 LOWEST		3.99	SEP 04, 2003	



KING GEORGE COUNTY—Continued

381732077021201. Local number, 54Q 74.

LOCATION.--Lat 38°17'32", long 77°02'11", NAD83, Hydrologic Unit 02070011, 0.5 mi east of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.0 ft, 19.0 to 19.5 ft, depth 19.5 ft, screened 9.0 to 19.0 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

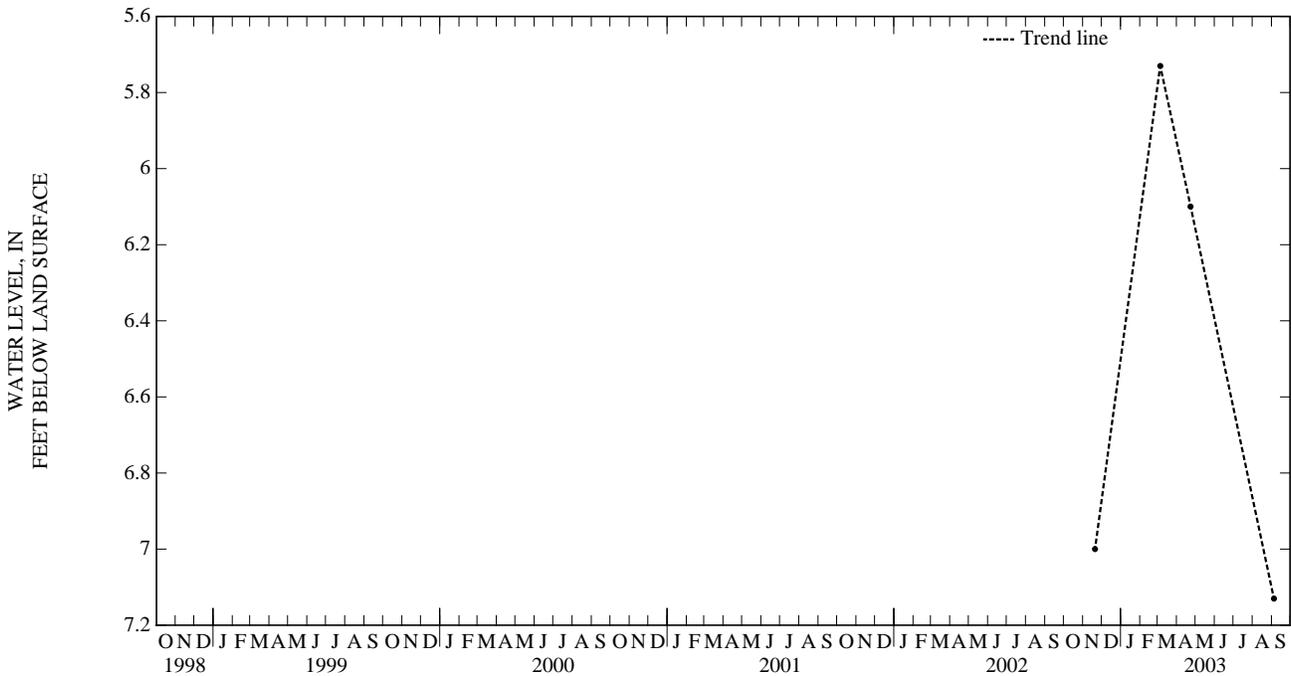
DATUM.--Elevation of land-surface datum is 12.70 ft above NGVD of 1929. Measuring point: Top of casing, 2.35 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.82 ft below land-surface datum, Mar. 30, 1998; lowest measured, 9.54 ft below land-surface datum, Sept. 25, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	7.00	MAR 05	5.73	APR 23	6.10	SEP 04	7.13
WATER YEAR 2003 HIGHEST		5.73	MAR 05, 2003 LOWEST		7.13	SEP 04, 2003	



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381825077021101. Local number, 54Q 79.

LOCATION.--Lat 38°18'25", long 77°02'10", NAD83, Hydrologic Unit 02070011, 1.1 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 9.1 ft, 14.1 to 16.6 ft, depth 16.6 ft, screened 9.1 to 14.1 ft.

INSTRUMENTATION.--Measurement with chalked tape by USGS personnel, September 2003. November 2002 to July 2003 and February to September 1999, electronic pressure transducer data logger 60-minute record interval. Prior to February 1999, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 11.43 ft above NGVD of 1929. Measuring point: Top of casing, 0.10 ft above land-surface datum.

PERIOD OF RECORD.--March 1994 to September 1999, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.99 ft below land-surface datum, Feb. 22, 2003; lowest measured, 10.66 ft below land-surface datum, Sept. 25, 1995.

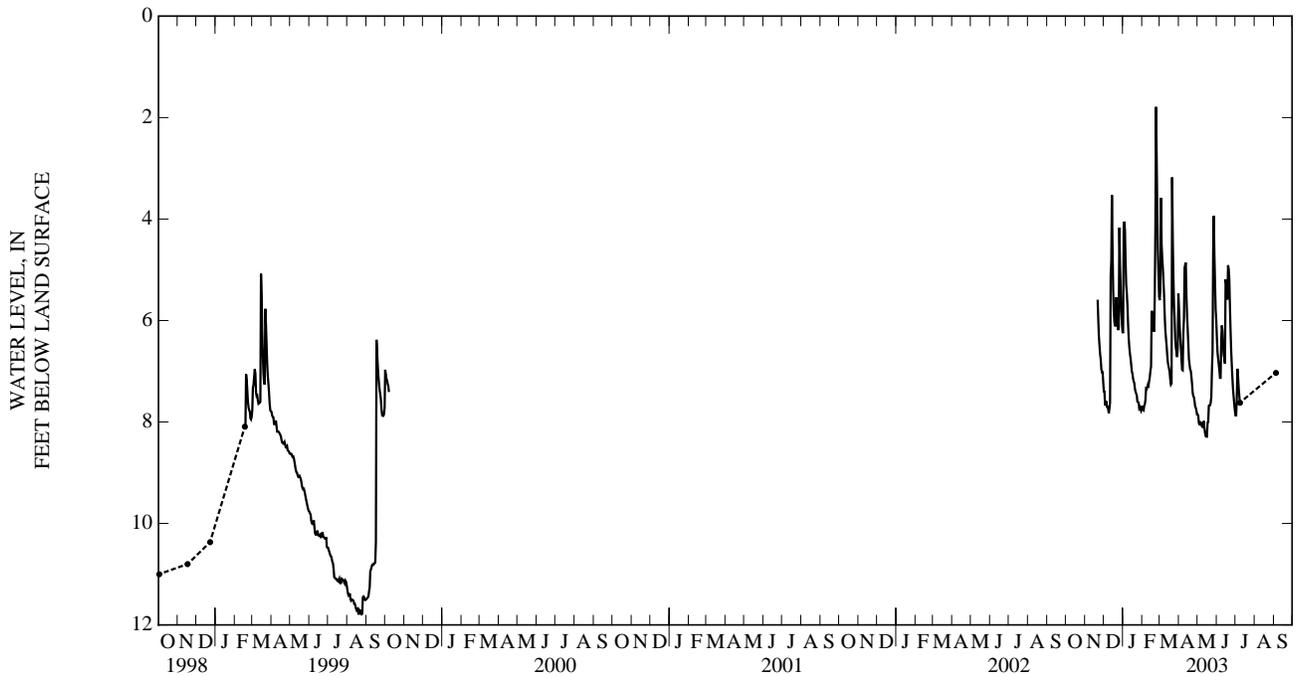
EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 0.99 ft below land-surface datum, Feb. 22; lowest instantaneous water level, 8.29 ft below land-surface datum, May 15, 16.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	7.59	4.83	7.65	4.76	6.76	8.05	6.98	7.09	---	---
10	---	---	7.73	6.34	7.26	6.19	4.96	8.09	6.19	---	---	---
15	---	---	4.55	7.00	6.91	6.89	6.18	8.29	5.19	---	---	---
20	---	---	6.10	7.34	6.22	7.24	6.99	7.67	4.99	---	---	---
25	---	6.66	6.14	7.61	3.83	5.98	7.51	6.62	6.89	---	---	---
EOM	---	7.21	6.22	7.74	5.54	5.47	7.85	5.99	7.78	---	---	---

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE WATER LEVEL
SEP 04 7.03



KING GEORGE COUNTY—Continued

381820077024501. Local number, 54Q 81.

LOCATION.--Lat 38°18'20", long 77°02'44", NAD83, Hydrologic Unit 02070011, 0.9 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.7 ft, 9.7 to 12.2 ft, depth 12.2 ft, screened 4.7 to 9.7 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

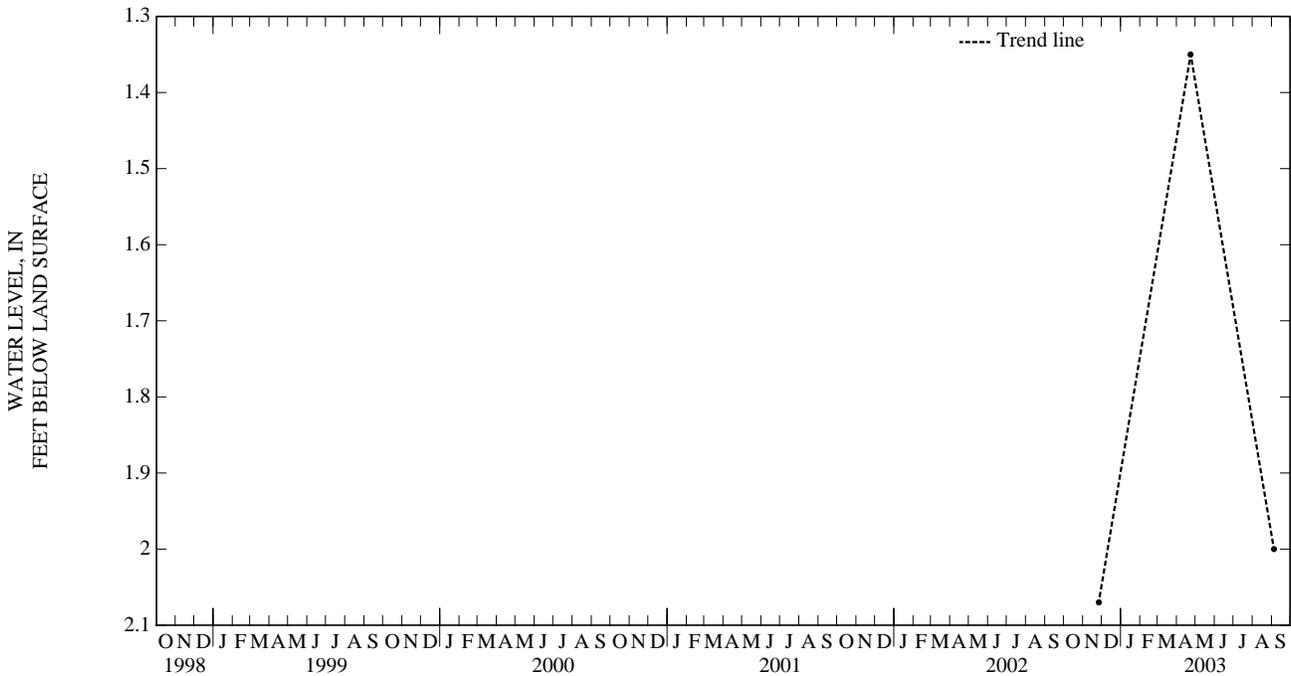
DATUM.--Elevation of land-surface datum is 13.21 ft above NGVD of 1929. Measuring point: Top of casing, 0.31 ft below land-surface datum.

PERIOD OF RECORD.--May 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.61 ft below land-surface datum, Aug. 3, 1994; lowest measured, 4.49 ft below land-surface datum, Aug. 29, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 26	2.07	APR 23	1.35	SEP 04	2.00
WATER YEAR 2003 HIGHEST		1.35 APR 23, 2003	LOWEST		2.07 NOV 26, 2002



GROUND-WATER LEVELS
KING GEORGE COUNTY—Continued

381804077022001. Local number, 54Q 86.

LOCATION.--Lat 38°18'04", long 77°02'19", NAD83, Hydrologic Unit 02070011, 0.7 mi northeast of the main gate at Tetotum Flats at the Naval Surface Warfare Center, Dahlgren Laboratory, in Dahlgren. Owner: U.S. Department of the Navy.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 4.5 ft, 14.5 to 17.0 ft, depth 17.0 ft, screened 4.5 to 14.5 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

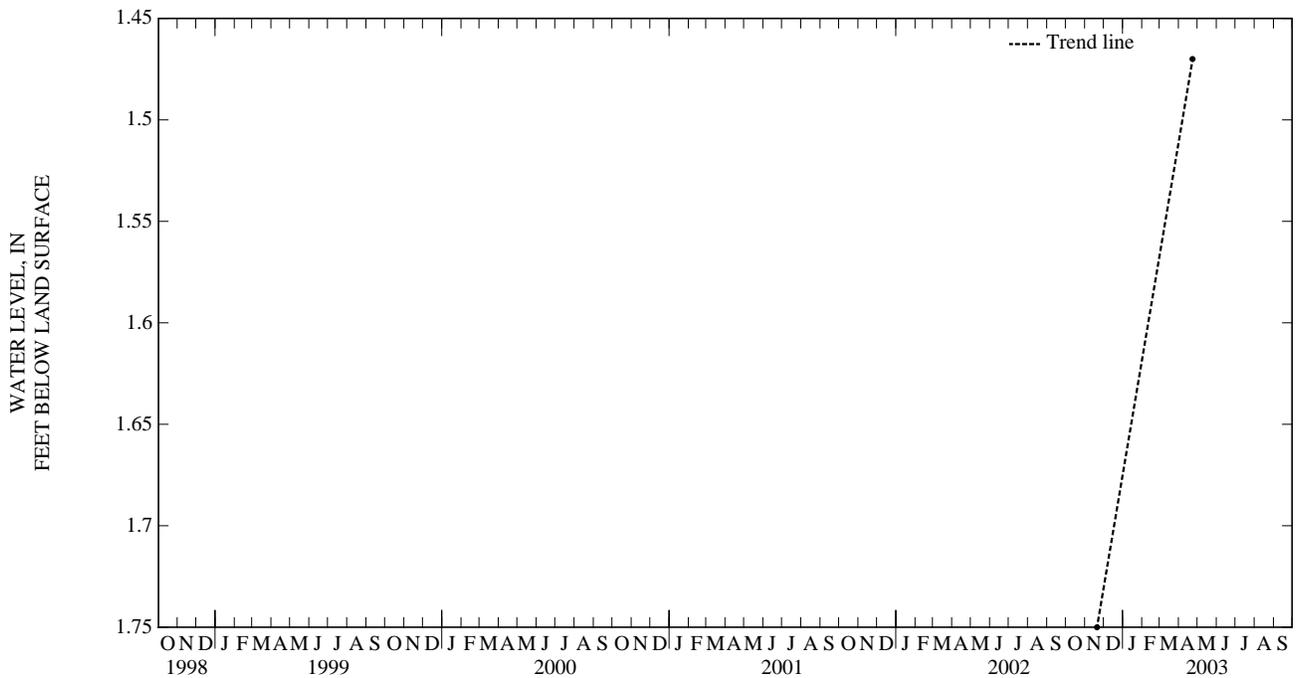
DATUM.--Elevation of land-surface datum is 17.30 ft above NGVD of 1929. Measuring point: Top of casing, 0.4 ft below land-surface datum.

PERIOD OF RECORD.--March 1994 to March 1998, November 2002 to September 2003 (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.06 ft below land-surface datum, Mar. 30, 1994; lowest measured, 5.62 ft below land-surface datum, Aug. 29, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	1.75	APR 23	1.47
WATER YEAR 2003 HIGHEST 1.47 APR 23, 2003		LOWEST 1.75 NOV 20, 2002	



KING GEORGE COUNTY—Continued

382341077032401. Local number, 54R 2.

LOCATION.--Lat 38°23'41", long 77°03'23", NAD83, Hydrologic Unit 02070011, 50 ft southeast of steep bank of the Potomac River, 150 ft west of State Highway 687, 1.5 mi west of the intersection of U.S. Highway 301 and State Highway 614, 1.9 mi north of the intersection of State Highways 629 and 687, and near Dahlgren. Owner: E. V. Bruchez.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 210 ft, diameter 2 in. from 210 to 806 ft, depth 806 ft, screened 781 to 801 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 70 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

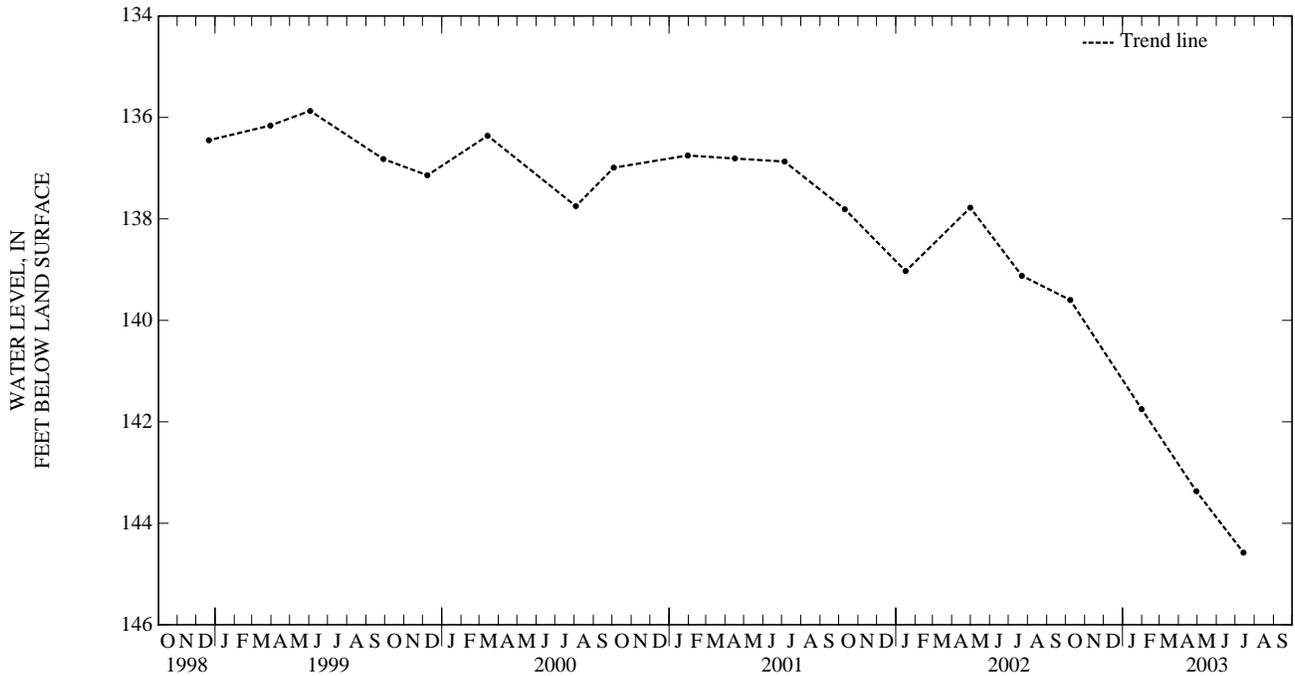
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 70.00 ft below land-surface datum, Oct. 15, 1969; lowest measured, 144.58 ft below land-surface datum, July 14, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	139.60	JAN 31	141.75	APR 29	143.37	JUL 14	144.58
WATER YEAR 2003 HIGHEST 139.60		OCT 08, 2002		LOWEST 144.58		JUL 14, 2003	



GROUND-WATER LEVELS
KING WILLIAM COUNTY

373226076481201. Local number, 56J 2.

LOCATION.--Lat 37°32'27", long 76°48'11", NAD83, Hydrologic Unit 02080106, 0.1 mi west of State Highway 30, 0.3 mi north of State Highway 33, and in West Point. Owner: St. Laurent Paper Products Corporation (formerly Chesapeake Corporation).

AQUIFER.--Brightseat-upper and middle Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused withdrawal water well, diameter 18 in. to 300 ft, diameter 8 in. from 300 to 600 ft, depth 600 ft, screened 390 to 400 ft, 550 to 570 ft, 580 to 600 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 25 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

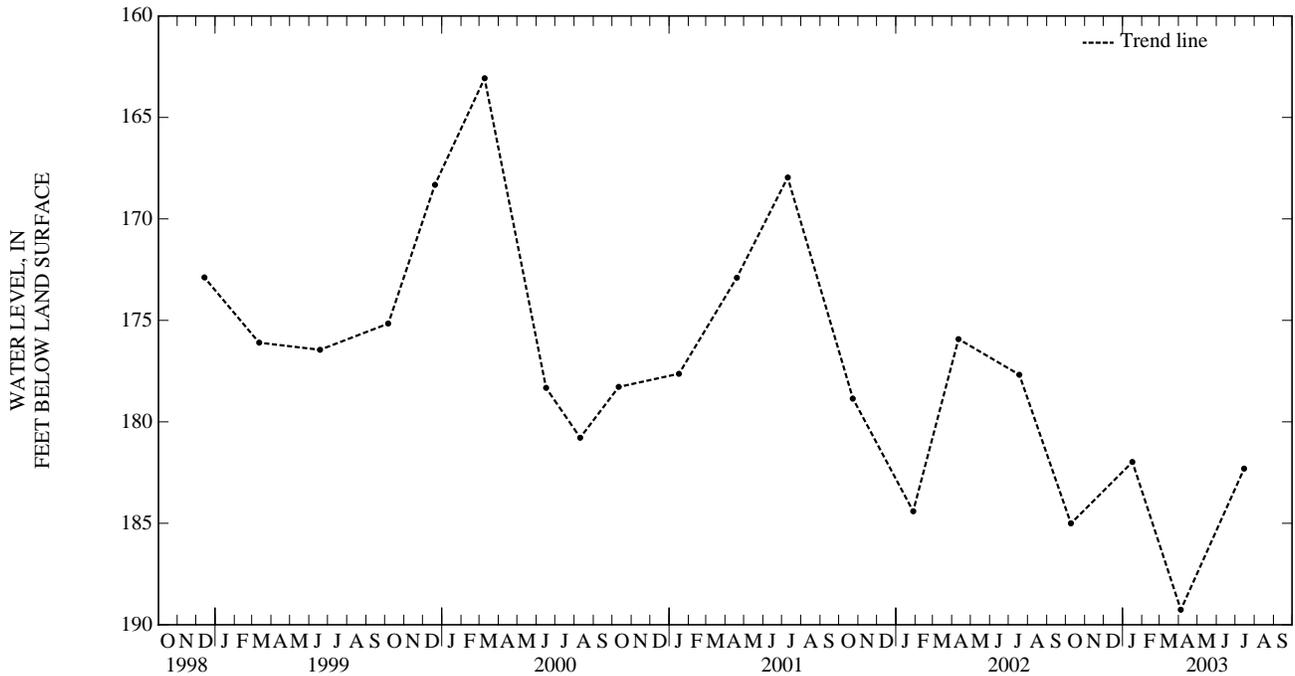
REMARKS.--Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--November 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 141.48 ft below land-surface datum, Feb. 15, 1983; lowest measured, 189.26 ft below land-surface datum, Apr. 4, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	185.01	JAN 16	181.98	APR 04	189.26	JUL 15	182.30
WATER YEAR 2003 HIGHEST 181.98		JAN 16, 2003		LOWEST 189.26		APR 04, 2003	



KING WILLIAM COUNTY—Continued

373459076510201. Local number, 56J 10.

LOCATION.--Lat 37°35'00", long 76°51'01", NAD83, Hydrologic Unit 02080105, 100 ft northeast of State Highway 30 at the Virginia State Police office, 4.2 mi west of the intersection of State Highways 30 and 33 in West Point. Owner: Virginia Department of State Police.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 437 ft, screened 417 to 437 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 101 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft below land-surface datum.

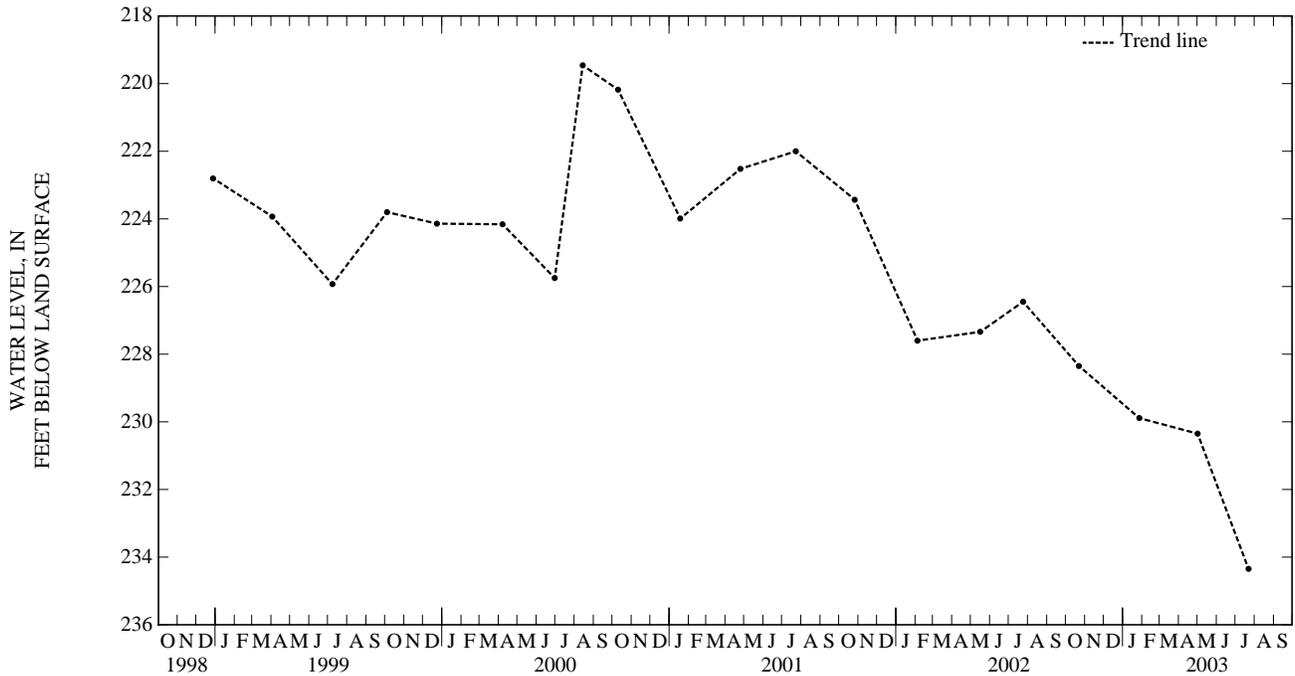
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1972, December 1974, October 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 176.00 ft below land-surface datum, Dec. 8, 1972; lowest measured, 234.35 ft below land-surface datum, July 22, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 22	228.35	JAN 27	229.89	MAY 01	230.35	JUL 22	234.35
WATER YEAR 2003 HIGHEST 228.35		OCT 22, 2002		LOWEST 234.35		JUL 22, 2003	



GROUND-WATER LEVELS

LANCASTER COUNTY

374249076230101. Local number, 59K 1 SOW 015.

LOCATION.--Lat 37°42'49", long 76°23'00", NAD83, Hydrologic Unit 02080104, at Lancaster County High School in Kilmarnock. Owner: Lancaster County Public Schools.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 163 ft, diameter 2 in. from 163 to 716 ft, depth 716 ft, screened 706 to 716 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 2, 1985, to July 11, 1995, bimonthly measurement with chalked tape. Sept. 30, 1976, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1976, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 85 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum prior to July 29, 1991; 0.75 ft above land-surface datum thereafter.

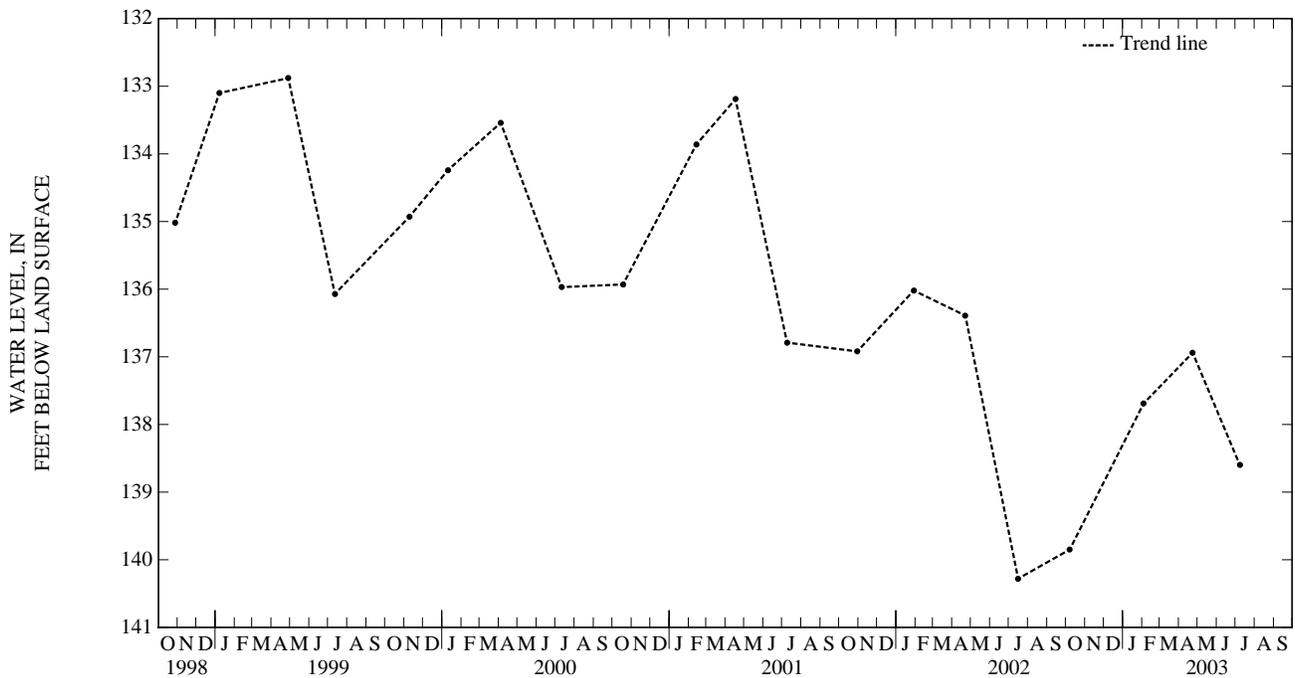
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--October 1967 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 95.89 ft below land-surface datum, Feb. 20, 1968; lowest measured, 140.28 ft below land-surface datum, July 16, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	139.85	FEB 03	137.69	APR 23	136.94	JUL 08	138.60
WATER YEAR 2003 HIGHEST 136.94		APR 23, 2003		LOWEST 139.85		OCT 07, 2002	



LANCASTER COUNTY—Continued

374142076272701. Local number, 59K 9.

LOCATION.--Lat 37°41'42", long 76°27'26", NAD83, Hydrologic Unit 02080104, on the south bank of Moran Creek, 1,000 ft northwest of the intersection of State Highway 630 and a private dirt drive, 0.8 mi west of Wesley Church, 3.0 mi north of Weems, 4.0 mi west of Kilmarnock and the intersection of State Highways 629 and 630, and near Weems. Owner: Fred Hansen.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in. to 147 ft, diameter 2 in. from 147 to 585 ft, depth 585 ft, screened 565 to 580 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

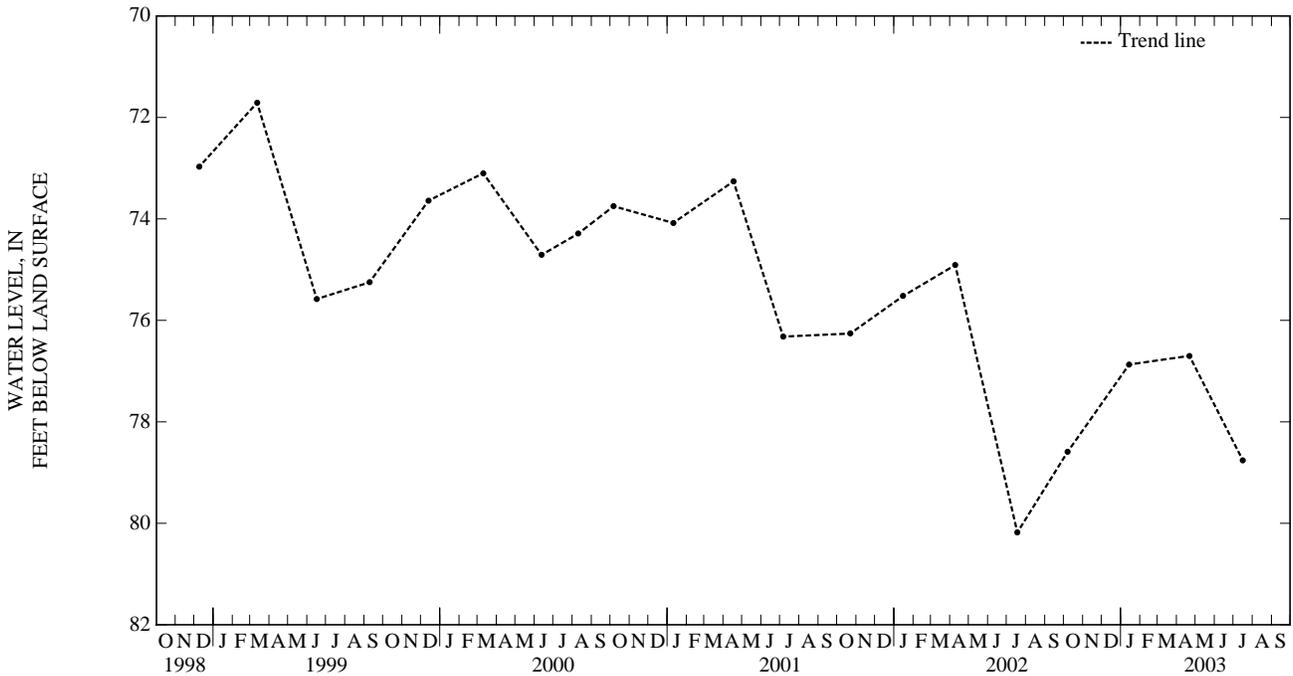
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1969 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Sept. 16, 1969; lowest measured, 80.18 ft below land-surface datum, July 18, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	78.59	JAN 14	76.87	APR 21	76.70	JUL 16	78.76
WATER YEAR 2003 HIGHEST		76.70	APR 21, 2003		LOWEST		78.76
						JUL 16, 2003	



GROUND-WATER LEVELS

LOUDOUN COUNTY

391542077423801. Local number, 49Y 1 SOW 022.

LOCATION.--Lat 39°15'42", long 77°42'37", NAD83, Hydrologic Unit 02070008, 4.2 mi southeast of Harpers Ferry. Owner: American Telephone and Telegraph Company.

AQUIFER.--Bedrock of Precambrian or Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.5 in., depth 516 ft, cased to 45 ft, open hole 45 to 516 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. Sept. 30, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to Sept. 30, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 1,100 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

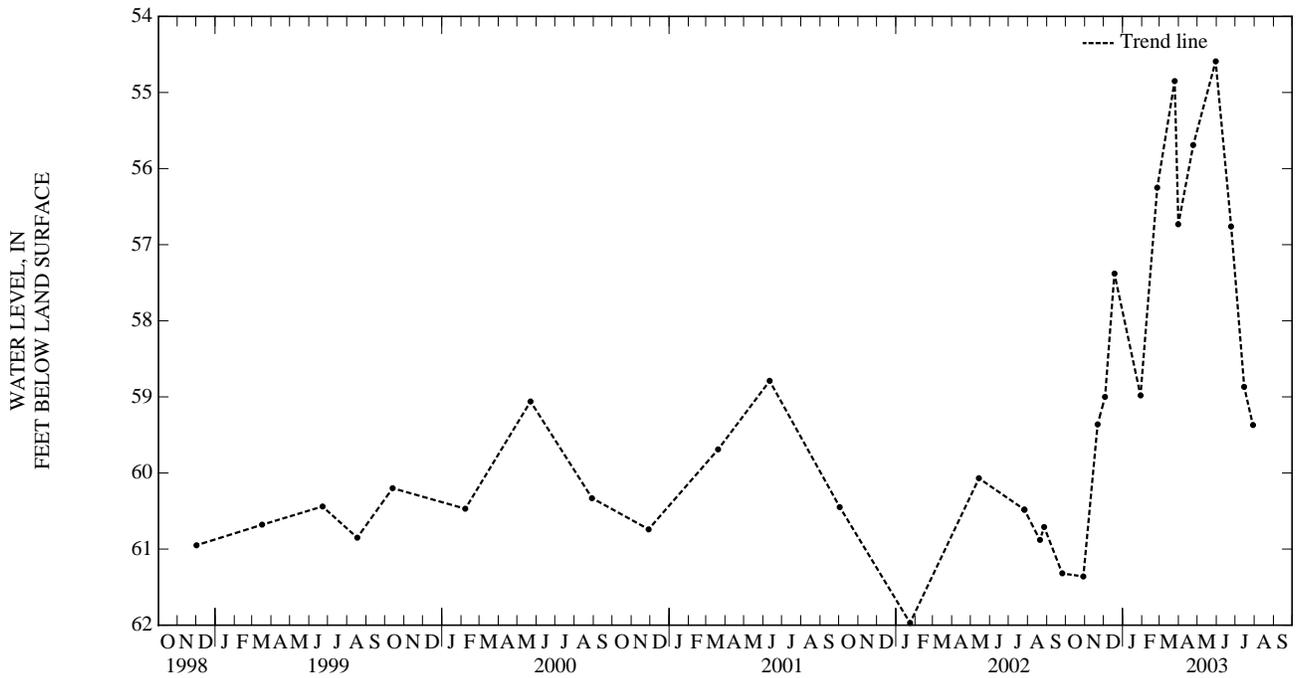
PERIOD OF RECORD.--August 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 48.00 ft below land-surface datum, June 22, 1972; lowest measured, 61.97 ft below land-surface datum, Jan. 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 29	61.36	DEC 18	57.38	MAR 25	54.85	MAY 30	54.59	JUL 29	59.37
NOV 21	59.36	JAN 29	58.98	31	56.73	JUN 24	56.76		
DEC 03	59.00	FEB 25	56.25	APR 24	55.69	JUL 15	58.87		

WATER YEAR 2003 HIGHEST 54.59 MAY 30, 2003 LOWEST 61.36 OCT 29, 2002



LOUDOUN COUNTY—Continued

390623077314201. Local number, 50W 4C.

LOCATION.--Lat 39°06'23", long 77°31'41", NAD83, Hydrologic Unit 02070008, under water tower 500 ft east of State Highway 7, 0.75 mi east of Leesburg.
 Owner: Town of Leesburg.

AQUIFER.--Slightly metamorphosed Balls Bluff Formation of Late Triassic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 535 ft, cased to 6 ft, open hole 6 to 535 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 400 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

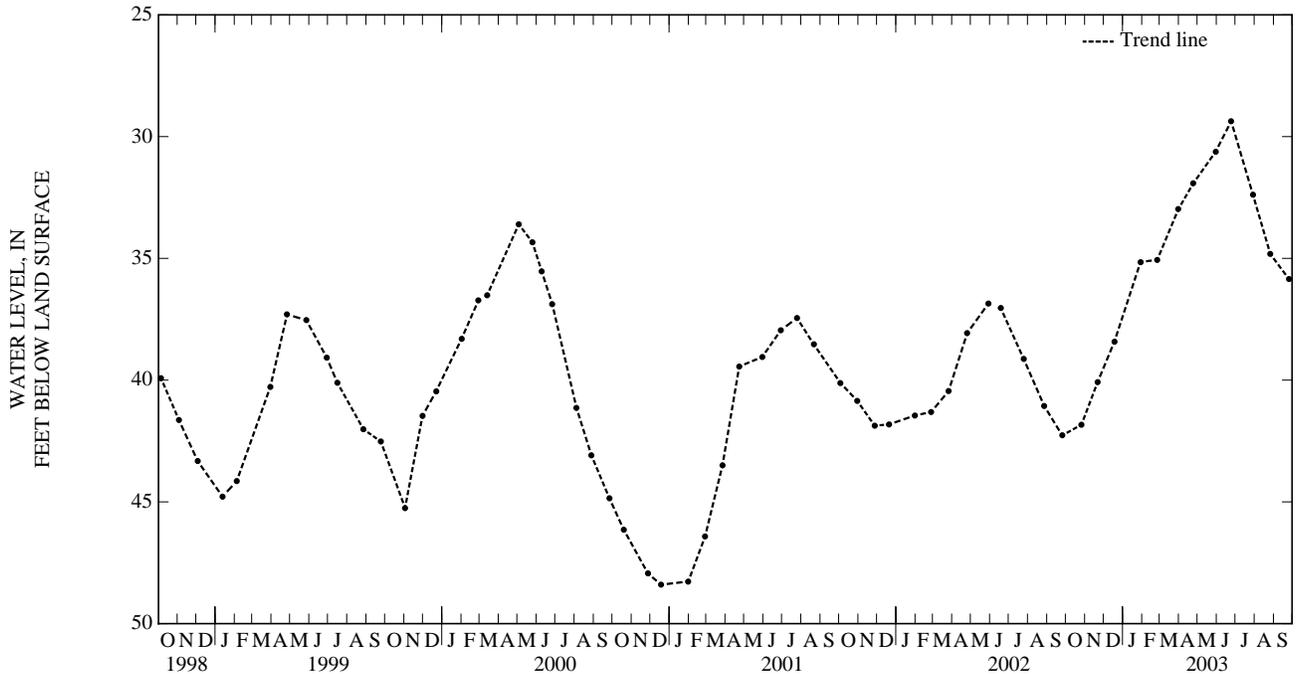
PERIOD OF RECORD.--October 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.13 ft below land-surface datum, Apr. 3, 1997; lowest measured, 49.06 ft below land-surface datum, Nov. 27, 1985.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL										
OCT 26	41.83	DEC 18	38.42	FEB 25	35.06	APR 24	31.92	JUN 24	29.37	AUG 26	34.82
NOV 21	40.08	JAN 29	35.15	MAR 31	32.98	MAY 30	30.62	JUL 29	32.38	SEP 25	35.85

WATER YEAR 2003 HIGHEST 29.37 JUN 24, 2003 LOWEST 41.83 OCT 26, 2002



GROUND-WATER LEVELS

LOUISA COUNTY

380217078133701. Local number, 45N 1.

LOCATION.--Lat 38°02'17", long 78°13'42", NAD83, Hydrologic Unit 02080106, off State Highway 640 on Tyler property, 0.9 mi southeast of Thelma, and 3 mi southwest of Boswells Tavern. Owner: Tyler.

AQUIFER.--Metagraywacke, quartzose schist, and melange of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., original depth 56 ft, length of casing 23 ft. Well was observed with borehole camera on Dec. 4, 2001 and found to be caved in up to a depth of about 40 ft below land-surface datum.

INSTRUMENTATION.--Continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 500 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.95 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction.

PERIOD OF RECORD.--July 1952 to current year.

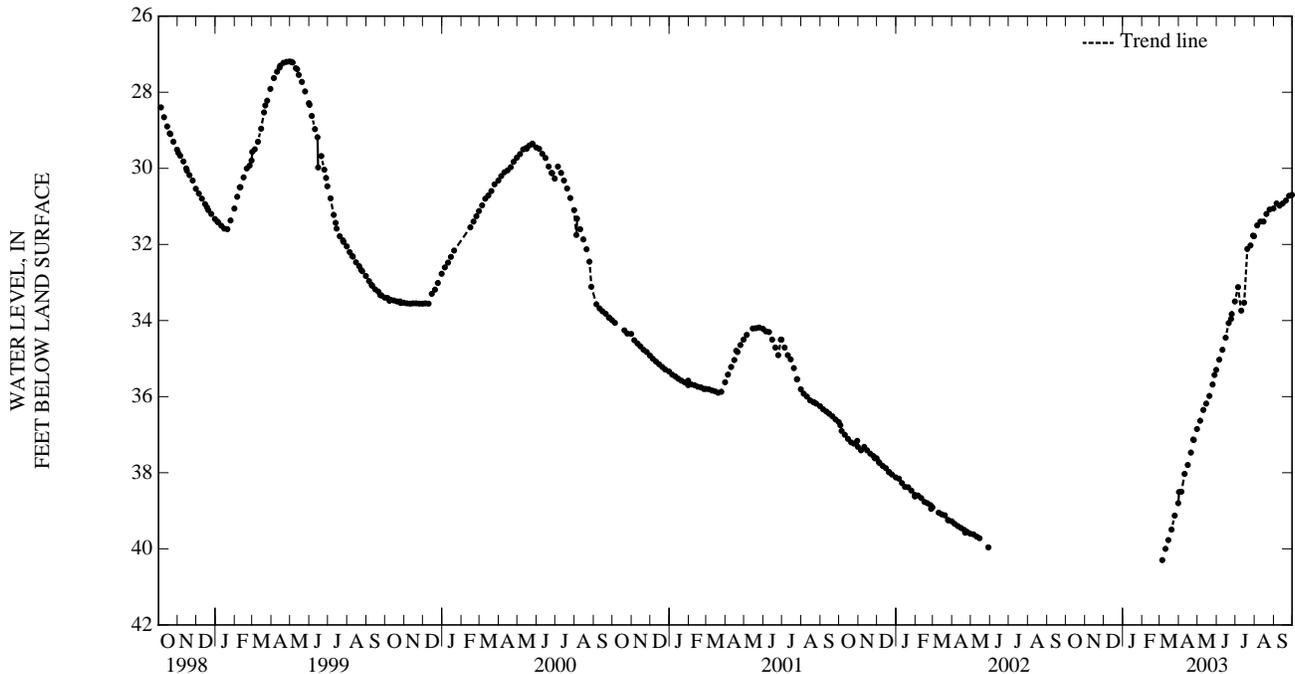
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.63 ft below land-surface datum, Apr. 18, 19, 1993; well dry June 2002 to March 2003; lowest measured water level, 40.30 ft below land-surface datum, Mar. 5, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 30.72 ft below land-surface datum, Sept. 19; well dry October to March; lowest measured water level, 40.30 ft below land-surface datum, Mar. 5.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	40.30	38.50	36.63	35.03	33.12	31.50	30.92
10	---	---	---	---	---	40.00	38.03	36.35	34.77	33.74	31.40	30.98
15	---	---	---	---	---	39.77	37.80	36.18	34.45	33.53	31.40	30.92
20	---	---	---	---	---	39.49	37.47	35.98	34.07	32.12	31.20	30.85
25	---	---	---	---	---	39.13	37.14	35.68	33.83	32.03	31.08	30.72
EOM	---	---	---	---	---	38.80	36.85	35.30	33.50	31.78	31.06	30.70

WATER YEAR 2003 HIGHEST 30.70 SEP 30, 2003 LOWEST 40.30 MAR 05, 2003



LOUISA COUNTY—Continued

380043078111301. Local number, 45N 4.

LOCATION.--Lat 38°00'46", long 78°11'13", NAD83, Hydrologic Unit 02080106, 0.25 mi east of U.S. Highway 15, 4.1 mi south of Boswells Tavern. Owner: Virginia Department of Corrections.

AQUIFER.--Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 200 ft, cased to 42 ft, open hole 42 to 200 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

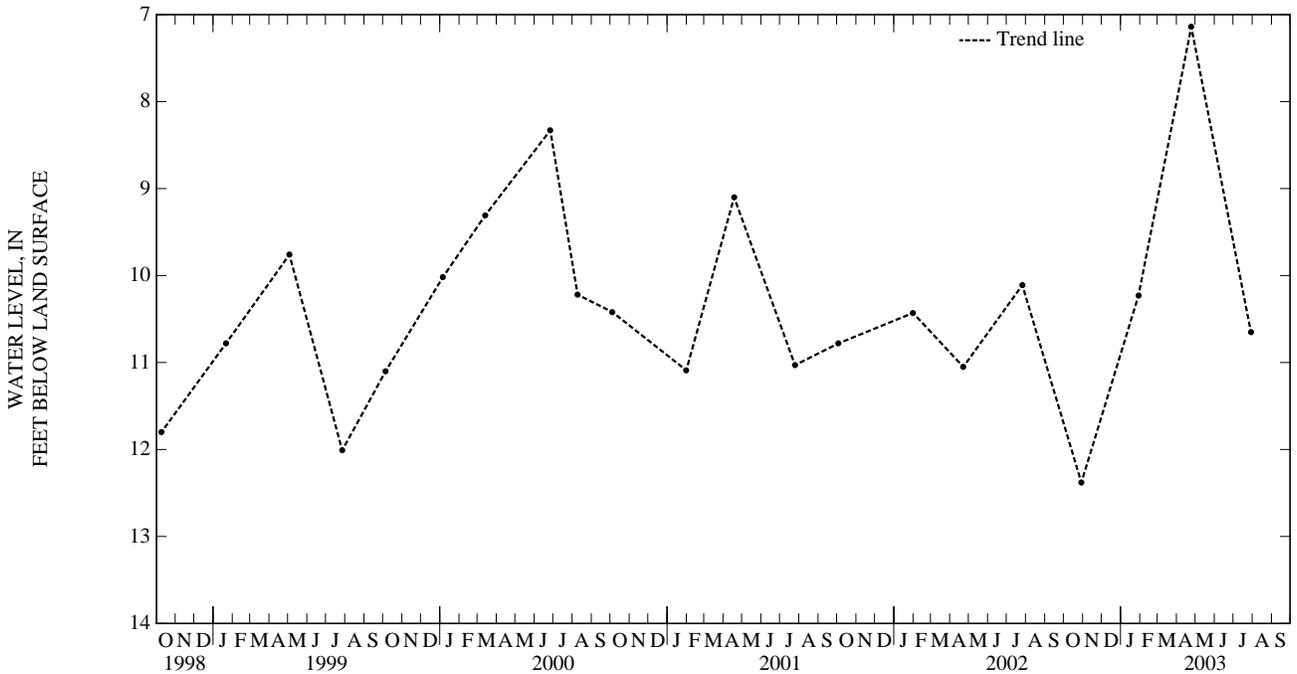
DATUM.--Elevation of land-surface datum is 415 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.3 ft above land-surface datum.

PERIOD OF RECORD.--February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.14 ft below land-surface datum, Apr. 24, 2003; lowest measured, 14.43 ft below land-surface datum, Aug. 26, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	12.38	JAN 29	10.23	APR 24	7.14	JUL 29	10.65
WATER YEAR 2003 HIGHEST		7.14	APR 24, 2003 LOWEST		12.38	OCT 29, 2002	



GROUND-WATER LEVELS
LOUISA COUNTY—Continued

380131078001001. Local number, 46N 1 SOW 056.

LOCATION.--Lat 38°01'32", long 78°00'09", NAD83, Hydrologic Unit 02080106, 200 ft northeast of intersection of U.S. Highway 33 and State Highway 208 in Louisa. Owner: Town of Louisa.

AQUIFER.--Metamorphosed sedimentary and volcanic rocks of unknown age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 132 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 4, 1985, to Sept. 30, 1993, bimonthly measurement with chalked tape. Mar. 31, 1979, to Oct. 4, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 455 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

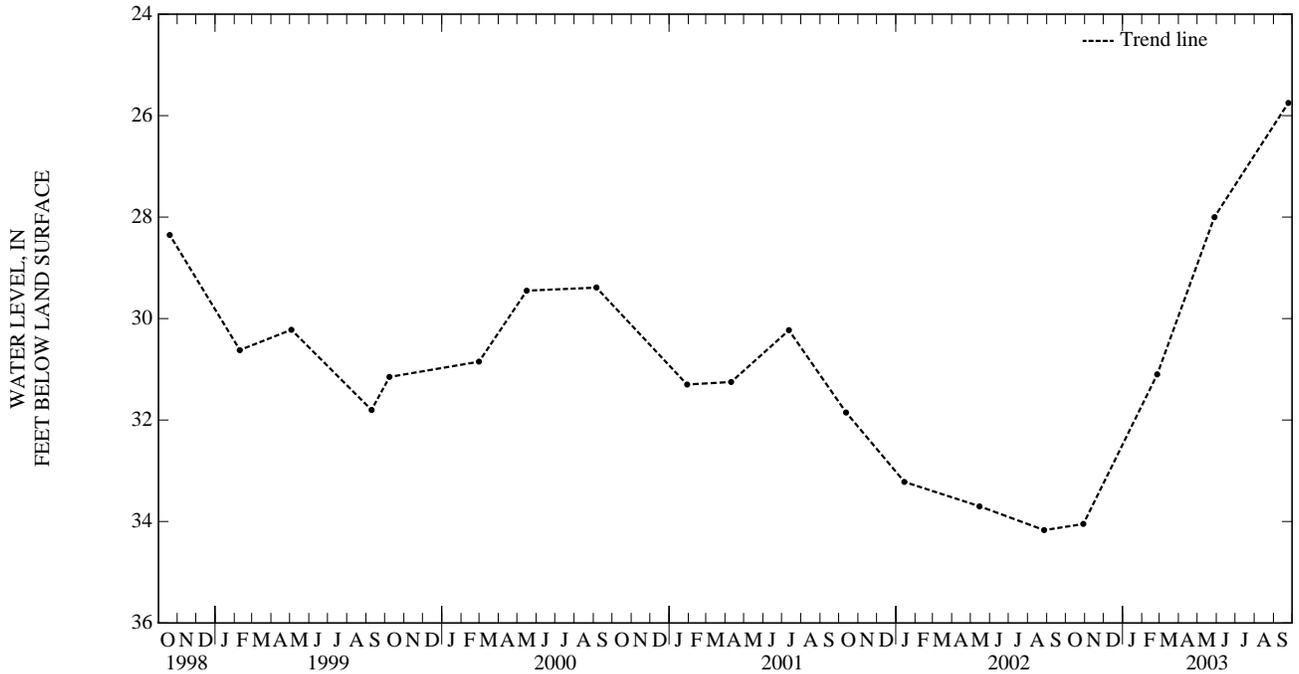
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--March 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 24.65 ft below land-surface datum, May 21, 1998; lowest measured, 34.78 ft below land-surface datum, Dec. 8, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	34.05	FEB 25	31.10	MAY 28	28.00	SEP 24	25.75
WATER YEAR 2003 HIGHEST		25.75	SEP 24, 2003 LOWEST		34.05	OCT 29, 2002	



MATHEWS COUNTY

372545076240101. Local number, 59H 1.

LOCATION.--Lat 37°25'45", long 76°24'00", NAD83, Hydrologic Unit 02080102, 0.5 mi south of the intersection of State Highway 617 and private dirt road at the shore line of Greenmansion Cove at North and 0.7 mi southeast of the intersection of State Highways 14 and 617. Owner: G. T. Abernathy.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled flowing water well, diameter 4 in., depth 568 ft, depth of screen unknown.

INSTRUMENTATION.--Occasional measurement with manometer or chalked tape by USGS personnel.

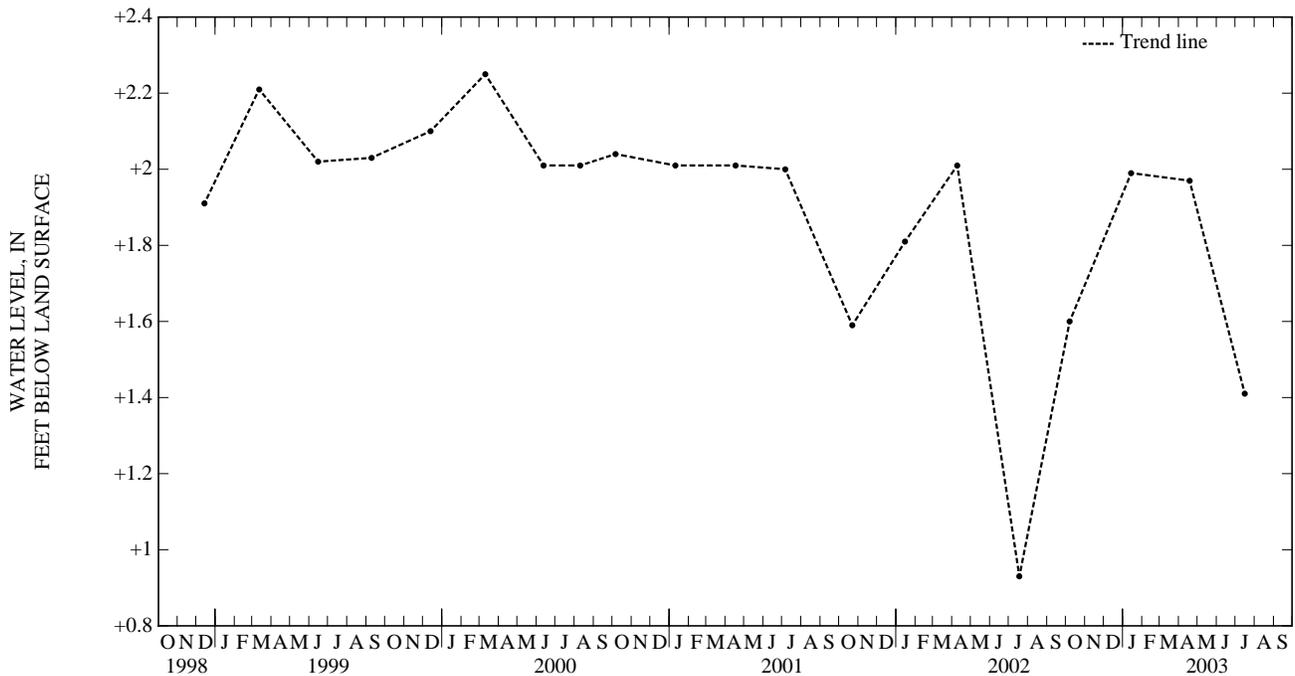
DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--January 1950 to December 1995, September 1997 to current year. Unpublished records available prior to October 1988 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.70 ft above land-surface datum, Feb. 12, 1980; lowest measured, 0.93 ft above land-surface datum, July 18, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	+1.60	JAN 14	+1.99	APR 18	+1.97	JUL 16	+1.41
WATER YEAR 2003 HIGHEST		+1.99	JAN 14, 2003		LOWEST		+1.41 JUL 16, 2003



GROUND-WATER LEVELS

MIDDLESEX COUNTY

373630076312601. Local number, 58J 5.

LOCATION.--Lat 37°36'31", long 76°31'25", NAD83, Hydrologic unit 02080104, 1100 ft west of State Highway 619, 3 mi north of State Highway 33. Owner: Robert Bunch.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 14 in., 0 to 400 ft, 8 in., 400 to 730 ft, depth 730 ft, screened 507 to 522 ft, 527 to 542 ft, 550 to 560 ft, 578 to 588 ft, 650 to 660 ft, 669 to 679 ft, 688 to 703 ft, 710 to 730 ft.

INSTRUMENTATION.--Occasional measurement with chalk tape by USGS personnel.

DATUM.--Elevation of land surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Bottom of pump motor mount flange, 1.17 ft above land surface datum.

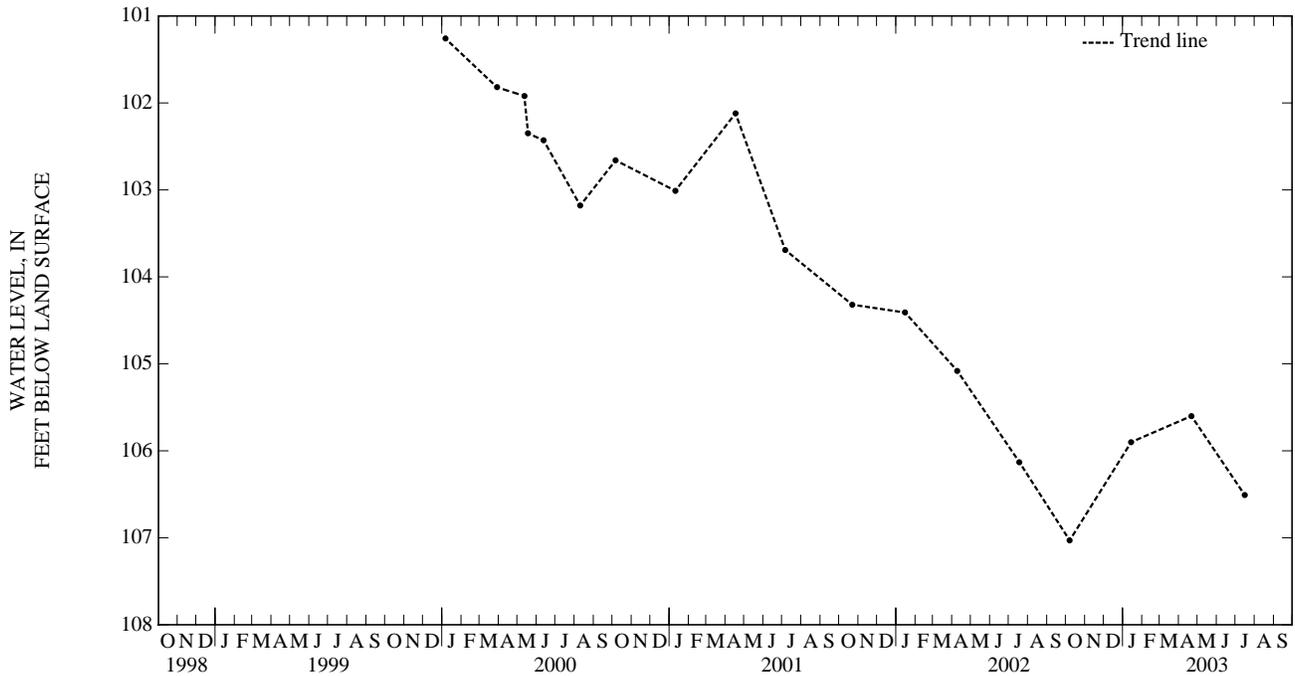
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1974, January 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 85.54 ft below land-surface datum, June 3, 1974; lowest measured, 107.03 ft below land-surface datum, Oct. 7, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	107.03	JAN 14	105.90	APR 21	105.60	JUL 16	106.51
WATER YEAR 2003 HIGHEST		105.60	APR 21, 2003 LOWEST		107.03	OCT 07, 2002	



MIDDLESEX COUNTY—Continued

373149076251501. Local number, 59J 16.

LOCATION.--Lat 37°31'45", long 76°25'15", NAD83, Hydrologic unit 02080102, 20 ft southwest of 59J 25, 165 ft east of State Highway 3, 350 ft north of Coves of Wilton Creek entrance road, 1.25 mi north of Piankatank Creek. Owner: CWWD Development Co. LLC.

AQUIFER.--Yorktown-Eastover aquifer of Miocene to Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 100 ft, casing 0 to 80 ft, 90 to 100 ft, screened 80 to 90 ft.

INSTRUMENTATION.--Occasional measurement with chalk tape by USGS personnel.

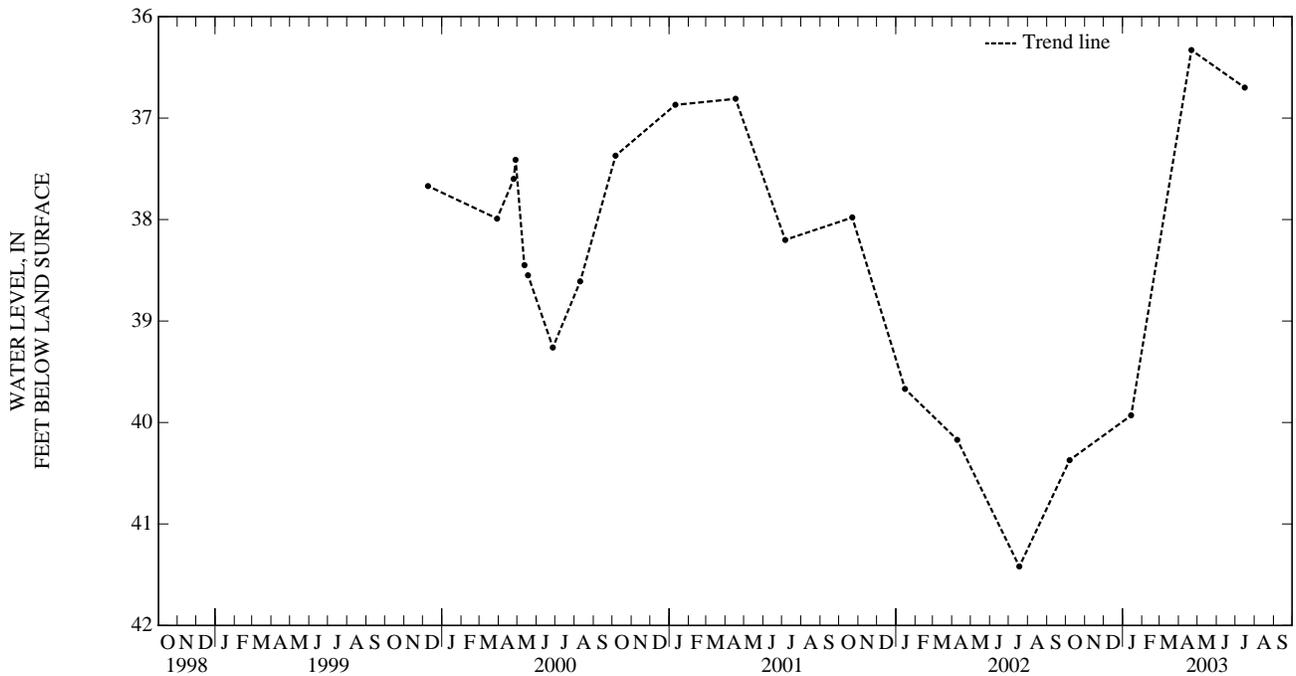
DATUM.--Elevation of land surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.05 ft above land surface datum prior to July 18, 2002; 0.75 ft thereafter.

PERIOD OF RECORD.--December 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.33 ft below land-surface datum, Apr. 21, 2003; lowest measured, 41.42 ft below land-surface datum, July 18, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	40.37	JAN 14	39.93	APR 21	36.33	JUL 16	36.70
WATER YEAR 2003 HIGHEST		36.33	APR 21, 2003 LOWEST		40.37	OCT 07, 2002	



GROUND-WATER LEVELS
MIDDLESEX COUNTY—Continued

373145076251601. Local number, 59J 25.

LOCATION.--Lat 37°31'45", long 76°25'15", NAD83, Hydrologic unit 02080102, 20 ft northeast of 59J 16, 165 ft east of State Highway 3, 350 ft north of Coves of Wilton Creek entrance road, 1.25 mi north of Piankatank Creek. Owner: CWWD Development Co. LLC.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 43 ft, casing depth unknown, screened depth unknown.

INSTRUMENTATION.--Occasional measurement with chalk tape by USGS personnel.

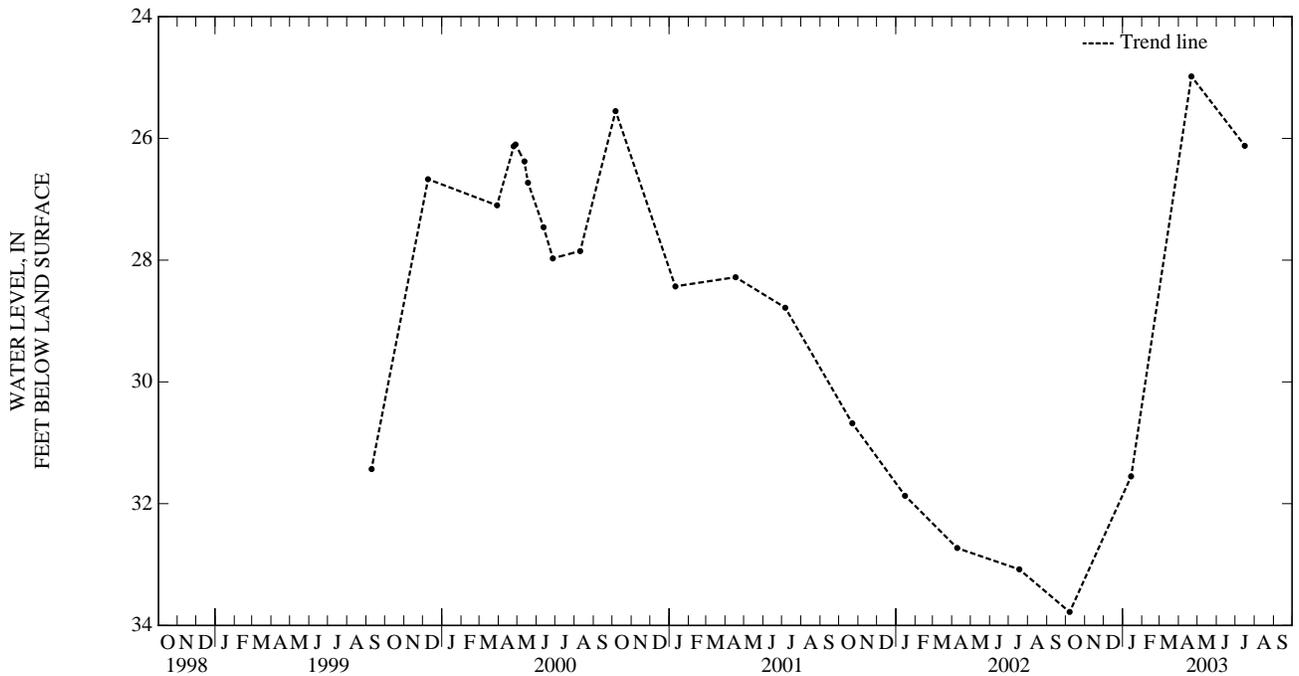
DATUM.--Elevation of land surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.87 ft above-land surface datum.

PERIOD OF RECORD.--September 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 24.98 ft below land-surface datum, Apr. 21, 2003; lowest measured, 33.78 ft below land-surface datum Oct. 7, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	33.78	JAN 14	31.55	APR 21	24.98	JUL 16	26.12
WATER YEAR 2003 HIGHEST		24.98 APR 21, 2003		LOWEST		33.78 OCT 07, 2002	



MIDDLESEX COUNTY—Continued

373125076251501. Local number, 59J 27.

LOCATION.--Lat 37°31'25", long 76°25'14", NAD83, Hydrologic unit 02080102, 1000 ft east of State Highway 3, 0.9 mi north of Piankatank Creek. Owner: Carolyn Wuyts.

AQUIFER.--Upper Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1001 ft, casing 0 to 981 ft, screened 981 to 1001 ft.

INSTRUMENTATION.--Occasional measurement with chalk tape by USGS personnel.

DATUM.--Elevation of land surface datum is 30 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.28 ft above land surface datum.

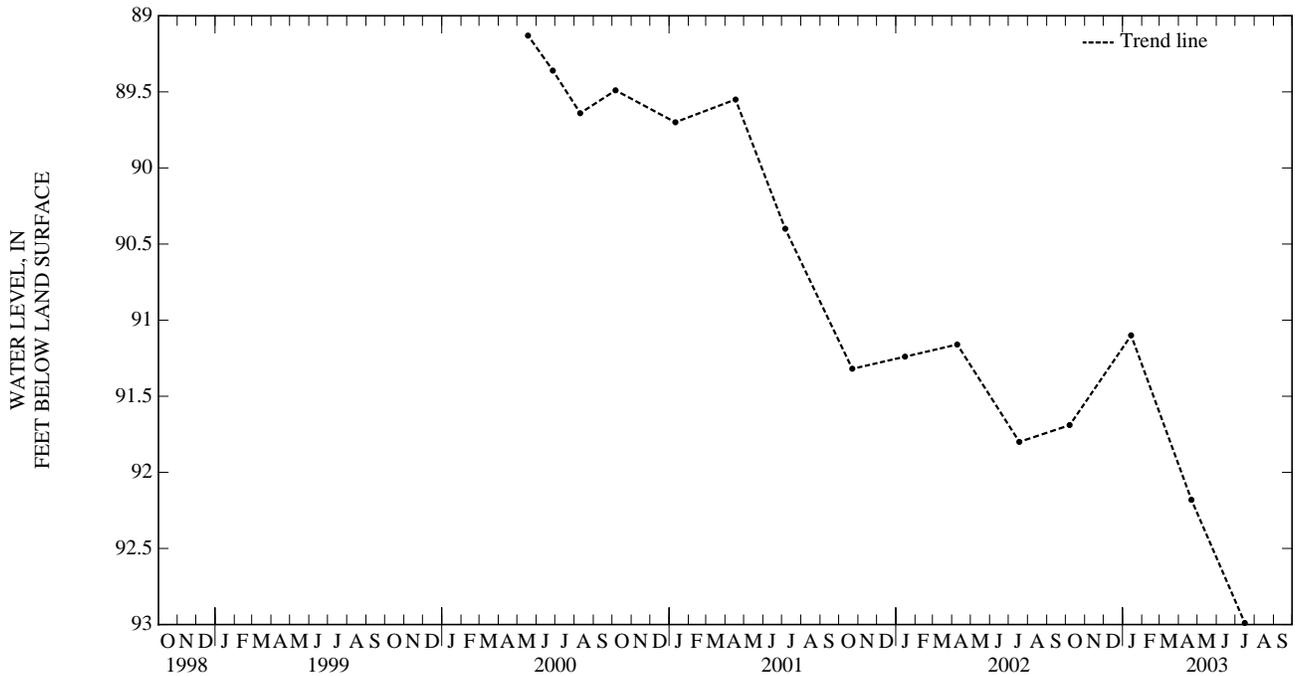
REMARKS.--Water level affected by regional drawdown.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.13 ft below land-surface datum, May 18, 2000; lowest measured, 92.99 ft below land-surface datum July 16, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	91.69	JAN 14	91.10	APR 21	92.18	JUL 16	92.99
WATER YEAR 2003 HIGHEST		91.10	JAN 14, 2003 LOWEST		92.99	JUL 16, 2003	



GROUND-WATER LEVELS
MONTGOMERY COUNTY

370812080261901. Local number, 27F 2 SOW 019.

LOCATION.--Lat 37°08'12", long 80°26'18", NAD83, Hydrologic Unit 05050001, off entrance road to Round Meadow Country Club, 400 ft north of State Highway 661, and 0.5 mi west of Christiansburg. Owner: Town of Christiansburg.

AQUIFER.--Beekmantown Formation of Early Ordovician age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 450 ft, length of casing unknown.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Apr. 5, 1969, one measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 1,970 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft below land-surface datum prior to May 1, 1990; 0.43 ft above land-surface datum thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Lowest recorded water level, 7.39 ft, is a result of the Mexico earthquake of Sept. 19, 1985, but is not shown as the minimum of record since it is an earthquake affected measurement. Prior to May 1, 1990, brief periods when water flowed over top of casing. Missing record due to recorder malfunction.

PERIOD OF RECORD.--July 1953, April 1969 to current year. Unpublished record available July 1953 in files of the Virginia Department of Environmental Quality - Water Division.

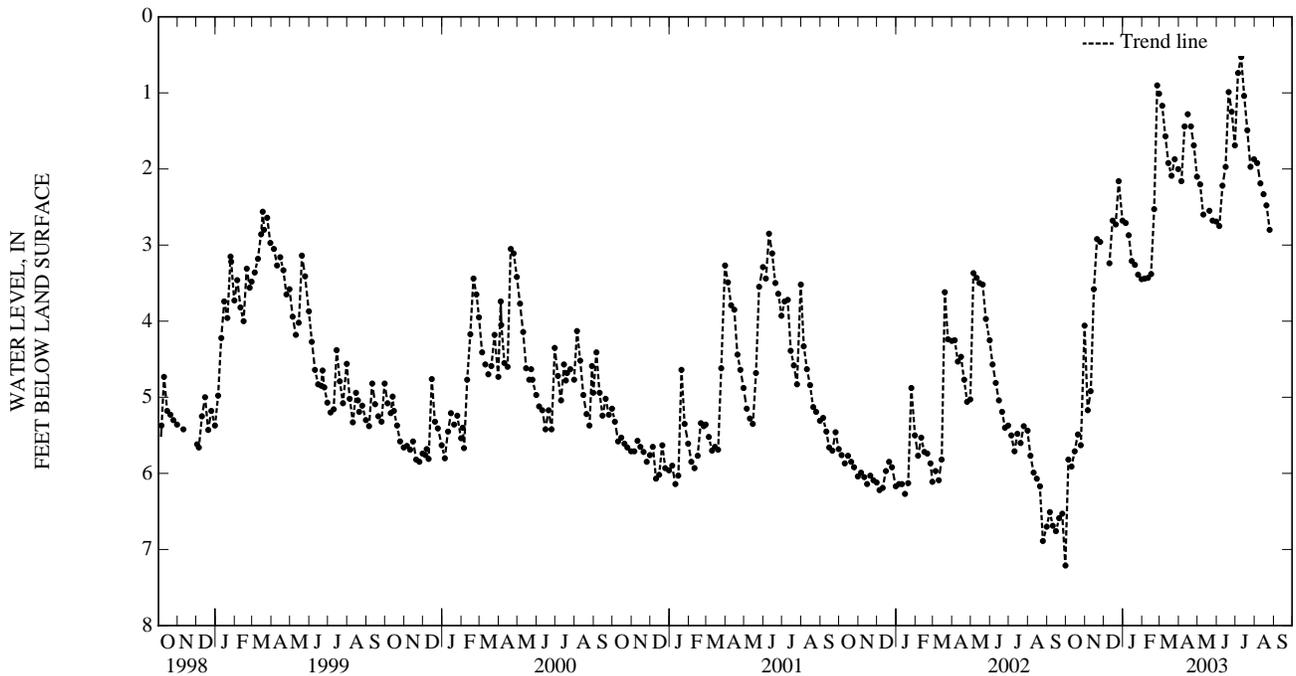
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.02 ft above land-surface datum, Mar. 28, 1993; lowest recorded, 7.30 ft below land-surface datum, Dec. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 0.27 ft below land-surface datum, July 7; lowest instantaneous water level, 5.92 ft below land-surface datum, Oct. 9.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.82	5.17	---	2.71	3.44	1.17	2.16	2.20	2.75	0.74	1.92	---
10	5.91	4.92	3.24	2.87	3.43	1.57	1.44	2.60	2.22	0.53	2.19	---
15	5.71	3.58	2.68	3.21	3.38	1.92	1.28	---	1.97	1.04	2.33	---
20	5.49	2.92	2.73	3.26	2.53	2.09	1.44	2.55	0.99	1.49	2.48	---
25	5.63	2.96	2.16	3.39	0.90	1.87	1.69	2.68	1.25	1.97	2.80	---
EOM	4.06	---	2.68	3.45	1.01	2.00	2.10	2.69	1.69	1.87	---	---

WATER YEAR 2003 HIGHEST .53 JUL 10, 2003 LOWEST 5.91 OCT 10, 2002



NEW KENT COUNTY

373111077104601. Local number, 53J 6.

LOCATION.--Lat 37°31'12", long 77°10'45", NAD83, Hydrologic Unit 02080206, 0.18 mi south of State Highway 249 in Brookwood Manor Subdivision, 0.7 mi northeast of the intersection of Interstate Highway 64 and State Highway 249, and 2.95 mi southwest of Quinton. Owner: Thomas M. Brooks.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 6 in., depth 305 ft, screened 285 to 305 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 115 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

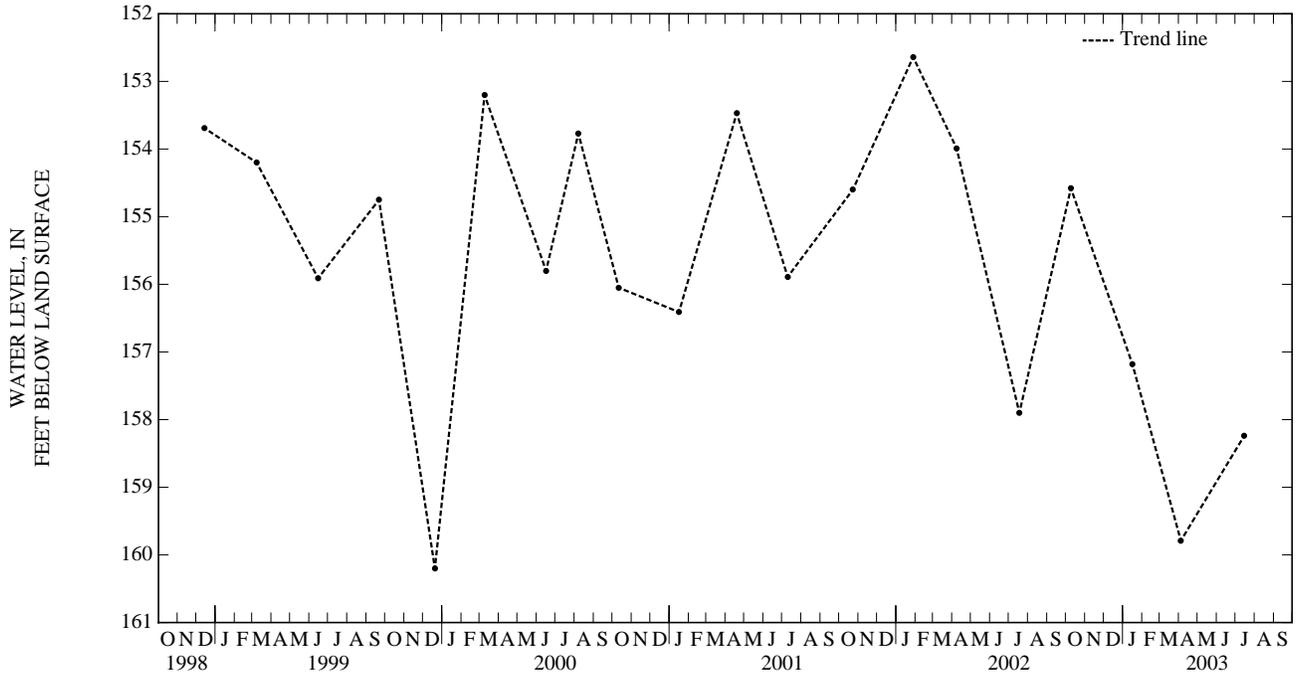
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1983 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 129.91 ft below land-surface datum, Feb. 3, 1984; lowest measured, 160.20 ft below land-surface datum, Dec. 20, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	154.58	JAN 16	157.18	APR 04	159.79	JUL 15	158.24
WATER YEAR 2003 HIGHEST 154.58		OCT 09, 2002		LOWEST 159.79		APR 04, 2003	



GROUND-WATER LEVELS
NEW KENT COUNTY—Continued

373024076542201. Local number, 55J 6.

LOCATION.--Lat 37°30'24", long 76°54'21", NAD83, Hydrologic Unit 02080106, 0.25 mi north of State Highway 249, 4.3 mi east of New Kent Courthouse.
Owner: Chad Brunskole.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 275 ft, screened 265 to 275 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 110 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.38 ft above land-surface datum.

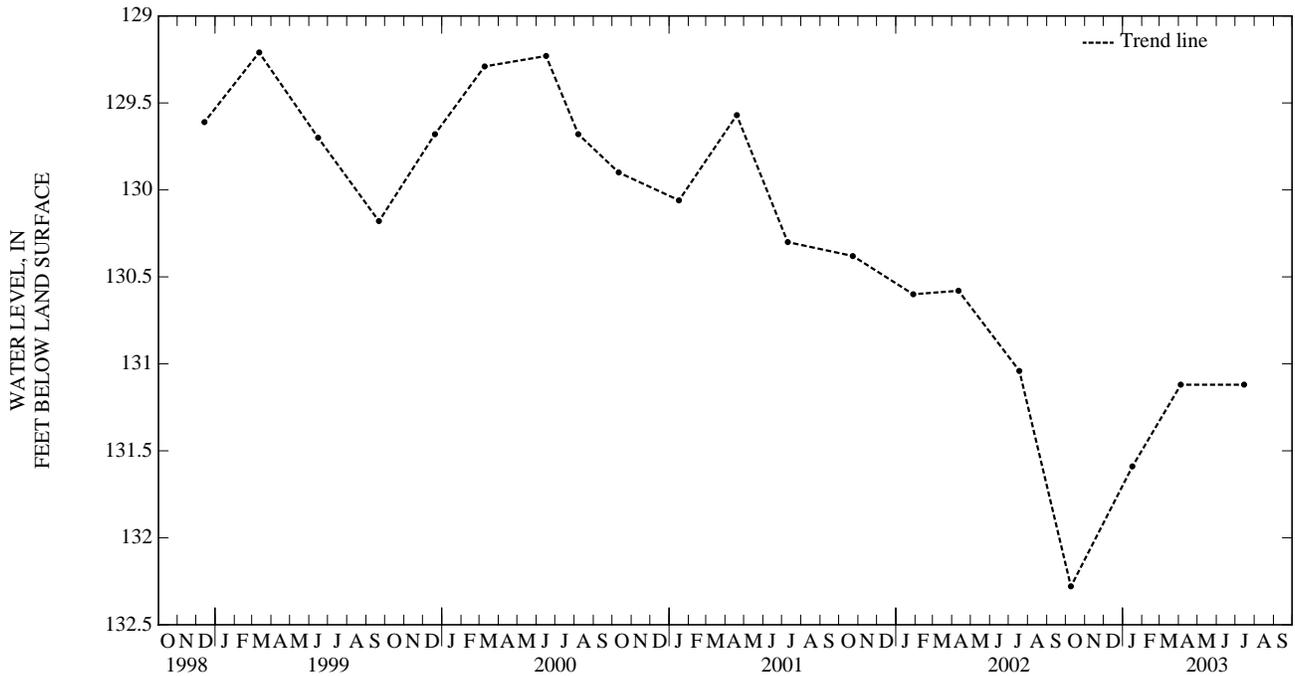
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1972, April 1984 to March 1986, March 1988 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 114.10 ft below land-surface datum, Dec. 7, 1972; lowest measured, 132.28 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	132.28	JAN 16	131.59	APR 04	131.12	JUL 15	131.12
WATER YEAR 2003 HIGHEST		131.12	APR 04, 2003		JUL 15, 2003	LOWEST	
					132.28	OCT 09, 2002	



CITY OF NEWPORT NEWS

371027076335601. Local number, 58F 1 SOW 002.

LOCATION.--Lat 37°10'28", long 76°33'55", NAD83, Hydrologic Unit 02080206, on shore of Lee Hall Reservoir, 0.15 mi north of intersection of State Highway 105 and U.S. Highway 60, and 0.65 mi northeast of Fort Eustis in Newport News. Owner: City of Newport News.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in. to 431.3 ft, diameter 8 in. from 431.3 to 443 ft, diameter 6 in. from 443 to 497 ft, depth 497 ft, screened 476 to 493 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 20 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.3 ft above land-surface datum.

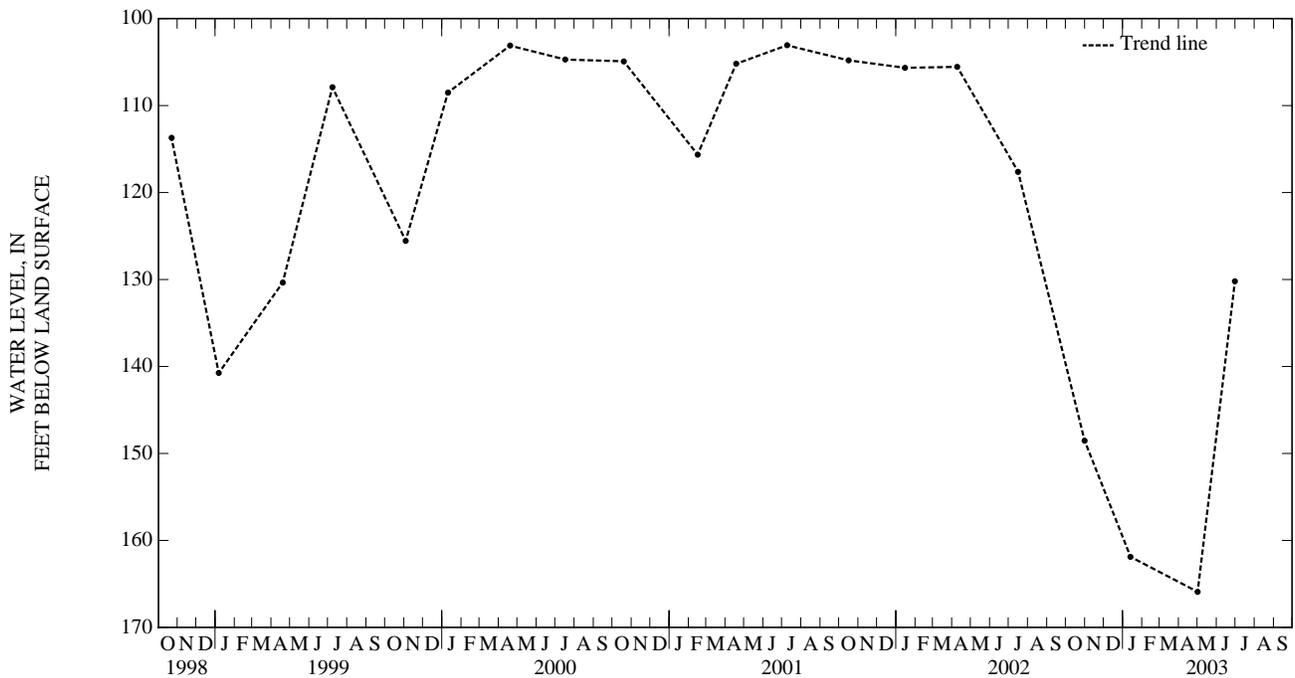
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--January 1968 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.76 ft below land-surface datum, May 10, 1969; lowest measured, 165.91 ft below land-surface datum, May 1, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	148.52	JAN 13	161.89	MAY 01	165.91	JUN 30	130.22
WATER YEAR 2003 HIGHEST 130.22 JUN 30, 2003		LOWEST 165.91 MAY 01, 2003					



CITY OF NEWPORT NEWS—Continued

371208076341101. Local number, 58F 50 SOW 171A.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,236 ft, screened 1,205 to 1,215 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to May 8, 1997, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.85 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

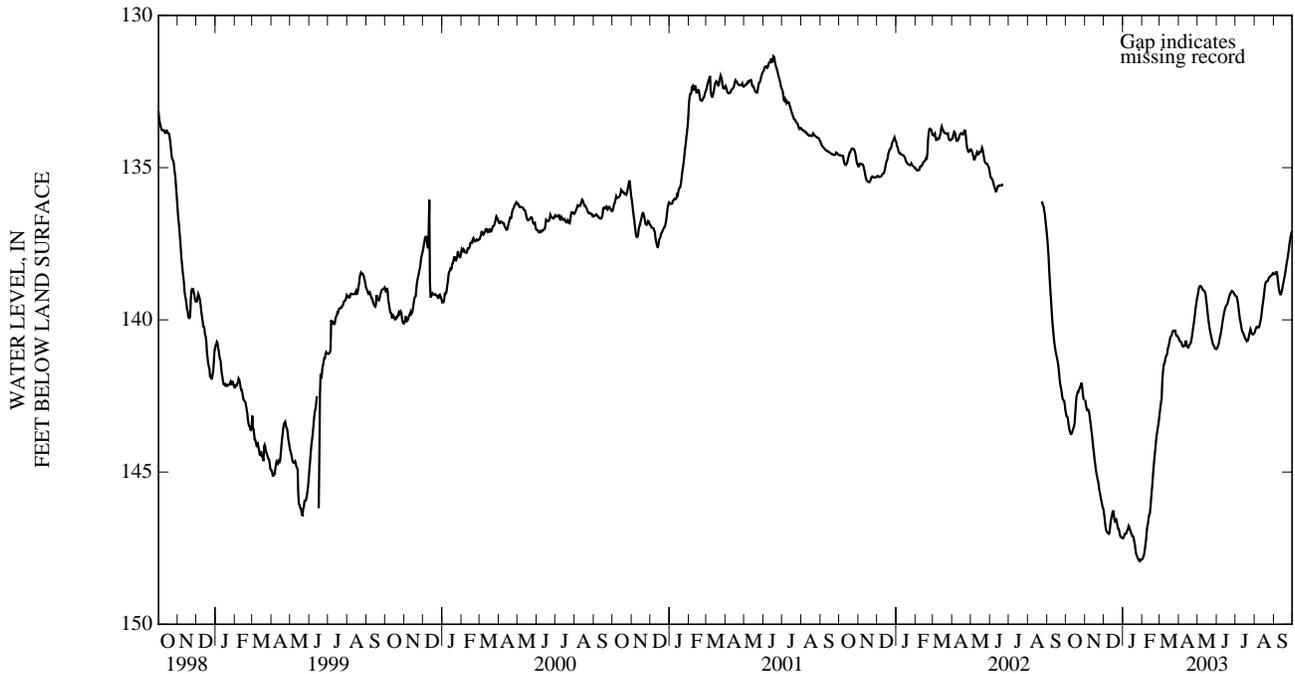
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 106.32 ft below land-surface datum, May 23-27, 1996; lowest recorded, 147.93 ft below land-surface datum, Jan. 28, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 137.05 ft below land-surface datum, Sept. 30; lowest instantaneous water level, 147.93 ft below land-surface datum, Jan. 28.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	143.41	142.97	146.92	147.03	147.54	142.07	140.74	138.89	140.67	139.46	140.24	138.41
10	143.74	143.46	147.00	146.77	146.70	141.28	140.85	139.02	140.08	140.19	140.05	139.11
15	143.38	144.36	146.32	147.05	145.91	140.89	140.90	139.38	139.58	140.53	139.31	138.90
20	142.37	145.15	146.60	147.39	144.64	140.52	140.75	140.24	139.30	140.67	138.74	138.33
25	142.14	145.72	146.87	147.85	143.67	140.37	140.10	140.75	139.05	140.31	138.59	137.66
EOM	---	146.19	147.18	147.88	143.23	140.59	139.29	140.96	139.18	140.44	138.46	137.08



CITY OF NEWPORT NEWS—Continued

371208076341102. Local number, 58F 51 SOW 171B.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 851 ft, screened 820 to 830 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to Apr. 24, 1996, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Apr. 14, 1993; 1.80 ft thereafter.

REMARKS.--Missing record due to recorder malfunction, except for periods in November and December 1998, January 1999, September, October, December 2002, and January 2003, due to water level below transducer, result of nearby pumpage. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

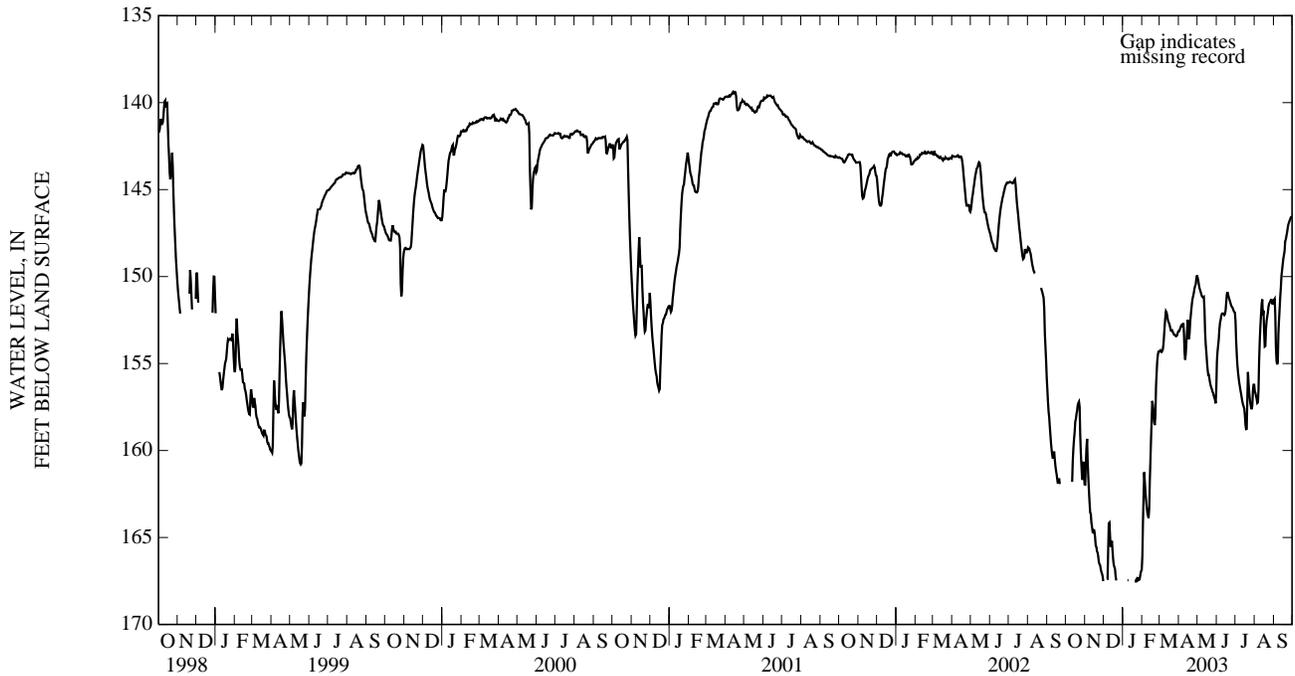
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 126.35 ft below land-surface datum, Mar. 23-25, 1985; lowest recorded, not determined, greater than 167.53 ft, probably occurred during December 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 146.51 ft below land-surface datum, Sept. 28; lowest instantaneous water level, not determined, greater than 167.53 ft, probably occurred during December.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	160.66	---	---	161.83	154.28	152.80	150.78	153.03	155.50	157.27	154.86
10	---	163.64	164.14	---	163.75	152.33	154.40	151.20	152.12	156.75	152.87	151.83
15	158.93	164.53	165.74	---	159.30	152.61	152.49	154.34	151.94	157.59	151.95	149.27
20	157.38	165.80	167.25	167.52	158.38	153.11	152.21	155.88	151.17	157.04	152.56	147.86
25	160.17	166.59	---	167.46	154.84	153.34	150.91	156.63	151.73	157.33	151.50	146.90
EOM	161.95	167.51	---	166.87	154.30	153.15	149.93	156.55	152.07	156.22	151.44	146.57



CITY OF NEWPORT NEWS—Continued

371208076341103. Local number, 58F 52 SOW 171C.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 537 ft, screened 527 to 537 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 24, 1996, digital recorder 60-minute punch. October 1993 to June 1994, occasional measurement with chalked tape by USGS personnel. Prior to October 1993, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 3.1 ft thereafter.

REMARKS.--Missing record due to recorder malfunction except for periods in October to December 1998, January 1999, and September, October, December 2002, due to water level below transducer, result of nearby pumpage. Water level affected by regional drawdown, nearby pumpage, and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

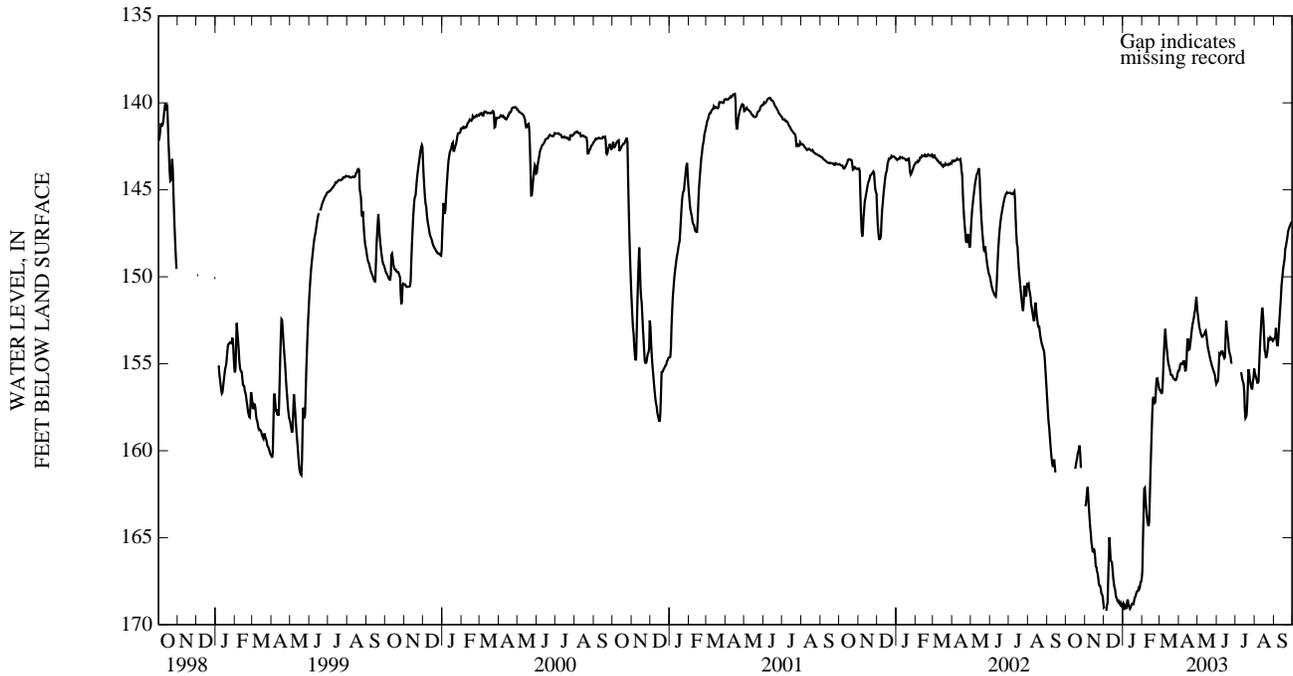
PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 128.12 ft below land-surface datum, Mar. 23, 1985; lowest recorded, not determined, greater than 169.22 ft, occurred Dec. 3-4, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 146.83 ft below land-surface datum, Sept. 30; lowest instantaneous water level, not determined, greater than 169.22 ft, occurred Dec. 3-4.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	162.09	169.20	169.05	162.13	156.66	154.97	153.09	154.44	---	156.09	153.60
10	---	164.74	164.98	168.90	164.21	153.00	155.06	153.39	154.29	155.49	153.53	152.30
15	---	165.63	166.77	168.82	160.09	155.00	153.54	153.33	153.49	156.59	152.61	149.78
20	160.13	166.94	168.26	168.42	157.12	155.65	153.59	154.50	154.08	157.12	154.58	148.27
25	160.99	167.77	168.65	168.06	155.84	155.90	152.33	155.23	154.95	156.11	153.63	147.23
EOM	---	168.65	168.83	167.36	156.45	155.40	151.71	156.15	---	155.28	153.64	146.88



CITY OF NEWPORT NEWS—Continued

371208076341104. Local number, 58F 53 SOW 171D.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 343 ft, screened 333 to 343 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Apr. 14, 1993; 2.9 ft thereafter.

REMARKS.--Missing record due to recorder malfunction. Water level affected by regional drawdown and occasional pumpage for water-quality sampling. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

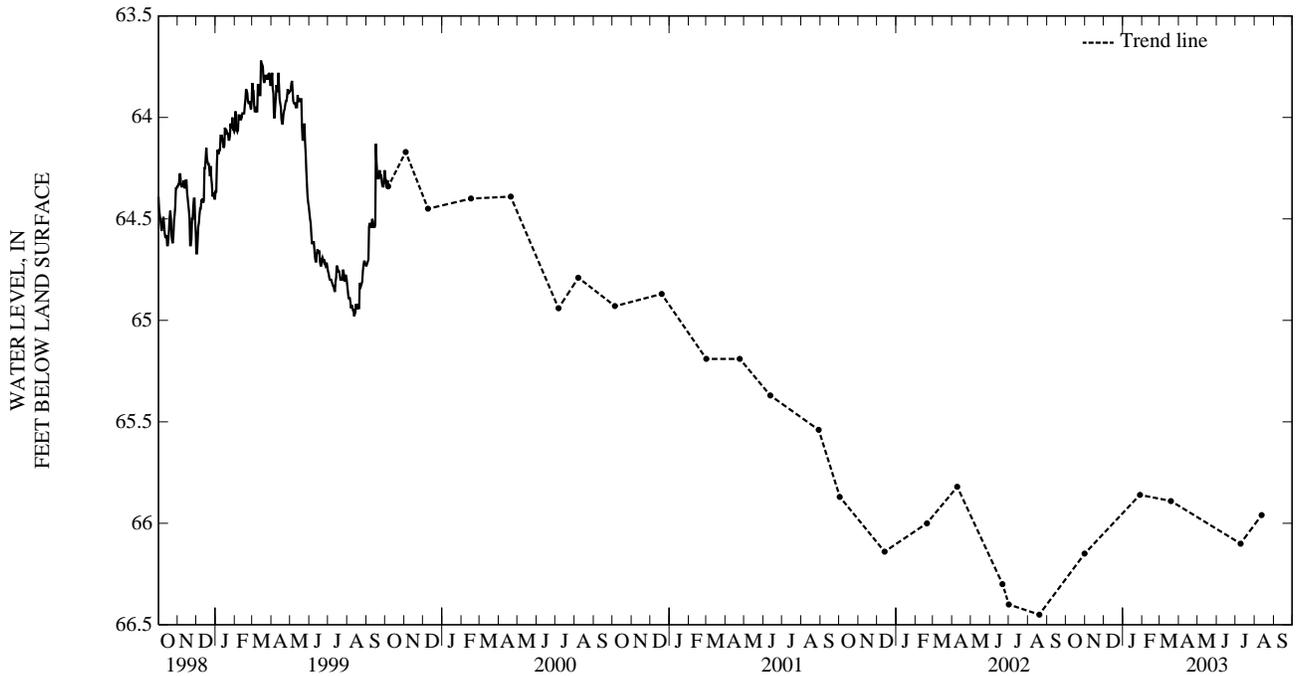
PERIOD OF RECORD.--July 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 55.18 ft below land-surface datum, Feb. 2, 1985; lowest recorded, 66.45 ft below land-surface datum, Aug. 19, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 31	66.15	JAN 28	65.86	MAR 19	65.89	JUL 09	66.10	AUG 12	65.96

WATER YEAR 2003 HIGHEST 65.86 JAN 28, 2003 LOWEST 66.15 OCT 31, 2002



371208076341105. Local number, 58F 54 SOW 171E.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 88 ft, screened 78 to 88 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch. Digital recorder was removed from Oct. 18, 1991 to July 8, 1992. During this period, occasional measurements with chalked tape.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to July 8, 1992; 1.6 ft thereafter.

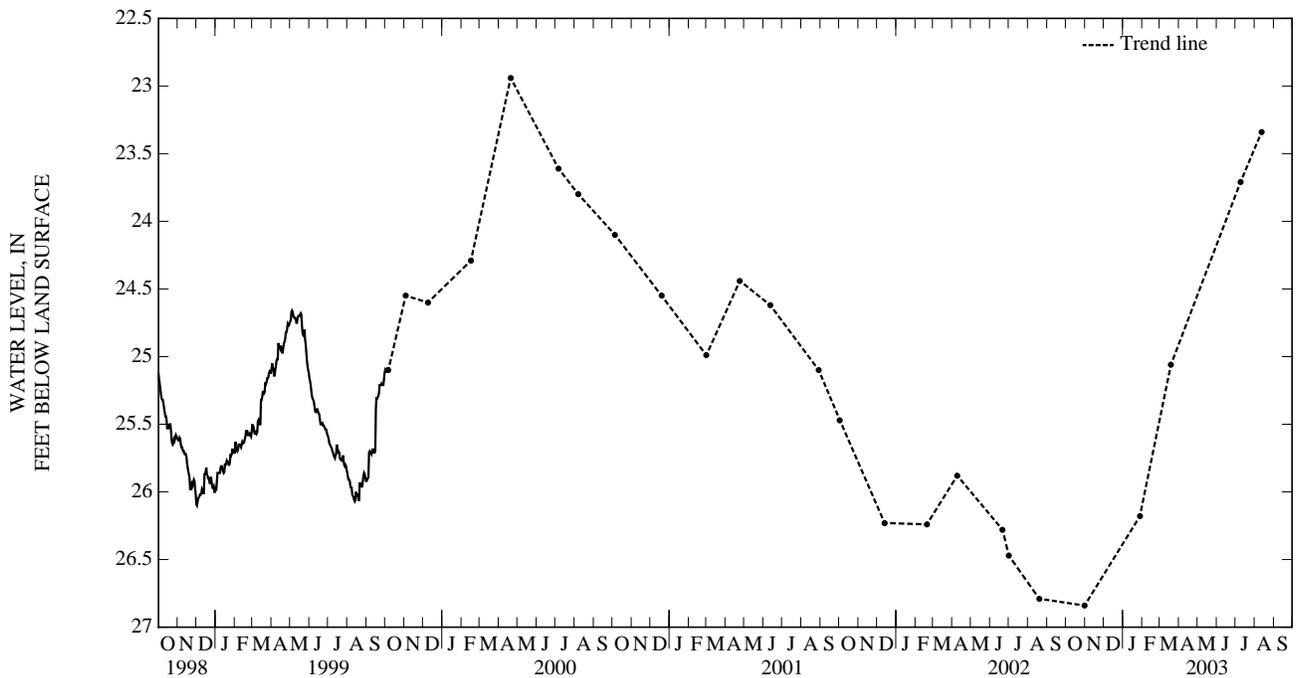
REMARKS.--Missing record due to recorder malfunction. Water level affected by occasional pumpage for water-quality sampling. Occasional stepping in hydrograph due to well not being plum and float rubbing the side of the casing.

PERIOD OF RECORD.--June 1984 to October 1991, July 1992 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 22.05 ft below land-surface datum, May 20, 21, 1993; lowest recorded, 27.34 ft below land-surface datum, Nov. 1, 1990.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	26.84	JAN 28	26.18	MAR 19	25.06	JUL 09	23.71	AUG 12	23.34
WATER YEAR 2003 HIGHEST		23.34	AUG 12, 2003 LOWEST		26.84	OCT 31, 2002			



CITY OF NEWPORT NEWS—Continued

371208076341106. Local number, 58F 55 SOW 171F.

LOCATION.--Lat 37°12'09", long 76°34'10", NAD83, Hydrologic Unit 02080206, 0.4 mi southeast of the intersection of State Highways 143 and 238 and 150 ft north of State Highway 143 in the city of Newport News. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1999, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

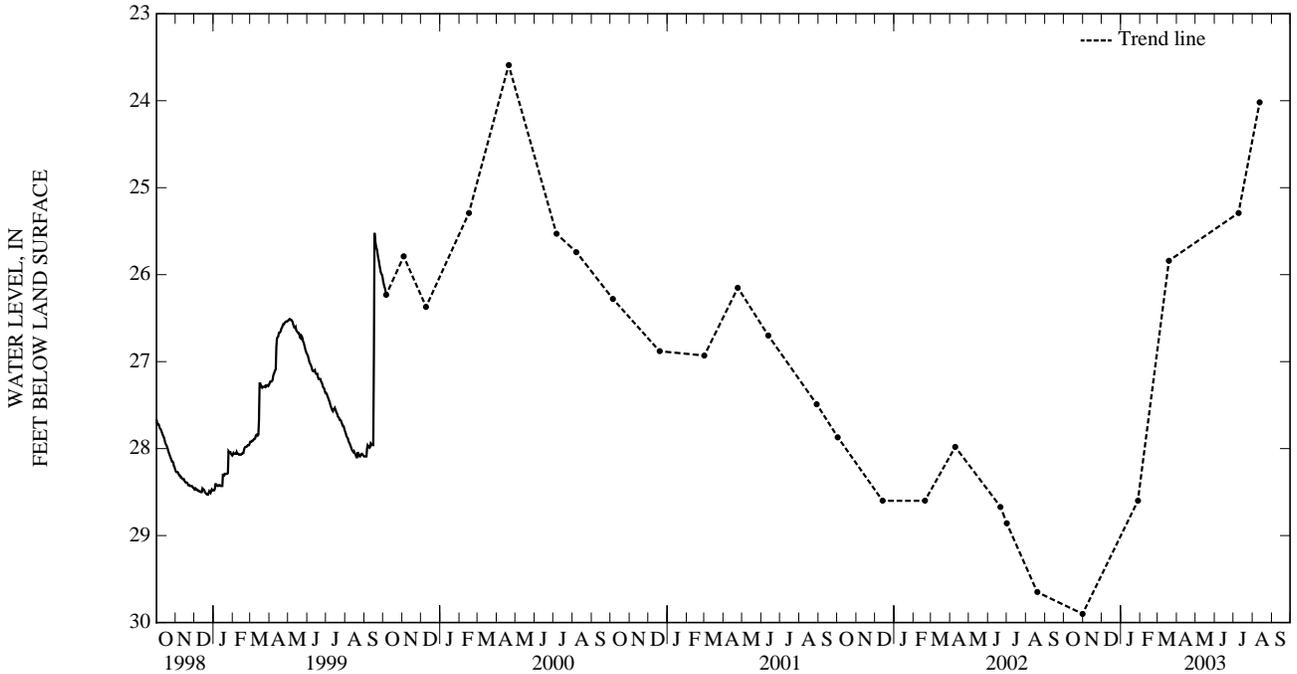
REMARKS.--Water level affected by occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--June 1984 to current year. Unpublished records available prior to October 1986 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 23.04 ft below land-surface datum, May 21-24, 1993; lowest measured, 29.90 ft below land-surface datum, Oct. 31, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	29.90	JAN 28	28.60	MAR 19	25.84	JUL 09	25.29	AUG 12	24.02
WATER YEAR 2003 HIGHEST		24.02	AUG 12, 2003 LOWEST		29.90	OCT 31, 2002			



GROUND-WATER LEVELS

CITY OF NORFOLK

365223076122101. Local number, 61C 1.

LOCATION.--Lat 36°52'24", long 76°12'20", NAD83, Hydrologic Unit 02080108, at Moores Bridge Filter Plant, 0.3 mi east of intersection of State Highway 165 and U.S. Highway 13 in Norfolk. Owner: City of Norfolk.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 970 ft, screened 900 to 960 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 10.80 ft above NGVD of 1929. Measuring point: Inner edge of manhole at land-surface datum. Prior to Oct. 29, 1987, measuring point at top of casing, 3.15 ft above land-surface datum.

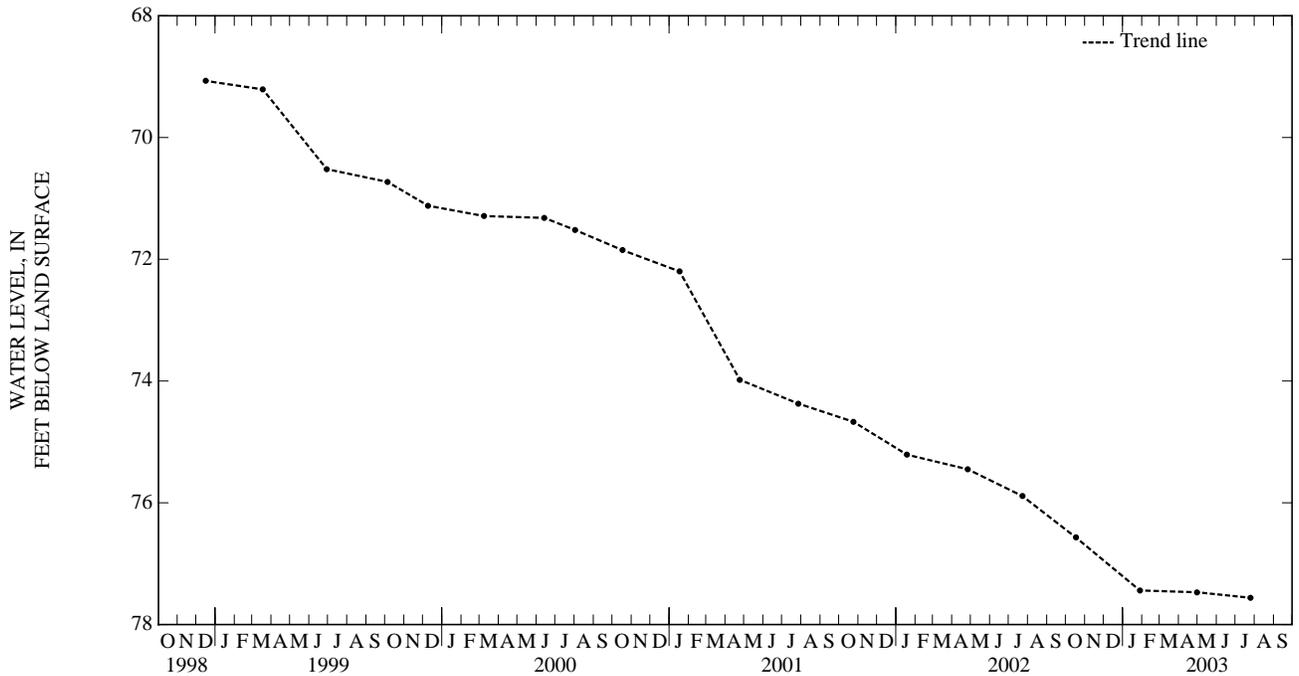
REMARKS.--Water level affected by local pumpage, regional drawdown, and recharge operations in nearby wells May 18, 1971, to Nov. 5, 1973.

PERIOD OF RECORD.--January 1968 to June 1990, September 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.70 ft below land-surface datum, Feb. 17, 1968; lowest measured, 77.56 ft below land-surface datum, July 25, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	76.57	JAN 28	77.44	APR 30	77.47	JUL 25	77.56
WATER YEAR 2003 HIGHEST 76.57		OCT 17, 2002		LOWEST 77.56		JUL 25, 2003	



NORTHAMPTON COUNTY

371543076003401. Local number, 62G 15 SOW 121.

LOCATION.--Lat 37°15'43", long 76°00'33", NAD83, Hydrologic Unit 02080110, 100 ft southwest of State Highway 642, 0.5 mi south of intersection of State Highways 184 and 642, and 0.7 mi southeast of Cape Charles. Owner: Brown and Root Corporation.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 190 ft, screened 180 to 190 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 12 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--November 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

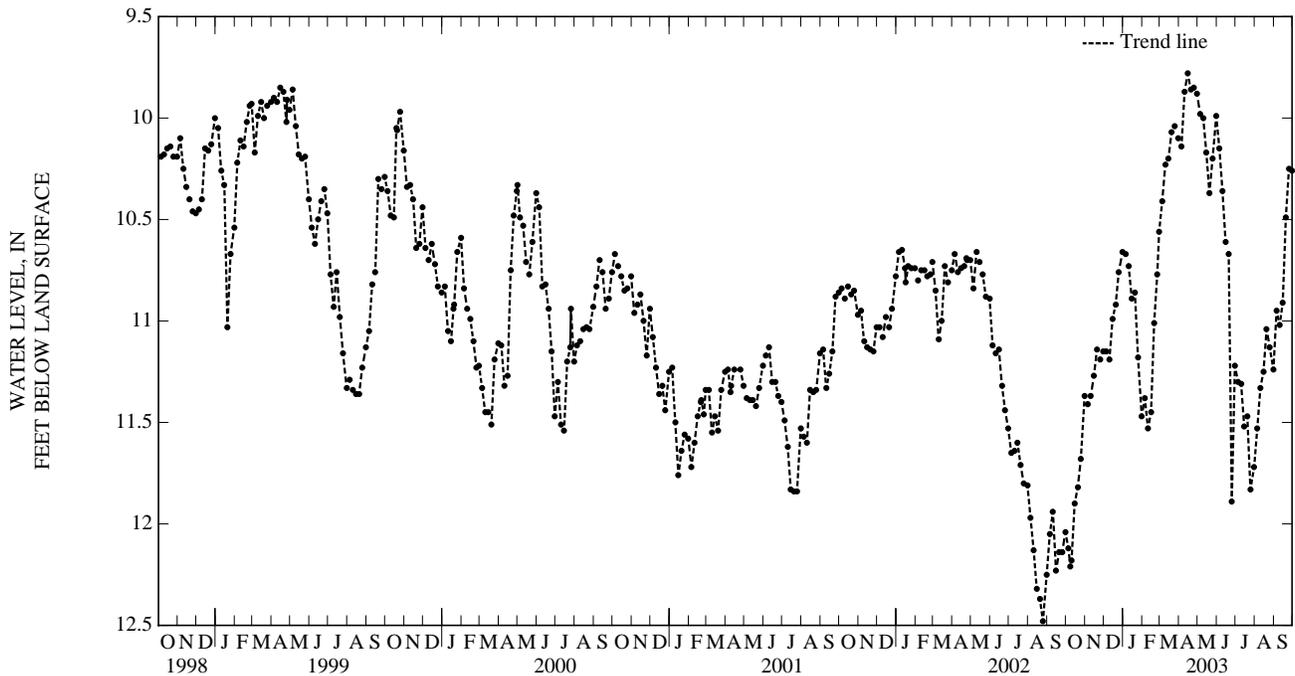
EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.37 ft below land-surface datum, May 11, 12, 13, 1998; lowest recorded, 14.31 ft below land-surface datum, Jan. 16, 17, 1986.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 9.68 ft below land-surface datum, Apr. 12; lowest instantaneous water level, 12.24 ft below land-surface datum, Oct. 6.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.12	11.41	11.15	10.67	11.38	10.41	10.14	9.98	10.15	11.30	11.53	10.95
10	12.18	11.37	11.19	10.73	11.53	10.23	9.87	10.00	10.36	11.31	11.33	11.02
15	11.90	11.27	10.99	10.89	11.45	10.20	9.78	10.17	10.61	11.52	11.25	10.91
20	11.82	11.14	10.92	10.86	11.01	10.07	9.86	10.37	10.67	11.47	11.04	10.49
25	11.68	11.19	10.76	11.18	10.77	10.04	9.85	10.20	11.89	11.83	11.13	10.25
EOM	11.37	11.15	10.66	11.47	10.56	10.10	9.88	9.99	11.22	11.72	11.24	10.26

WATER YEAR 2003 HIGHEST 9.78 APR 15, 2003 LOWEST 12.18 OCT 10, 2002



GROUND-WATER LEVELS

NORTHAMPTON COUNTY—Continued

371307075583501. Local number, 63F 15 SOW 105A.

LOCATION.--Lat 37°13'08", long 75°58'34", NAD83, Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 130 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 5, 1985 to Oct. 24, 1995, continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.97 ft above NGVD of 1929. Measuring point: Top of recorder shelf, 1.1 ft above land-surface datum prior to July 21, 1987; 1.4 ft thereafter.

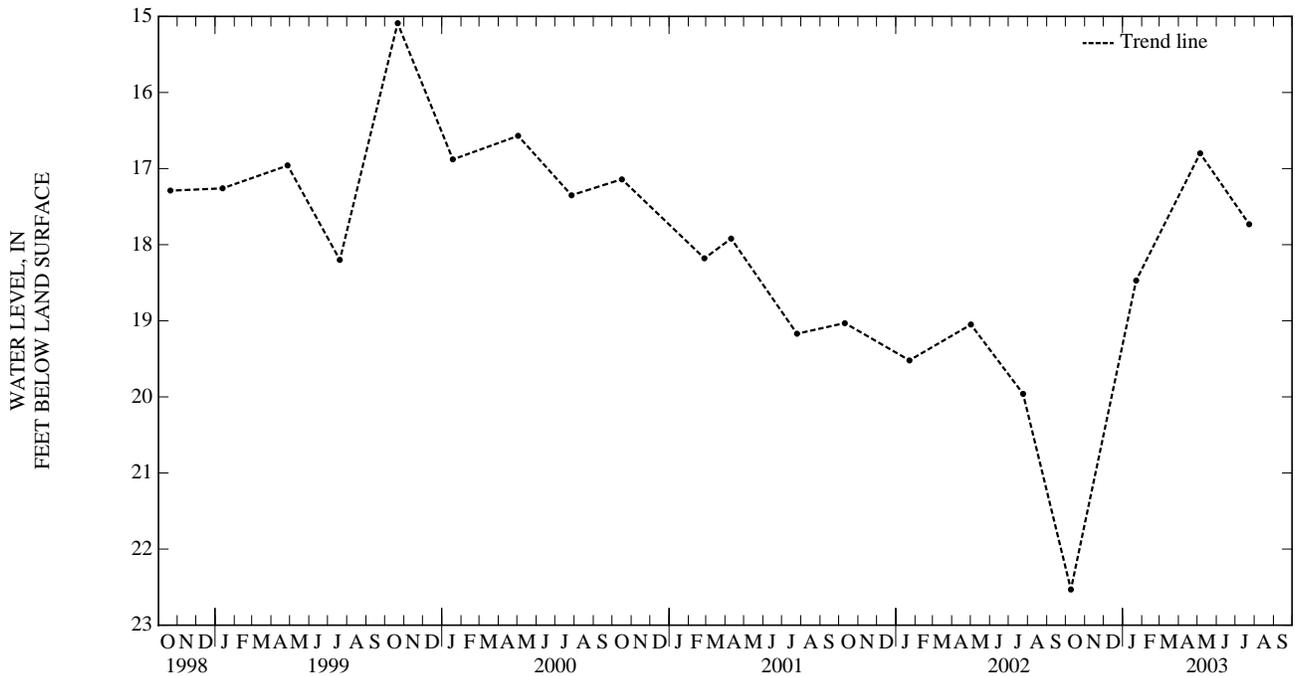
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.44 ft below land-surface datum, Apr. 12, 1982; lowest recorded, 24.62 ft below land-surface datum, June 15, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	22.53	JAN 22	18.47	MAY 05	16.80	JUL 23	17.73
WATER YEAR 2003 HIGHEST		16.80	MAY 05, 2003 LOWEST		22.53	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

371307075583502. Local number, 63F 16 SOW 105C.

LOCATION.--Lat 37°13'08", long 75°58'34", NAD83, Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 285 ft, screened 275 to 285 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.16 ft above NGVD of 1929. Measuring point: Top of casing, 0.1 ft above land-surface datum prior to Mar. 1, 1994; 0.6 ft thereafter.

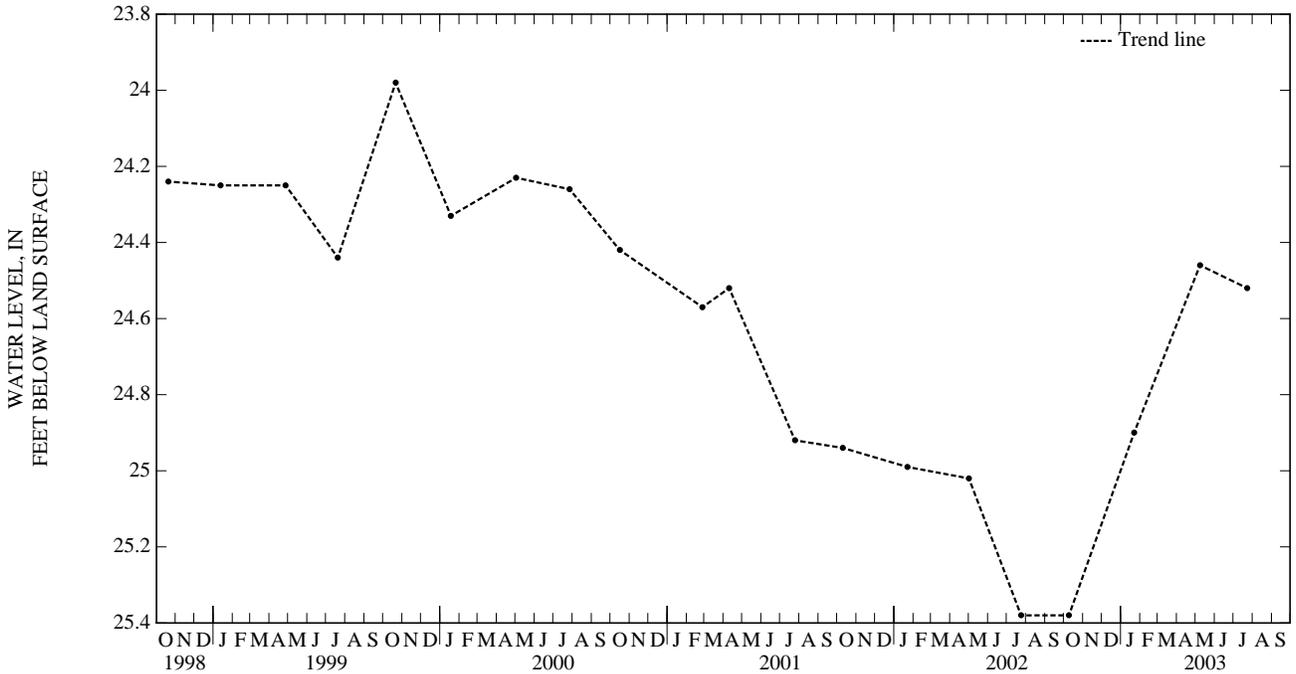
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 23.90 ft below land-surface datum, July 7, 1998; lowest measured, 29.58 ft below land-surface datum, May 23, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	25.38	JAN 22	24.90	MAY 08	24.46	JUL 23	24.52
WATER YEAR 2003 HIGHEST		24.46	MAY 08, 2003 LOWEST		25.38	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

371307075583503. Local number, 63F 17 SOW 105B.

LOCATION.--Lat 37°13'08", long 75°58'34", NAD83, Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.3 mi west of intersection of State Highway 644 and U.S. Highway 13, and 1.3 mi north of Cheapside. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 196 ft, screened 186 to 196 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.50 ft above NGVD of 1929. Measuring point: Top of casing, 0.5 ft above land-surface datum, prior to July 22, 1996. 1.0 ft thereafter.

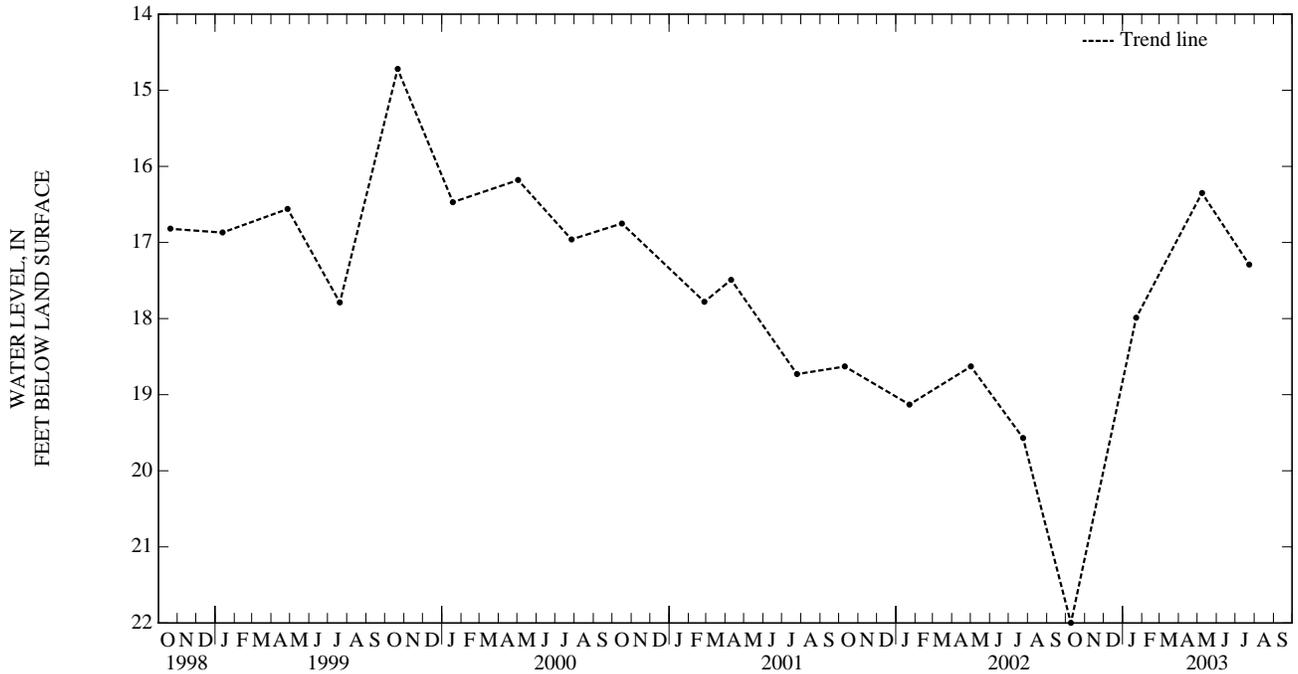
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--June 1978 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.72 ft below land-surface datum, Oct. 21, 1999; lowest measured, 22.00 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	22.00	JAN 22	17.99	MAY 08	16.35	JUL 23	17.29
WATER YEAR 2003 HIGHEST		16.35	MAY 08, 2003 LOWEST		22.00	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

371307075583601. Local number, 63F 34.

LOCATION.--Lat 37°13'08", long 75°58'35", NAD83, Hydrologic Unit 02080109, 50 ft south of State Highway 644, 0.35 mi west of intersection of U.S. Highway 13 and State Highway 644, and 1.55 mi northwest of Capeville. Owner: U.S. Geological Survey.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Driven observation water well, diameter 2 in., depth 13 ft, screened 10 to 13 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Aug. 16 to Sept. 30, 1989, bimonthly measurement with chalked tape by USGS personnel. Jan. 22, 1988, to Aug. 16, 1989, digital recorder 60-minute punch. Prior to Jan. 22, 1988, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 31.15 ft above NGVD of 1929. Measuring point: Top of casing, 1.85 ft above land-surface datum.

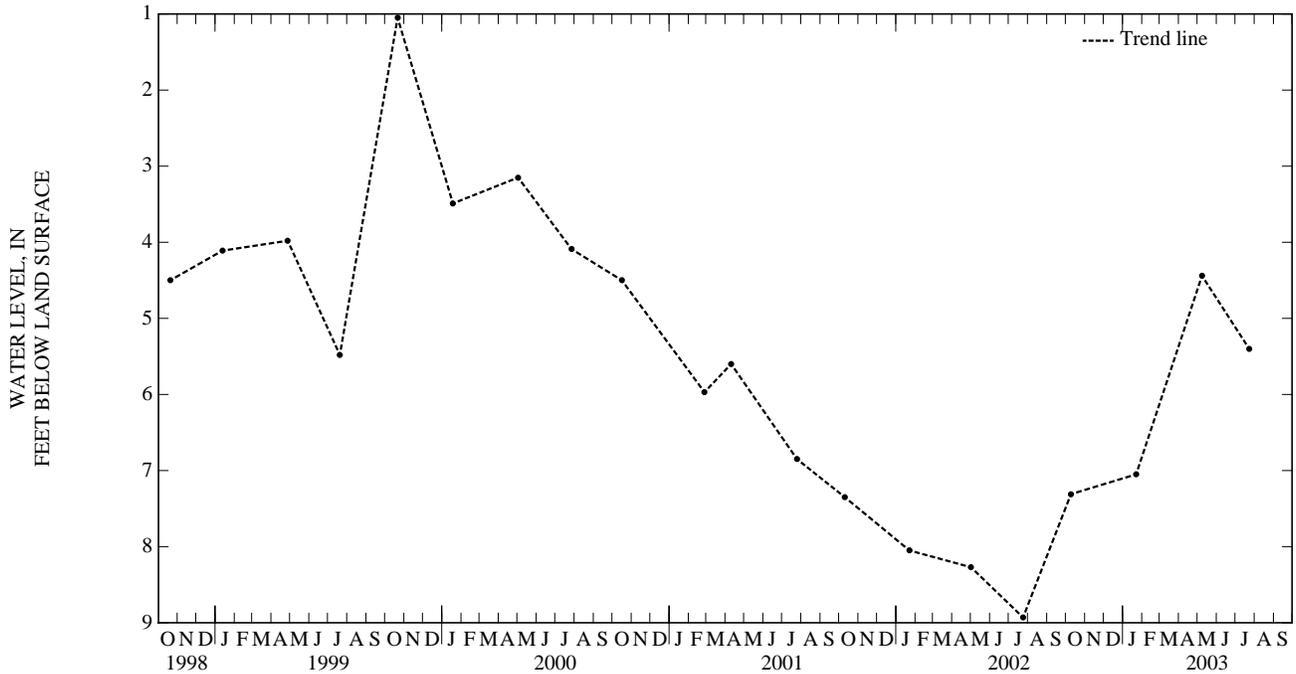
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1987 to current year. Unpublished records available prior to October 1987 in files of the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.05 ft below land-surface datum, Oct. 21, 1999; lowest measured, 9.08 ft below land-surface datum, Feb. 4, 5, 1989.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	7.31	JAN 22	7.05	MAY 08	4.44	JUL 23	5.40
WATER YEAR 2003 HIGHEST		4.44	MAY 08, 2003 LOWEST		7.31	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

370807075570802. Local number, 63F 51 SOW 182A

LOCATION.--Lat 37°08'08", long 75°57'07", NAD83, Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,730 ft, screened 1,720 to 1,730 ft.

INSTRUMENTATION.--Occasional measurement with manometer and/or chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 24, 1995, bimonthly measurement with manometer and/or chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

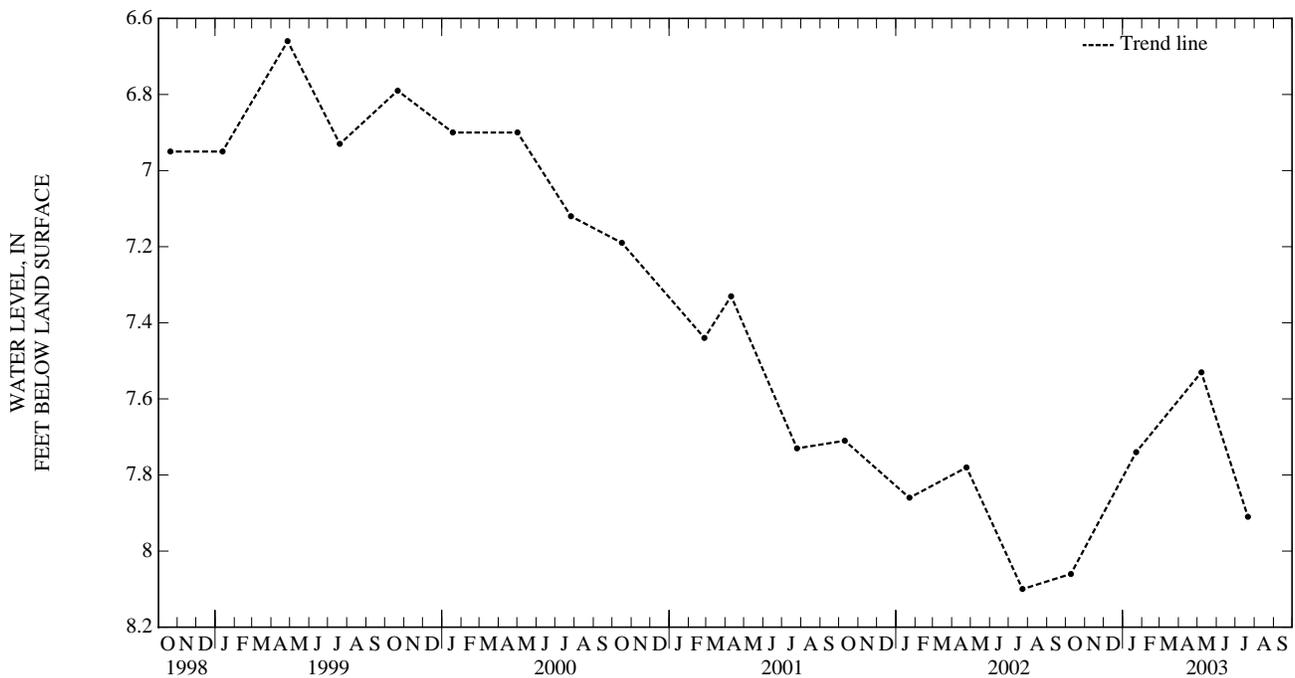
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by occasional pumpage for water-quality sampling. Cause of nonrecovery to pre-pumpage level after November 1997 unknown.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.35 ft above land-surface datum, May 7, 1990; lowest measured, 8.76 ft below land-surface datum, Nov. 12, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	8.06	JAN 22	7.74	MAY 07	7.53	JUL 21	7.91
WATER YEAR 2003 HIGHEST		7.53	MAY 07, 2003 LOWEST		8.06	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

370807075570803. Local number, 63F 52 SOW 182B.

LOCATION.--Lat 37°08'08", long 75°57'07", NAD83, Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,040 ft, diameter 2 in. from 1,040 to 1,320 ft, depth 1,320 ft, screened 1,300 to 1,320 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 24, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

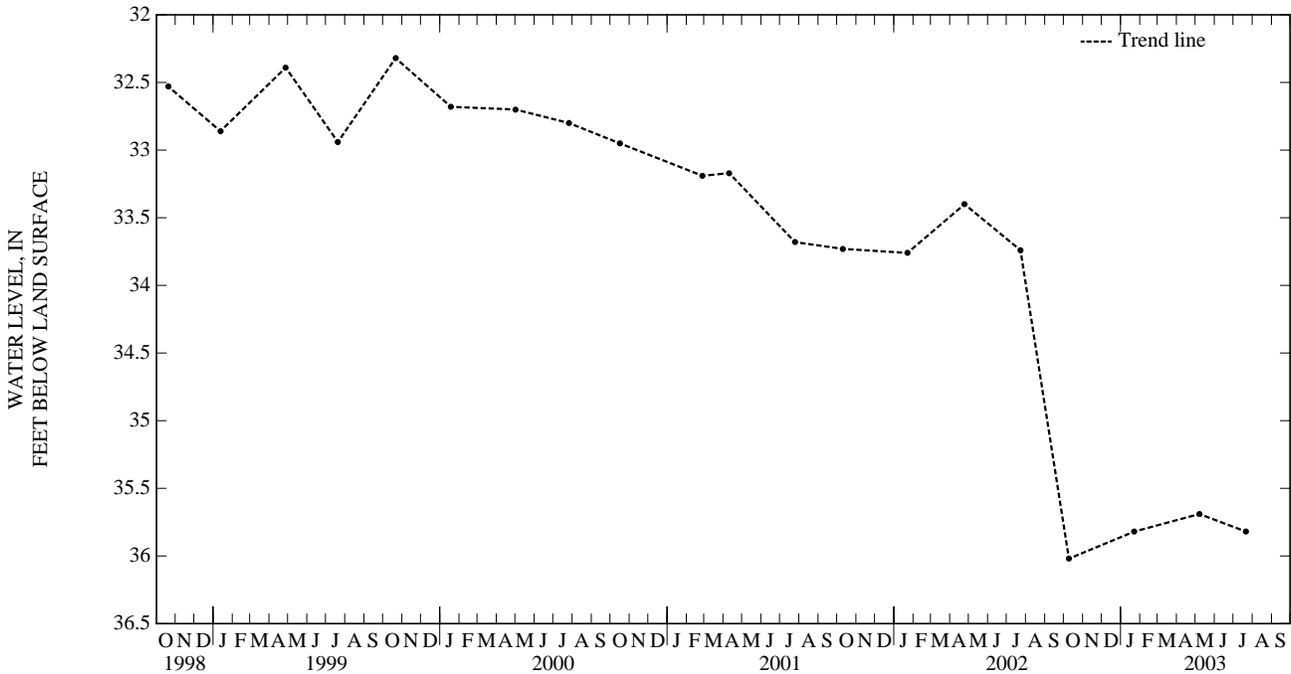
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by occasional pumpage for water-quality sampling. Cause of nonrecovery to pre-pumpage level after November 1997 unknown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.12 ft below land-surface datum, Dec. 3, 1990; lowest measured, 36.02 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	36.02	JAN 22	35.82	MAY 07	35.69	JUL 21	35.82
WATER YEAR 2003 HIGHEST		35.69	MAY 07, 2003 LOWEST		36.02	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

370807075570804. Local number, 63F 53 SOW 182C.

LOCATION.--Lat 37°08'08", long 75°57'07", NAD83, Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 188 ft, diameter 2 in. from 188 to 220 ft, depth 220 ft, screened 210 to 220 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

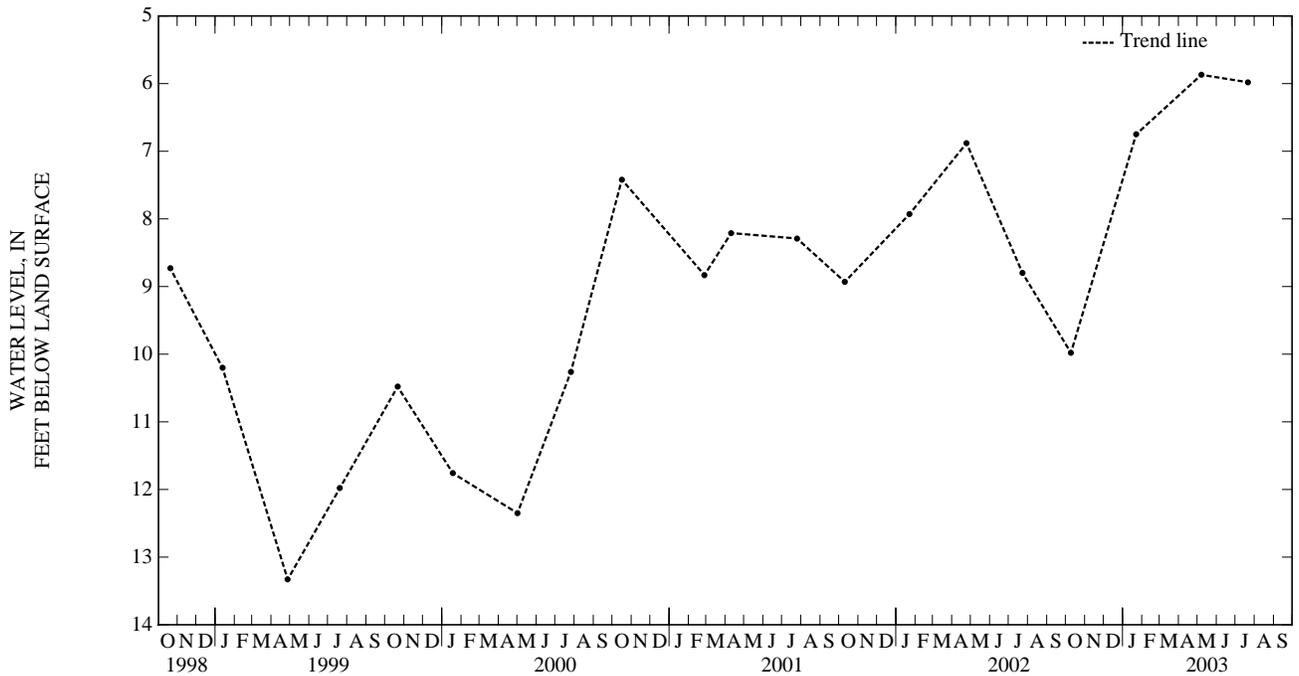
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.90 ft below land-surface datum, Jan. 22, 1991; lowest measured, 13.80 ft below land-surface datum, Apr. 11, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	9.98	JAN 22	6.75	MAY 07	5.87	JUL 21	5.98
WATER YEAR 2003 HIGHEST		5.87	MAY 07, 2003 LOWEST		9.98	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

370807075570805. Local number, 63F 54 SOW 182D.

LOCATION.--Lat 37°08'08", long 75°57'07", NAD83, Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 55 ft, screened 45 to 55 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 24, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

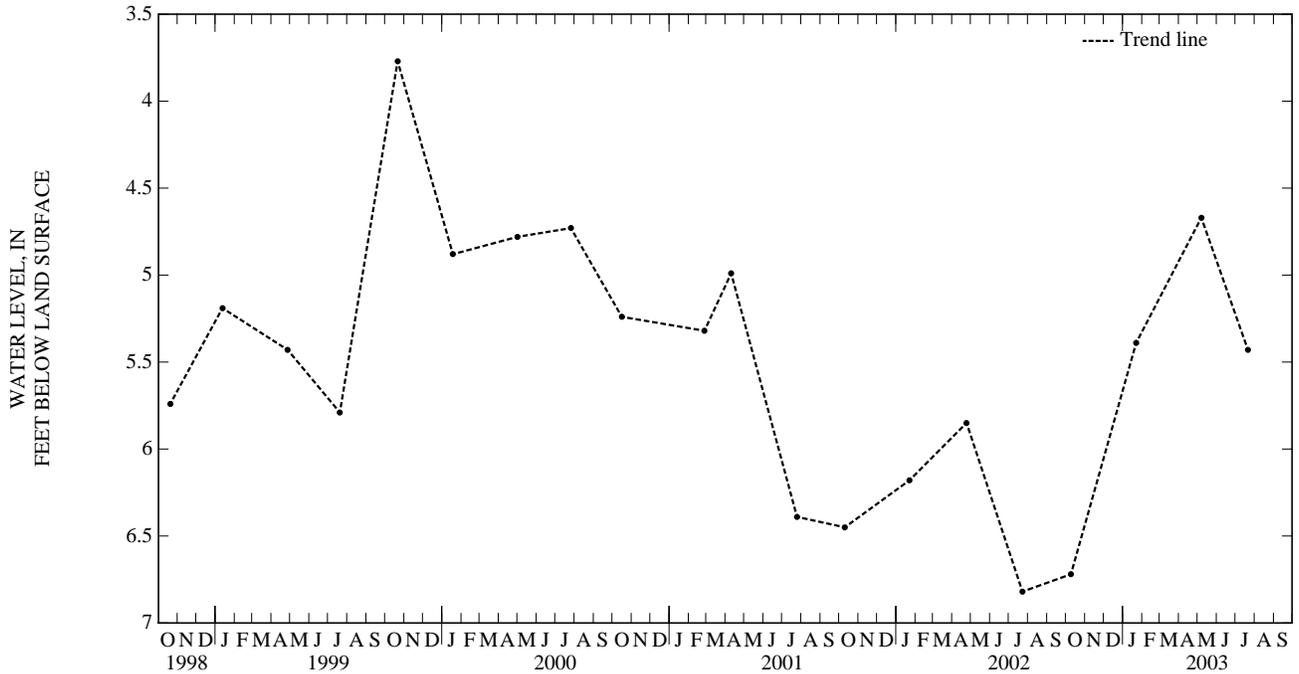
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.77 ft below land-surface datum, Oct. 21, 1999; lowest measured, 7.90 ft below land-surface datum, July 8, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	6.72	JAN 22	5.39	MAY 07	4.67	JUL 21	5.43
WATER YEAR 2003 HIGHEST		4.67	MAY 07, 2003 LOWEST		6.72	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

370807075570806. Local number, 63F 55 SOW 182E.

LOCATION.--Lat 37°08'08", long 75°57'07", NAD83, Hydrologic Unit 02080110, at Kiptopeke Wildlife Refuge, 0.6 mi southeast of State Highway 600, 0.8 mi southeast of Kiptopeke, and 0.9 mi southeast of intersection of State Highway 600 and U.S. Highway 13. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 24, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

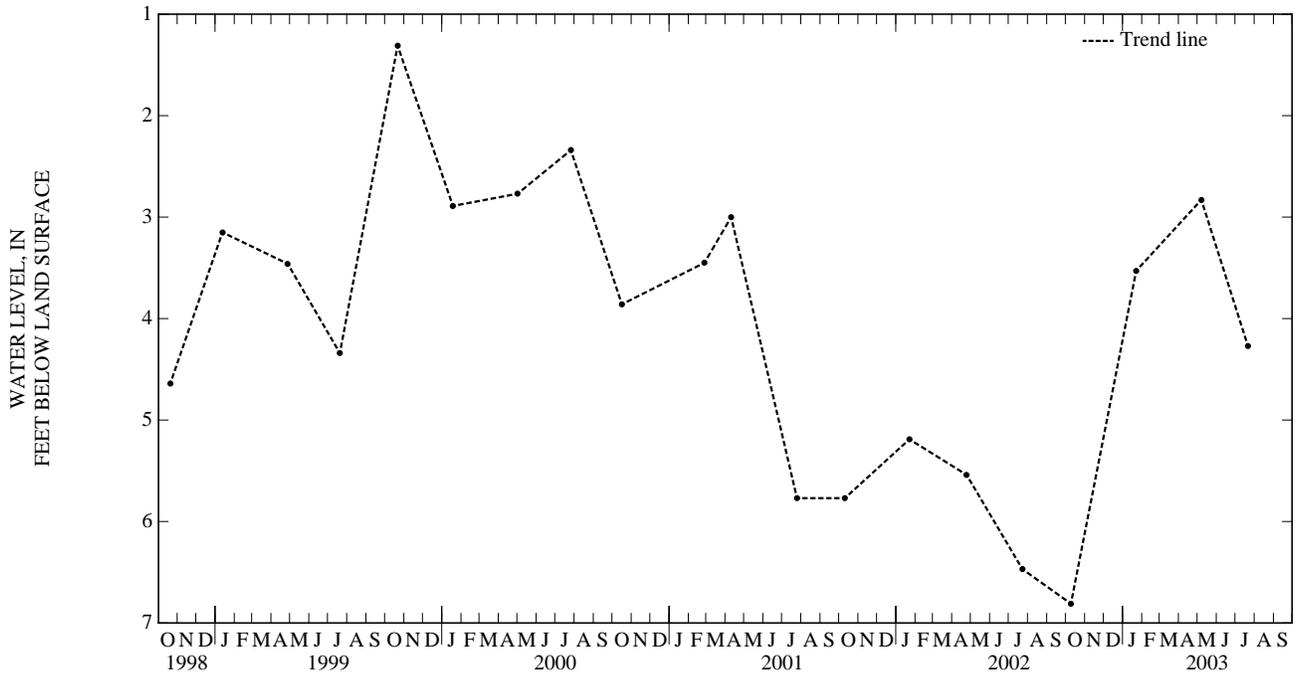
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.31 ft below land-surface datum, Oct. 21, 1999; lowest measured, 6.81 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	6.81	JAN 22	3.53	MAY 07	2.83	JUL 21	4.27
WATER YEAR 2003 HIGHEST		2.83	MAY 07, 2003 LOWEST		6.81	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

371709075560801. Local number, 63G 15 SOW 104C.

LOCATION.--Lat 37°17'09", long 75°56'06", NAD83, Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 310 ft, screened 300 to 310 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. July 15, 1985 to Oct. 23, 1995, continuous strip-chart recorder. Prior to July 15, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.24 ft above land-surface datum prior to Nov. 10, 1986; 1.75 ft prior to June 4, 1996. Top of casing, 1.50 ft thereafter.

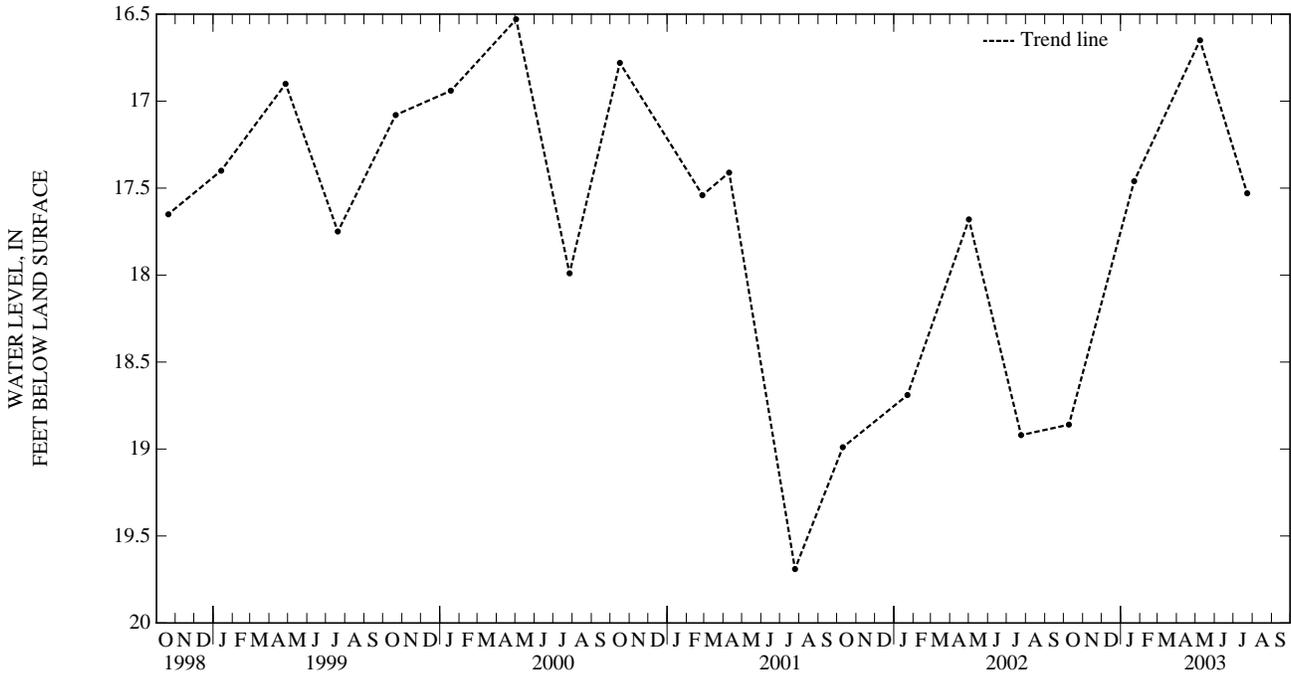
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 16.11 ft below land-surface datum, Apr. 21, 1998; lowest measured, 27.96 ft below land-surface datum, Oct. 8, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	18.86	JAN 22	17.46	MAY 08	16.65	JUL 23	17.53
WATER YEAR 2003 HIGHEST		16.65	MAY 08, 2003 LOWEST		18.86	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

371709075560802. Local number, 63G 16 SOW 104B.

LOCATION.--Lat 37°17'09", long 75°56'07", NAD83, Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 240 ft, screened 230 to 240 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Feb. 29, 1988; 0.9 ft thereafter.

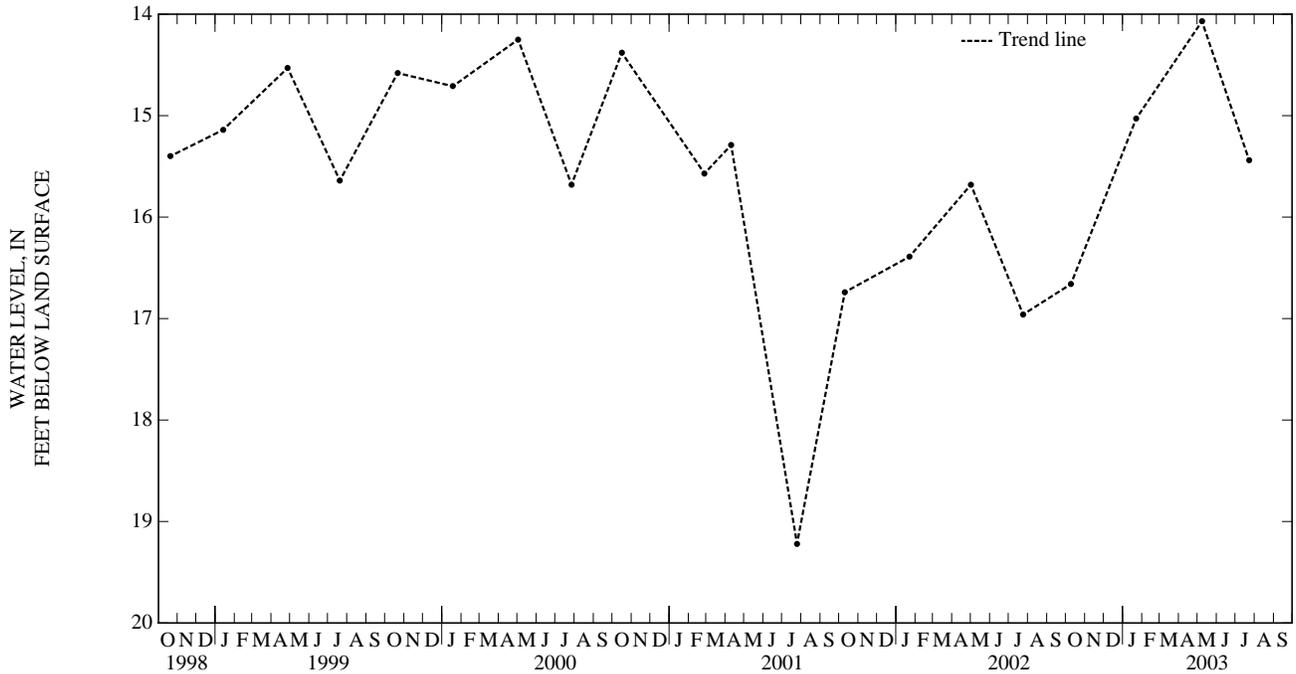
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.54 ft below land-surface datum, Apr. 21, 1998; lowest measured, 23.47 ft below land-surface datum, Oct. 8, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	16.66	JAN 22	15.03	MAY 08	14.07	JUL 23	15.44
WATER YEAR 2003 HIGHEST		14.07	MAY 08, 2003 LOWEST		16.66	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

371709075560803. Local number, 63G 17 SOW 104A.

LOCATION.--Lat 37°17'09", long 75°56'07", NAD83, Hydrologic Unit 02080110, 50 ft north of State Highway 639, 0.1 mi east of intersection of State Highways 600 and 639, and 0.7 mi west of Oyster. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 140 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 28 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.05 ft above land-surface datum prior to Feb. 29, 1988; 0.5 ft thereafter.

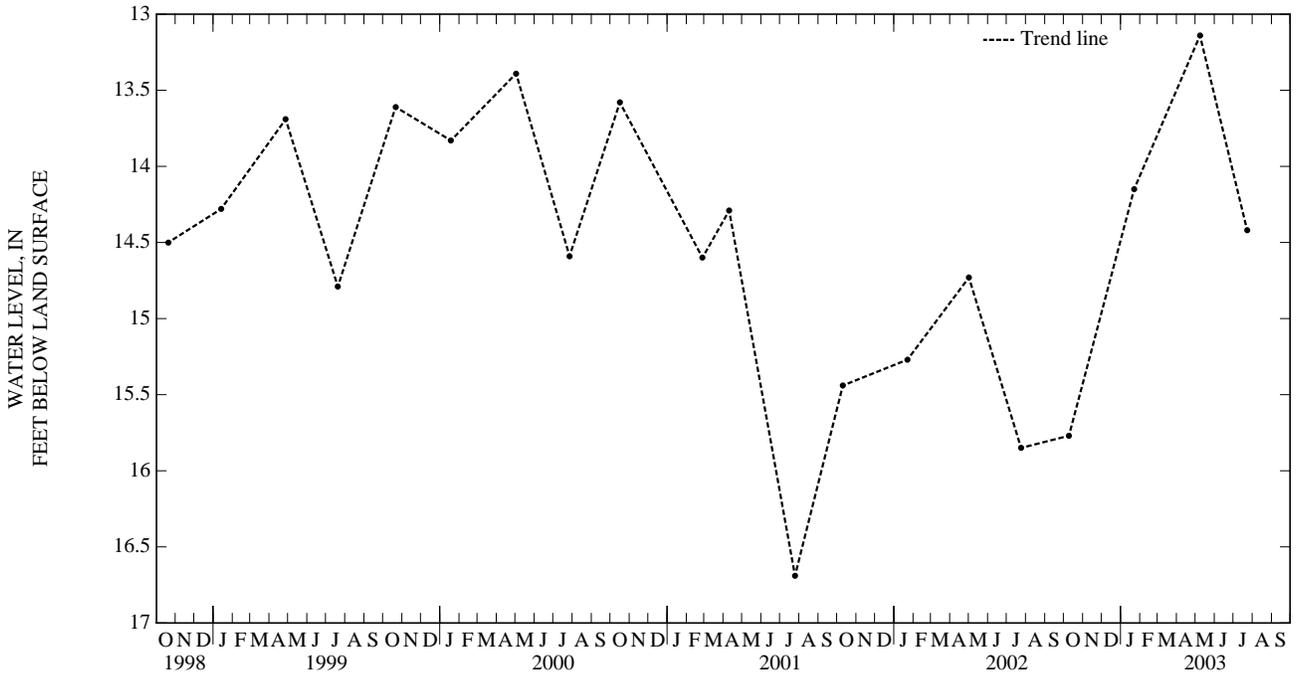
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.62 ft below land-surface datum, Apr. 21, 1998; lowest measured, 21.99 ft below land-surface datum, Oct. 8, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	15.77	JAN 22	14.15	MAY 08	13.14	JUL 23	14.42
WATER YEAR 2003 HIGHEST		13.14	MAY 08, 2003 LOWEST		15.77	OCT 09, 2002	



GROUND-WATER LEVELS

NORTHAMPTON COUNTY—Continued

371653075584801. Local number, 63G 22 SOW 111A.

LOCATION.--Lat 37°16'53", long 75°58'47", NAD83, Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 150 ft, screened 140 to 150 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Apr. 27, 1987; 1.60 ft Apr. 27, 1987 to Feb. 29, 1988; 1.1 ft Mar. 1, 1988 to June 19, 1989; 0.80 ft June 20 1989 to Oct. 19, 1999; 0.85 ft thereafter.

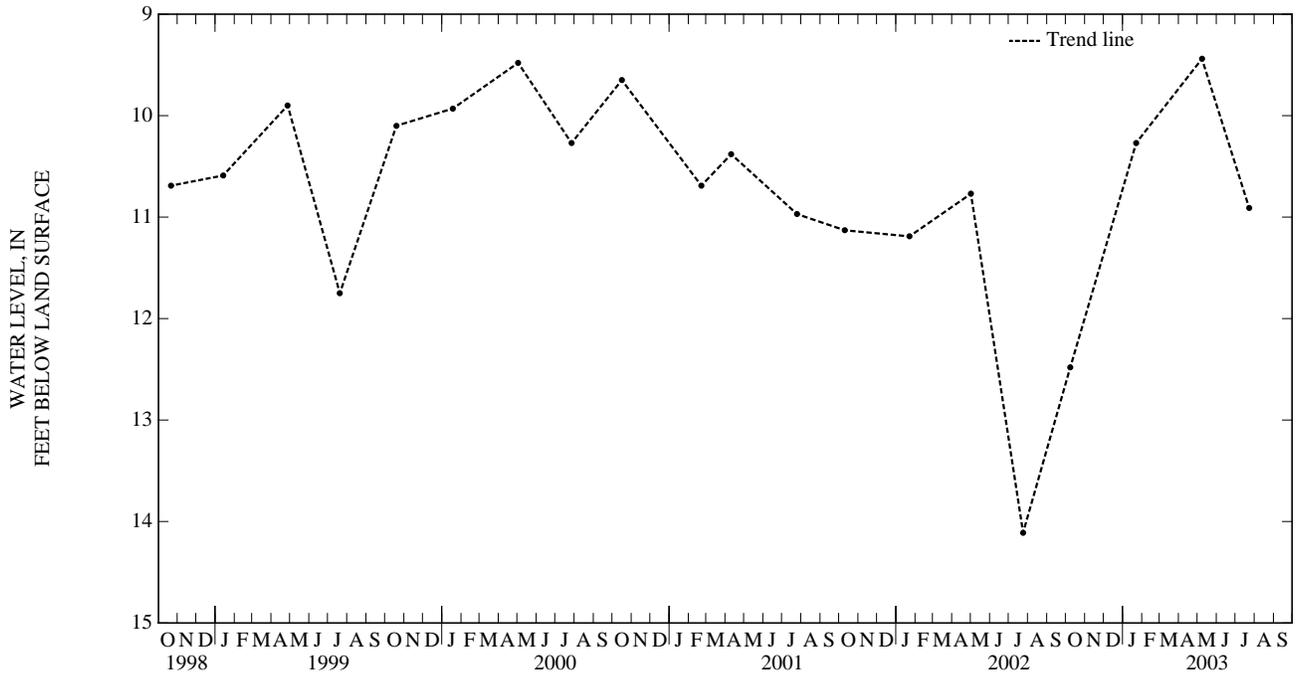
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.60 ft below land-surface datum, Apr. 21, 1998; lowest measured, 14.51 ft below land-surface datum, Feb. 17, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	12.48	JAN 22	10.27	MAY 08	9.44	JUL 23	10.91
WATER YEAR 2003 HIGHEST		9.44	MAY 08, 2003 LOWEST		12.48	OCT 08, 2002	



NORTHAMPTON COUNTY—Continued

371653075584802. Local number, 63G 23 SOW 111B.

LOCATION.--Lat 37°16'53", long 75°58'47", NAD83, Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. July 20, 1985 to Oct. 24, 1995, continuous strip chart recorder. Prior to July 20, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.42 ft above land-surface datum prior to July 20, 1987; 1.56 ft thereafter.

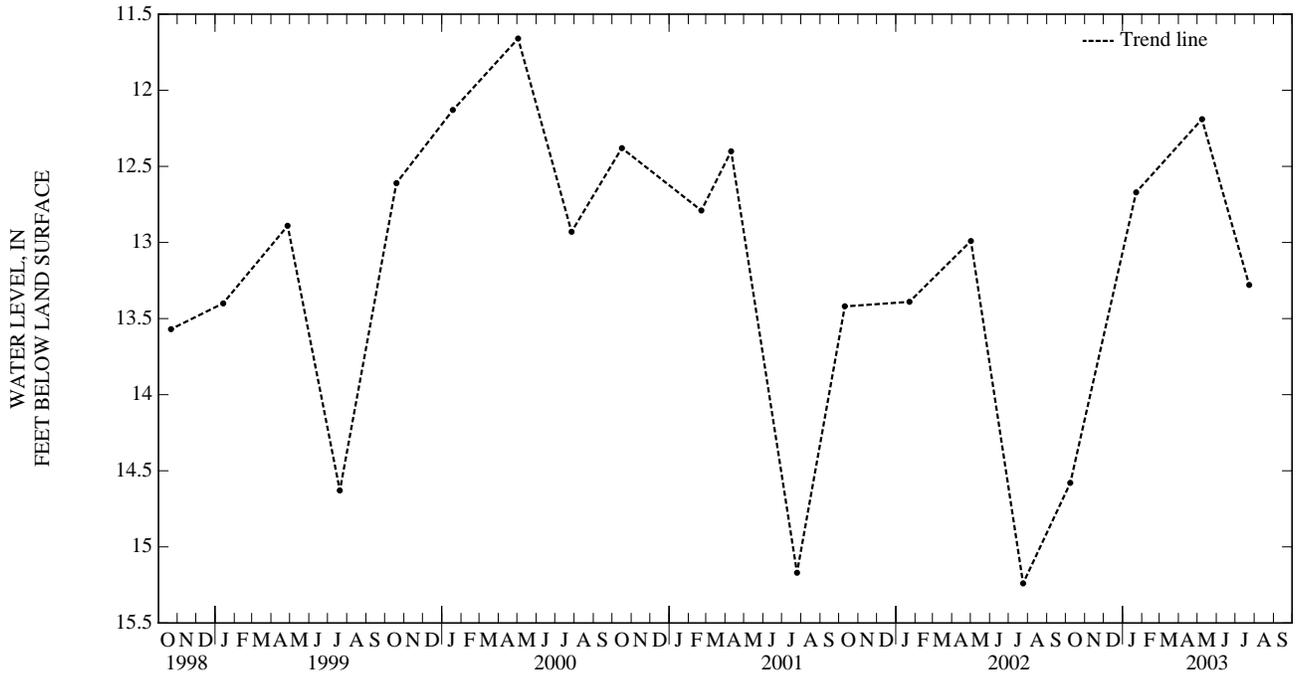
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.01 ft below land-surface datum, Dec. 30, 1982; lowest measured, 22.47 ft below land-surface datum, Sept. 15, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	14.58	JAN 22	12.67	MAY 08	12.19	JUL 23	13.28
WATER YEAR 2003 HIGHEST		12.19	MAY 08, 2003 LOWEST		14.58	OCT 08, 2002	



GROUND-WATER LEVELS

NORTHAMPTON COUNTY—Continued

371653075584804. Local number, 63G 25 SOW 111S.

LOCATION.--Lat 37°16'53", long 75°58'47", NAD83, Hydrologic Unit 02080109, 50 ft west of U.S. Highway 13, 0.4 mi north of intersection of U.S. Highway 13 and State Highway 641, and 0.7 mi southwest of Cheriton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 1.25 in., depth 70 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.64 ft above land-surface datum prior to Oct. 10, 1996; 0.60 ft thereafter.

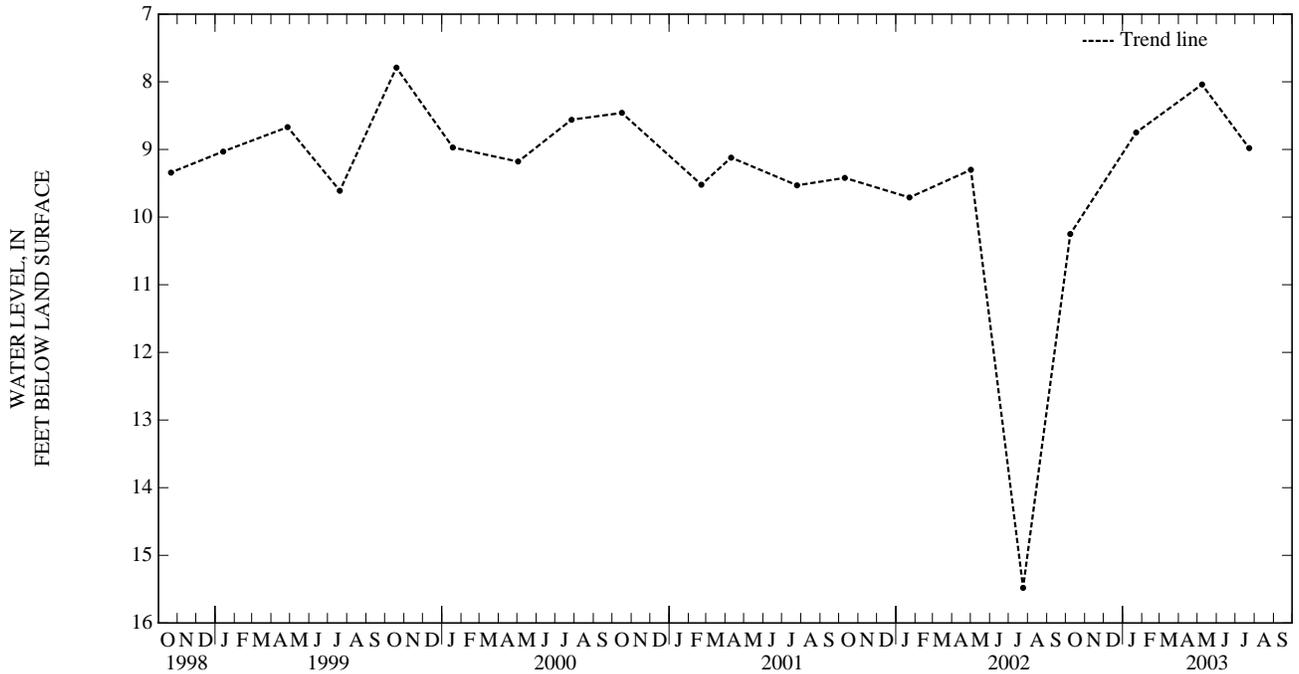
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.64 ft below land-surface datum, Apr. 21, 1998; lowest measured, 15.48 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 08	10.25	JAN 22	8.75	MAY 08	8.04	JUL 23	8.98
WATER YEAR 2003 HIGHEST		8.04	MAY 08, 2003 LOWEST		10.25	OCT 08, 2002	



NORTHAMPTON COUNTY—Continued

372705075555901. Local number, 63H 4 SOW 103C.

LOCATION.--Lat 37°27'06", long 75°55'58", NAD83, Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 235 ft, screened 225 to 235 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar 1, 1988; 0.8 ft thereafter.

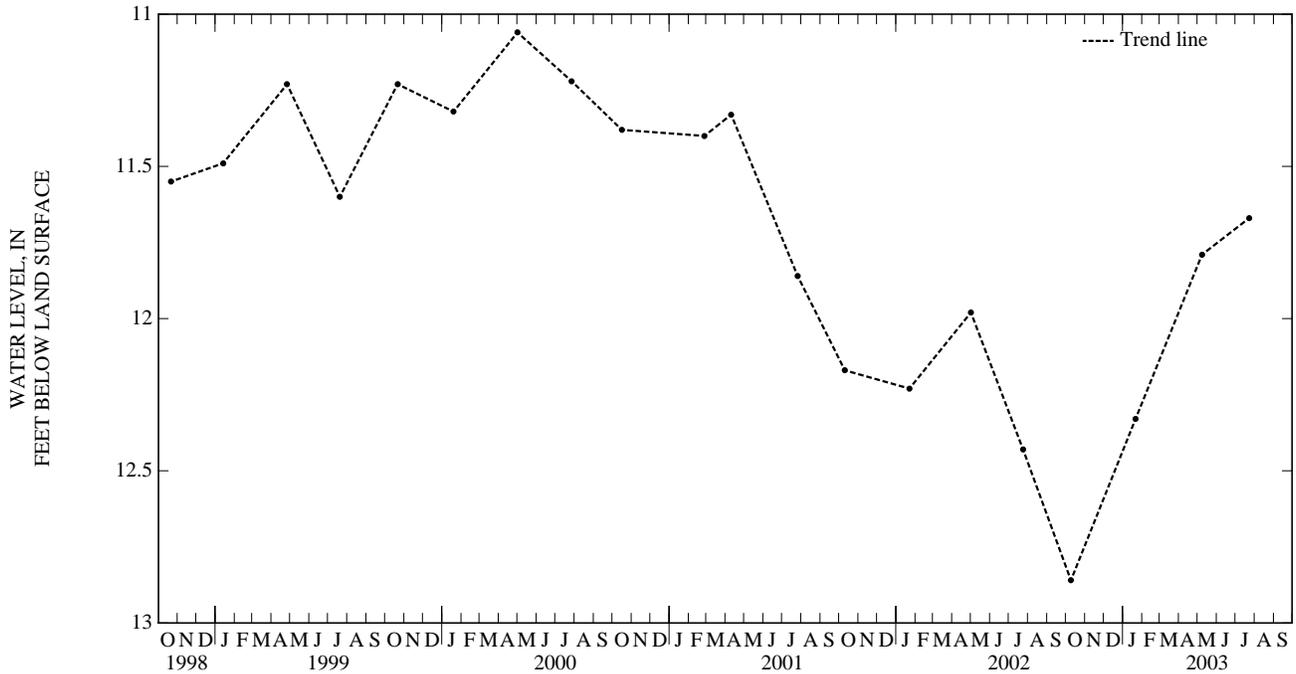
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in file of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.15 ft below land-surface datum, May 1, 1979; lowest measured, 12.86 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	12.86	JAN 21	12.33	MAY 08	11.79	JUL 23	11.67
WATER YEAR 2003 HIGHEST		11.67	JUL 23, 2003 LOWEST		12.86	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

372705075555902. Local number, 63H 5 SOW 103B.

LOCATION.--Lat 37°27'05", long 75°55'58", NAD83, Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 132 ft, screened 122 to 132 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.55 ft above land-surface datum prior to Mar. 1, 1988; 1.25 ft thereafter.

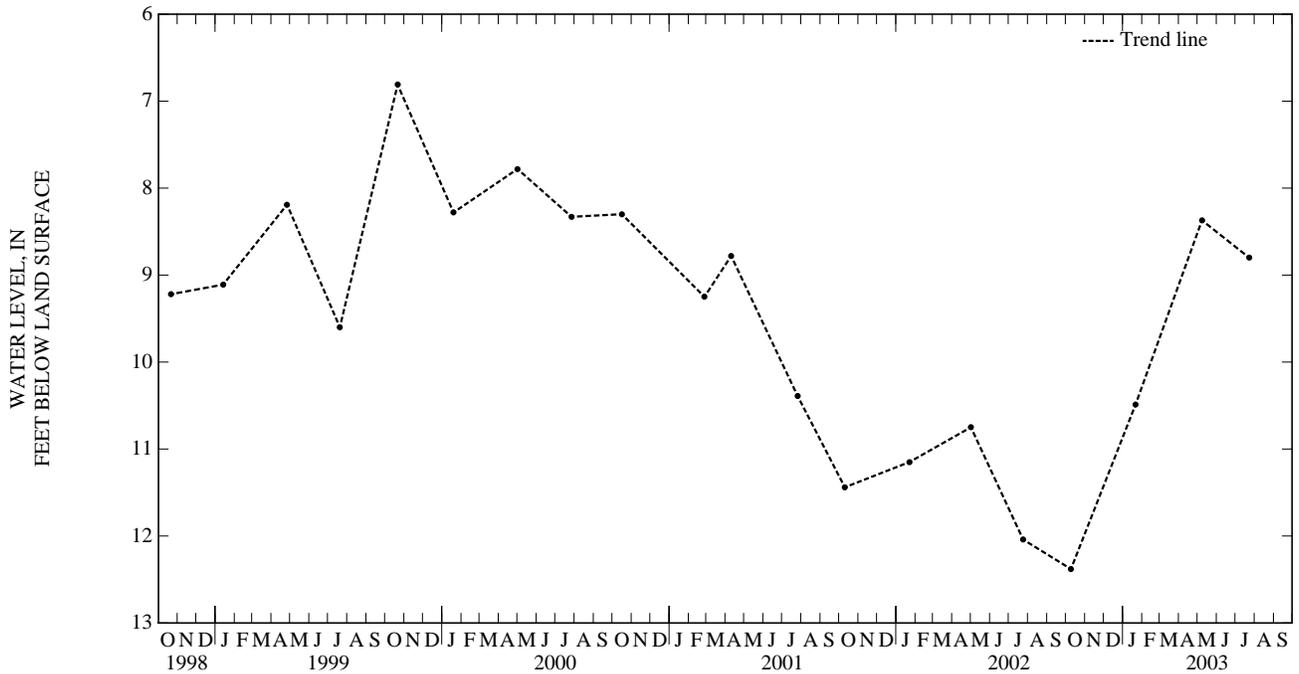
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.81 ft below land-surface datum, Oct. 21, 1999; lowest measured, 12.38 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	12.38	JAN 21	10.49	MAY 08	8.37	JUL 23	8.80
WATER YEAR 2003 HIGHEST		8.37	MAY 08, 2003 LOWEST		12.38	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

372705075555903. Local number, 63H 6 SOW 103A.

LOCATION.--Lat 37°27'05", long 75°55'58", NAD83, Hydrologic Unit 02080109, 0.2 mi north of State Highway 619, 0.5 mi northwest of intersection of State Highways 619 and 622, and 0.5 mi northwest of Bridgetown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 37 ft, screened 27 to 37 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.2 ft above land-surface datum prior to July 23, 2003; 1.33 ft thereafter.

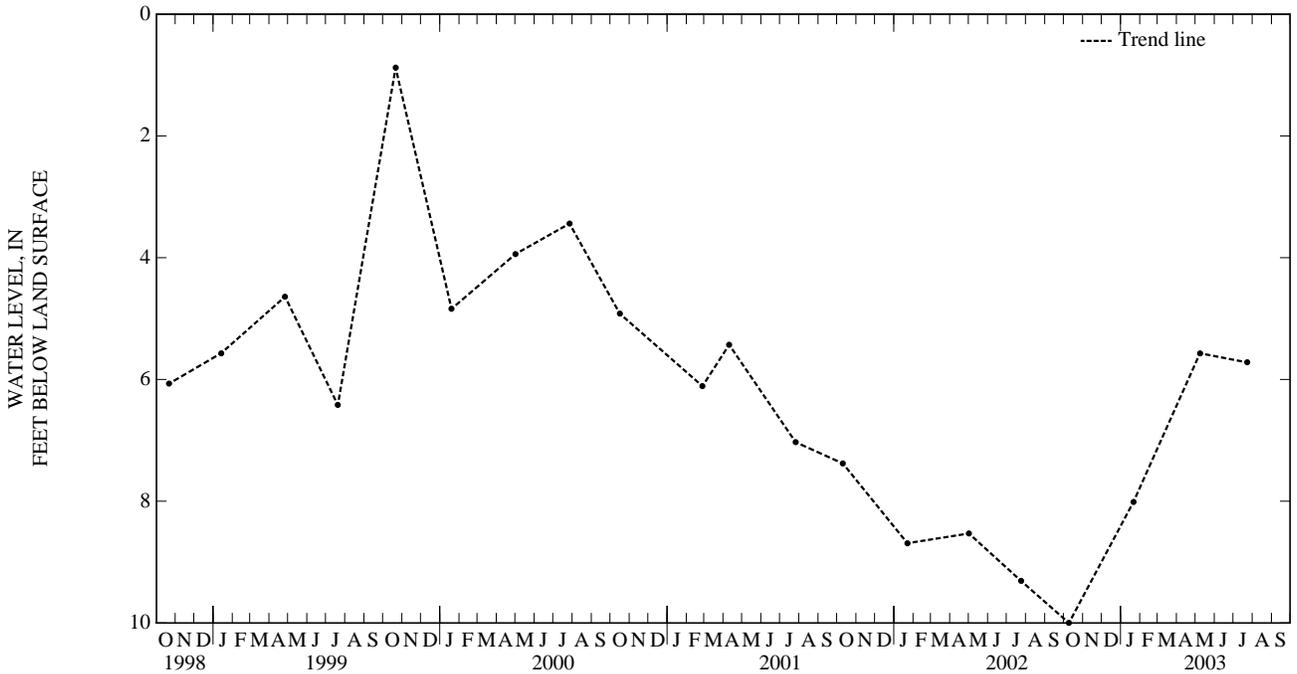
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--October 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.88 ft below land-surface datum, Oct. 21, 1999; lowest measured, 10.00 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	10.00	JAN 21	8.01	MAY 08	5.57	JUL 23	5.72
WATER YEAR 2003 HIGHEST		5.57	MAY 08, 2003 LOWEST		10.00	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

373230075541001. Local number, 63J 1 SOW 113A.

LOCATION.--Lat 37°32'16", long 75°54'06", NAD83, Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 120 ft, screened 110 to 120 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.32 ft above land-surface datum prior to Oct. 6, 1988; 1.5 ft thereafter.

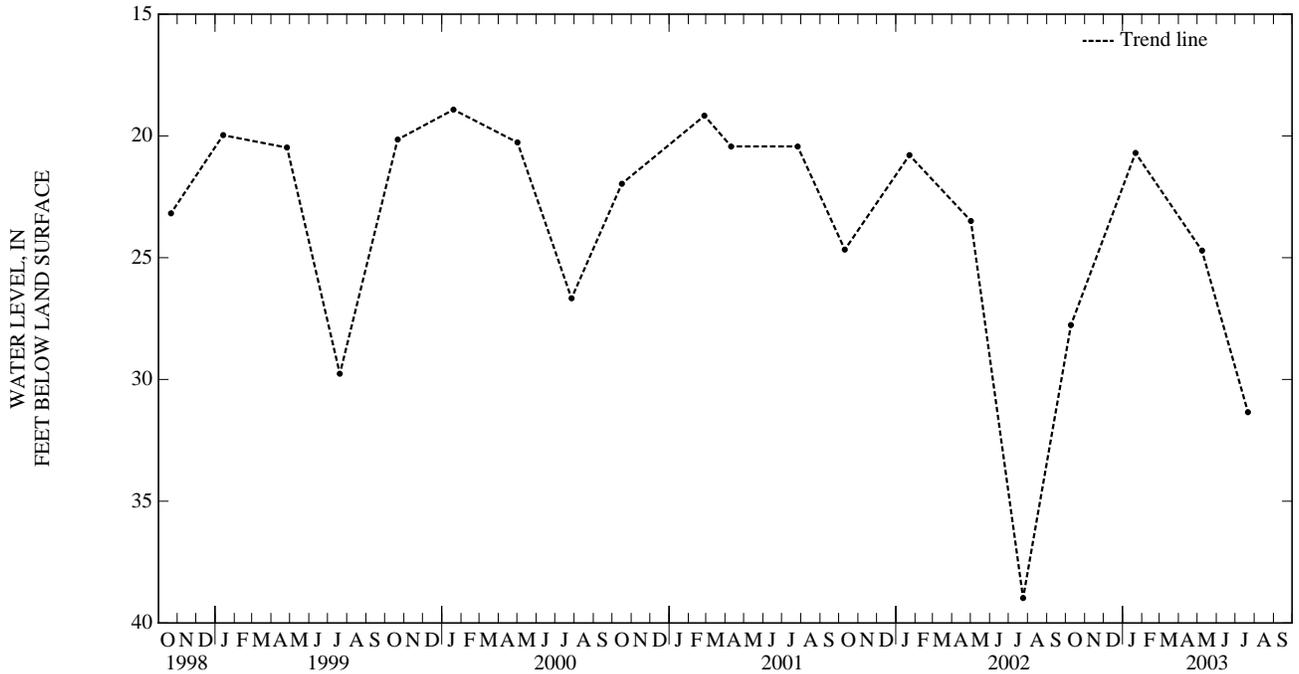
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.79 ft below land-surface datum, Apr. 21, 1983; lowest measured, 38.98 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	27.77	JAN 21	20.70	MAY 08	24.71	JUL 21	31.34
WATER YEAR 2003 HIGHEST		20.70	JAN 21, 2003 LOWEST		31.34	JUL 21, 2003	



NORTHAMPTON COUNTY—Continued

373230075541002. Local number, 63J 2 SOW 113B.

LOCATION.--Lat 37°32'16", long 75°54'06", NAD83, Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.40 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 225 ft, screened 215 to 225 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.52 ft above land-surface datum prior to Oct. 6, 1988; 1.3 ft thereafter.

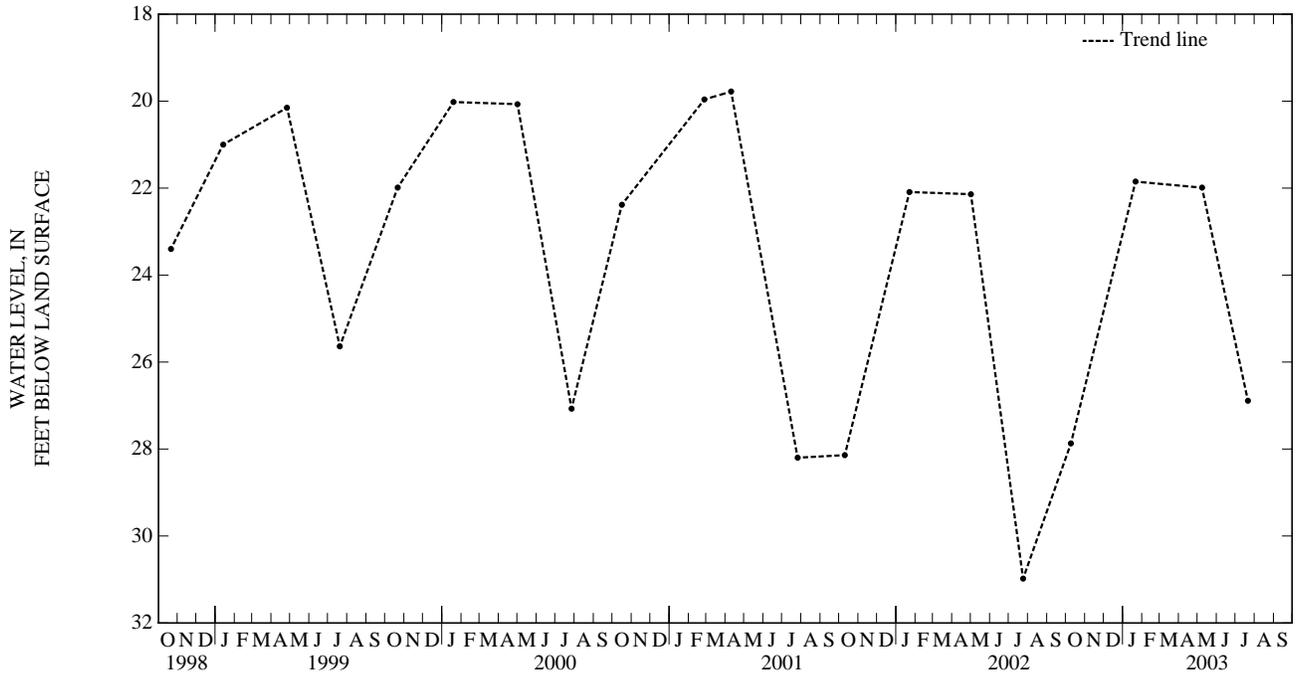
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.20 ft below land-surface datum, Apr. 21, 1983; lowest measured, 30.98 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	27.87	JAN 21	21.85	MAY 08	21.99	JUL 21	26.89
WATER YEAR 2003 HIGHEST		21.85	JAN 21, 2003 LOWEST		27.87	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

373230075541003. Local number, 63J 3 SOW 113C.

LOCATION.--Lat 37°32'16", long 75°54'06", NAD83, Hydrologic Unit 02080109, 0.15 mi north of State Highway 183, 0.4 mi east of intersection of State Highways 183 and 611, and 1.3 mi west of Wardtown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 290 ft, screened 280 to 290 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 20, 1995, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 22 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.44 ft above land-surface datum.

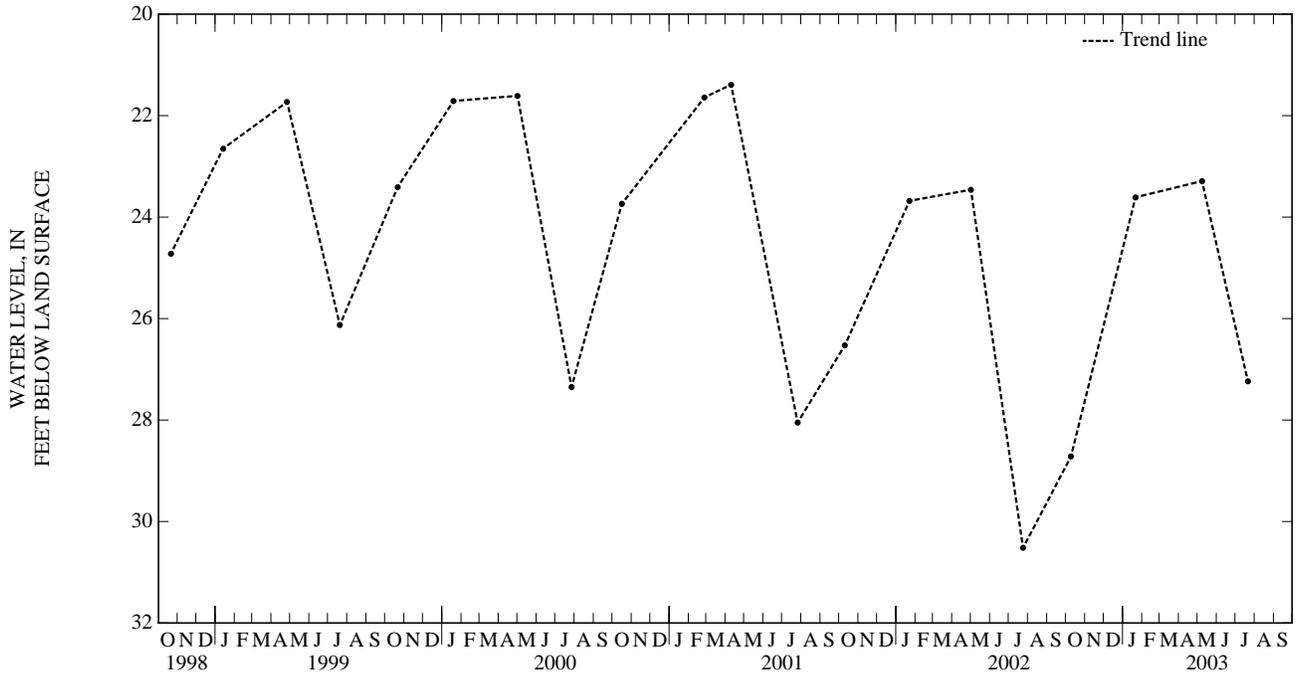
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1981 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.26 ft below land-surface datum, Apr. 21, 1983; lowest measured, 30.52 ft below land-surface datum, July 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	28.72	JAN 21	23.61	MAY 08	23.29	JUL 21	27.24
WATER YEAR 2003 HIGHEST		23.29	MAY 08, 2003 LOWEST		28.72	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

373059075484501. Local number, 64J 9 SOW 112A.

LOCATION.--Lat 37°30'59", long 75°48'44", NAD83, Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 660 and 600, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 135 ft, screened 125 to 135 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum prior to Feb. 29, 1988; 0.7 ft thereafter.

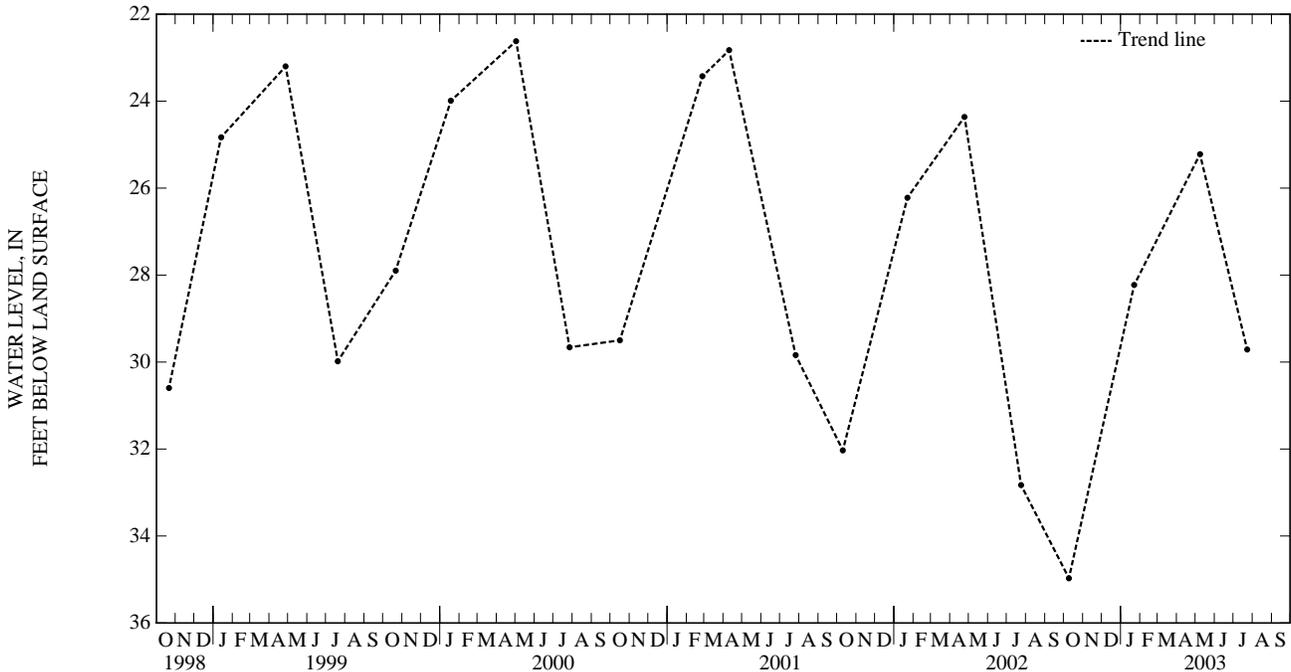
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.19 ft below land-surface datum, Feb. 22, 1993; lowest measured, 34.97 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	34.97	JAN 22	28.23	MAY 08	25.22	JUL 23	29.71
WATER YEAR 2003 HIGHEST		25.22	MAY 08, 2003 LOWEST		34.97	OCT 09, 2002	



GROUND-WATER LEVELS
NORTHAMPTON COUNTY—Continued

373059075484502. Local number, 64J 10 SOW 112B.

LOCATION.--Lat 37°30'59", long 75°48'44", NAD83, Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 210 ft, screened 200 to 210 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 5, 1985 to Oct. 23, 1995, continuous strip-chart recorder. Prior to Oct. 5, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.5 ft above land-surface datum prior to Aug. 12, 1987; 1.6 ft thereafter.

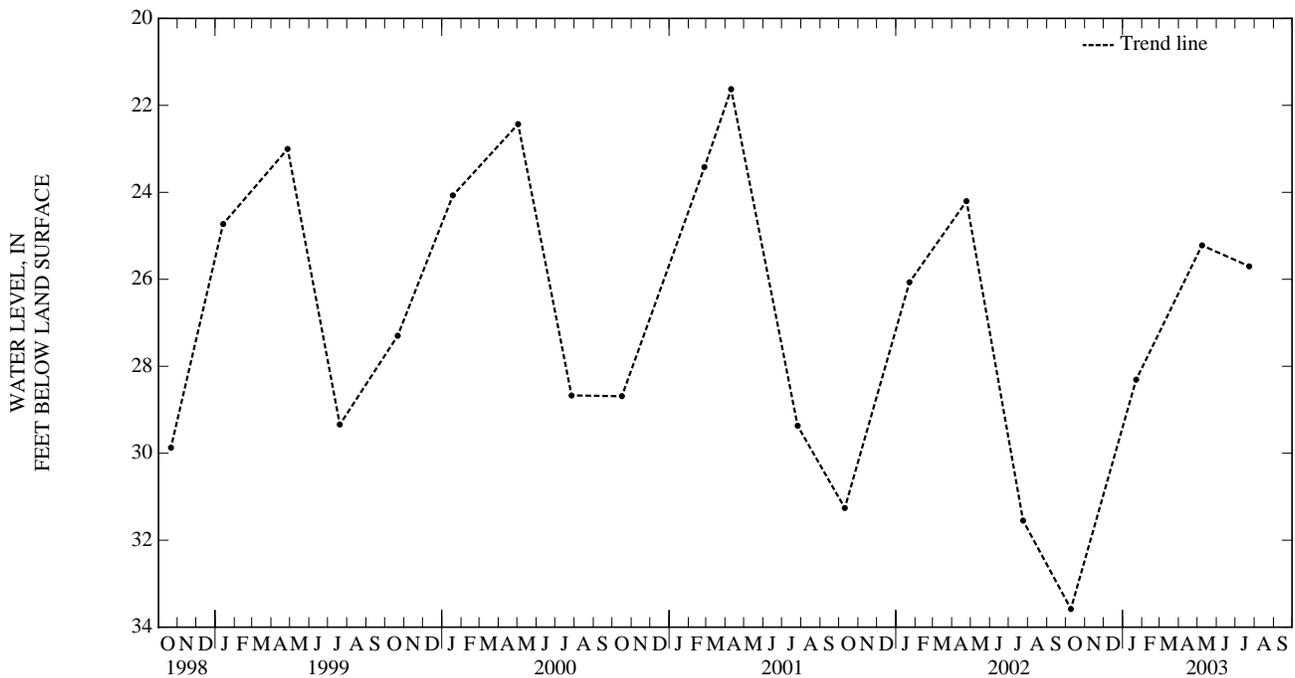
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by tidal effects and local pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 20.42 ft below land-surface datum, Mar. 13, 1993; lowest measured, 33.58 ft below land-surface datum, Oct. 9, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	33.58	JAN 22	28.31	MAY 08	25.22	JUL 23	25.70
WATER YEAR 2003 HIGHEST		25.22	MAY 08, 2003 LOWEST		33.58	OCT 09, 2002	



NORTHAMPTON COUNTY—Continued

373059075484503. Local number, 64J 11 SOW 112C.

LOCATION.--Lat 37°30'59", long 75°48'44", NAD83, Hydrologic Unit 02080109, 100 ft northeast of State Highway 660, 0.3 mi southeast of intersection of State Highways 600 and 660, and 0.3 mi west of Willis Wharf. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 313 ft, screened 303 to 313 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 30, 1985, to July 24, 1995, bimonthly measurement with chalked tape. Prior to Sept. 30, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 30 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.4 ft above land-surface datum prior to Apr. 27, 1987; 0.65 ft thereafter.

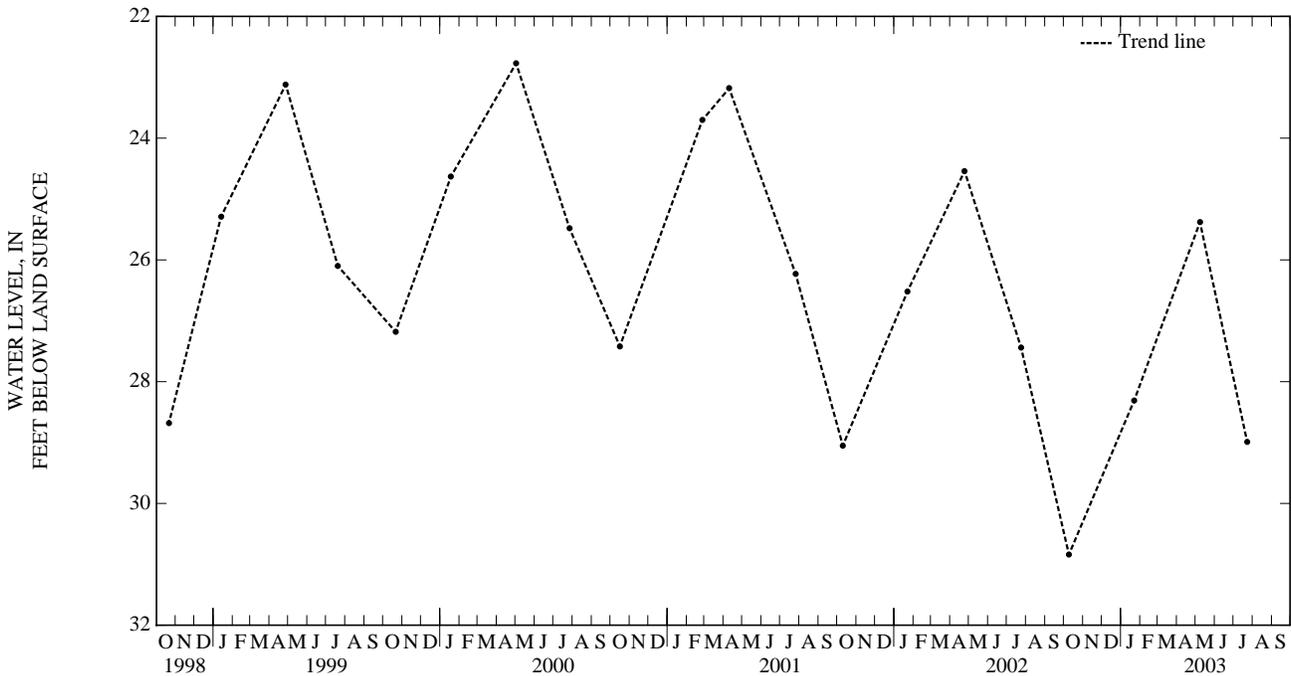
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by tidal effects and local pumpage.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 20.78 ft below land-surface datum, Mar. 29, 1984; lowest measured, 35.70 ft below land-surface datum, Dec. 5, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 09	30.84	JAN 22	28.31	MAY 08	25.38	JUL 23	28.99
WATER YEAR 2003 HIGHEST		25.38	MAY 08, 2003 LOWEST		30.84	OCT 09, 2002	



GROUND-WATER LEVELS

ORANGE COUNTY

381002078094201. Local number, 45P 1 SOW 030.

LOCATION.--Lat 38°10'02", long 78°09'41", NAD83, Hydrologic Unit 02080106, off U.S. Highway 15, 2.3 mi north of Gordonsville. Owner: M. L. Johnson.

AQUIFER.--Phyllite of Evington Group of Cambrian or Precambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 98 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked taped by Virginia Department of Environmental Quality - Water Division personnel. Prior to Oct. 31, 1995, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 480 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.40 ft above land-surface datum prior to June 27, 1996; 1.90 ft thereafter.

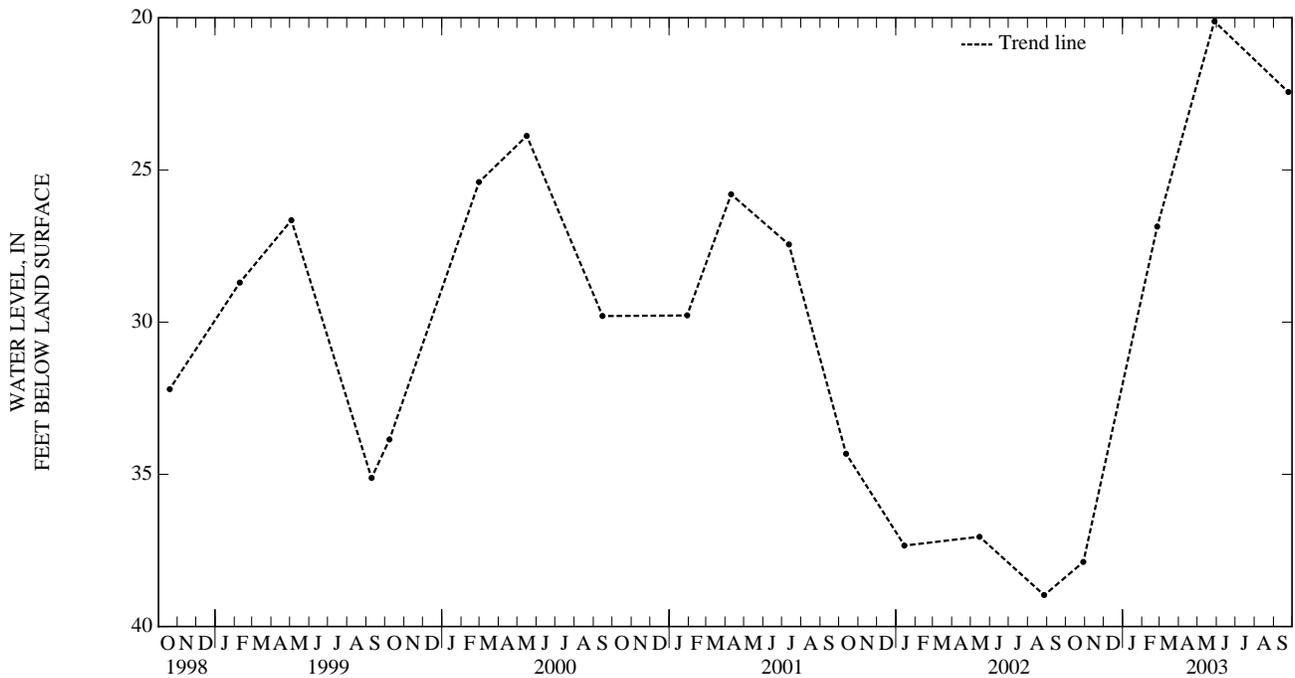
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 11.83 ft below land-surface datum, Apr. 10, 1973; lowest recorded, 38.97 ft below land-surface datum, Aug. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	37.88	FEB 25	26.86	MAY 28	20.12	SEP 24	22.44
WATER YEAR 2003 HIGHEST		20.12 MAY 28, 2003		LOWEST		37.88 OCT 29, 2002	



PATRICK COUNTY

364732080070301. Local number, 30C 1 SOW 010.

LOCATION.--Lat 36°47'32", long 80°07'02", NAD83, Hydrologic Unit 03010103, 300 ft west of State Highway 623, 1.0 mi northeast of intersection of State Highways 57 and 623, and 6.2 mi west of Philpott. Owner: Commonwealth of Virginia.

AQUIFER.--Lynchburg Group of Late Proterozoic age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6.25 in., depth 250 ft, cased to 9 ft, open hole 9 to 250 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1996 to Oct. 1, 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

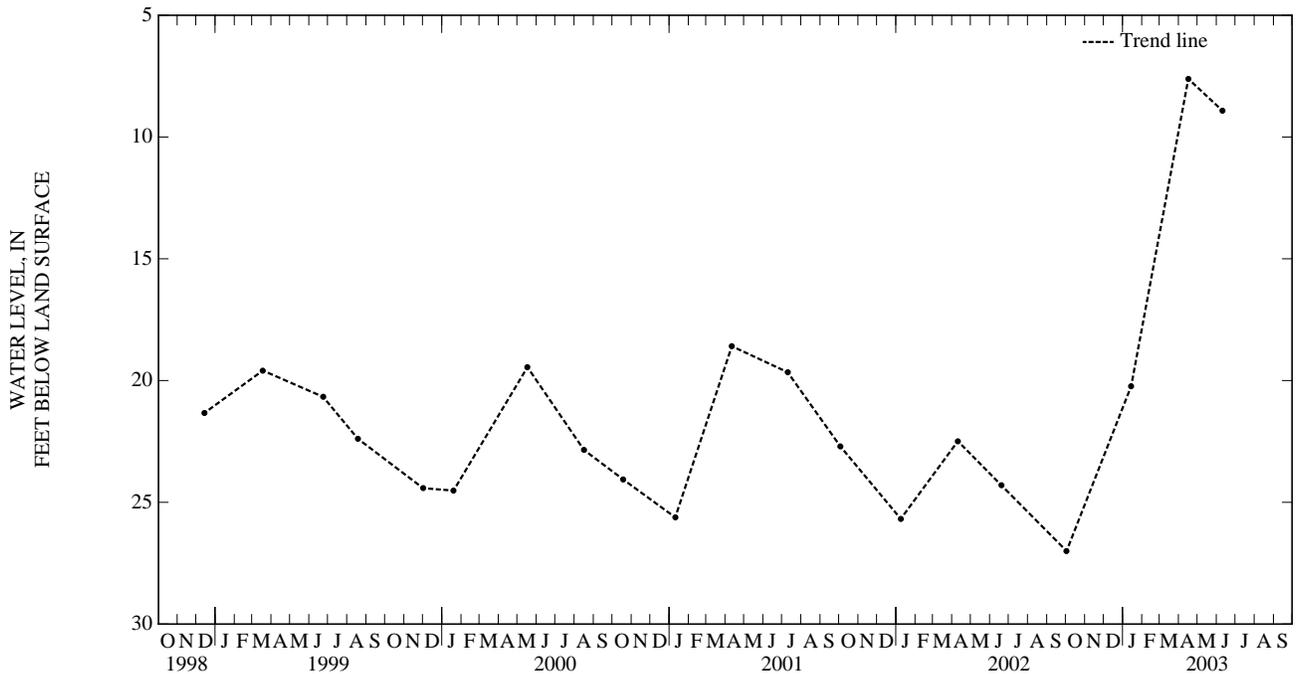
DATUM.--Elevation of land-surface datum is 1,060 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum.

PERIOD OF RECORD.--May 1966 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.98 ft below land-surface datum, Mar. 23, 1993; lowest measured, 27.00 ft below land-surface datum, Oct. 2, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	27.00	JAN 14	20.23	APR 16	7.61	JUN 10	8.92
WATER YEAR 2003 HIGHEST		7.61	APR 16, 2003 LOWEST		27.00	OCT 02, 2002	



GROUND-WATER LEVELS

CITY OF PORTSMOUTH

364823076181501. Local number, 60C 27.

LOCATION.--Lat 36°48'24", long 76°18'14", NAD83, Hydrologic Unit 02080208, 100 ft east of State Highway 239 (Victory Boulevard), 0.1 mi south of the intersection of State Highway 239 (Victory Boulevard) and State Highway 337 (Elem Avenue) in the city of Portsmouth. Owner: U.S. Department of the Navy.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 908 ft, screened 903 to 908 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 18 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

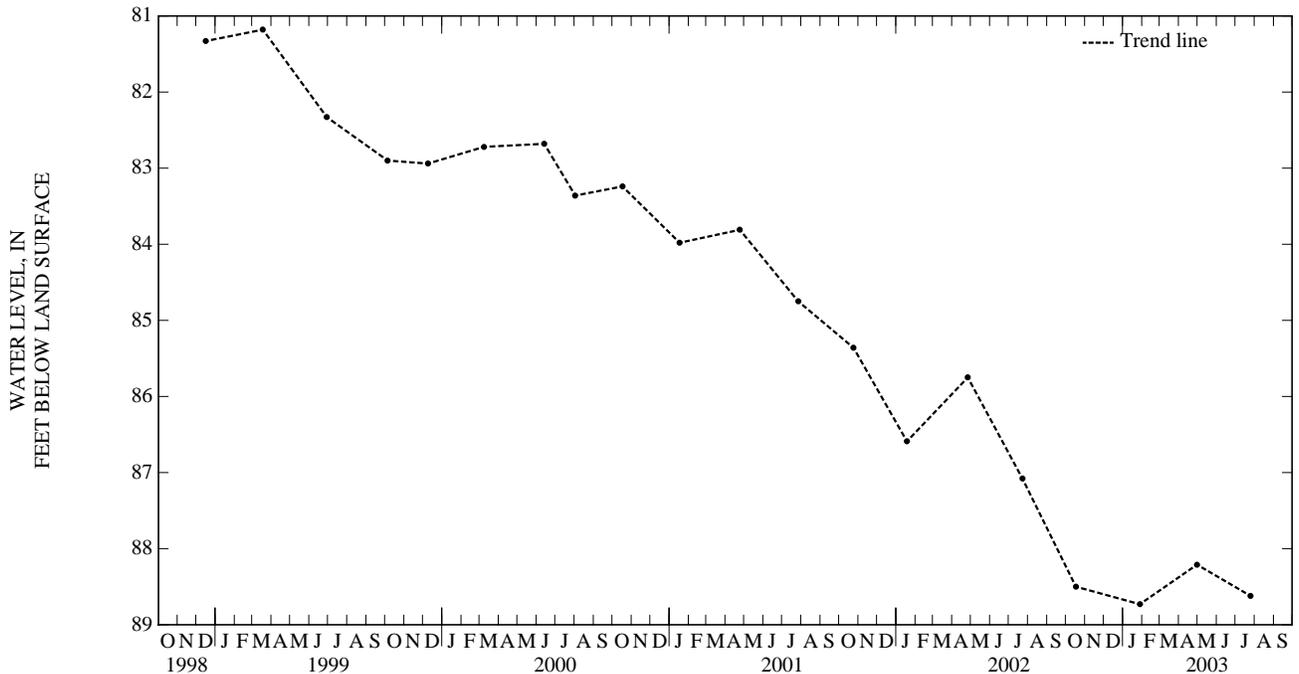
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1985 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 63.65 ft below land-surface datum, June 19, 1985; lowest measured, 88.73 ft below land-surface datum, Jan. 28, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	88.50	JAN 28	88.73	APR 30	88.21	JUL 25	88.62
WATER YEAR 2003 HIGHEST 88.21		APR 30, 2003		LOWEST 88.73		JAN 28, 2003	



CITY OF PORTSMOUTH—Continued

365313076215101. Local number, 60D 2.

LOCATION.--Lat 36°53'14", long 76°21'50", NAD83, Hydrologic Unit 02080208, 1.1 mi east of the main gate of the U.S. Naval Supply Center on Main Street in Building 285, 2.0 mi northwest of West Norfolk in the city of Portsmouth, and 2.25 mi north of the intersection of U.S. Highway 17 and Cedar Lane (Craney Island Road). Owner: U.S. Department of the Navy.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in. to 170 ft, diameter 4 in. from 170 to 565 ft, depth 565 ft, screened 545 to 565 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

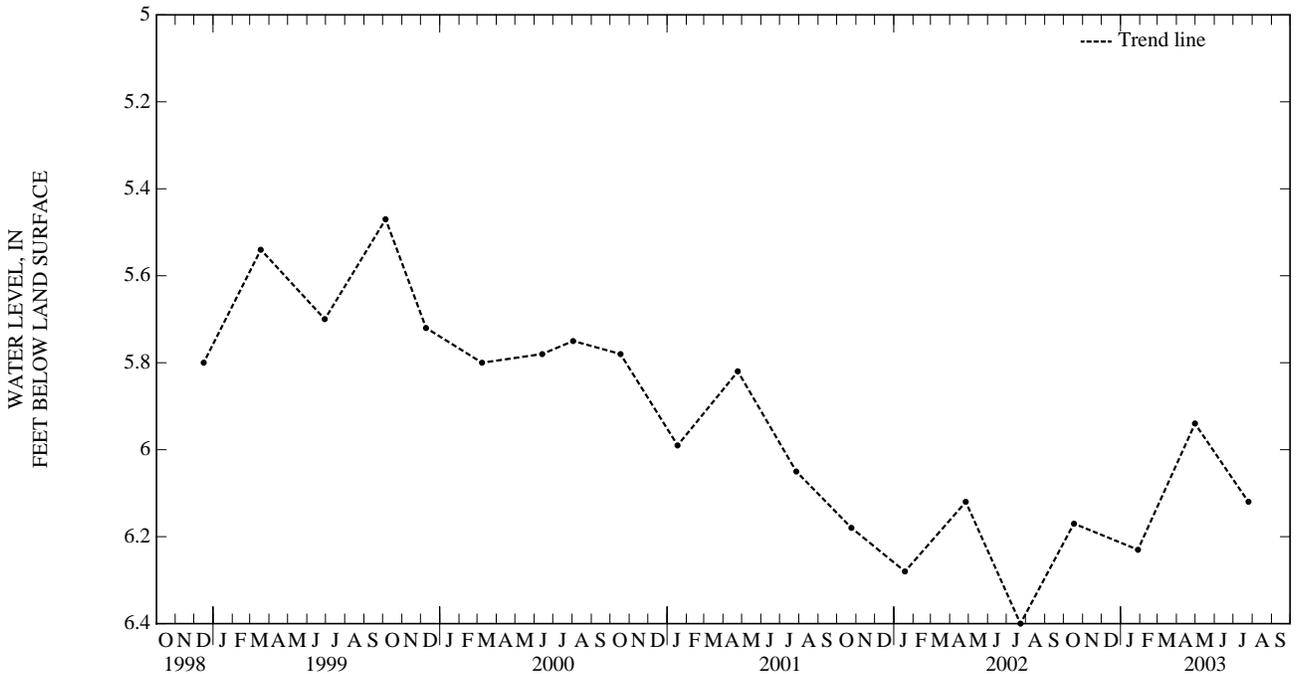
DATUM.--Elevation of land-surface datum is 12 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.6 ft above land-surface datum.

PERIOD OF RECORD.--January 1984 to current year. Unpublished records available prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.01 ft below land-surface datum, Sept. 18, 1985; lowest measured, 6.40 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	6.17	JAN 28	6.23	APR 30	5.94	JUL 25	6.12
WATER YEAR 2003 HIGHEST		5.94	APR 30, 2003 LOWEST		6.23	JAN 28, 2003	



GROUND-WATER LEVELS
PRINCE GEORGE COUNTY

370501077214401. Local number, 52E 2.

LOCATION.--Lat 37°05'02", long 77°21'43", NAD83, Hydrologic Unit 03010201, at Virginia Department of Transportation - Carson Area Headquarters, 1500 ft west of intersection of State Highway 35 and Interstate 95. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 69.47 ft, screened 64.47 ft to 69.47 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1998 to Oct. 1, 1999, occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1998, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 140 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum prior to Dec. 23, 1998; 1.08 ft thereafter.

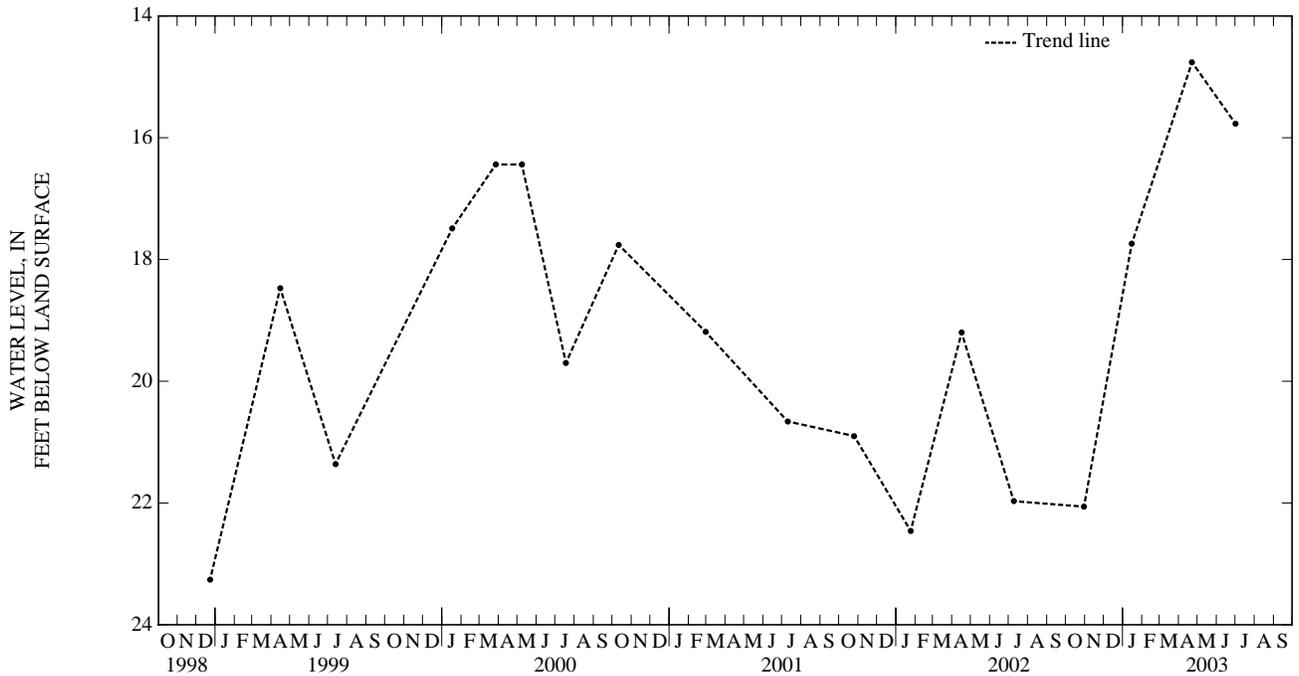
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.76 ft below land-surface datum, Apr. 22, 2003; lowest measured, 23.26 ft below land-surface datum, Dec. 23, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	22.06	JAN 15	17.74	APR 22	14.76	JUL 01	15.77
WATER YEAR 2003 HIGHEST		14.76	APR 22, 2003		LOWEST		22.06
						OCT 30, 2002	



PRINCE GEORGE COUNTY—Continued

371315077171901. Local number, 52F 1 SOW 038.

LOCATION.--Lat 37°13'16", long 77°17'18", NAD83, Hydrologic Unit 03010202, 0.1 mi north of State Highway 106 in Prince George. Owner: Prince George County.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 180 ft, cased to 170 ft, open hole 170 to 180 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 10, 1985, to July 10, 1995, bimonthly measurement with chalked tape. May 25, 1974, to Oct. 9, 1985, occasional measurement with chalked tape. Jan. 31, 1971, to May 25, 1974, continuous strip-chart recorder. Prior to Jan. 31, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 132 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.4 ft above land-surface datum.

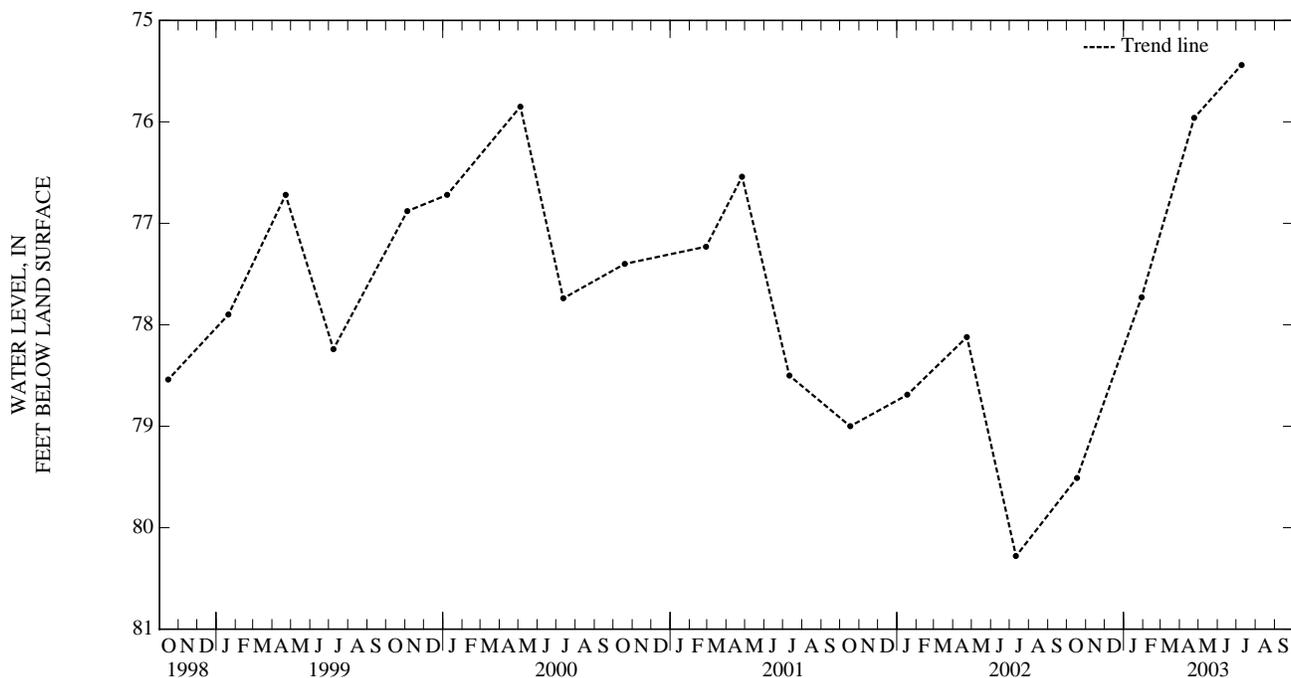
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.32 ft below land-surface datum, Feb. 4, 1980; lowest measured, 80.28 ft below land-surface datum, July 11, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	79.51	JAN 29	77.73	APR 24	75.96	JUL 09	75.44
WATER YEAR 2003 HIGHEST 75.44		JUL 09, 2003		LOWEST 79.51		OCT 17, 2002	



GROUND-WATER LEVELS
PRINCE WILLIAM COUNTY

384931077420301. Local number, 49U 1.

LOCATION.--Lat 38°49'30", long 77°42'07", NAD83, Hydrologic Unit 02070010, 500 ft north of State Highway 55, 0.8 mi east of Thoroughfare Gap, and 3.7 mi west of Haymarket. Owner: Virginia Department of Transportation.

AQUIFER.--Waterfall Formation of Early Jurassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 345 ft, cased to 20 ft, open hole 20 to 345 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to February 1980, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 383 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

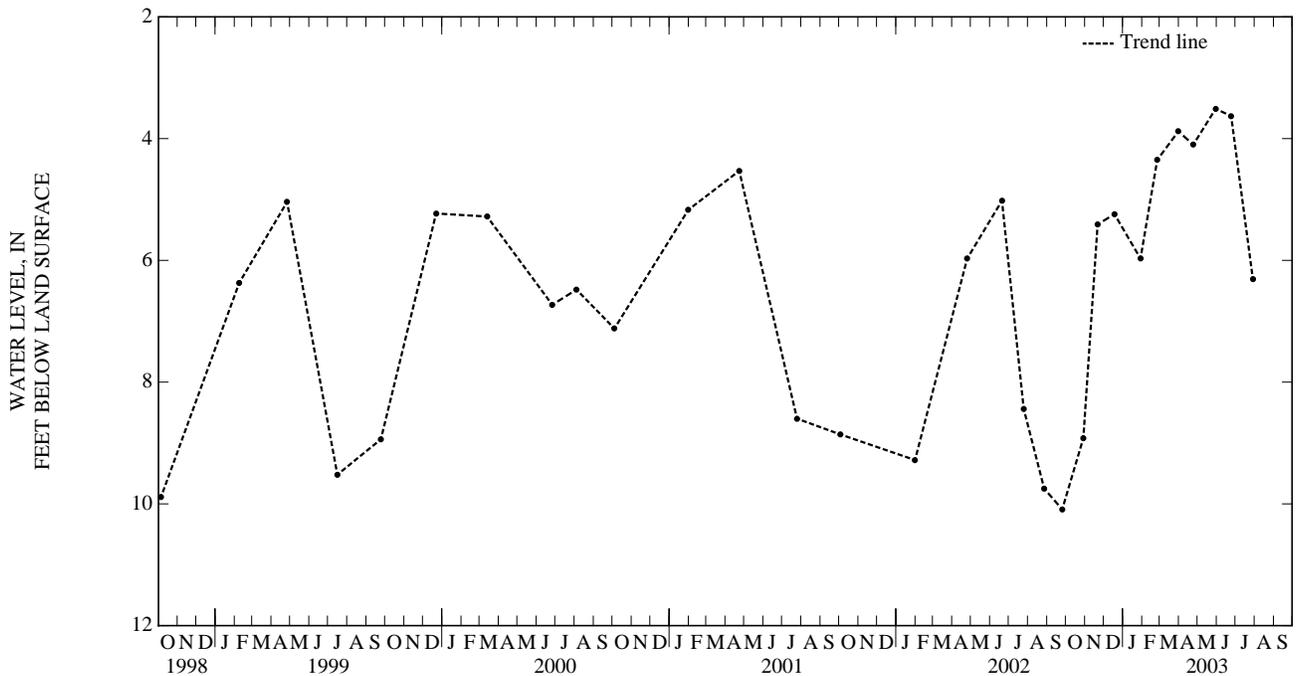
PERIOD OF RECORD.--October 1968 to current year. Unpublished records available prior to May 1969 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.59 ft below land-surface datum, Mar. 19, 1975; lowest measured, 10.33 ft below land-surface datum, Oct. 14, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 29	8.92	DEC 18	5.24	FEB 25	4.35	APR 24	4.10	JUN 24	3.63
NOV 21	5.41	JAN 29	5.97	MAR 31	3.88	MAY 30	3.51	JUL 29	6.31

WATER YEAR 2003 HIGHEST 3.51 MAY 30, 2003 LOWEST 8.92 OCT 29, 2002



PRINCE WILLIAM COUNTY—Continued

385607077381101. Local number, 49V 1.

LOCATION.--Lat 38°56'07", long 77°38'10", NAD83, Hydrologic Unit 02070010, near intersection of State Highways 600 and 615, 2.8 mi south of Aldie.
Owner: J. H. Hutchison.

AQUIFER.--Turkey Run Formation of Early Jurassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 7 in., depth 165 ft, cased to 10 ft, open hole 10 to 165 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. June 19, 1979 to Oct. 1, 1995, digital recorder 60-minute punch.
Prior to June 19, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 420 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Sept. 11, 2003; top of 1 inch conduit pipe, 3.29 ft above land-surface datum thereafter. Readings from 1979 to 1981 should be 0.7 ft lower than previously published.

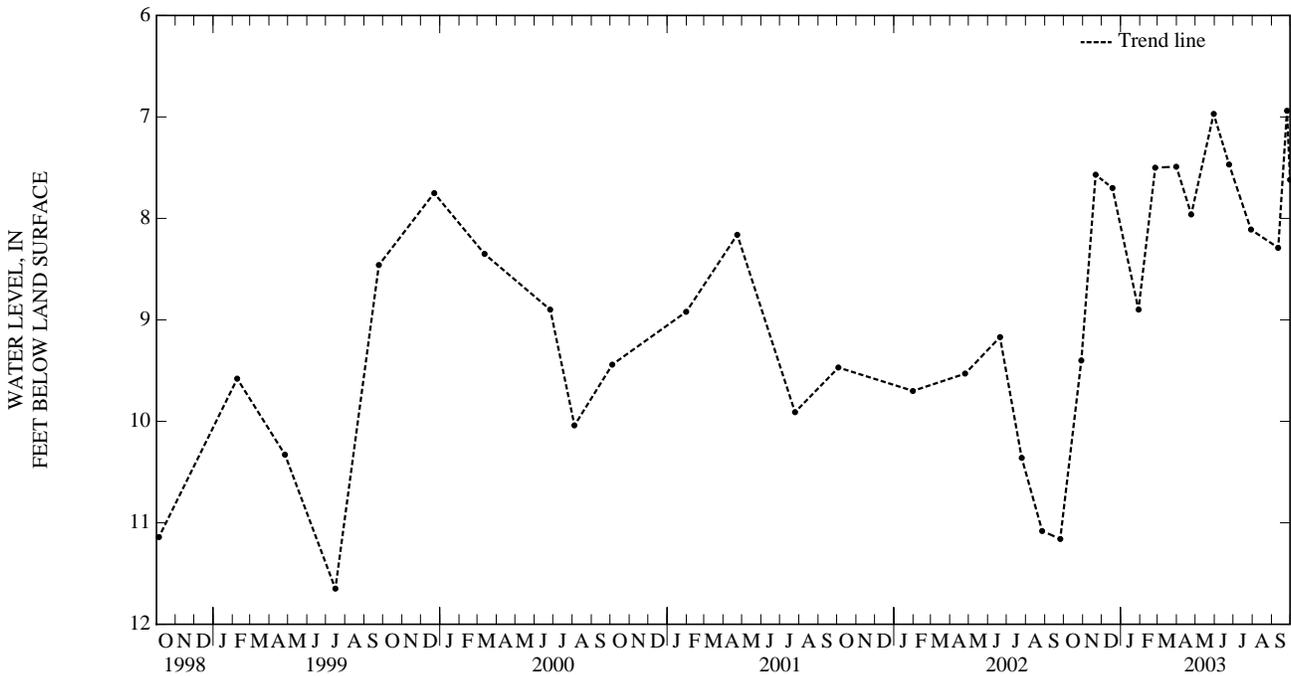
PERIOD OF RECORD.--November 1968 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.85 ft below land-surface datum, Oct. 12, 1979; lowest recorded, 13.09 ft below land-surface datum, Sept. 16, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 29	9.40	JAN 29	8.90	APR 24	7.96	JUL 29	8.11	SEP 30	7.62
NOV 21	7.57	FEB 25	7.50	MAY 30	6.97	SEP 11	8.29		
DEC 18	7.70	MAR 31	7.49	JUN 24	7.47	25	6.94		

WATER YEAR 2003 HIGHEST 6.94 SEP 25, 2003 LOWEST 9.40 OCT 29, 2002



PRINCE WILLIAM COUNTY—Continued

383423077245901. Local number, 51S 7.

LOCATION.--Lat 38°34'23", long 77°24'58", NAD83, Hydrologic Unit 02070011, in Prince William Forest Park, 700 ft north of State Highway 619, 0.7 mi southeast of Belfair Crossroads, and 4.6 mi south of Independent Hill. Owner: National Park Service.

AQUIFER.--Lunga Reservoir Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 490 ft, cased to 50 ft, open hole 50 to 490 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Dec. 21, 1982 to Feb. 1, 1996, digital recorder 60-minute punch. Prior to Dec. 21, 1982, occasional measurement with chalked tape.

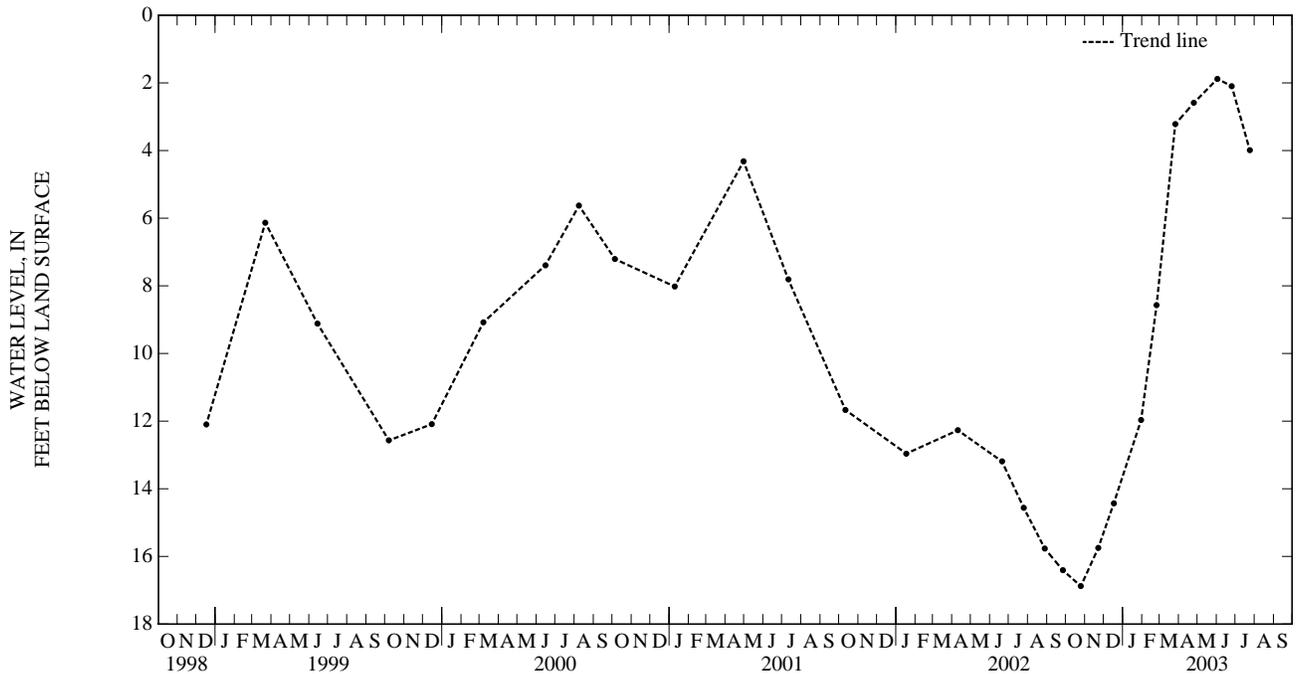
DATUM.--Elevation of land-surface datum is 295 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--September 1973 to November 1975, December 1977 to current year. Unpublished records available prior to December 1977 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.00 ft above land-surface datum, Mar. 29, 1994; lowest measured, 16.88 ft below land-surface datum, Oct. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	16.88	DEC 17	14.43	FEB 24	8.57	APR 25	2.59	JUN 25	2.10
NOV 22	15.75	JAN 30	11.97	MAR 26	3.22	JUN 02	1.88	JUL 24	3.99
WATER YEAR 2003 HIGHEST 1.88 JUN 02, 2003		LOWEST 16.88		OCT 25, 2002					



PRINCE WILLIAM COUNTY—Continued

383634077151301. Local number, 52S 4.

LOCATION.--Lat 38°36'34", long 77°15'12", NAD83, Hydrologic Unit 02070010, 193 ft east of Richmond, Fredericksburg, and Potomac (RFP) railroad tracks, 1.1 mi southeast of the intersection of U.S. Highway 1 and State Highway 636 (Featherstone Road), 1.4 mi south of the intersection of State Highway 636 (Featherstone Road) and RFP railroad tracks, and near Woodbridge. Owner: District of Columbia Department of Sanitary Engineering.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 10 in., depth 186 ft, screened 156 to 176 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Aug. 1, 1971, to July 10, 1978, continuous strip-chart recorder. Prior to Aug. 1, 1971, occasional measurement with chalked tape.

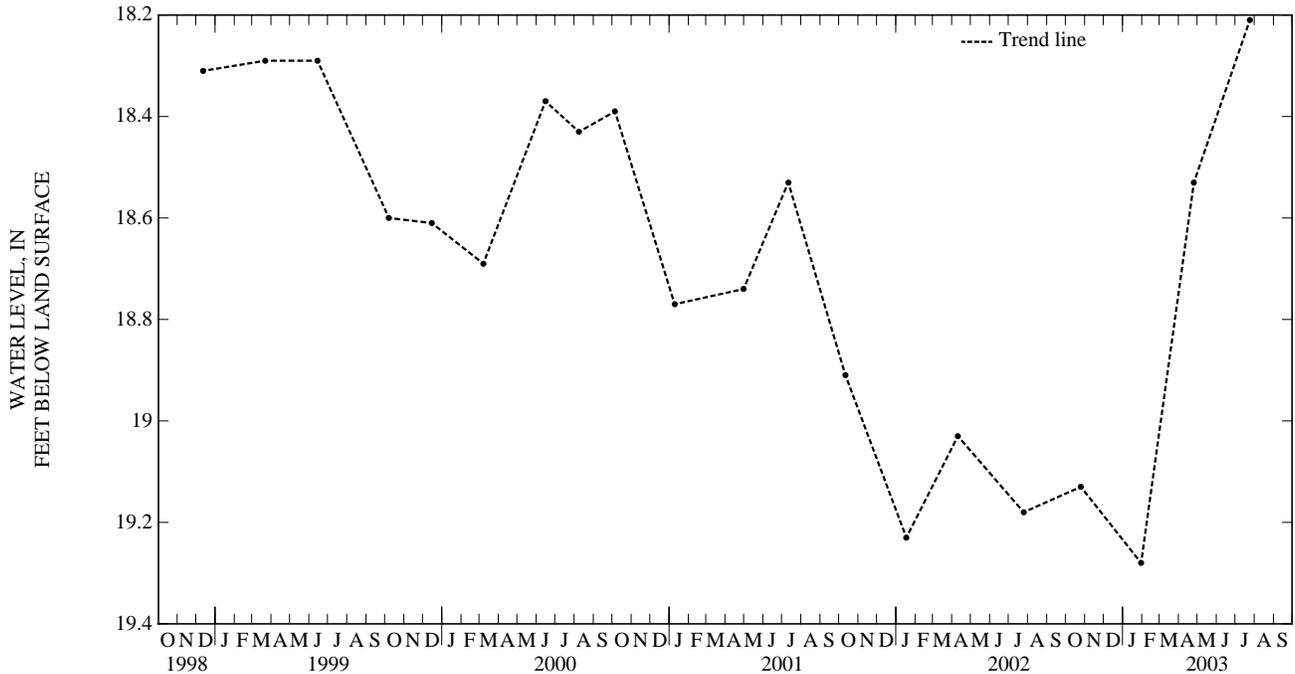
DATUM.--Elevation of land-surface datum is 28 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 3.3 ft above land-surface datum prior to Aug. 28, 1978; 1.9 ft thereafter.

PERIOD OF RECORD.--June 1969 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 17.17 ft below land-surface datum, Apr. 28, 1973; lowest measured, 22.17 ft below land-surface datum, July 1, 1969.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	19.13	JAN 30	19.28	APR 25	18.53	JUL 24	18.21
WATER YEAR 2003 HIGHEST		18.21	JUL 24, 2003		LOWEST		19.28
						JAN 30, 2003	



PRINCE WILLIAM COUNTY—Continued

383830077135502. Local number, 53T 2 SOW 029.

LOCATION.--Lat 38°38'30", long 77°13'54", NAD83, Hydrologic Unit 02070010, at U.S. Army Woodbridge Research Facility, 1.5 mi east of Woodbridge. Owner: U.S. Department of the Army.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 162 ft, screened 130 to 156 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 1, 1996 to Sept. 30, 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 25, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. Prior to Sept. 25, 1985, occasional measurement with chalked tape.

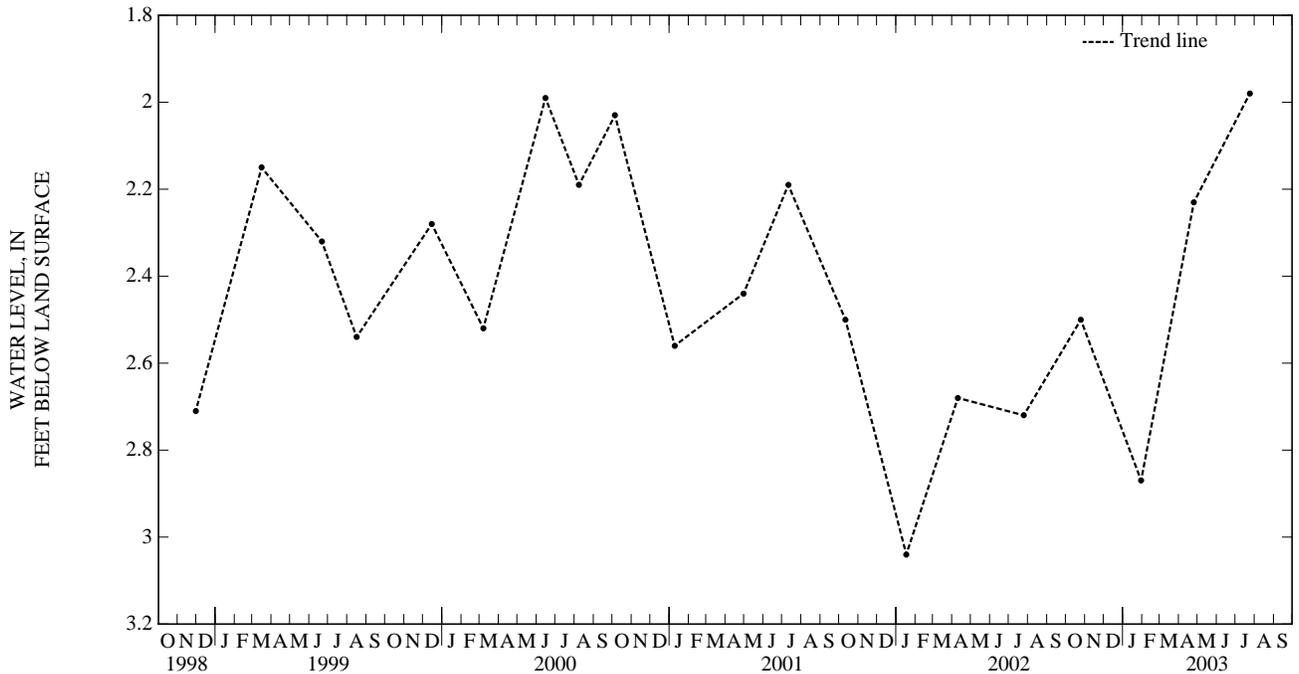
DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

PERIOD OF RECORD.--March 1970 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.60 ft below land-surface datum, Apr. 4, 1973; lowest measured, 10.35 ft below land-surface datum, Oct. 12, 1977.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 25	2.50	JAN 30	2.87	APR 25	2.23	JUL 24	1.98
WATER YEAR 2003 HIGHEST		1.98	JUL 24, 2003		LOWEST		2.87
						JAN 30, 2003	



PULASKI COUNTY

370254080374401. Local number, 25E 1 SOW 009.

LOCATION.--Lat 37°02'54", long 80°37'43", NAD83, Hydrologic Unit 05050001, 300 ft east of State Highway 100, 0.3 mi south of intersection of State Highways 682 and 700, and 1.1 mi south of Dublin. Owner: Commonwealth of Virginia.

AQUIFER.--Elbrook Formation of Middle to Late Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 318 ft, cased to 56 ft, open hole 56 to 318 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. Prior to Oct. 1, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 1,880 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

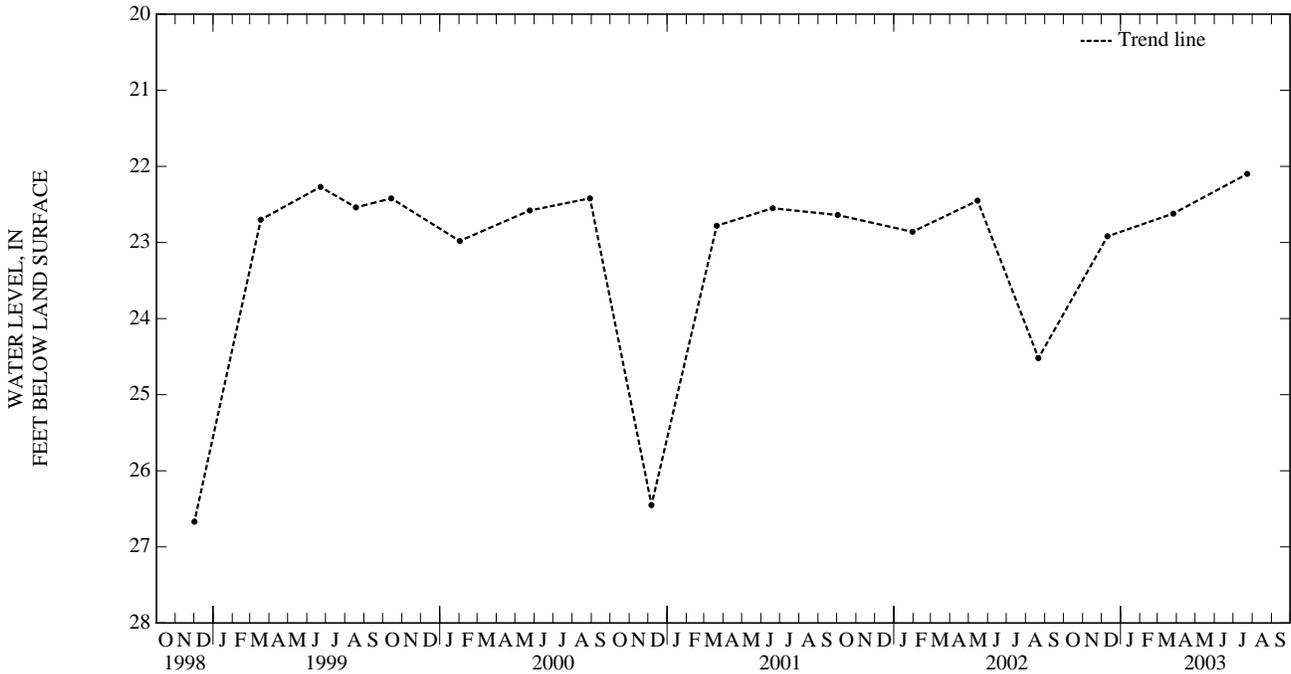
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.15 ft below land-surface datum, Mar. 31, Apr. 30, 1975; lowest measured, 27.25 ft below land-surface datum, Dec. 13, 1976.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10	22.92	MAR 26	22.62	JUL 23	22.10
WATER YEAR 2003 HIGHEST		22.10	JUL 23, 2003	LOWEST	
				22.92	DEC 10, 2002



GROUND-WATER LEVELS
PULASKI COUNTY—Continued

370516080411501. Local number, 25E 2 SOW 059.

LOCATION.--Lat 37°05'16", long 80°41'14", NAD83, Hydrologic Unit 05050001, 400 ft east of State Highway 100, 0.5 mi south of Dublin. Owner: Town of Dublin.

AQUIFER.--Conococheague Formation of Late Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 370 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. July 20, 1974, to Oct. 1, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 2,170 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, at land-surface datum.

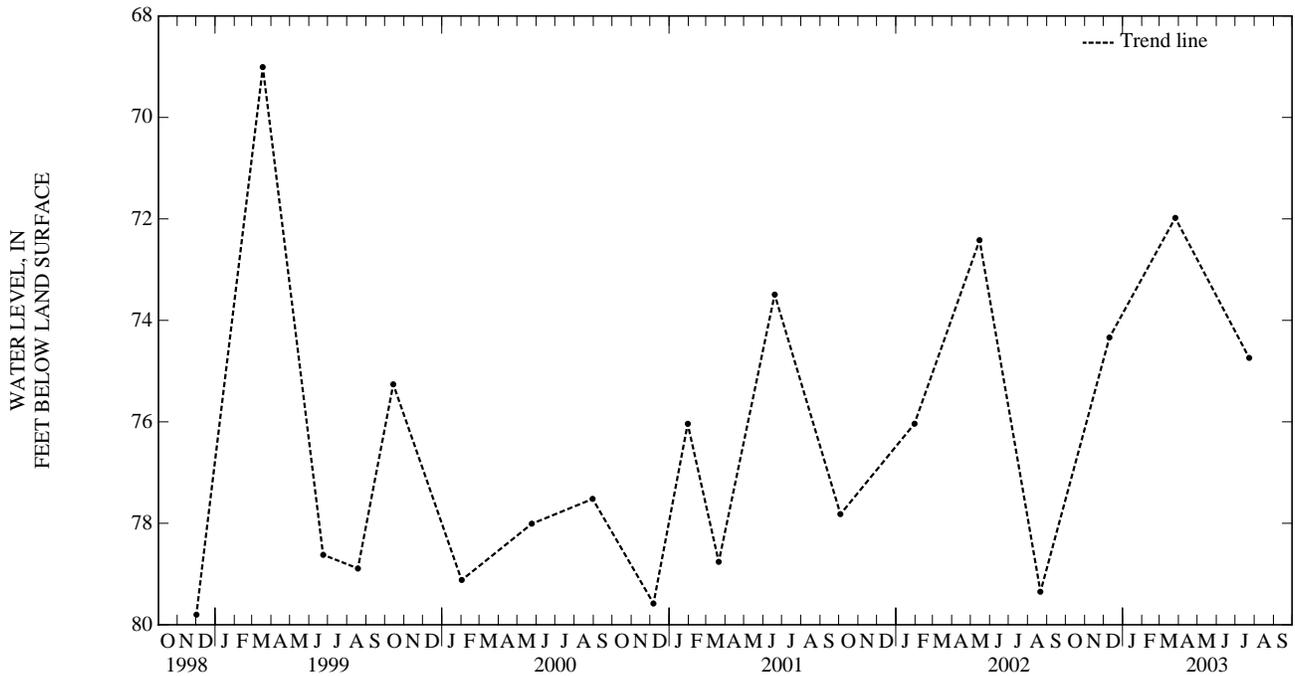
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 60.00 ft below land-surface datum, Mar. 18, 1973; lowest measured, 82.50 ft below land-surface datum, Oct. 5, 1982.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10	74.34	MAR 26	71.98	JUL 23	74.74
WATER YEAR 2003 HIGHEST 71.98 MAR 26, 2003 LOWEST 74.74 JUL 23, 2003					



RICHMOND COUNTY

375523076431801. Local number, 57M 4.

LOCATION.--Lat 37°55'23", long 76°43'17", NAD83, Hydrologic Unit 02080104, 50 ft west of Totuskey Creek, off of State Highway 3 at Totuskey Creek Brige, near Warsaw. Owner: L. Jones.

AQUIFER.--Chickahominy-Pine Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Jetted unused water well, diameter 2 in, depth 180 ft, screened 177 to 180 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

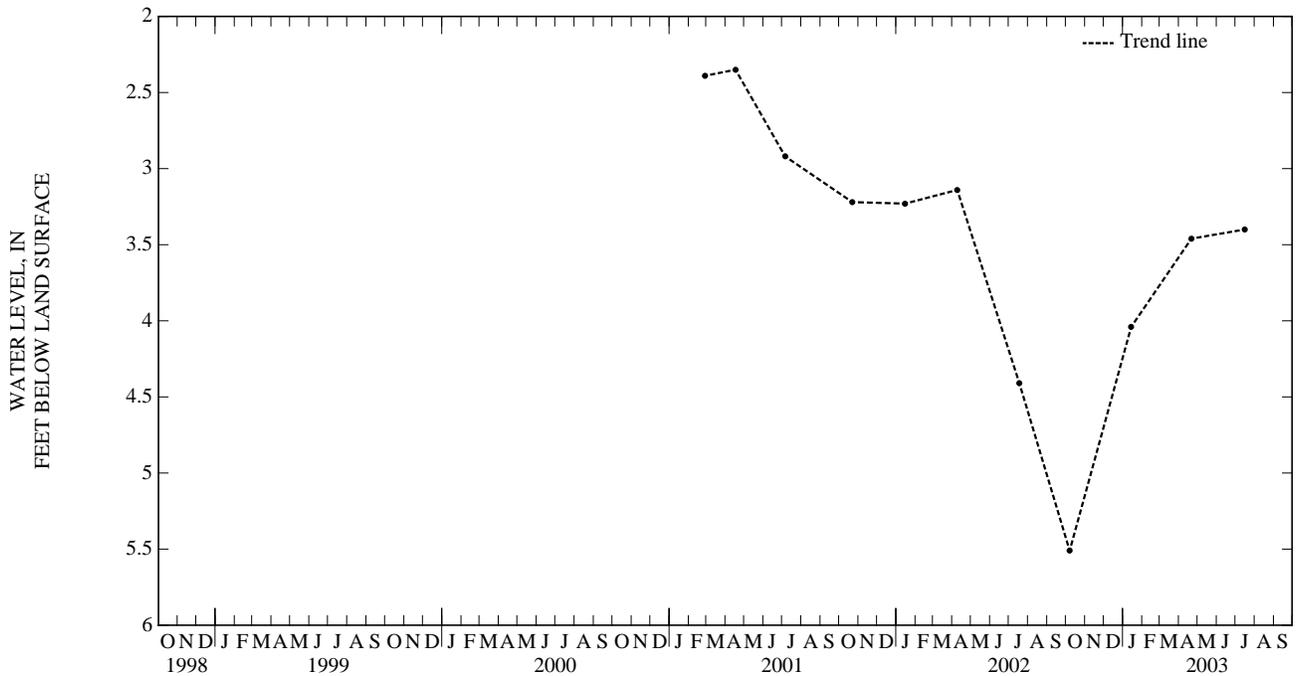
DATUM.--Elevation of land-surface datum is 3 ft, above NGVD of 1929, from topographic map. Measuring point: Top of casing at land-surface.

PERIOD OF RECORD.--1906, February 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.35 ft below land-surface datum, Apr. 17, 2001 ; lowest measured, 5.51 ft below land-surface datum, Oct. 7, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	5.51	JAN 14	4.04	APR 21	3.46	JUL 16	3.40
WATER YEAR 2003 HIGHEST		3.40	JUL 16, 2003 LOWEST		5.51	OCT 07, 2002	



GROUND-WATER LEVELS

CITY OF ROANOKE

371653079552101. Local number, 31G 1 SOW 008.

LOCATION.--Lat 37°16'53", long 79°55'20", NAD83, Hydrologic Unit 03010101, 700 ft south of intersection of 10th Street and Orange Avenue in Roanoke. Owner: Nelson-Roanoke Corporation.

AQUIFER.--Rome Formation of Cambrian age. Prior to 1974, reported as Elbrook Formation.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 48 ft, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to Oct. 1, 1996, bimonthly measurement with chalked tape. July 20, 1974, to Sept. 30, 1985, occasional measurement with chalked tape. Prior to July 20, 1974, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 930 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.94 ft above land-surface datum.

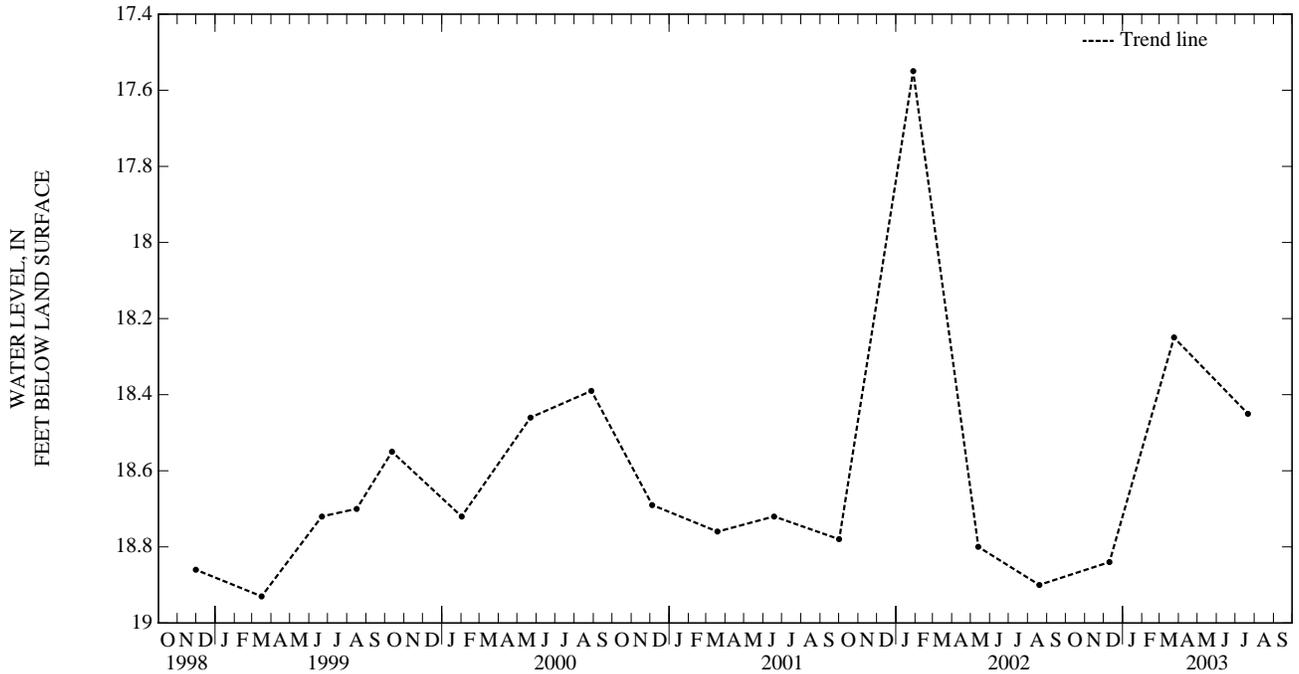
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--August 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.36 ft below land-surface datum, Feb. 18, 1986; lowest measured, 19.29 ft below land-surface datum, June 23, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 10	18.84	MAR 24	18.25	JUL 21	18.45
WATER YEAR 2003 HIGHEST 18.25 MAR 24, 2003		LOWEST 18.84		DEC 10, 2002	



ROCKBRIDGE COUNTY

373758079271601. Local number, 35K 1 SOW 063.

LOCATION.--Lat 37°37'58", long 79°27'15", NAD83, Hydrologic Unit 02080202, 0.35 mi northwest of intersection of State Highways 130 and 684 in Glasgow. Owner: Town of Glasgow.

AQUIFER.--Rome Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 6 in., depth 695 ft, cased to 101 ft, open hole from 101 to 695 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel, prior to Oct. 1, 1995 continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 745 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

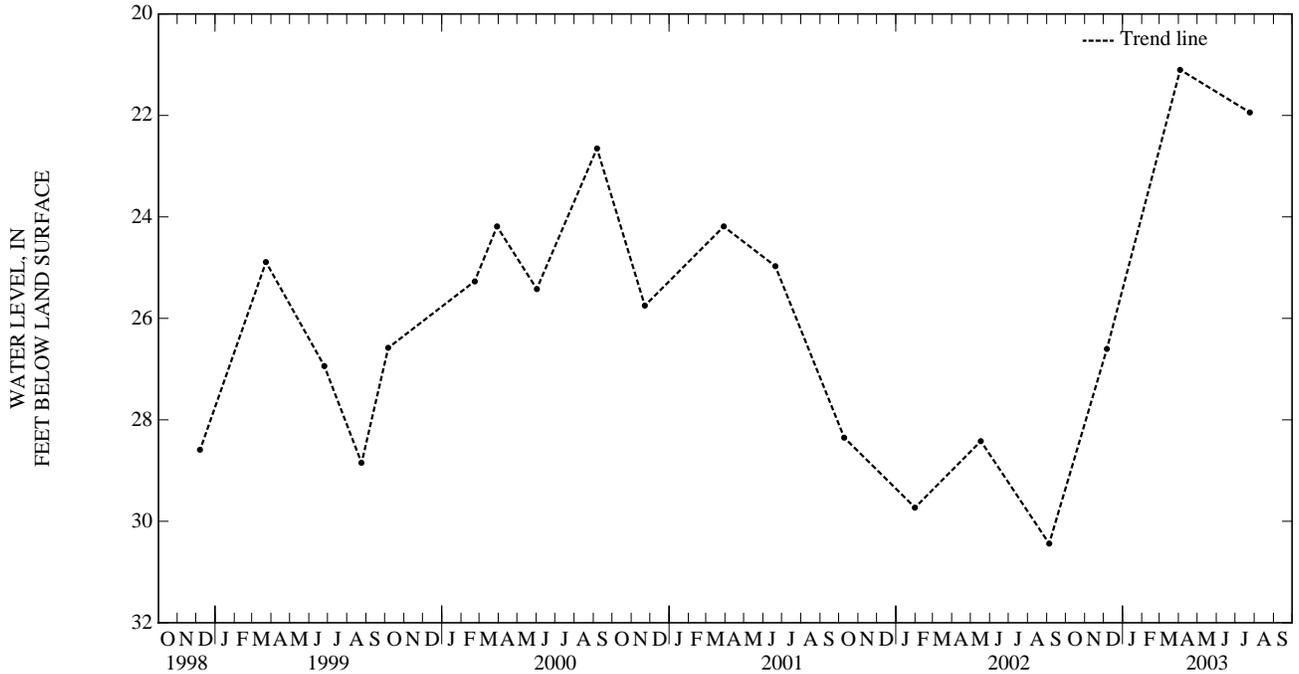
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 14.27 ft below land-surface datum, Apr. 29, 1987; lowest recorded, 30.44 ft below land-surface datum, Sept. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 06	26.60	APR 03	21.10	JUL 24	21.94
WATER YEAR 2003 HIGHEST		21.10	APR 03, 2003	LOWEST	
		26.60	DEC 06, 2002		



GROUND-WATER LEVELS
ROCKINGHAM COUNTY

382150078424001. Local number, 41Q 1.

LOCATION.--Lat 38°21'50", long 78°42'39", NAD83, Hydrologic Unit 02070005, at Virginia Department of Transportation garage, 1.3 mi southeast of McGaheysville. Owner: U.S. Geological Survey.

AQUIFER.--Conococheague Formation of Late Cambrian age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6.25 in., depth 310 ft, cased to 131 ft, open hole 131 to 310 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. June 27, 1979 to Oct. 1, 1995, digital recorder 60-minute punch. Prior to June 27, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 1,105 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing 2.4 ft above land-surface datum. Prior to Feb. 27, 1996, top edge of recorder shelf, 3.5 ft above land-surface datum.

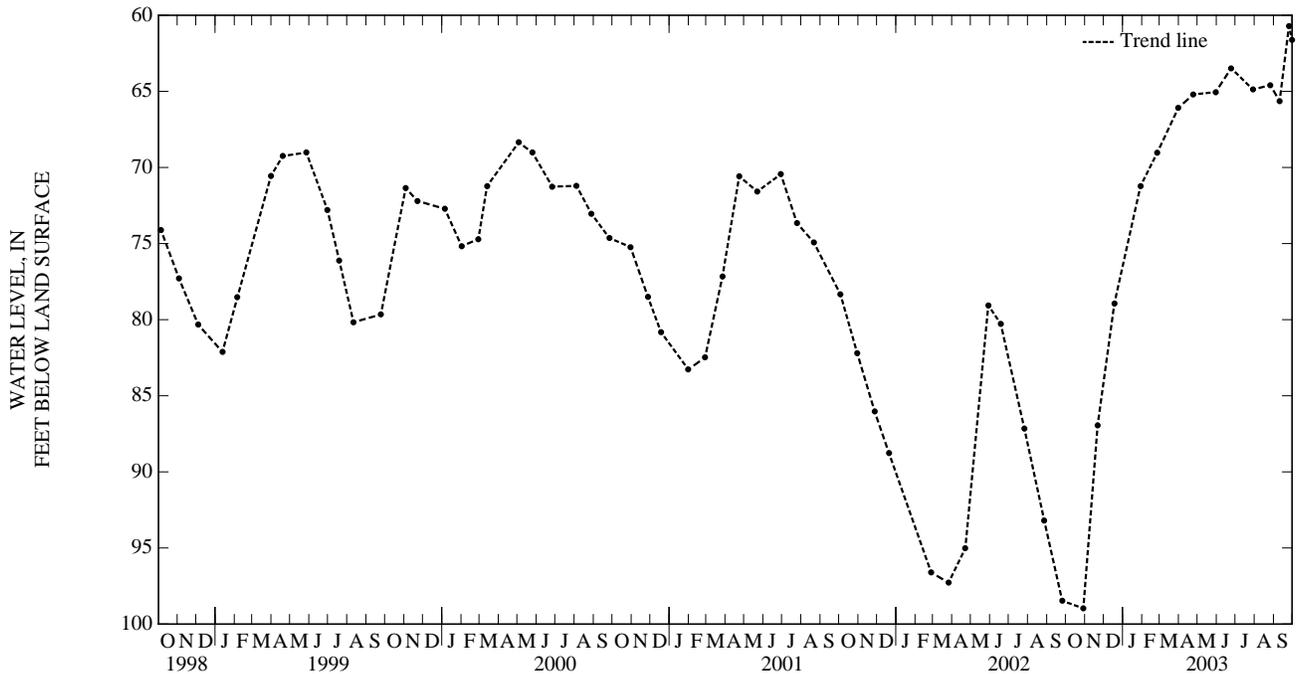
PERIOD OF RECORD.--August 1970 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 57.73 ft below land-surface datum, Feb. 27, 1998; lowest measured, 98.97 ft below land-surface datum, Oct. 29, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL								
OCT 29	98.97	JAN 29	71.22	APR 24	65.20	JUL 29	64.88	SEP 25	60.71
NOV 21	86.94	FEB 25	69.03	MAY 30	65.05	AUG 26	64.59	30	61.62
DEC 18	78.93	MAR 31	66.08	JUN 24	63.48	SEP 10	65.65		

WATER YEAR 2003 HIGHEST 60.71 SEP 25, 2003 LOWEST 98.97 OCT 29, 2002



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY

364109077230701. Local number, 51B 3.

LOCATION.--Lat 36°41'10", long 77°23'06", NAD83, Hydrologic Unit 03010201, 150 ft, west of the intersection of U.S. Highway 58 and State Highway 615, and 0.5mi south of Adams Grove. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 175 ft, screened 165 to 175 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. July 1977 to September 1995, digital recorder 60-minute punch. July 1975 to July 1977 continuous strip-chart recorder. Prior to July 1975 occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 126 ft, above NGVD of 1929, from topographic map. Measuring point: top of recorder shelf, 3.12 ft above land-surface datum.

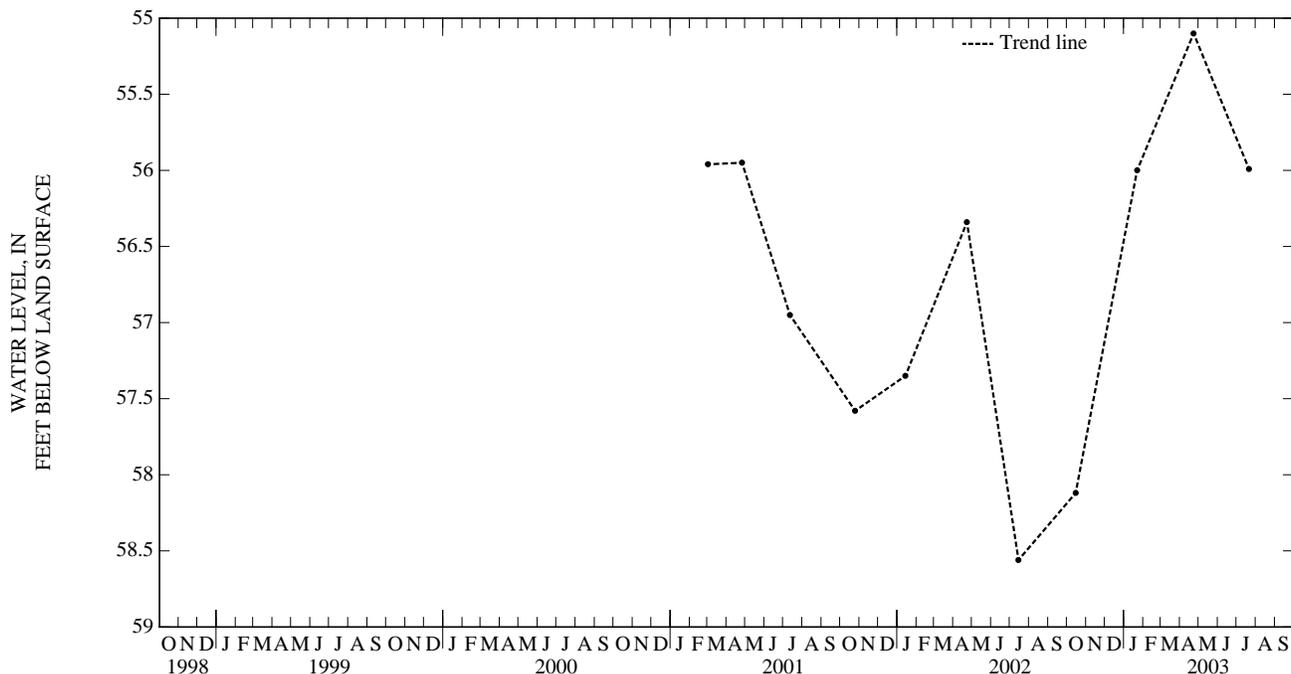
REMARKS.--Water level may be affected by regional drawdown. The depth of the well was reported incorrectly as 253 ft, for the period October 1981 to September 1993.

PERIOD OF RECORD.--October 1974 to September 1995. March 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 54.21 ft, below land-surface datum, Apr. 30, 1978; lowest recorded, 60.03 ft below land-surface datum, Oct. 24, 25, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	58.12	JAN 22	56.00	APR 23	55.10	JUL 21	55.99
WATER YEAR 2003 HIGHEST		55.10	APR 23, 2003 LOWEST		58.12	OCT 15, 2002	



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY—Continued

363410077150801. Local number, 52A 1.

LOCATION.--Lat 36°34'11", long 77°15'07", NAD83, Hydrologic Unit 03010204, along Seaboard Coastline railroad, 0.15 mi northwest of intersection of State Highways 195 and 701 in Branchville. Owner: L. W. Grizzard.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 217 ft, screened 204 to 217 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 44 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

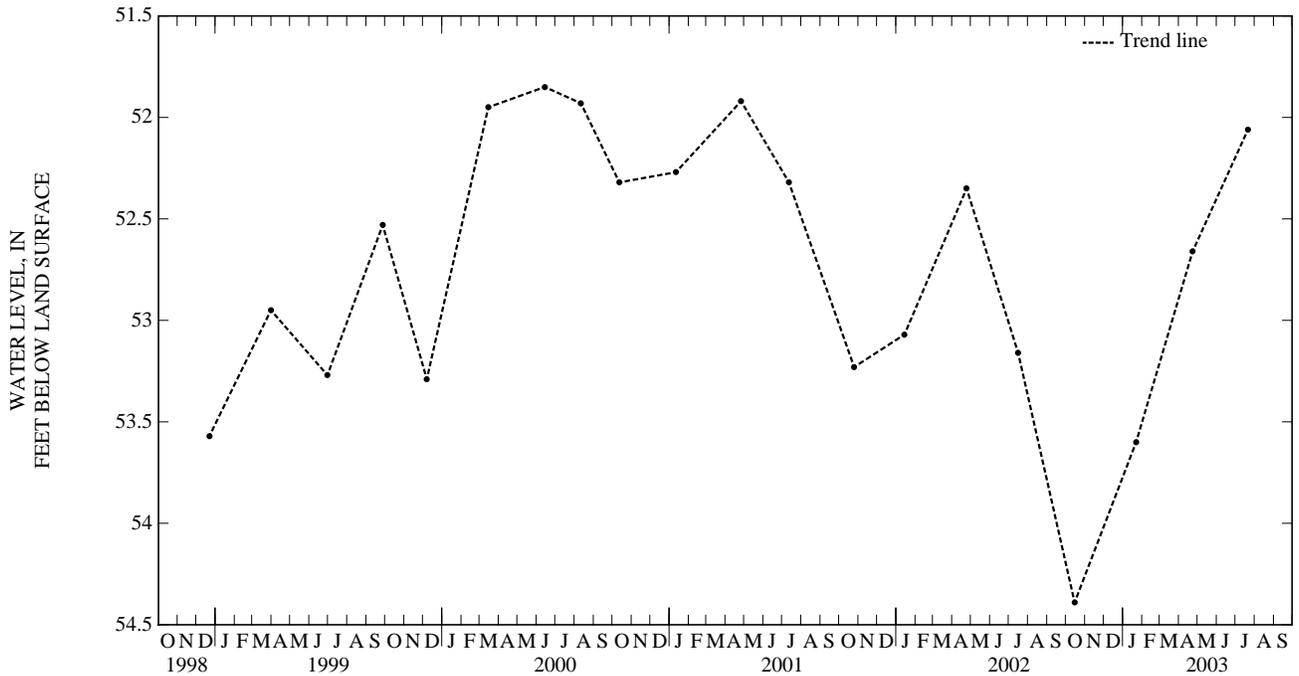
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.85 ft below land-surface datum, Sept. 9, 1970; lowest measured, 54.39 ft below land-surface datum, Oct. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	54.39	JAN 22	53.60	APR 23	52.66	JUL 21	52.06
WATER YEAR 2003 HIGHEST		52.06	JUL 21, 2003 LOWEST		54.39	OCT 15, 2002	



SOUTHAMPTON COUNTY—Continued

363916077201001. Local number, 52B 8 SOW 178A.

LOCATION.--Lat 36°39'17", long 77°20'09", NAD83, Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of the intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Newark Supergroup sandstone of Jurassic and Triassic age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 316 ft, screened 285 to 295 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 120 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

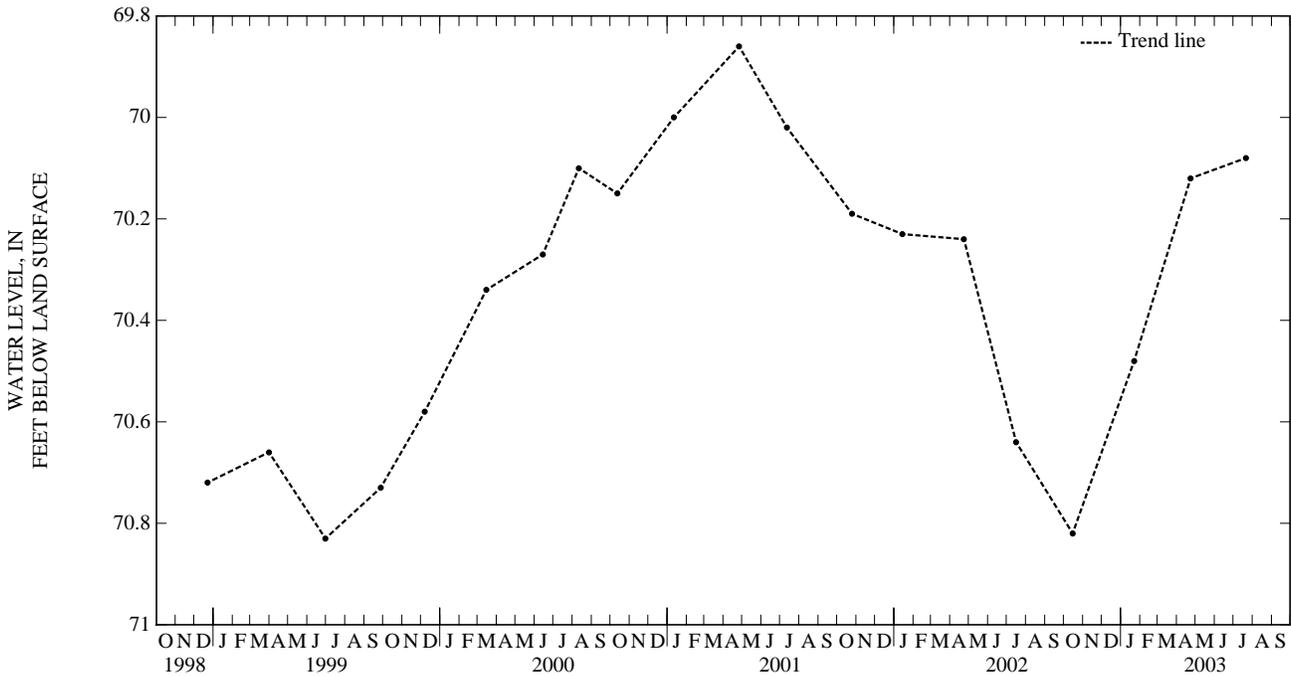
REMARKS.--Water level may be affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--March 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.30 ft below land-surface datum, Mar. 15, 1990; lowest measured, 71.39 ft below land-surface datum, Sept. 20, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	70.82	JAN 22	70.48	APR 23	70.12	JUL 21	70.08
WATER YEAR 2003 HIGHEST		70.08	JUL 21, 2003 LOWEST		70.82	OCT 15, 2002	



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY—Continued

363916077201004. Local number, 52B 11 SOW 178D.

LOCATION.--Lat 36°39'17", long 77°20'09", NAD83, Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 190 ft, screened 160 to 170 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to November 1987, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.1 ft above land-surface datum.

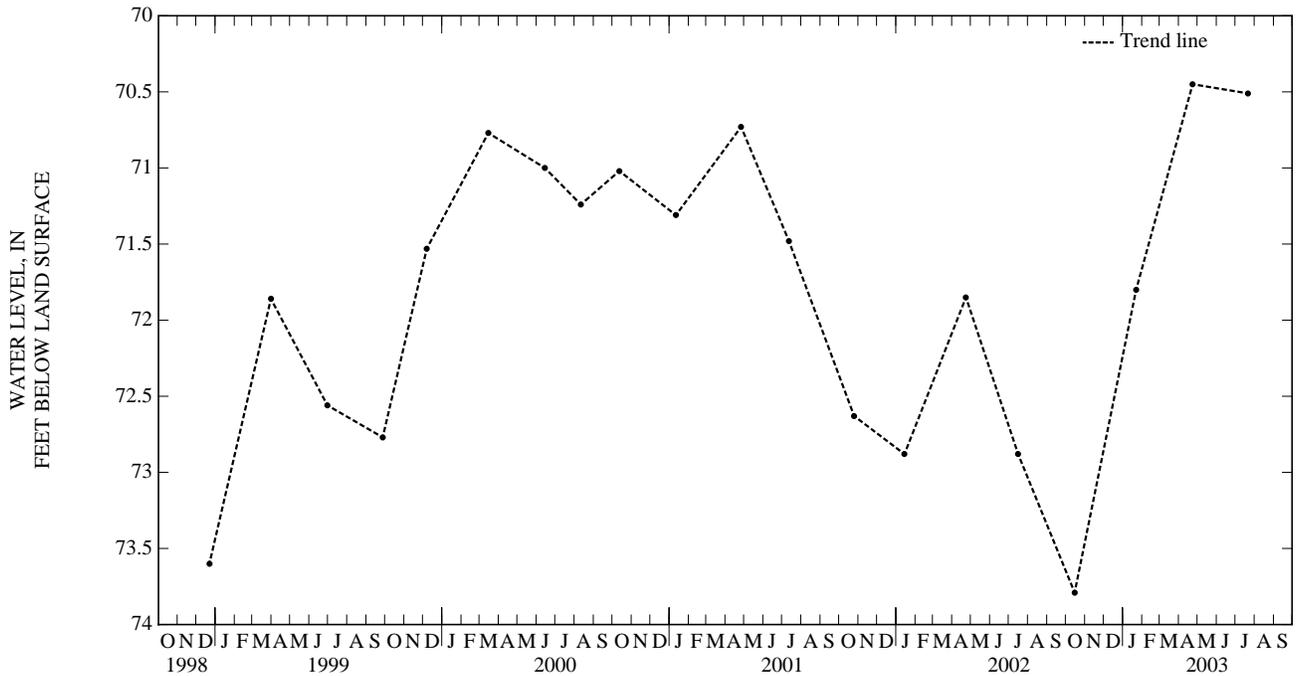
REMARKS.--Water level may be affected by regional drawdown.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 69.81 ft below land-surface datum, Apr. 16, 1987; lowest measured, 73.89 ft below land-surface datum, Sept. 20, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	73.79	JAN 22	71.80	APR 23	70.45	JUL 21	70.51
WATER YEAR 2003 HIGHEST		70.45	APR 23, 2003		LOWEST		73.79
						OCT 15, 2002	



SOUTHAMPTON COUNTY—Continued

363916077201005. Local number, 52B 12 SOW 178E.

LOCATION.--Lat 36°39'17", long 77°20'09", NAD83, Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to November 1987, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 120 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.2 ft above land-surface datum.

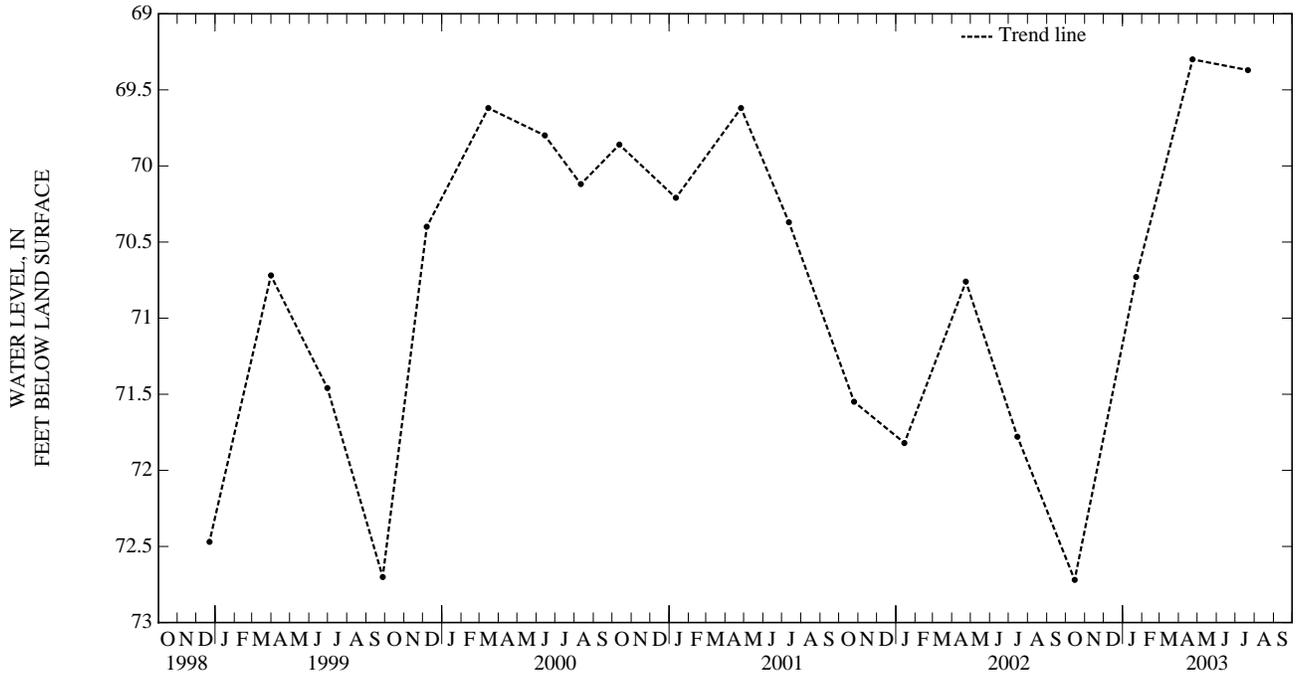
REMARKS.--Water level may be affected by regional drawdown.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 68.75 ft below land-surface datum, Apr. 16, 1987; lowest measured, 72.86 ft below land-surface datum, Sept. 20, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	72.72	JAN 22	70.73	APR 23	69.30	JUL 21	69.37
WATER YEAR 2003 HIGHEST		69.30	APR 23, 2003 LOWEST		72.72	OCT 15, 2002	



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY—Continued

363916077201006. Local number, 52B 13 SOW 178F.

LOCATION.--Lat 36°39'17", long 77°20'09", NAD83, Hydrologic Unit 03010204, 0.25 mi northeast of State Highway 661, 0.6 mi south of intersection of State Highways 652 and 661, and 4.5 mi southeast of Drewryville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 65 ft, screened 40 to 50 ft.

INSTRUMENTATION.--Occasional measurements with chalked tape by USGS personnel. Prior to November 1987, digital recorder 60-minute punch.

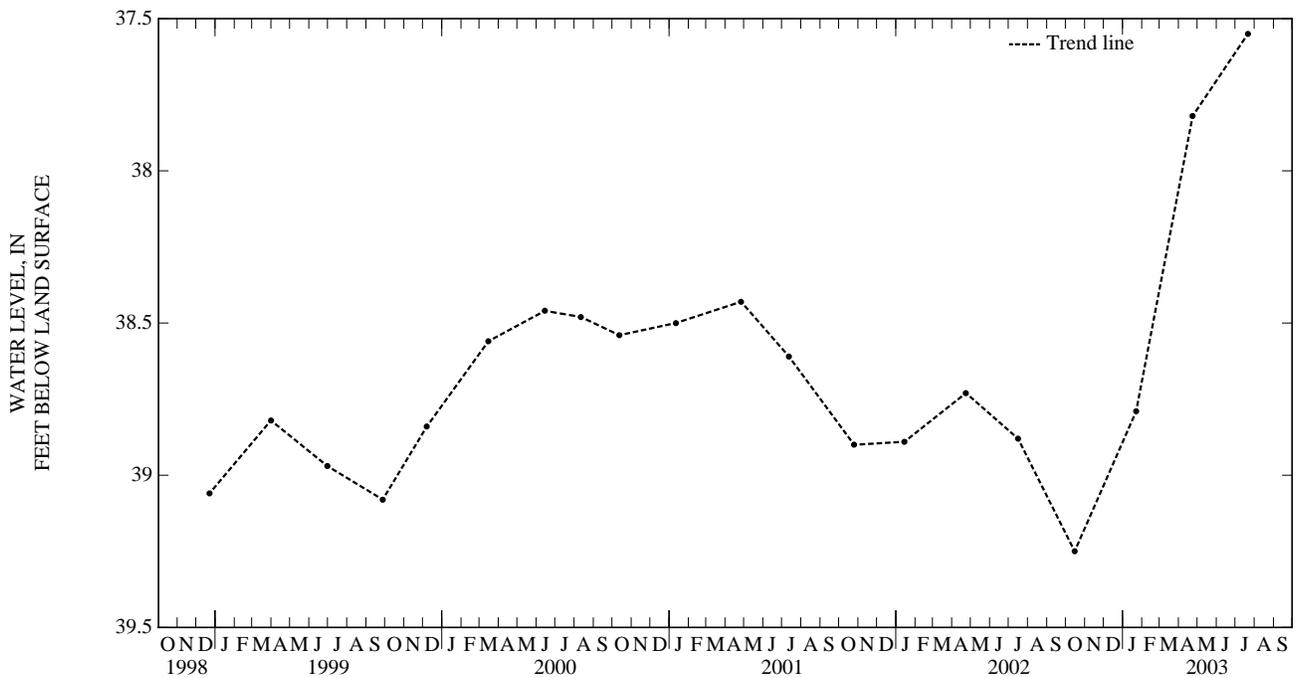
DATUM.--Elevation of land-surface datum is 120 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.9 ft above land-surface datum.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.55 ft below land-surface datum, July 21, 2003; lowest recorded, 43.77 ft below land-surface datum, Oct. 6-9, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	39.25	JAN 22	38.79	APR 23	37.82	JUL 21	37.55
WATER YEAR 2003		HIGHEST 37.55 JUL 21, 2003		LOWEST 39.25		OCT 15, 2002	



SOUTHAMPTON COUNTY—Continued

364242077121501. Local number, 53B 6.

LOCATION.--Lat 36°42'43", long 77°12'14", NAD83, Hydrologic Unit 03010201, at Virginia Department of Transportation - Capron Area Headquarters, 50 ft east of State Highway 654 and 2000 ft north of U.S. Highway 58. Owner: U.S. Geological Survey.

AQUIFER.--Aquia of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 115.65 ft, screened 110.65 ft to 115.65 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1998 to Oct. 1, 1999, occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1998, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.88 ft above land-surface datum prior to Dec. 23, 1998; 1.16 ft thereafter.

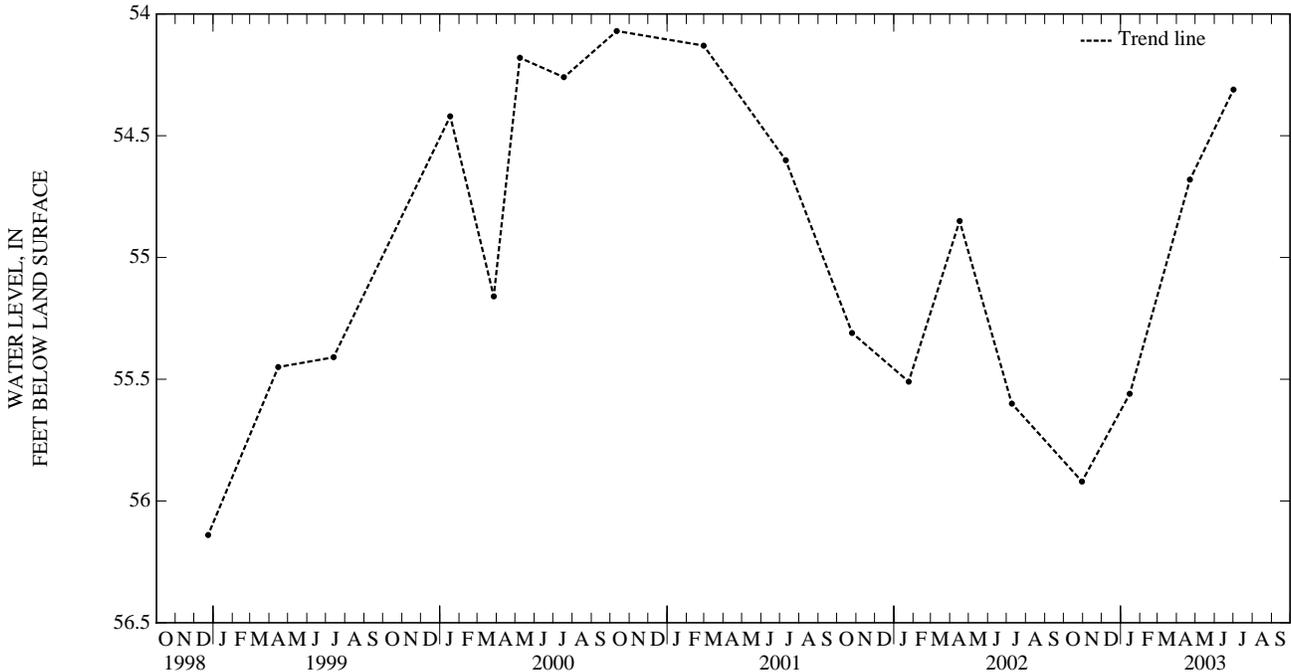
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Well drilled as part of Fall Zone ground-water study.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 54.18 ft below land-surface datum, May 8, 2000; lowest measured, 56.14 ft below land-surface datum, Dec. 23, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	55.92	JAN 15	55.56	APR 22	54.68	JUL 01	54.31
WATER YEAR 2003 HIGHEST		54.31	JUL 01, 2003 LOWEST		55.92	OCT 30, 2002	



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY—Continued

364242077121502. Local number, 53B 7.

LOCATION.--Lat 36°42'43", long 77°12'14", NAD83, Hydrologic Unit 03010201, at Virginia Department of Transportation - Capron Area Headquarters, 50 ft east of State Highway 654 and 2000 ft north of U.S. Highway 58. Owner: U.S. Geological Survey.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 80.77 ft, screened 75.77 ft to 80.77 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1998 to Oct. 1, 1999, occasional measurement with chalked tape by USGS personnel. Prior to Oct. 1, 1998, monthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 95 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.82 ft above land-surface datum prior to Dec. 23, 1998; 1.09 ft thereafter.

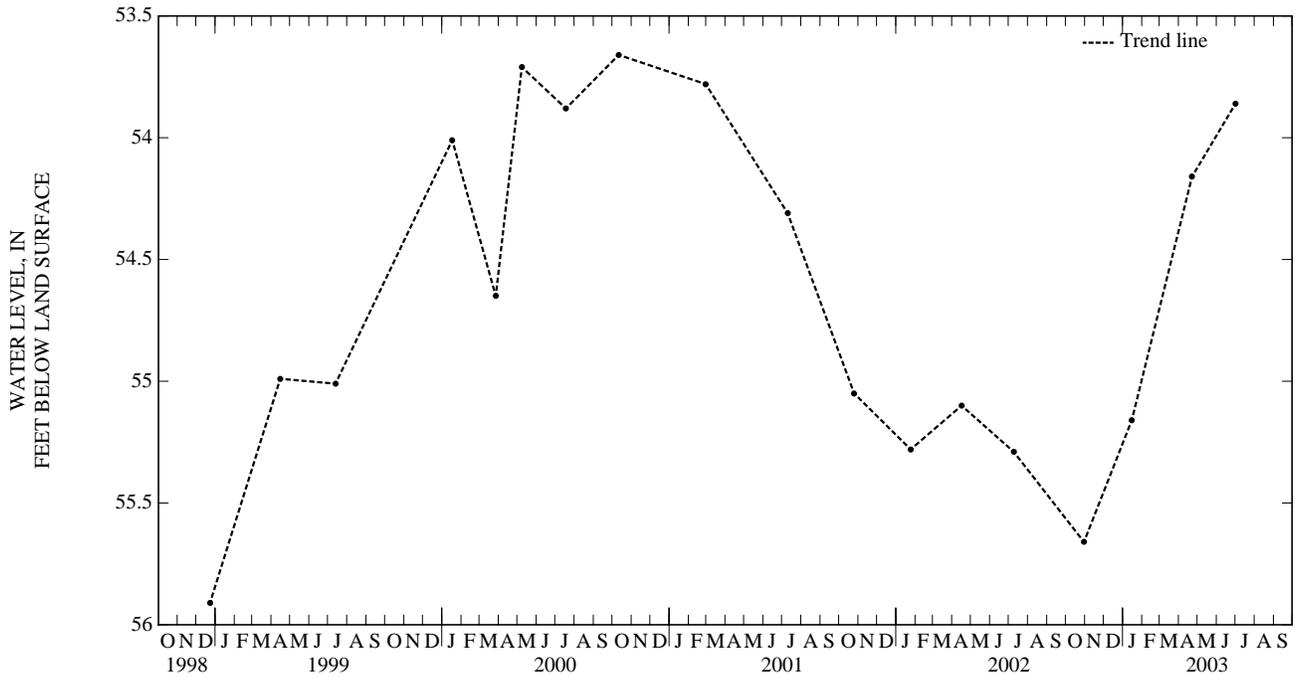
REMARKS.--Records provided by Virginia Department of Environmental Quality - Water Division. Well drilled as part of Fall Zone ground-water study.

PERIOD OF RECORD.--May 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.29 ft below land-surface datum, May 7, 1997; lowest measured, 55.91 ft below land-surface datum, Dec. 23, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	55.66	JAN 15	55.16	APR 22	54.16	JUL 01	53.86
WATER YEAR 2003 HIGHEST		53.86	JUL 01, 2003 LOWEST		55.66	OCT 30, 2002	



SOUTHAMPTON COUNTY—Continued

363722077014601. Local number, 54A 1.

LOCATION.--Lat 36°37'23", long 77°01'45", NAD83, Hydrologic Unit 03010201, 100 ft west of State Highway 681, 0.5 mi north of intersection of State Highways 672 and 681, and 2.4 mi north of Sunbeam. Owner: William Britt.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 254 ft, screened 244 to 254 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.03 ft above land-surface datum.

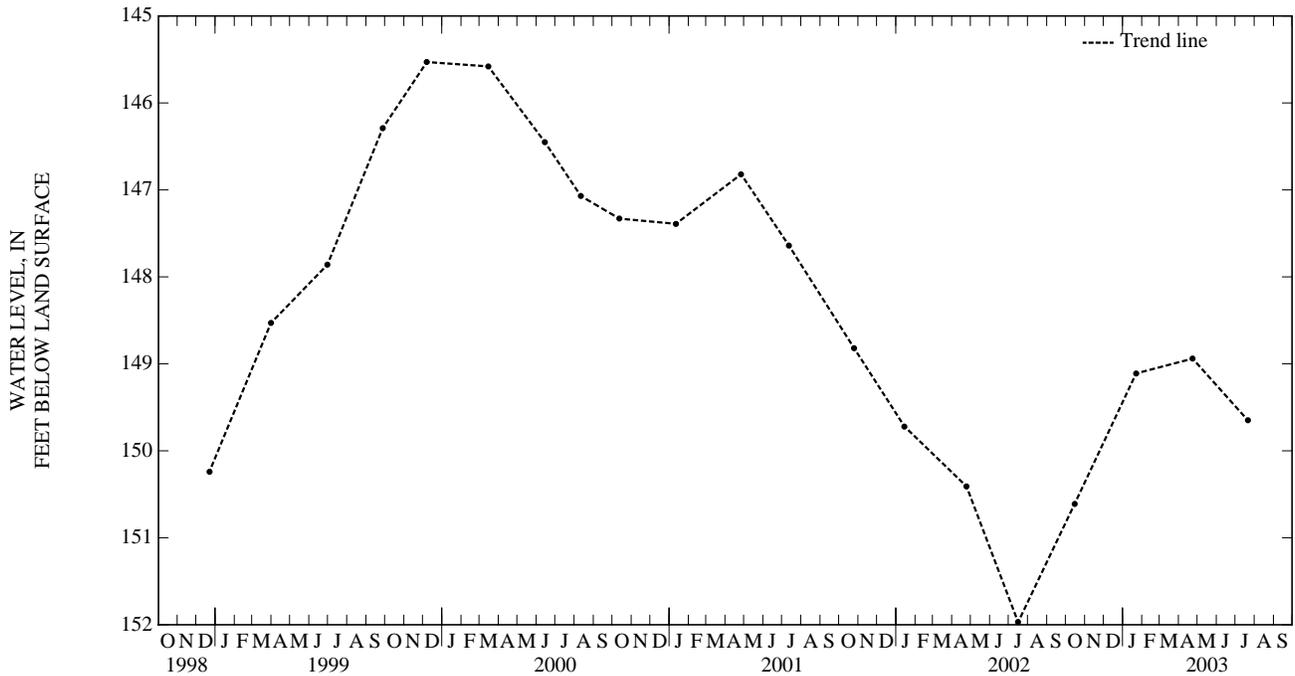
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 113.40 ft below land-surface datum, Aug. 17, 1970; lowest measured, 154.68 ft below land-surface datum, Dec. 18, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	150.61	JAN 22	149.11	APR 23	148.94	JUL 21	149.65
WATER YEAR 2003 HIGHEST		148.94	APR 23, 2003 LOWEST		150.61	OCT 15, 2002	



GROUND-WATER LEVELS

SOUTHAMPTON COUNTY—Continued

363632076580101. Local number, 55A 3 SOW 086.

LOCATION.--Lat 36°36'33", long 76°58'00", NAD83, Hydrologic Unit 03010201, 0.1 mi southeast of intersection of State Highways 687 and 689, 4.0 mi southwest of Franklin. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 745 ft, screened 714 to 724 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 16, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 18 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 11, 1988; 1.3 ft thereafter.

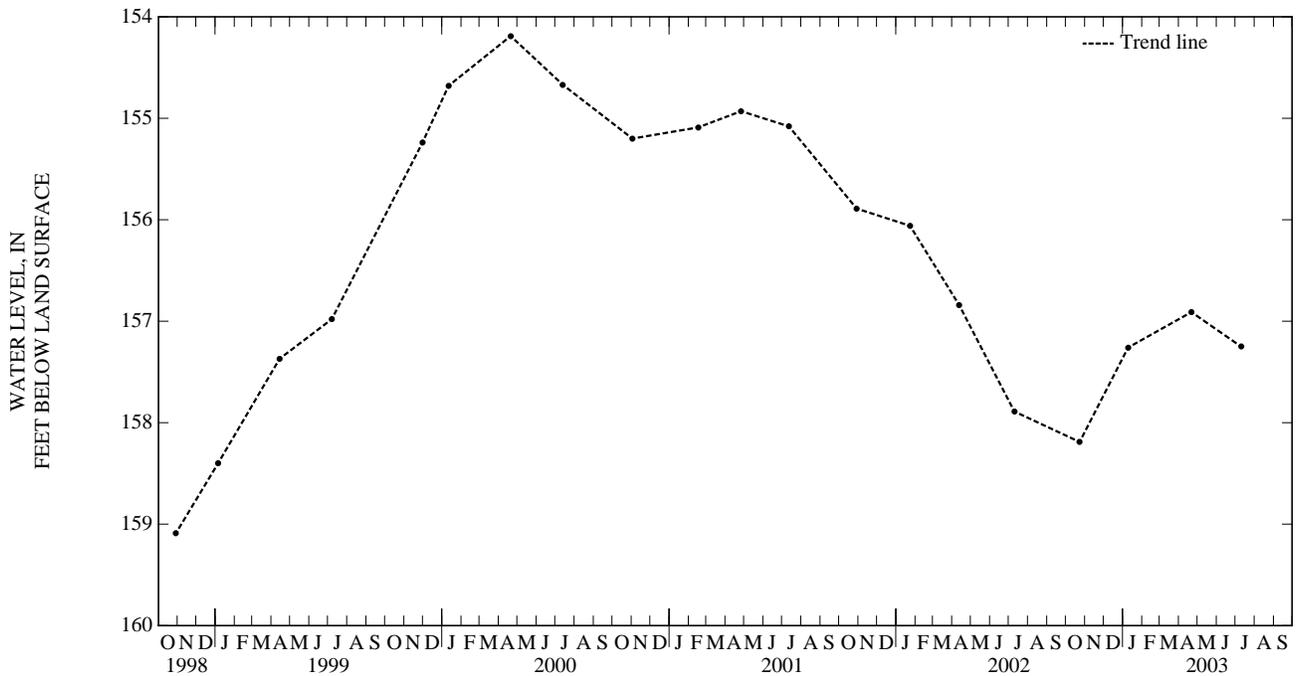
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 7, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1977, October 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 125.00 ft below land-surface datum, Mar. 18, 1977; lowest measured, 159.67 ft below land-surface datum, Oct. 11, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	158.19	JAN 09	157.26	APR 21	156.91	JUL 10	157.25
WATER YEAR 2003 HIGHEST		156.91	APR 21, 2003 LOWEST		158.19	OCT 23, 2002	



SOUTHAMPTON COUNTY—Continued

364628076552701. Local number, 55C 3.

LOCATION.--Lat 36°46'29", long 76°25'26", NAD83, Hydrologic Unit 03010202, 0.2 mi north of Black Creek, at the intersection of State Highways 638 and 626. Owner: Black Creek Baptist Church.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTIC.--Drilled unused water well, diameter 4 in., depth 312 ft, screened 300 to 312 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface is 57 ft above NGVD of 1929, from topographic map. Measuring Point: Top of coupling in breather pipe, 1.60 ft above land-surface datum prior to May 29, 2001; 1.12 ft thereafter.

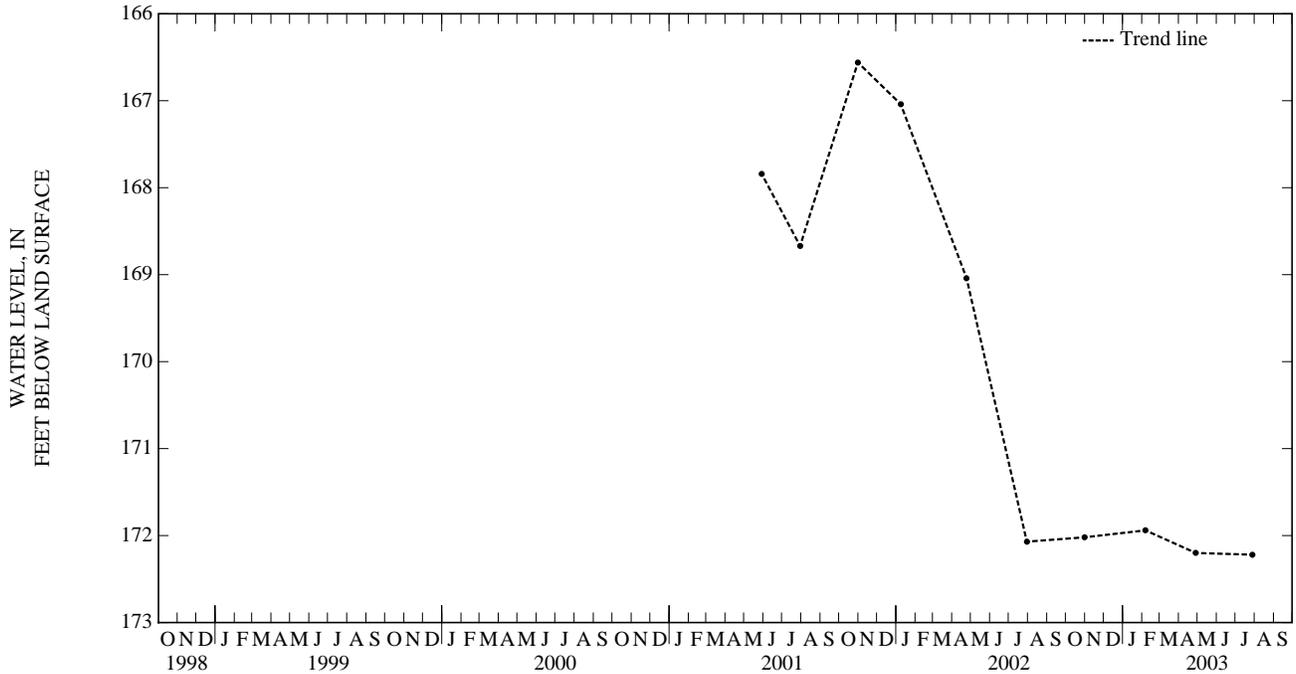
Remarks.--Water level affected by regional drawdown. Unpublished records available prior to October 1986 in files of the Geological Survey.

PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to March 1990, May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 132.80 ft below land-surface datum, Dec. 29, 1970; lowest measured, 172.22 ft below land-surface datum, July 28, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	172.02	FEB 06	171.94	APR 28	172.20	JUL 28	172.22
WATER YEAR 2003 HIGHEST		171.94 FEB 06, 2003		LOWEST		172.22 JUL 28, 2003	



GROUND-WATER LEVELS
SOUTHAMPTON COUNTY—Continued

365120076585101. Local number, 55C 10.

LOCATION.--Lat 36°51'21", long 76°58'50", NAD83, Hydrologic Unit 03010202, 100 ft west of State Highway 616, 0.3 mi south of Berlin. Owner: R. L. Harrup.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled withdrawal water well, diameter 4 in., depth 326 ft, screened 316 to 326 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 65 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

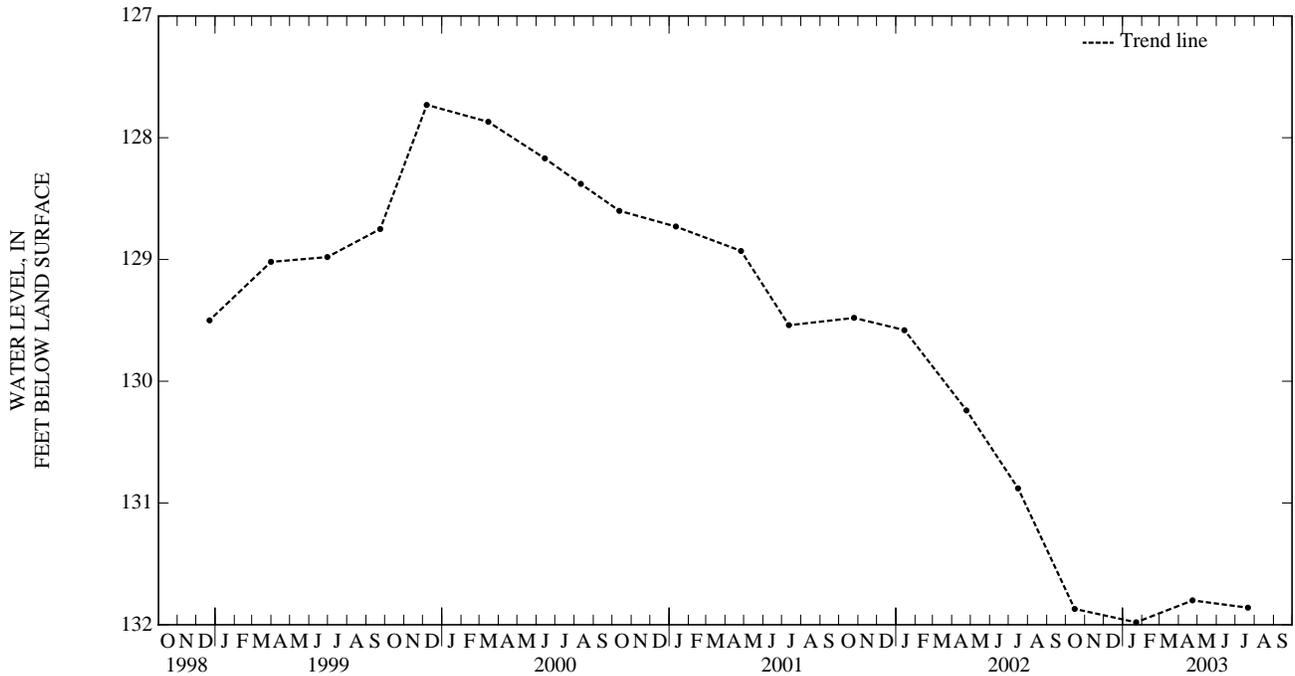
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1970 to December 1975, January 1978 to current year. Unpublished records available prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 94.62 ft below land-surface datum, Aug. 21, 1970; lowest measured, 132.10 ft below land-surface datum, Apr. 2, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	131.87	JAN 22	131.98	APR 23	131.80	JUL 21	131.86
WATER YEAR 2003 HIGHEST		131.80	APR 23, 2003		LOWEST		131.98
						JAN 22, 2003	



CITY OF SUFFOLK

363345076470201. Local number, 56A 10 SOW 088A.

LOCATION.--Lat 36°33'46", long 76°47'01", NAD83, Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,060 ft, screened 1,050 to 1,060 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 16, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

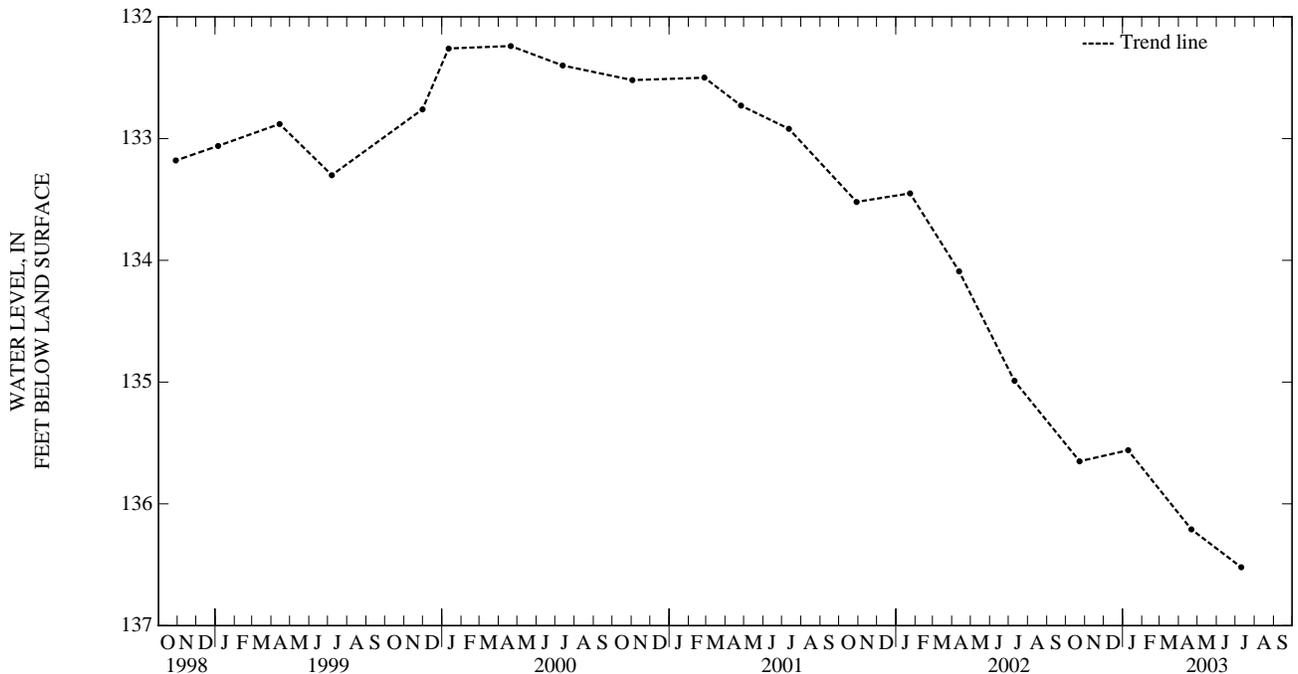
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.70 ft below land-surface datum, June 30, 1980; lowest measured, 136.52 ft below land-surface datum, July 10, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	135.65	JAN 09	135.56	APR 21	136.21	JUL 10	136.52
WATER YEAR 2003 HIGHEST		135.56 JAN 09, 2003		LOWEST		136.52 JUL 10, 2003	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363653076455401. Local number, 56A 11 SOW 089.

LOCATION.--Lat 36°36'54", long 76°45'53", NAD83, Hydrologic Unit 03010203, off State Highway 616, 1.1 mi east of Holy Neck Church, and 3.4 mi north of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 861 ft, screened 830 to 840 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 16, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 79 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Nov. 18, 1987; 0.6 ft Nov. 18, 1987, to Jan. 12, 1988; 1.3 ft thereafter.

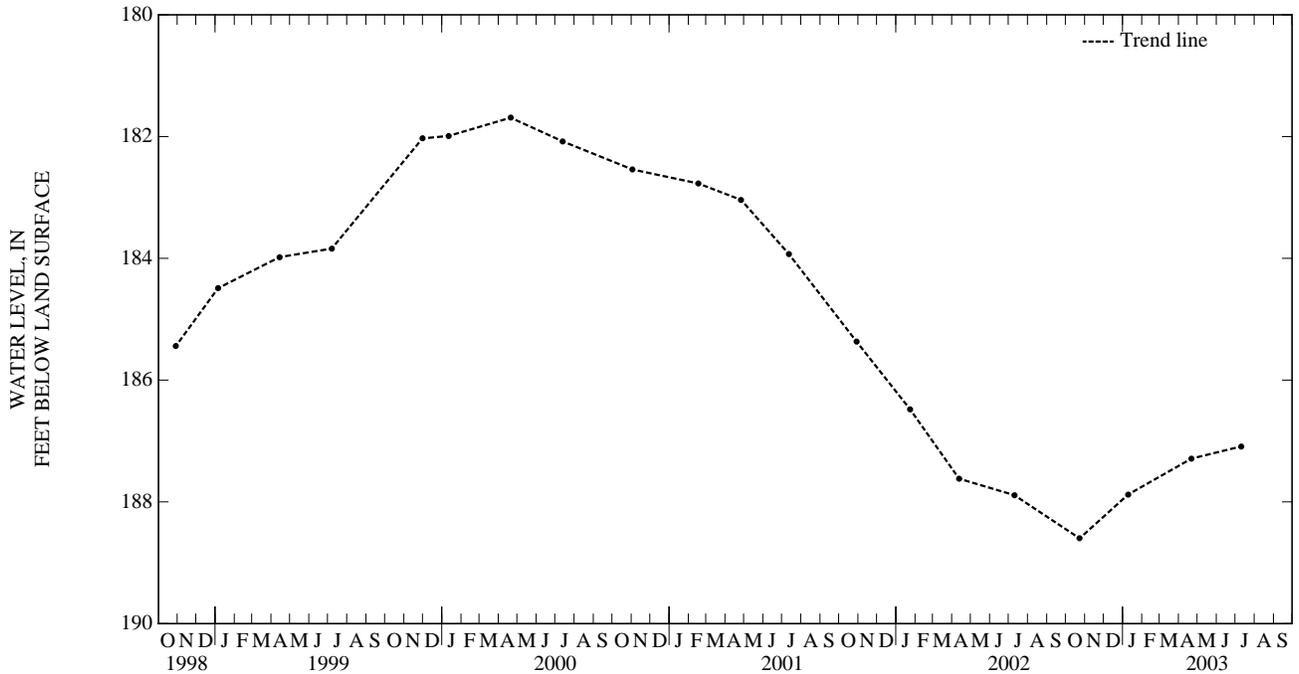
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1977 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 154.00 ft below land-surface datum, Aug. 9, 1977; lowest measured, 188.60 ft below land-surface datum, Oct. 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	188.60	JAN 09	187.88	APR 21	187.29	JUL 10	187.09
WATER YEAR 2003 HIGHEST		187.09 JUL 10, 2003		LOWEST		188.60 OCT 23, 2002	



CITY OF SUFFOLK—Continued

363345076470202. Local number, 56A 12 SOW 088B.

LOCATION.--Lat 36°33'46", long 76°47'01", NAD83, Hydrologic Unit 03010203, 0.1 mi north of intersection of State Highways 668 and 669, 1.9 mi west of Somerton. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 580 ft, screened 570 to 580 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 8, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 7, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 8, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.3 ft thereafter.

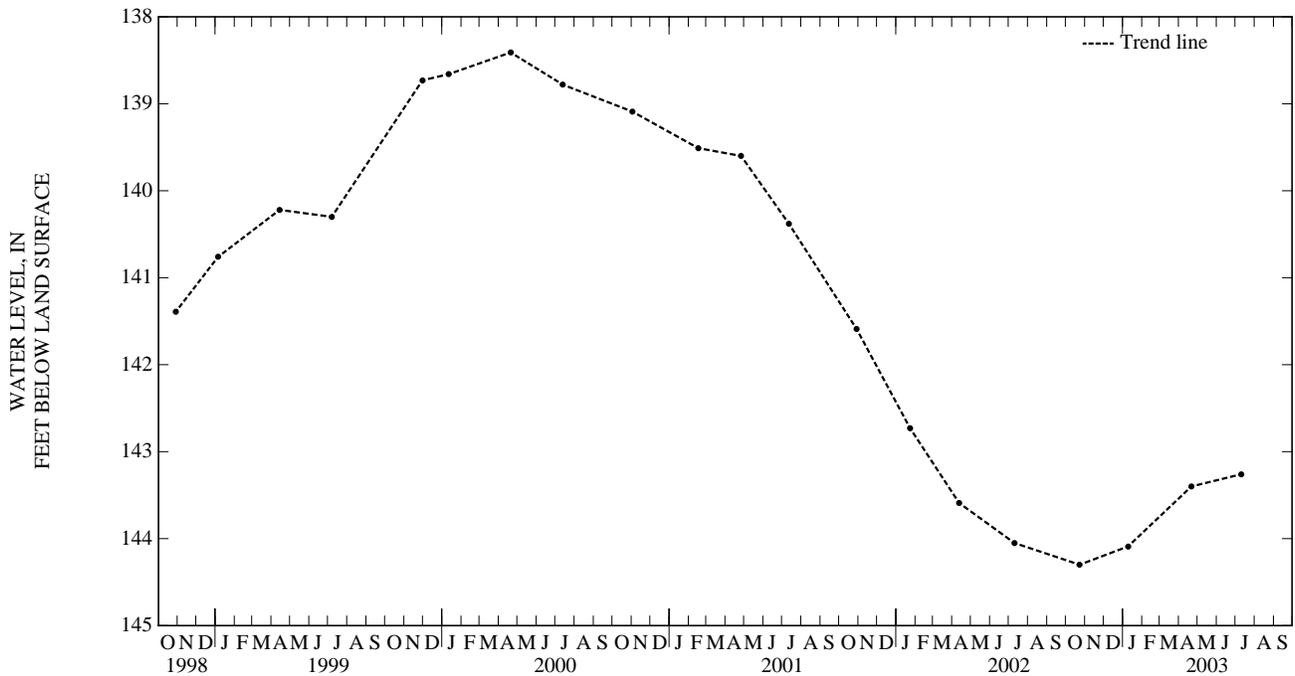
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 7, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1977 to November 1982, June 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 103.00 ft below land-surface datum, June 30, 1977; lowest measured, 144.30 ft below land-surface datum, Oct. 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	144.30	JAN 09	144.09	APR 21	143.40	JUL 10	143.26
WATER YEAR 2003 HIGHEST		143.26	JUL 10, 2003 LOWEST		144.30	OCT 23, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363625076522602. Local number, 56A 13 SOW 076B.

LOCATION.--Lat 36°36'26", long 76°52'25", NAD83, Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 807 ft, screened 797 to 802 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 16, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum prior to Jan. 12, 1988; 0.8 ft thereafter.

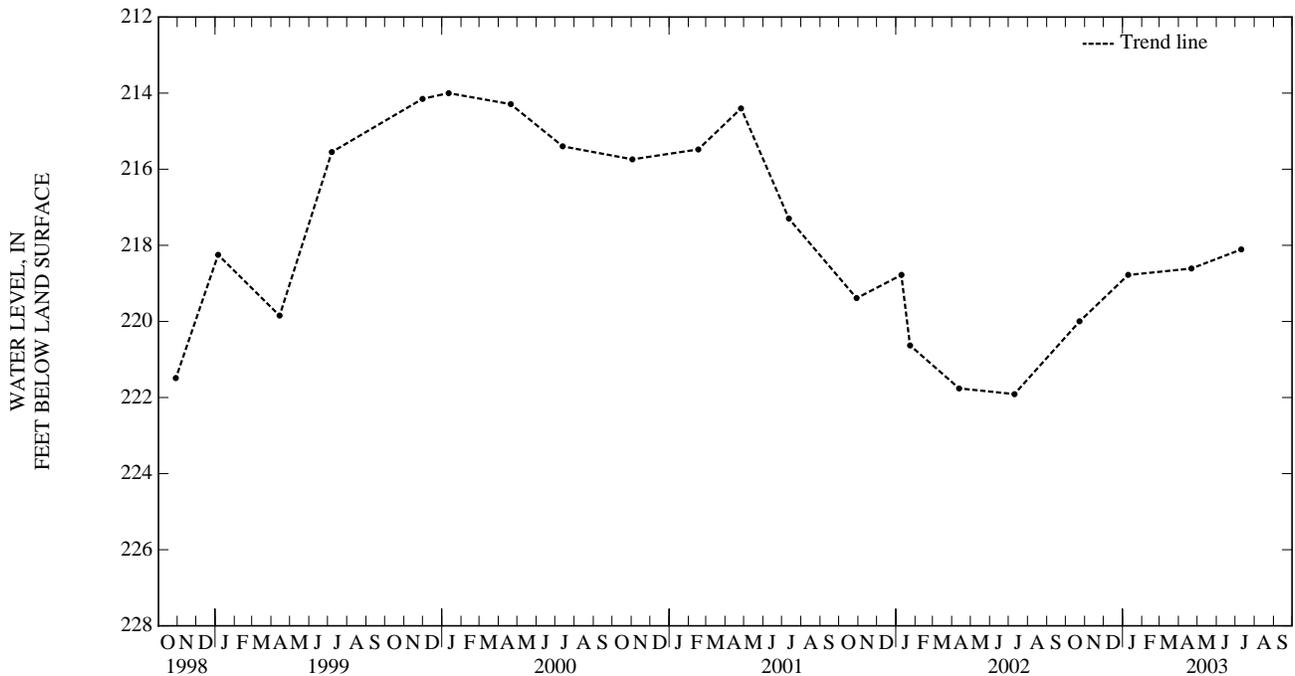
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--May 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 204.34 ft below land-surface datum, Oct. 26, 1982; lowest measured, 228.29 ft below land-surface datum, May 5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	220.00	JAN 09	218.78	APR 21	218.61	JUL 10	218.11
WATER YEAR 2003 HIGHEST		218.11 JUL 10, 2003		LOWEST		220.00 OCT 23, 2002	



CITY OF SUFFOLK—Continued

363625076522603. Local number, 56A 14 SOW 076C.

LOCATION.--Lat 36°36'26", long 76°52'25", NAD83, Hydrologic Unit 03010203, 700 ft west of State Highway 615, 0.5 mi southwest of Olive Branch Church, and 8.1 mi south of Holland. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 735 ft, screened 730 to 735 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 16, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 15, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 16, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 75 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum prior to Jan. 12, 1988; 1.2 ft thereafter.

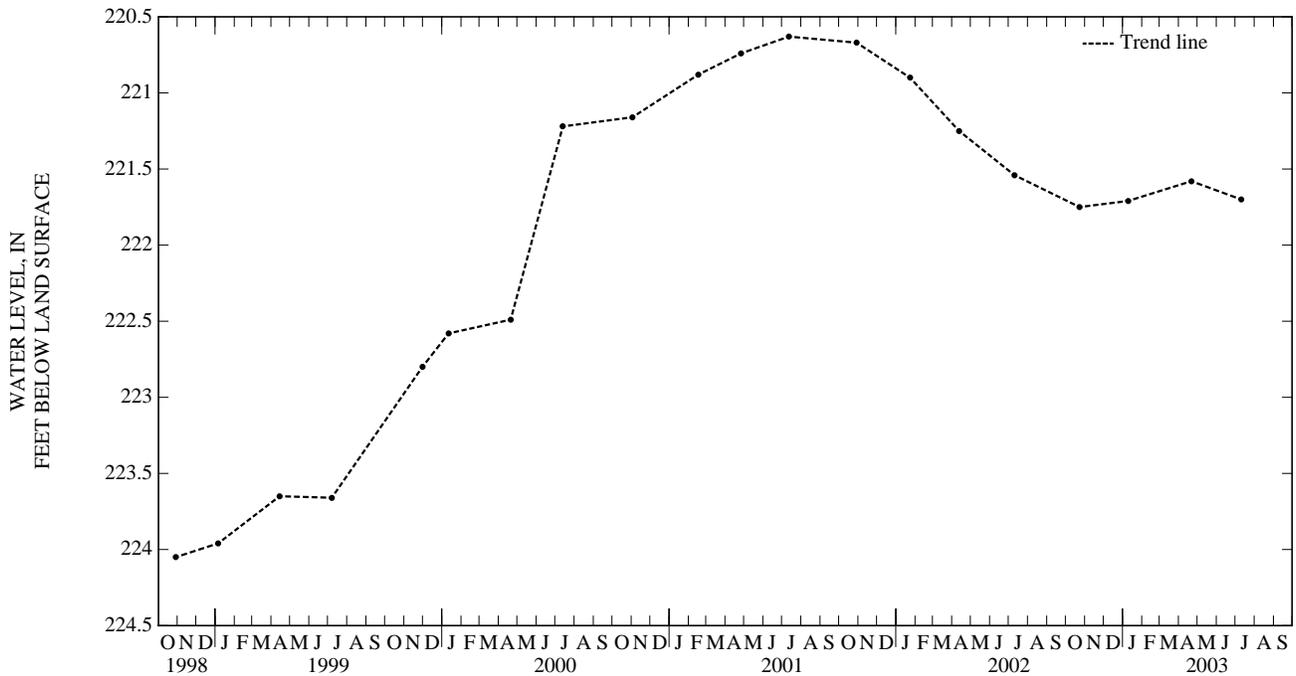
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 15, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--March 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 205.62 ft below land-surface datum, Mar. 7, 1979; lowest measured, 224.05 ft below land-surface datum, Oct. 29, 1998.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	221.75	JAN 09	221.71	APR 21	221.58	JUL 10	221.70
WATER YEAR 2003 HIGHEST		221.58	APR 21, 2003 LOWEST		221.75	OCT 23, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363834076382301. Local number, 57B 8.

LOCATION.--Lat 36°38'28", long 76°38'04", NAD83, Hydrologic Unit 03010205, 0.3 mi southwest of State Highway 664, 0.8 mi southeast of U.S. Highway 13, and 1.1 mi south of Nurneysville. Owner: Russ Family.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled flowing water well, diameter 2 in., depth 65 ft, screened 50 to 65 ft.

INSTRUMENTATION.--Occasional measurement with manometer by USGS personnel. Dec. 1, 1988, to June 1, 1990, quarterly measurement with a manometer. Prior to Dec. 1, 1988, bimonthly measurement with a manometer.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: At land-surface datum.

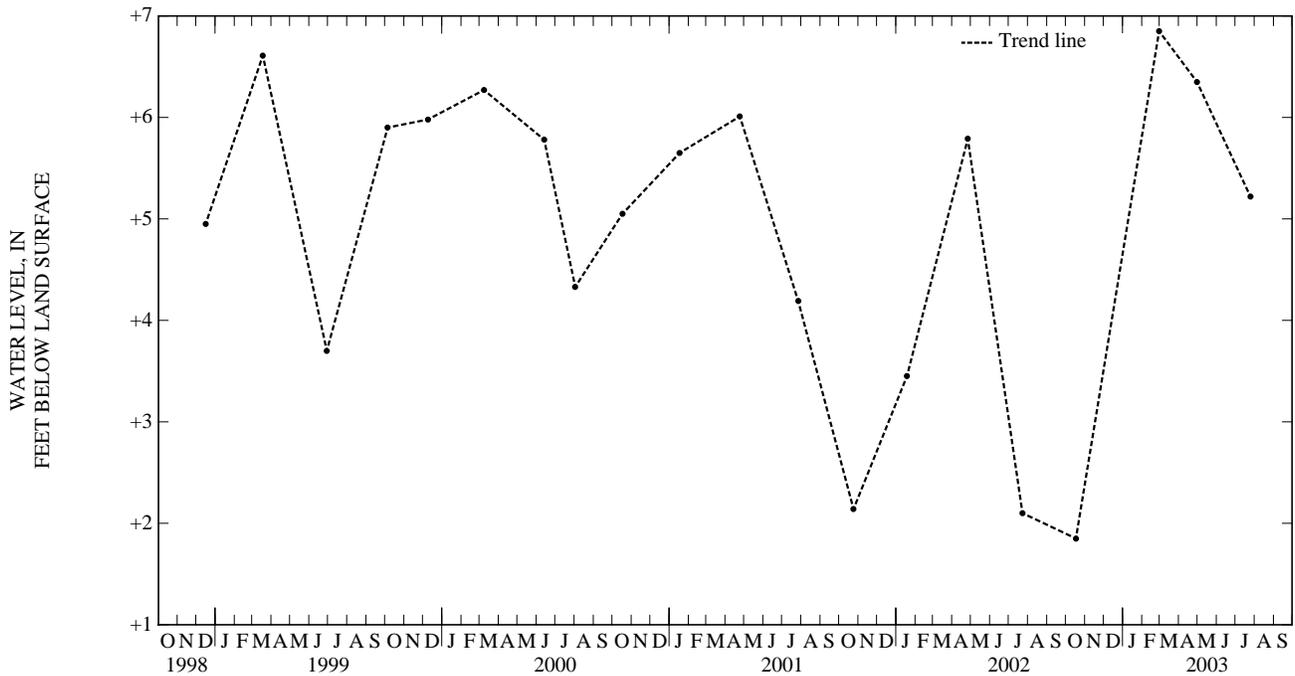
REMARKS.--Capped flowing well; readings are above land-surface datum. Occasional small withdrawals that supply nearby cabin can effect water levels.

PERIOD OF RECORD.--March 1975, November 1977 to current year. Unpublished records available March 1975 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.85 ft above land-surface datum, Feb. 28, 2003; lowest measured, at land-surface datum, Sept. 26, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	+1.85	FEB 28	+6.85	APR 30	+6.35	JUL 25	+5.22
WATER YEAR 2003 HIGHEST		+6.85 FEB 28, 2003	LOWEST		+1.85	OCT 17, 2002	



CITY OF SUFFOLK—Continued

364703076383701. Local number, 57C 21 SOW 099A.

LOCATION.--Lat 36°47'04", long 76°38'36", NAD83, Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 248 ft, screened 238 to 248 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 19, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan. 12, 1988; 1.1 ft thereafter.

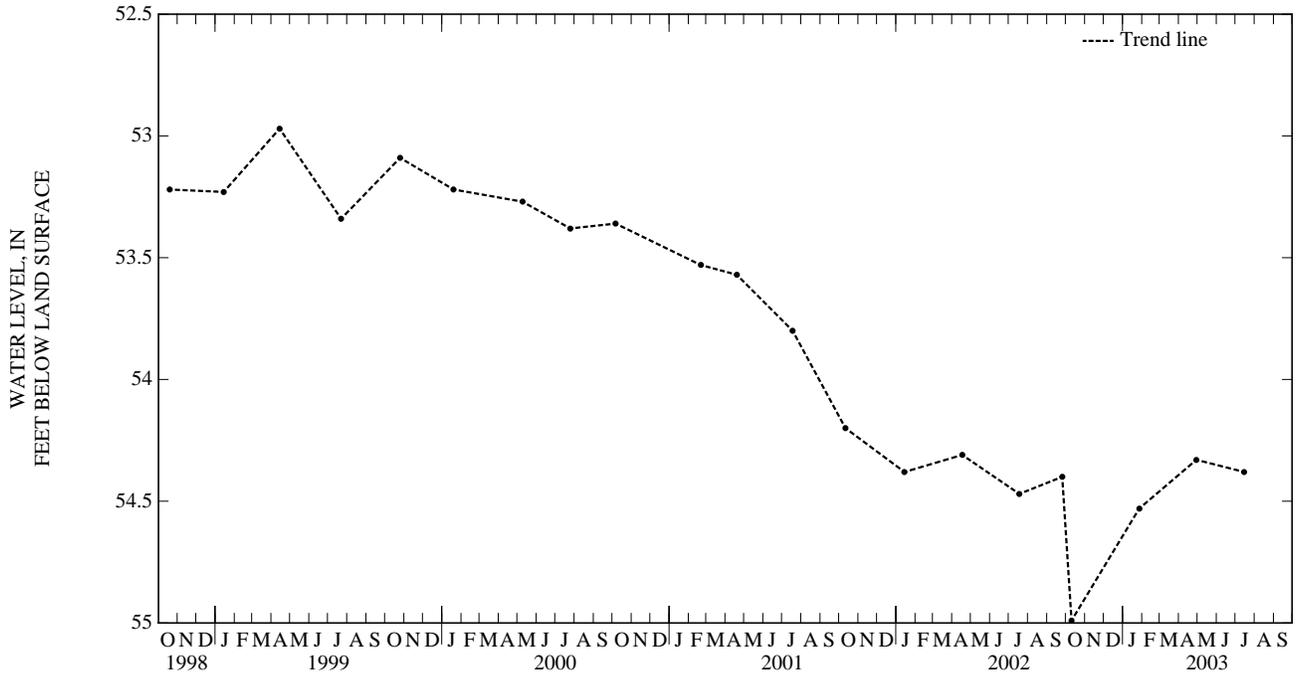
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.32 ft below land-surface datum, Apr. 19, 1984; lowest measured, 54.99 ft below land-surface datum, Oct 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	54.99	JAN 27	54.53	APR 29	54.33	JUL 15	54.38
WATER YEAR 2003 HIGHEST		54.33	APR 29, 2003 LOWEST		54.99	OCT 10, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

364703076383702. Local number, 57C 22 SOW 099B.

LOCATION.--Lat 36°47'04", long 76°38'36", NAD83, Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 694 ft, screened 684 to 694 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to Aug. 5, 1981, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 72 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.0 ft above land-surface datum prior to July 14, 1987; 1.7 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. Missing record due to recorder malfunction.

PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to August 1985 in files of the Virginia Department of Environmental Quality - Water Division.

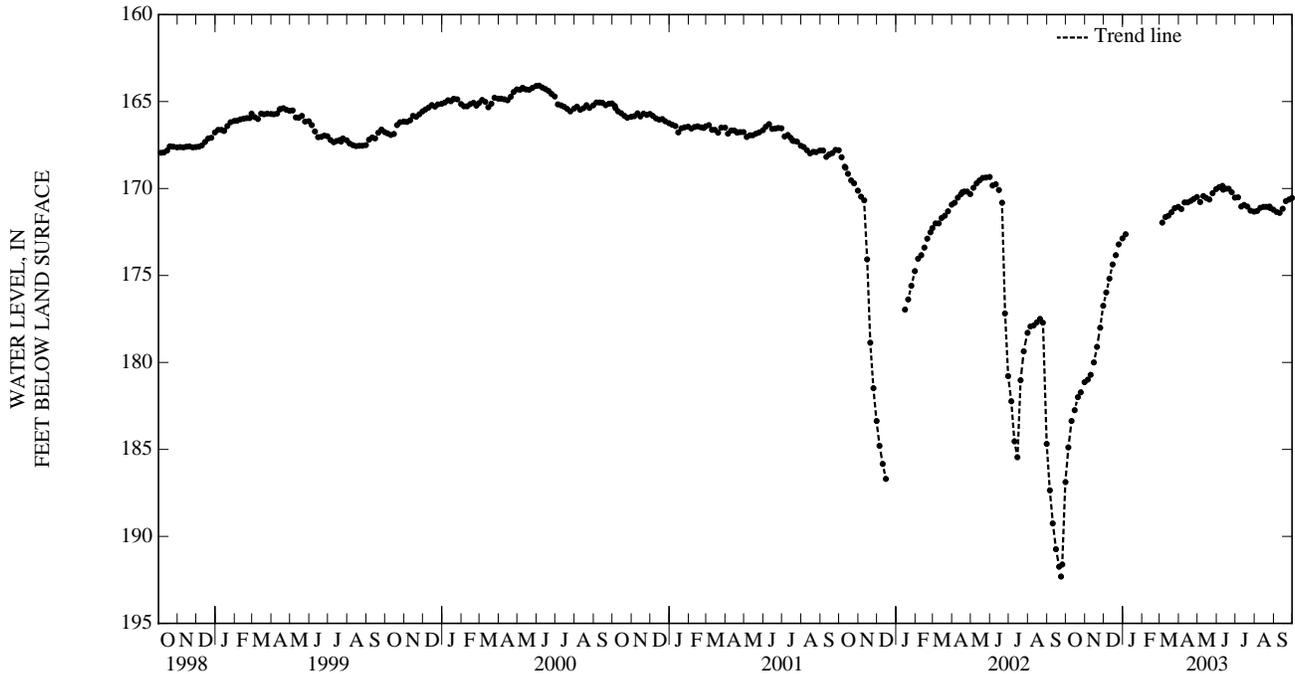
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.24 ft below land-surface datum, Feb. 18, 1980; lowest recorded, 192.37 ft below land-surface datum, Sept. 24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 169.85 ft below land-surface datum, June 10, 11; lowest instantaneous water level, 186.67 ft below land-surface datum, Oct. 1.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	184.88	180.99	175.97	172.63	---	171.96	171.18	170.78	169.92	170.50	171.30	171.35
10	183.36	180.71	175.18	---	---	171.64	170.80	170.43	169.85	171.04	171.10	171.41
15	182.75	180.00	174.37	---	---	171.56	170.80	170.55	170.02	170.95	171.06	171.16
20	182.00	179.11	173.83	---	172.17	171.36	170.70	170.63	170.02	171.04	171.05	170.72
25	181.71	178.00	173.21	---	---	171.13	170.60	170.27	170.21	171.28	171.04	170.63
EOM	181.14	176.74	172.87	---	---	171.05	170.48	170.03	170.52	171.33	171.22	170.55

WATER YEAR 2003 HIGHEST 169.85 JUN 10, 2003 LOWEST 184.88 OCT 05, 2002



364703076383704. Local number, 57C 24 SOW 099D.

LOCATION.--Lat 36°47'04", long 76°38'36", NAD83, Hydrologic Unit 02080208, 700 ft south of U.S. Highway 460, 0.5 mi west of Providence Church, and 1.0 mi west of Kings Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 19, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 72 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Mar. 25, 1987; 2.0 ft Mar. 25, 1987, to Jan. 12, 1988; 1.3 ft Jan. 13, 1988, to June 24, 1990; 0.3 ft June 25 to Aug. 15, 1990; 1.8 ft thereafter.

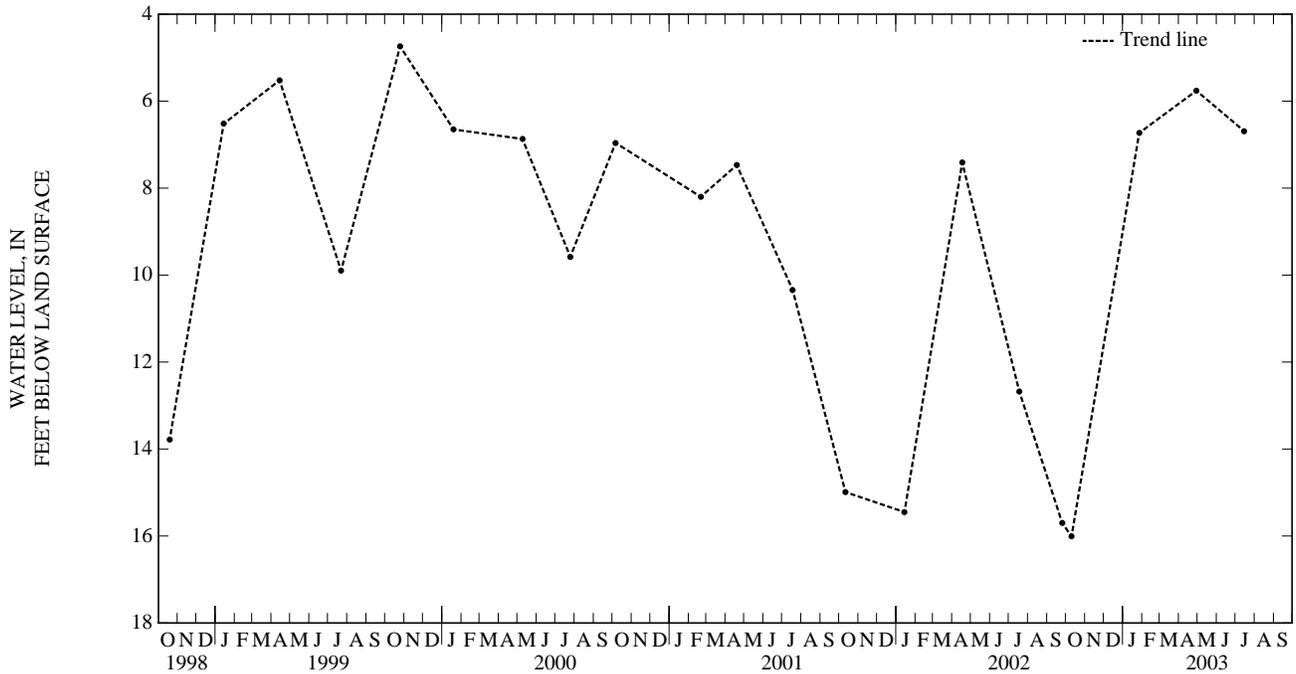
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1983 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.90 ft below land-surface datum, Mar. 14, 1989; lowest measured, 16.38 ft below land-surface datum, Oct. 15, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	16.01	JAN 27	6.73	APR 29	5.76	JUL 15	6.69
WATER YEAR 2003 HIGHEST		5.76	APR 29, 2003		LOWEST		16.01
OCT 10, 2002							



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363303076330201. Local number, 58A 75 SOW 170.

LOCATION.--Lat 36°33'04", long 76°33'01", NAD83, Hydrologic Unit 03010205, 100 ft north of North Carolina State line, 0.4 mi east of Desert Road, and 5.0 mi southeast of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 535 ft, screened 525 to 535 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 15, 1992, to July 19, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Mar. 2, 1989, to Oct. 14, 1992, occasional measurement with chalked tape by USGS. Prior to Oct. 15, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 40 ft above mean NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

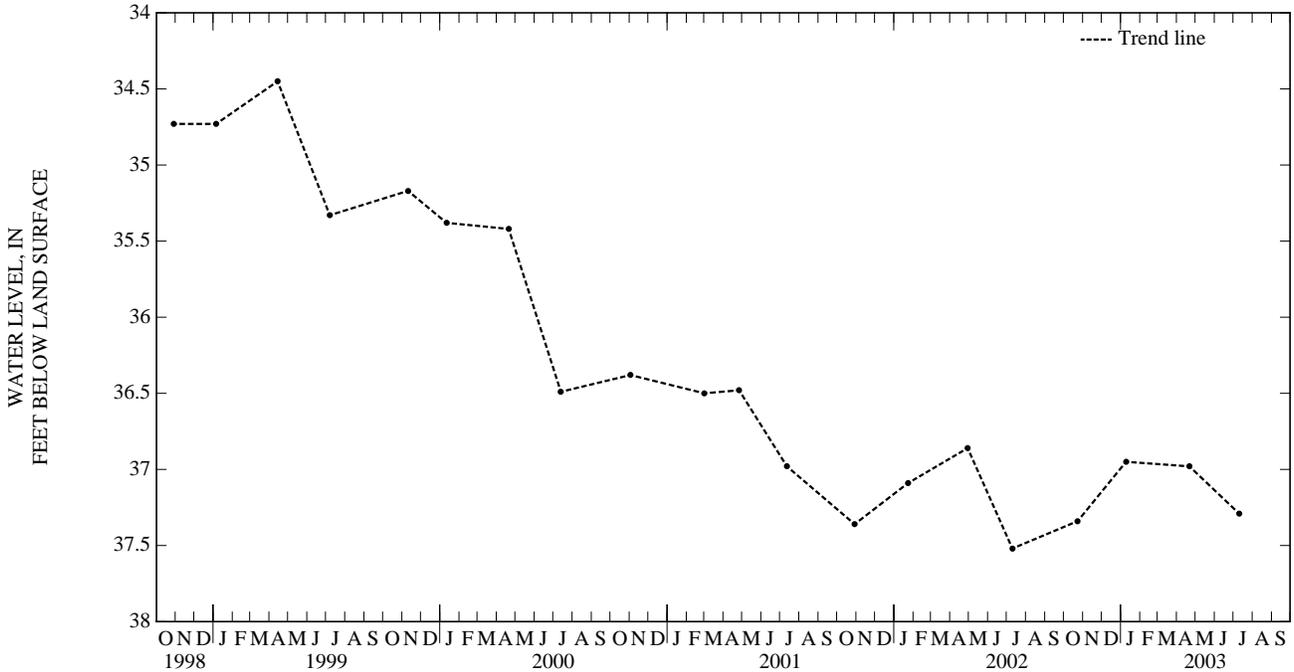
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division prior to Mar. 1, 1989; U.S. Geological Survey Mar. 2, 1989, to Oct. 14, 1992; Virginia Department of Environmental Quality - Water Division thereafter. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.52 ft below land-surface datum, July 11, 1985; lowest measured, 37.52 ft below land-surface datum, July 10, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	37.34	JAN 09	36.95	APR 21	36.98	JUL 10	37.29
WATER YEAR 2003 HIGHEST		36.95	JAN 09, 2003 LOWEST		37.34	OCT 23, 2002	



CITY OF SUFFOLK—Continued

363655076332002. Local number, 58A 77 SOW 180A.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 1,158 ft, diameter 3 in. from 1,136 to 1,209 ft, depth 1,209 ft, screened 1,199 to 1,209 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 34.02 ft above NGVD of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum prior to Apr. 15, 1992; 1.5 ft thereafter.

REMARKS.--Water level affected by regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

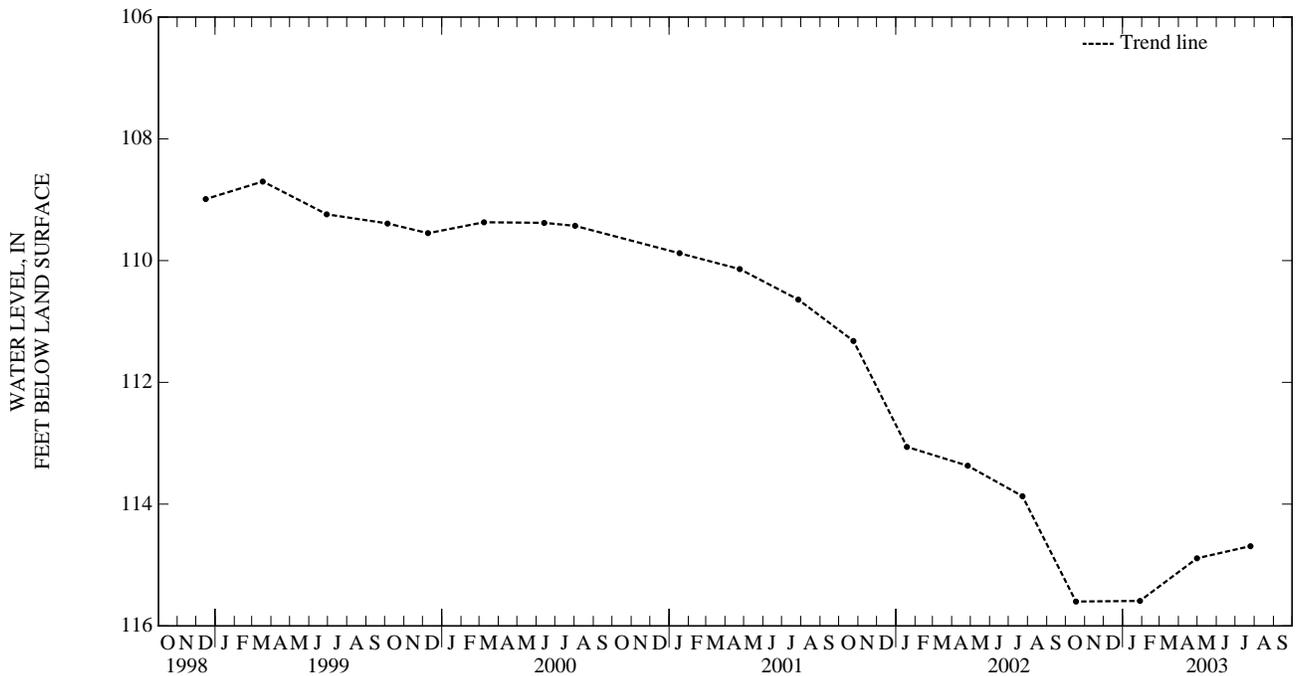
PERIOD OF RECORD.--February 1987 to current year.

REVISED RECORDS.--WDR VA-89-1: 1987.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 96.83 ft below land-surface datum, Sept. 30, 1987; lowest measured, 115.60 ft below land-surface datum, Oct. 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	115.60	JAN 28	115.59	APR 30	114.89	JUL 25	114.69
WATER YEAR 2003 HIGHEST		114.69 JUL 25, 2003		LOWEST		115.60 OCT 17, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363655076332003. Local number, 58A 78 SOW 180B.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 811 ft, diameter 2 in. from 766 to 880 ft, depth 880 ft, screened 850 to 860 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 34.02 ft above NGVD of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum prior to April 15, 1992; 1.4 ft thereafter.

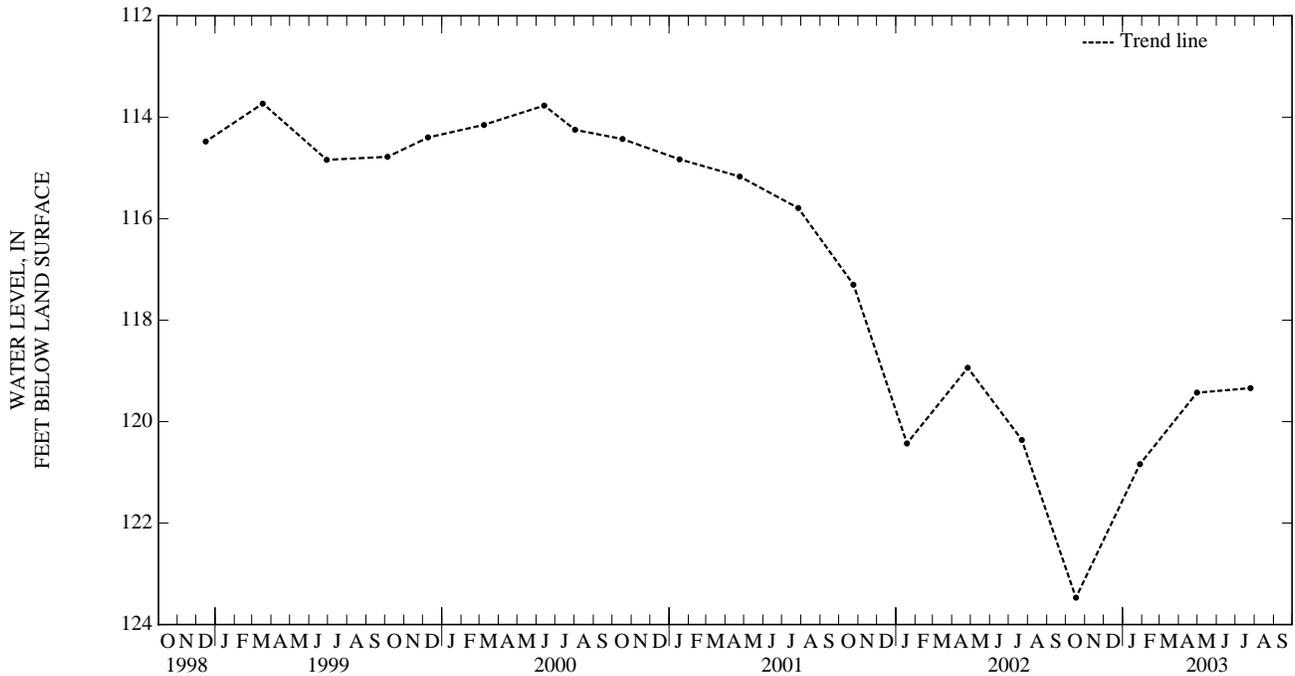
REMARKS.--Water level affected by regional drawdown and occasional pumpage for water-quality sampling.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.14 ft below land-surface datum, June 5, 27, 1987; lowest measured, 123.47 ft below land-surface datum, Oct. 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	123.47	JAN 28	120.84	APR 30	119.43	JUL 25	119.34
WATER YEAR 2003 HIGHEST		119.34 JUL 25, 2003		LOWEST		123.47 OCT 17, 2002	



CITY OF SUFFOLK—Continued

363655076332004. Local number, 58A 79 SOW 180C.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 670 ft, diameter 2 in. from 657 to 710 ft, depth 710 ft, screened 700 to 710 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 33.97 ft above NGVD of 1929. Measuring point: Top of casing, 2.4 ft above land-surface datum prior to Apr. 15, 1992; 1.3 ft thereafter.

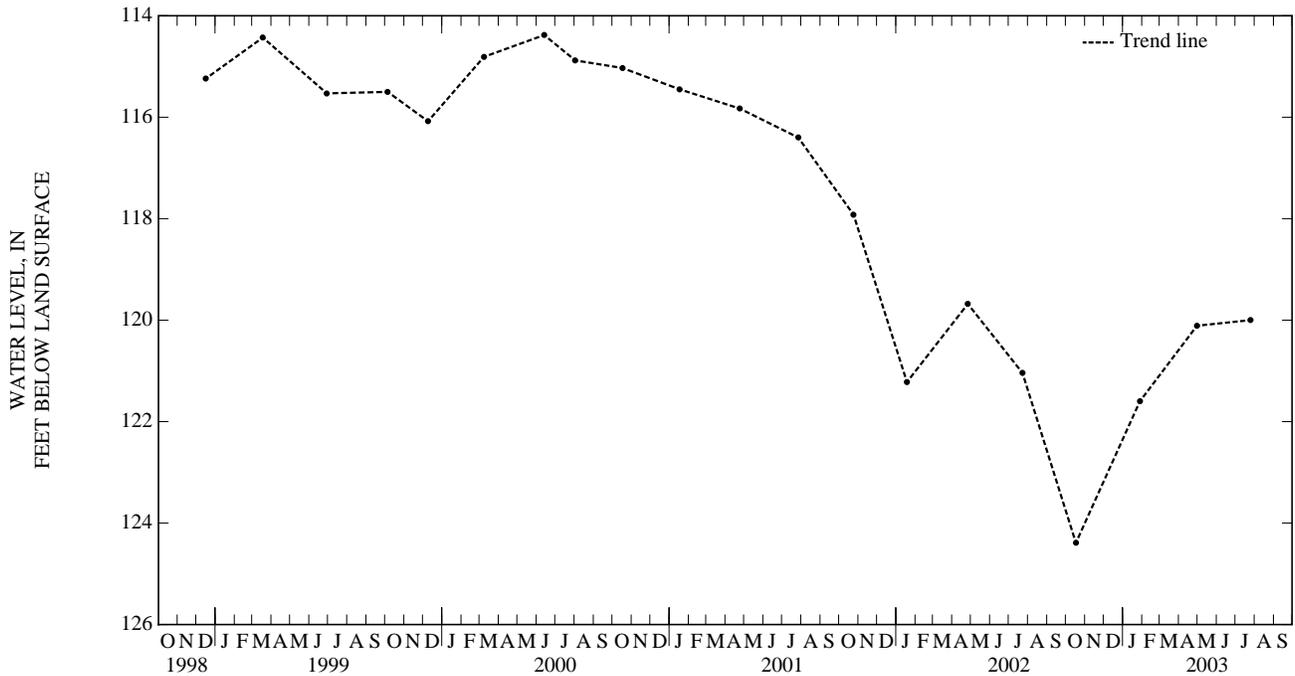
REMARKS.--Water level affected by regional drawdown and occasional pumpage from water-quality sampling.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 102.72 ft below land-surface datum, May 11, 1987; lowest measured, 124.39 ft below land-surface datum, Oct. 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	124.39	JAN 28	121.60	APR 30	120.11	JUL 25	120.00
WATER YEAR 2003 HIGHEST		120.00	JUL 25, 2003 LOWEST		124.39	OCT 17, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363655076332005. Local number, 58A 80 SOW 180D.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Virginia Beach aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 397 ft, diameter 2 in. from 388 to 440 ft, depth 440 ft, screened 430 to 440 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Oct. 29, 1987 to Sept. 30, 1990, digital recorder 60-minute punch. Prior to Oct. 29, 1987, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 34.26 ft above NGVD of 1929. Measuring point: Top of casing, 2.3 ft above land-surface datum prior to Apr. 15, 1992; 1.9 ft thereafter.

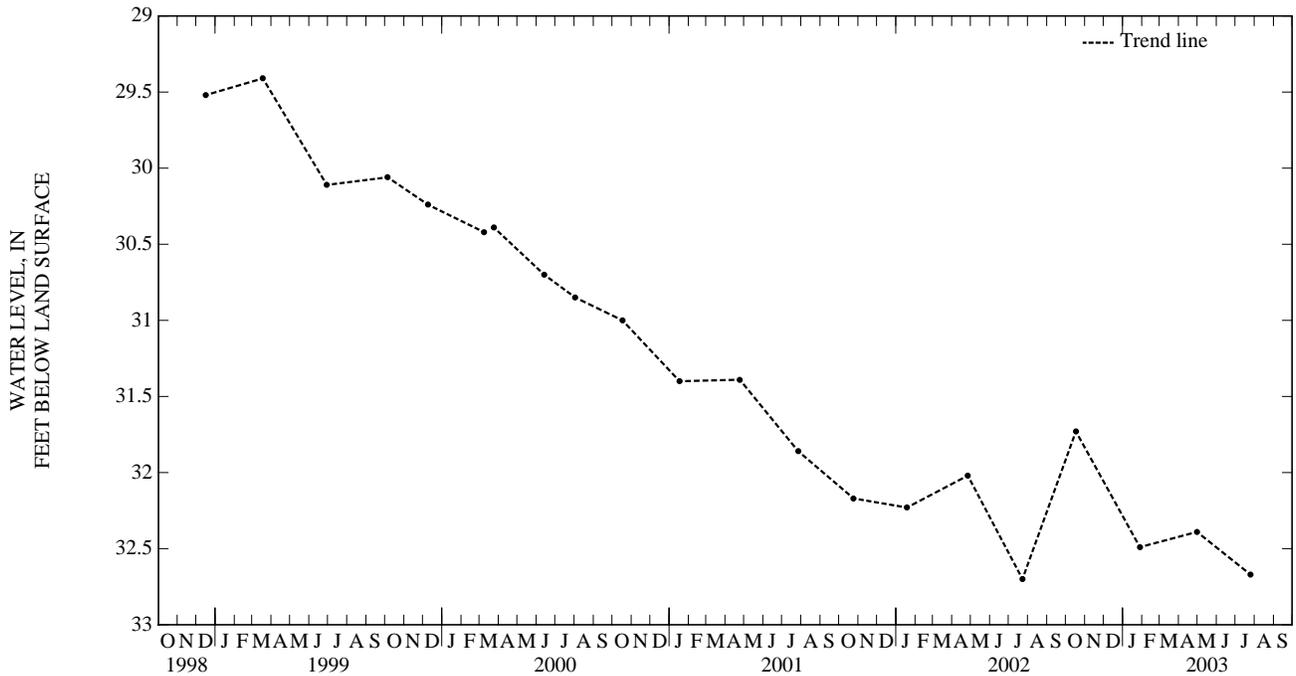
REMARKS.--Water level affected by regional drawdown.

PERIOD OF RECORD.--June 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.55 ft below land-surface datum, June 17, 1987; lowest measured, 32.70 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	31.73	JAN 28	32.49	APR 30	32.39	JUL 25	32.67
WATER YEAR 2003 HIGHEST 31.73		OCT 17, 2002		LOWEST 32.67		JUL 25, 2003	



CITY OF SUFFOLK—Continued

363655076332006. Local number, 58A 81 SOW 180E.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 309 ft, diameter 2 in. from 298 to 329 ft, depth 329 ft, screened 319 to 329 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Apr. 15, 1992, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 34.00 ft above NGVD of 1929. Measuring point: Top of casing, 2.4 ft above land-surface datum prior to Apr. 15, 1992; 1.4 ft thereafter.

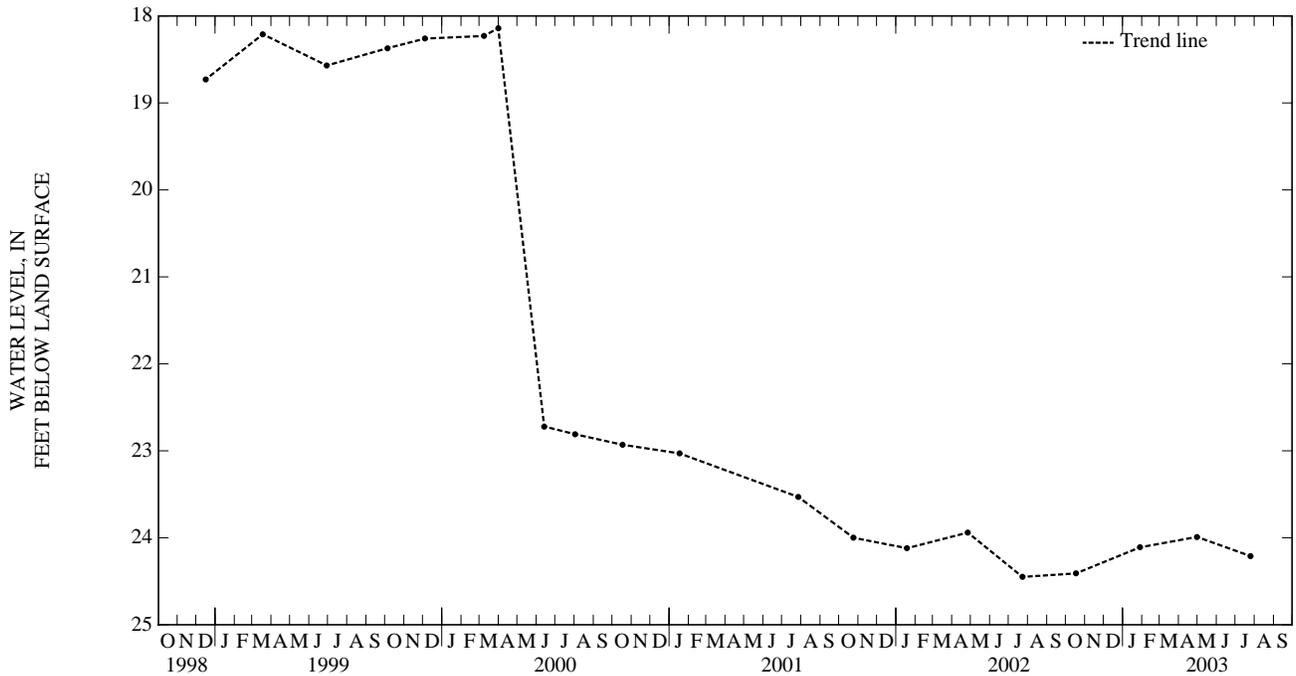
REMARKS.--Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L. Water level affected by pumpage for water-quality sampling on Mar. 31, 2000. Cause of nonrecovery to pre-pumpage level unknown.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 15.07 ft below land-surface datum, Feb. 23, 1987; lowest measured, 24.45 ft below land-surface datum, July 23, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	24.41	JAN 28	24.11	APR 30	23.99	JUL 25	24.21
WATER YEAR 2003 HIGHEST		23.99	APR 30, 2003 LOWEST		24.41	OCT 17, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363655076332008. Local number, 58A 83 SOW 180G.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 145 ft, diameter 2 in. from 135 to 165 ft, depth 165 ft, screened 155 to 165 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Feb. 15, 1996, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 33.84 ft above NGVD of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

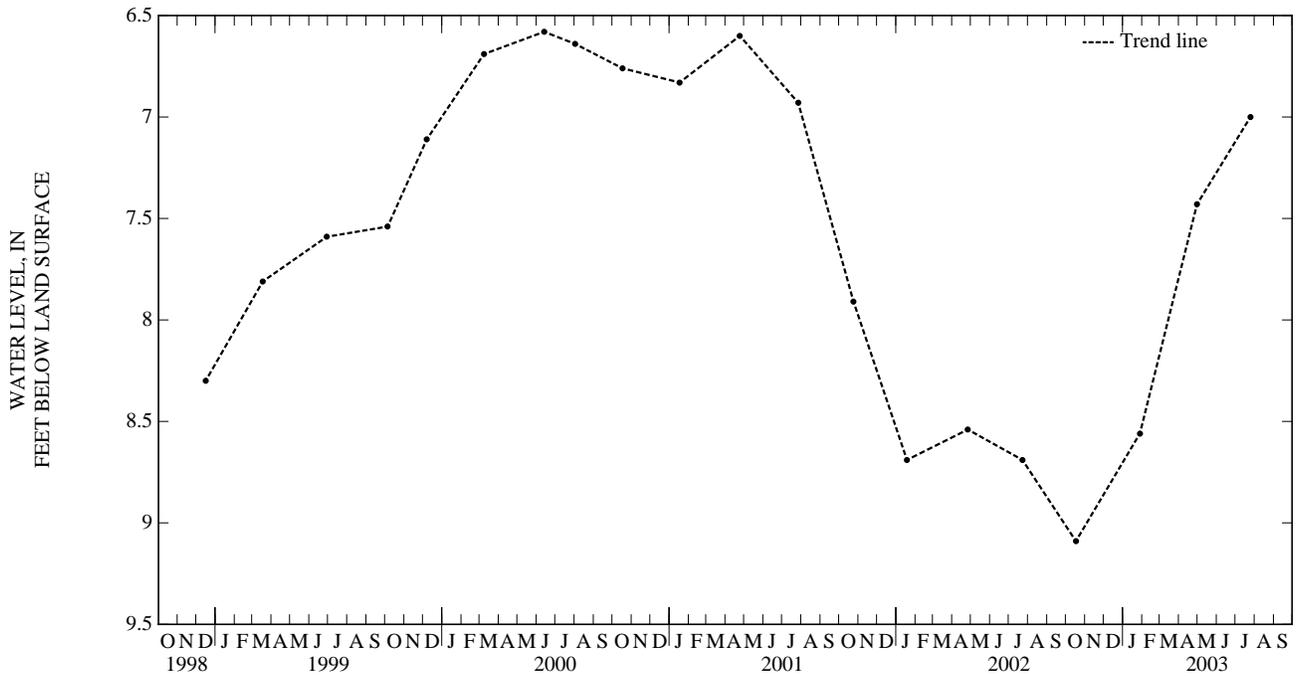
REMARKS.--Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 6.09 ft below land-surface datum, May 29, 1990; lowest recorded, 9.20 ft below land-surface datum, Dec. 29, 30, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	9.09	JAN 28	8.56	APR 30	7.43	JUL 25	7.00
WATER YEAR 2003 HIGHEST		7.00	JUL 25, 2003 LOWEST		9.09	OCT 17, 2002	



CITY OF SUFFOLK—Continued

363655076332009. Local number, 58A 84 SOW 180H.

LOCATION.--Lat 36°36'56", long 76°33'19", NAD83, Hydrologic Unit 03010205, 0.3 mi north of Great Dismal Swamp Wildlife Refuge Headquarters on Desert Road, 2.0 mi east of Cypress Chapel. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Feb. 15, 1996, digital recorder 60-minute punch.

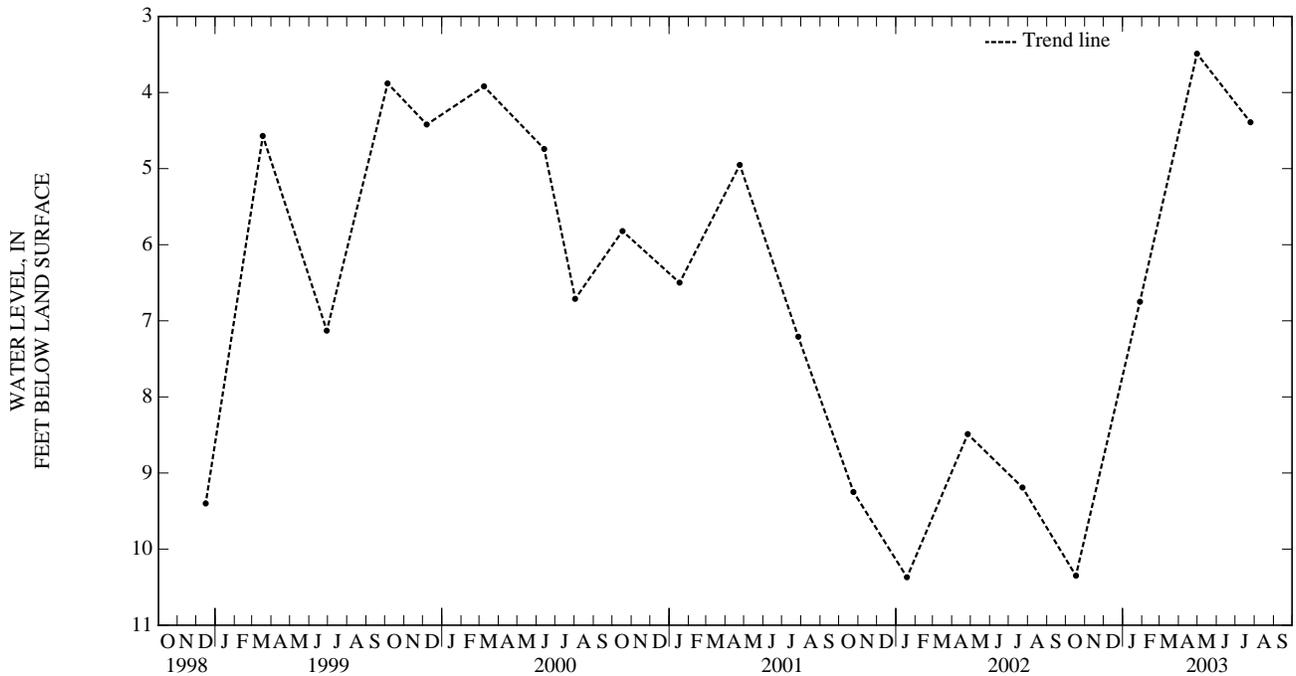
DATUM.--Elevation of land-surface datum is 33.87 ft above NGVD of 1929. Measuring point: Top of casing, 2.5 ft above land-surface datum.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.47 ft below land-surface datum, Mar. 24, 1989; lowest measured, 10.37 ft below land-surface datum, Jan. 18, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 17	10.35	JAN 28	6.75	APR 30	3.49	JUL 25	4.39
WATER YEAR 2003 HIGHEST		3.49	APR 30, 2003 LOWEST		10.35	OCT 17, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

363928076332901. Local number, 58B 13.

LOCATION.--Lat 36°39'29", long 76°33'28", NAD83, Hydrologic Unit 03010205, 700 ft east of State Highway 642, 4.0 mi south of Suffolk. Owner: Melvin Brinkley.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 22 in., depth 15 ft.

INSTRUMENTATION.--Electronic data logger 60 minute record interval. Mar. 2, 1994 to May 28, 1999, digital recorder 60-minute punch. Sept. 20, 1993 to Mar. 2, 1994, occasional measurement with chalked tape by USGS personnel. Jan. 24, 1981, to Sept. 20, 1993, digital recorder 60-minute punch. Prior to Jan. 24, 1981, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 1.9 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

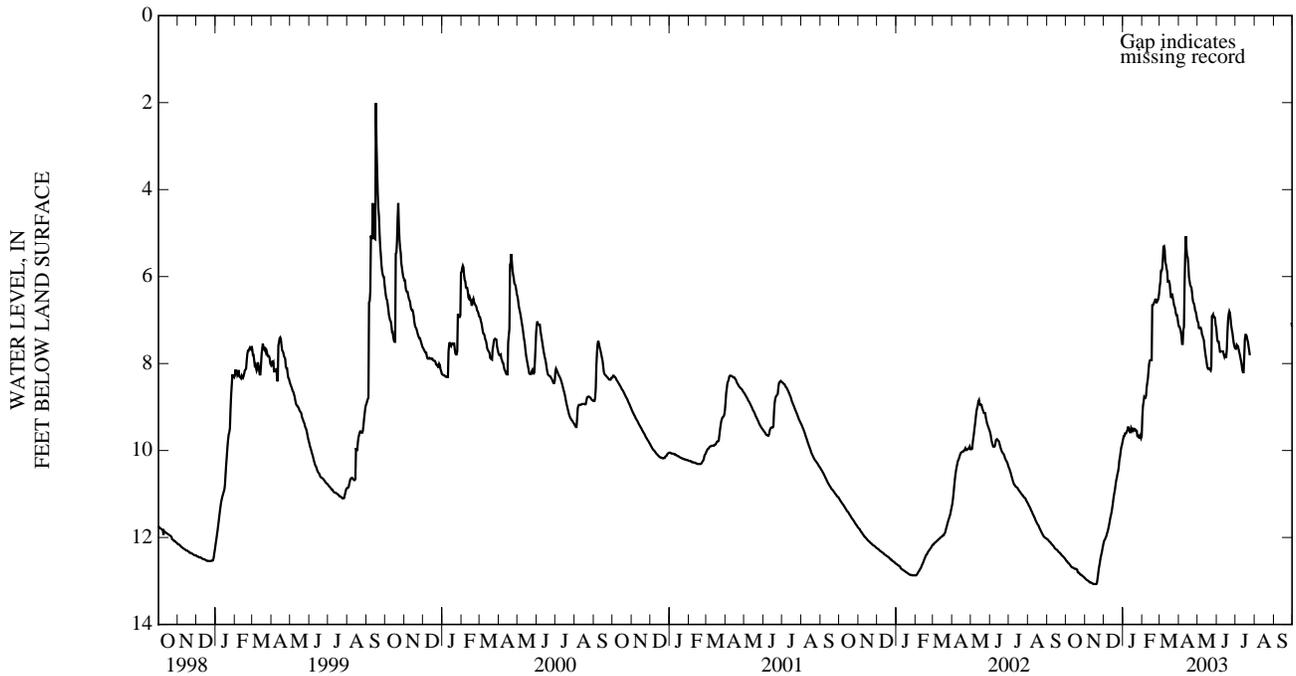
PERIOD OF RECORD.--March 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 0.59 ft below land-surface datum, Sept. 16, 1999; lowest recorded, 13.44 ft below land-surface datum, Jan. 23-26, 1981.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 4.90 ft below land-surface datum, Apr. 12; lowest instantaneous water level, 13.07 ft below land-surface datum, 14-16, 17-19.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.59	12.99	11.97	9.61	8.79	5.81	7.38	7.19	7.62	7.60	---	---
10	12.68	13.04	11.67	9.50	8.33	5.67	6.14	7.42	7.72	7.95	---	---
15	12.72	13.07	11.27	9.51	7.92	6.12	5.56	7.92	7.85	7.84	---	---
20	12.80	13.04	10.77	9.51	6.59	6.47	6.23	8.11	6.86	7.45	---	---
25	12.86	12.54	10.38	9.67	6.54	6.69	6.62	6.90	7.22	---	---	---
EOM	12.93	12.17	9.81	9.66	6.39	7.10	6.98	7.17	7.64	---	---	7.15



CITY OF SUFFOLK—Continued

364318076365501. Local number, 58B268 SOW 169A.

LOCATION.--Lat 36°43'19", long 76°36'54", NAD83, Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quarternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 12 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.5 ft above land-surface datum.

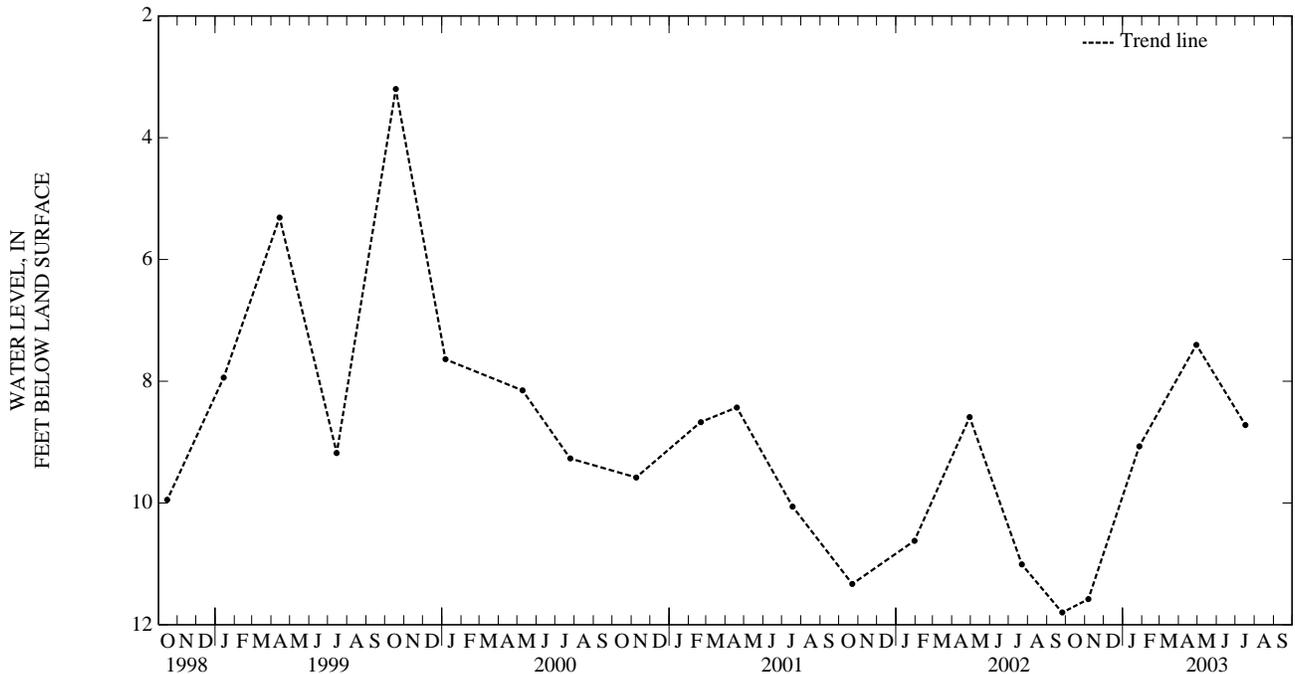
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.20 ft below land-surface datum, Oct. 18, 1999; lowest measured, 11.86 ft below land-surface datum, Oct. 11, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	11.58	JAN 27	9.07	APR 29	7.40	JUL 17	8.72
WATER YEAR 2003 HIGHEST		7.40	APR 29, 2003		LOWEST		11.58
						NOV 06, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

364318076365502. Local number, 58B269 SOW 169B.

LOCATION.--Lat 36°43'19", long 76°36'54", NAD83, Hydrologic Unit 02080202, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 360 ft, screened 350 to 360 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

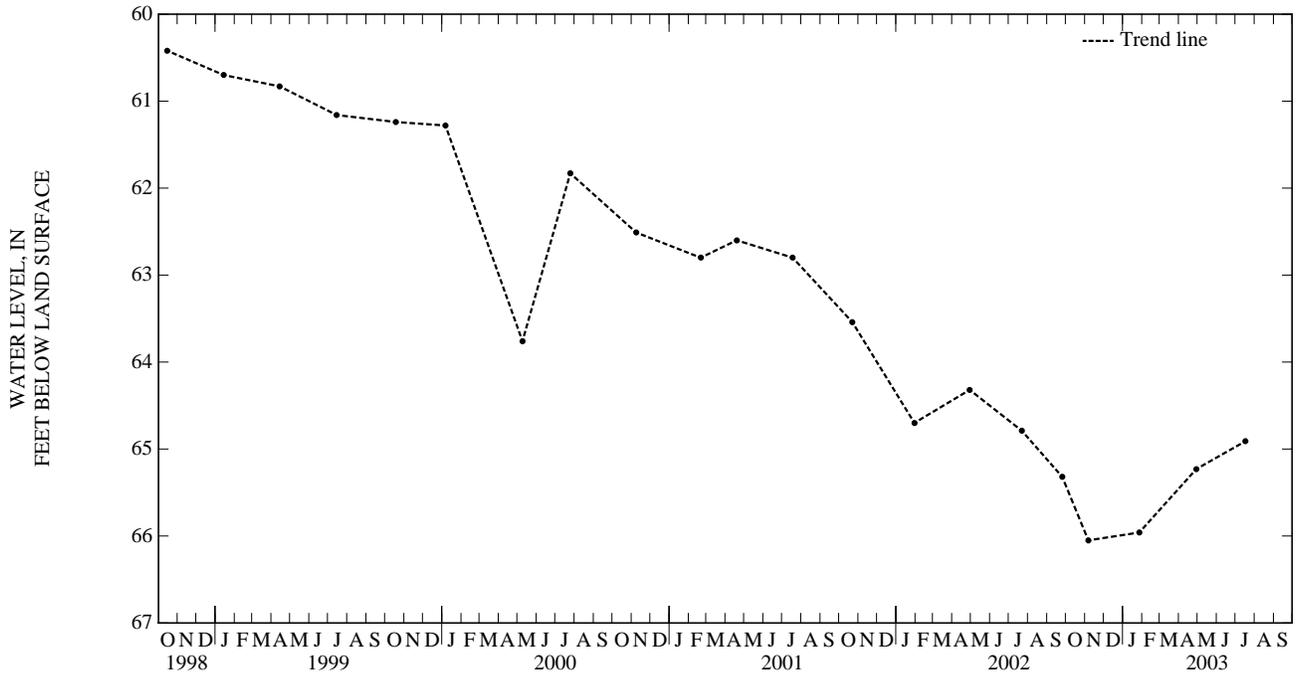
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 43.06 ft below land-surface datum, July 8, 1985; lowest measured, 66.05 ft below land-surface datum, Nov. 6, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	66.05	JAN 27	65.96	APR 29	65.23	JUL 17	64.91
WATER YEAR 2003 HIGHEST		64.91	JUL 17, 2003		LOWEST		66.05
						NOV 06, 2002	



CITY OF SUFFOLK—Continued

364318076365503. Local number, 58B270 SOW 169C.

LOCATION.--Lat 36°43'19", long 76°36'54", NAD83, Hydrologic Unit 02080208, 500 ft north of Norfolk and Western Railroad near Lake Kilby, 0.5 mi west of Suffolk. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 500 ft, screened 490 to 500 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to July 19, 1995, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 35 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.4 ft above land-surface datum.

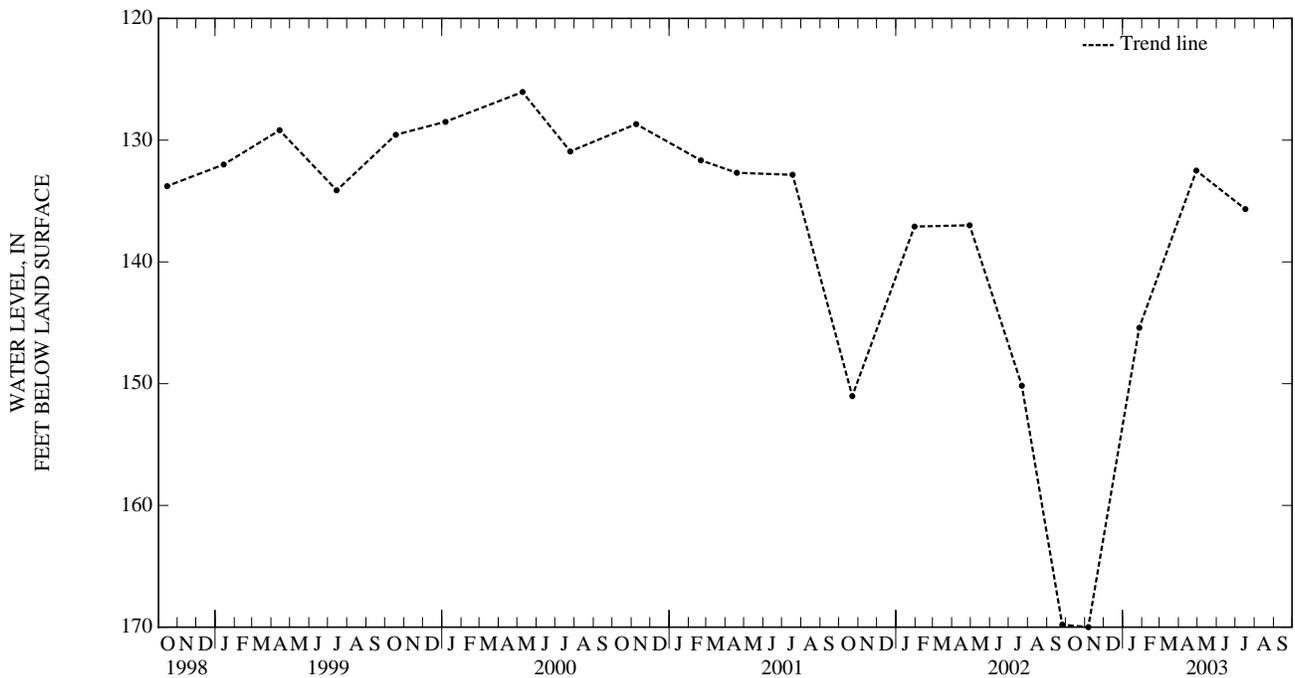
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 112.59 ft below land-surface datum, Feb. 25, 1986; lowest measured, 169.99 ft below land-surface datum, Nov. 6, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	169.99	JAN 27	145.40	APR 29	132.51	JUL 17	135.67
WATER YEAR 2003 HIGHEST		132.51	APR 29, 2003 LOWEST		169.99	NOV 06, 2002	



GROUND-WATER LEVELS

CITY OF SUFFOLK

364348076363201. Local number, 58B273 SOW 169F.

LOCATION.--Lat 36°43'49", long 76°36'31", NAD83, Hydrologic Unit 02080208, 100 ft south of U.S. Highway 58 near Lake Kilby, 0.2 mi west of Suffolk.
 Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 661 ft, screened 541 to 546 ft, 567 to 572 ft, 635 to 640 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 2, 1992, to July 19, 1995, bimonthly measurement with chalked tape. Nov. 5, 1986, to Oct. 1, 1992, continuous strip-chart recorder. Prior to Nov. 5, 1986, bimonthly measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 26 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.2 ft above land-surface datum.

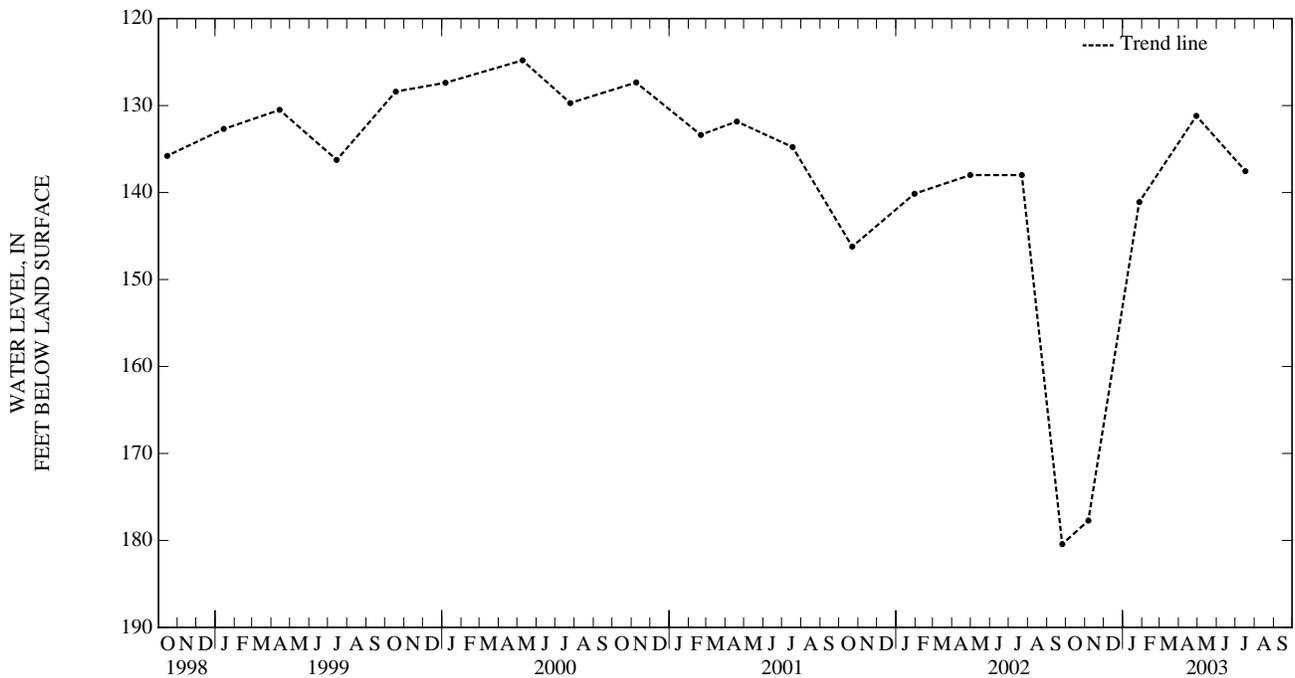
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1985 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 111.00 ft below land-surface datum, July 18, 1991; lowest recorded, 180.43 ft below land-surface datum, Sept. 25, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	177.72	JAN 27	141.09	APR 29	131.19	JUL 17	137.53
WATER YEAR 2003 HIGHEST		131.19 APR 29, 2003		LOWEST		177.72 NOV 06, 2002	



CITY OF SUFFOLK

365133076351201. Local number, 58C 57 SOW 141A.

LOCATION.--Lat 36°51'34", long 76°35'11", NAD83, Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 122 ft, screened 112 to 122 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 8, 1985, to July 19, 1995, bimonthly measurement with chalked tape. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 52 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.0 ft Jan. 12, 1988, to Nov. 12, 1991; 2.4 ft Nov. 13, 1991 to July 9, 1998; 1.80 ft thereafter.

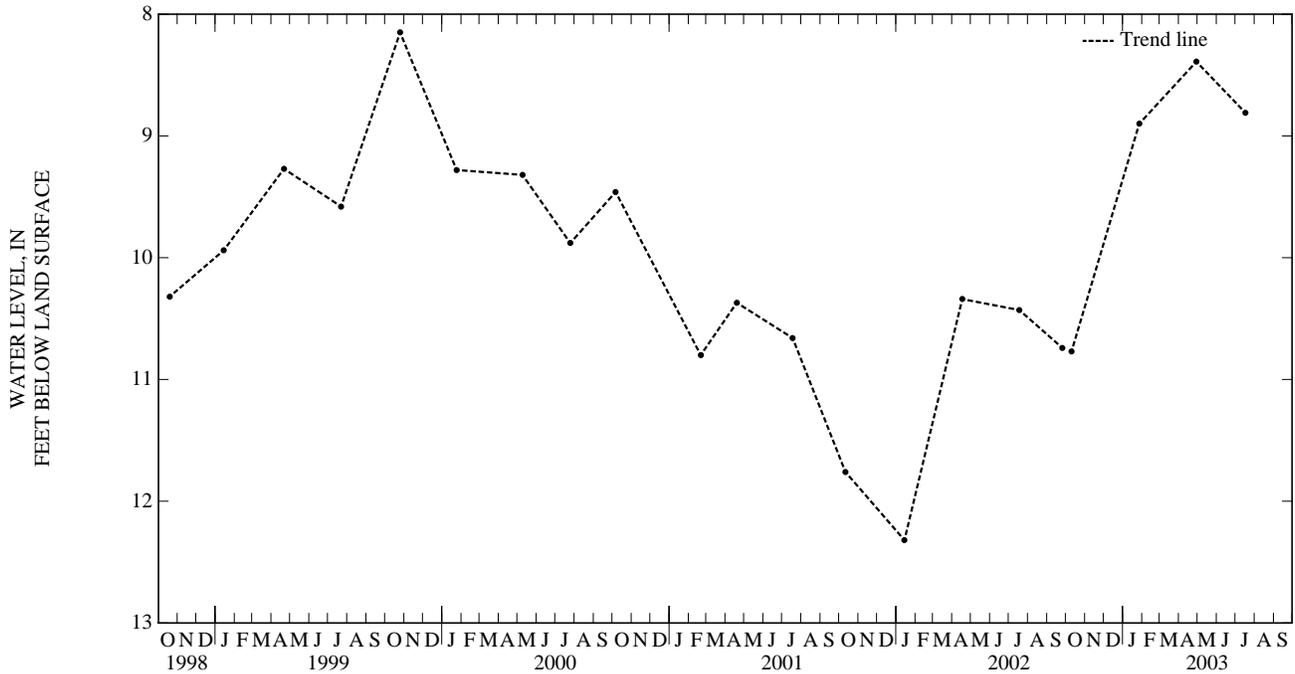
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.90 ft below land-surface datum, Jan. 21, 1998; lowest measured, 12.32 ft below land-surface datum, Jan. 14, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	10.77	JAN 27	8.90	APR 29	8.39	JUL 17	8.81
WATER YEAR 2003 HIGHEST		8.39	APR 29, 2003 LOWEST		10.77	OCT 10, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

365133076351202. Local number, 58C 58 SOW 141B.

LOCATION.--Lat 36°51'34", long 76°35'11", NAD83, Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. July 20, 1995 to Mar. 12, 1997, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 8, 1985, to July 19, 1995, bimonthly measurement with chalked tape. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 52 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.5 ft above land-surface datum prior to Jan. 12, 1988; 1.5 ft Jan. 12, 1988, to Mar. 12, 1997; 2.38 ft thereafter.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. Missing record due to recorder malfunction.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

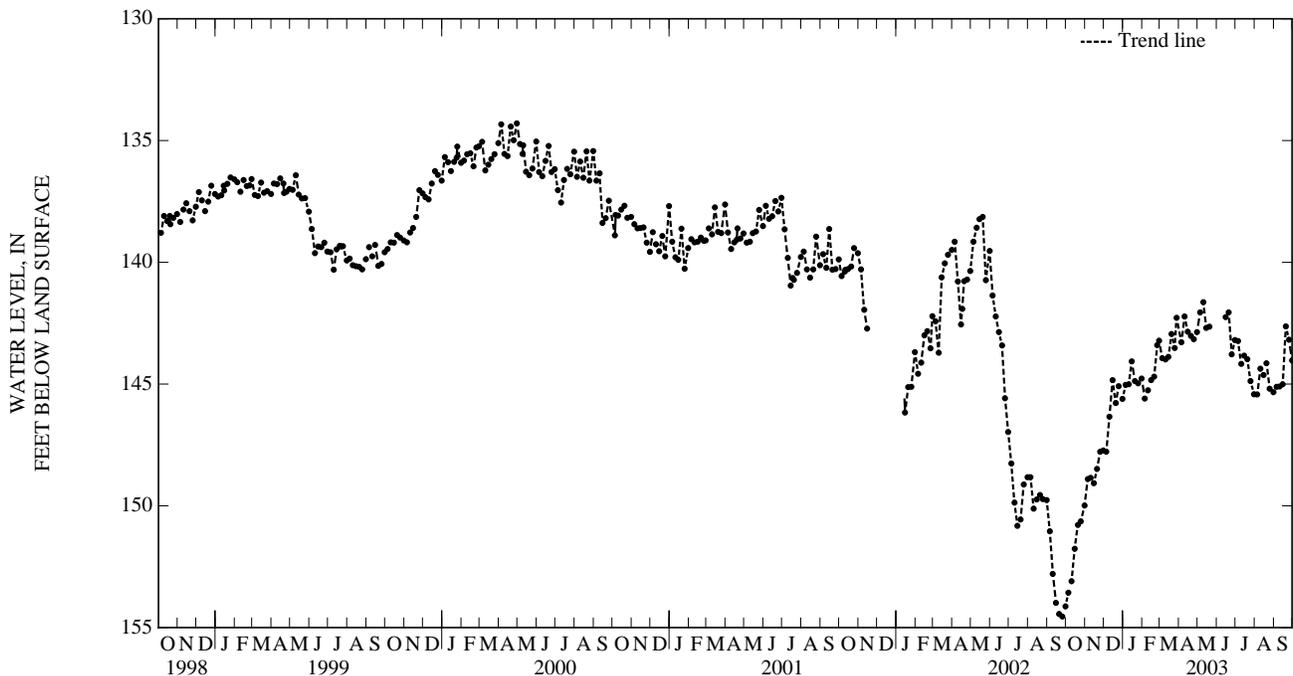
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.60 ft below land-surface datum, Apr. 24, 1980; lowest measured, 155.22 ft below land-surface datum, Sept. 24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 140.12 ft below land-surface datum, July 16; lowest instantaneous water level, 153.83 ft below land-surface datum, Oct. 2.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	153.57	148.90	147.78	145.04	145.60	143.94	143.29	142.05	---	143.23	145.43	145.11
10	153.10	148.85	146.34	145.01	145.26	143.99	142.22	141.64	---	144.17	144.37	145.10
15	151.77	149.07	144.84	144.07	144.84	143.88	142.85	142.69	142.25	143.83	144.63	145.01
20	150.78	148.49	145.78	144.88	144.70	142.94	143.02	142.64	142.06	143.98	144.15	142.63
25	150.64	147.78	145.09	144.97	143.40	143.52	143.16	---	143.78	144.88	145.19	143.18
EOM	149.98	147.73	145.61	144.77	143.22	---	142.87	---	143.19	145.42	145.34	144.03

WATER YEAR 2003 HIGHEST 141.64 MAY 10, 2003 LOWEST 153.57 OCT 05, 2002



CITY OF SUFFOLK—Continued

365133076351203. Local number, 58C 59 SOW 141C.

LOCATION.--Lat 36°51'34", long 76°35'11", NAD83, Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 447 ft, screened 437 to 447 ft.

INSTRUMENTATION.--Continuous strip-chart recorder. Prior to May 5, 1981, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 52 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--April 1980 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

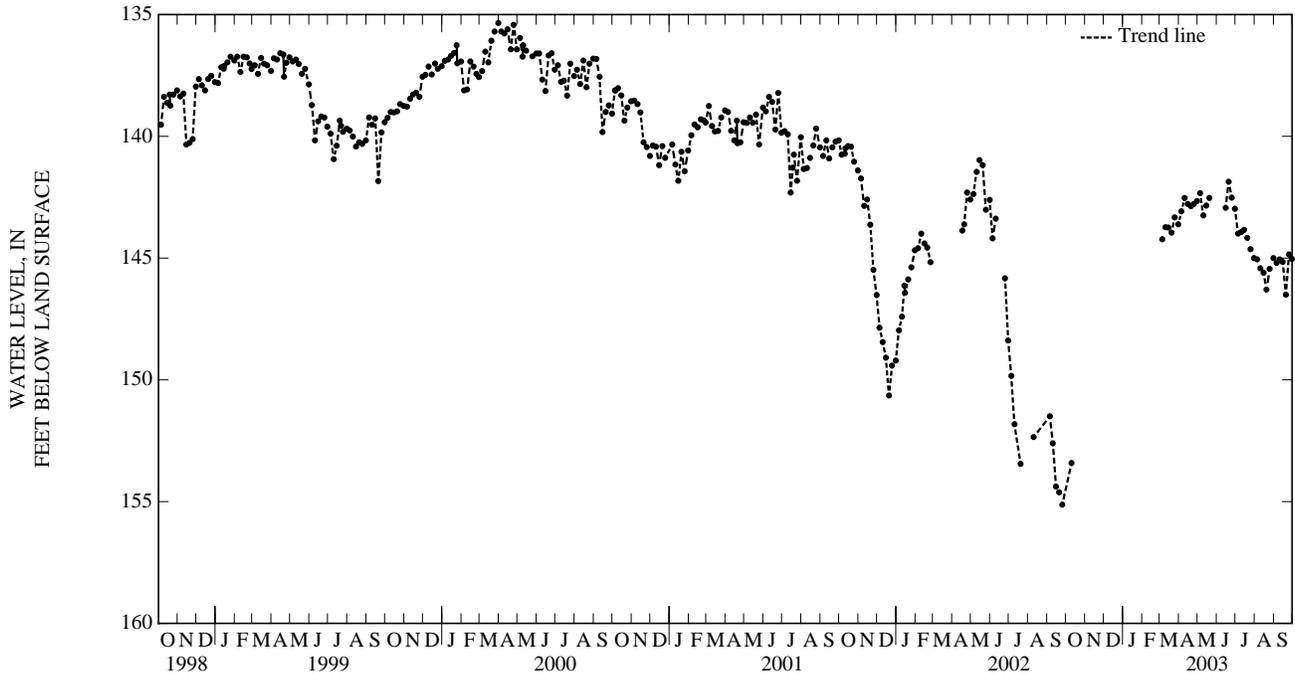
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 108.80 ft below land-surface datum, June 30, 1980; lowest recorded, 156.02 ft below land-surface datum, Oct. 1, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 141.12 ft below land-surface datum, June 16; lowest instantaneous water level, 156.02 ft below land-surface datum, Oct. 1.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	144.23	143.08	142.33	---	143.99	145.05	145.20
10	153.42	---	---	---	---	143.73	142.53	143.25	---	143.93	145.42	145.05
15	---	---	---	---	---	143.75	142.78	142.84	142.93	143.84	145.60	145.16
20	---	---	---	---	---	143.96	142.87	142.53	141.86	144.17	146.29	146.50
25	---	---	---	---	---	143.33	142.78	---	142.52	144.64	145.44	144.85
EOM	---	---	---	---	---	143.62	142.66	---	142.97	145.00	145.00	145.04

WATER YEAR 2003 HIGHEST 141.86 JUN 20, 2003 LOWEST 153.42 OCT 10, 2002



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

365133076351204. Local number, 58C 60 SOW 141D.

LOCATION.--Lat 36°51'34", long 76°35'11", NAD83, Hydrologic Unit 02080208, 500 ft west of old Chuckatuck High School in Chuckatuck. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 8, 1985, to July 19, 1995, bimonthly measurement with chalked tape. Prior to Oct. 8, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Jan. 12, 1988; 1.0 ft thereafter.

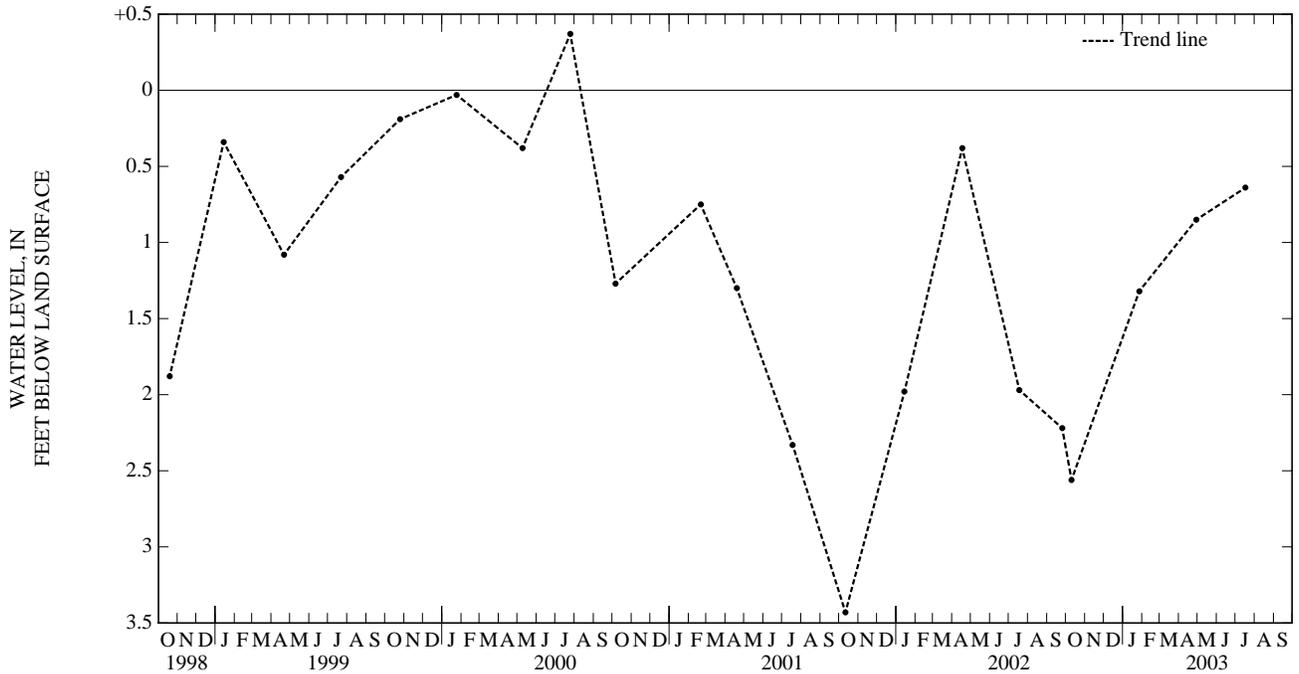
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.37 ft above land-surface datum, July 25, 2000; lowest measured, 4.20 ft below land-surface datum, Oct. 15, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 10	2.56	JAN 27	1.32	APR 29	.85	JUL 17	.64
WATER YEAR 2003 HIGHEST		.64	JUL 17, 2003 LOWEST		2.56	OCT 10, 2002	



CITY OF SUFFOLK—Continued

364731076355501. Local number, 58C 61 SOW 159A.

LOCATION.--Lat 36°47'32", long 76°35'54", NAD83, Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 25 ft, screened 20 to 25 ft, sounded to 17.50 ft on Jul. 8, 1985, redrilled to 25 ft on May 15, 1990.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 26, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum prior to June 25, 1990; 1.55 ft thereafter.

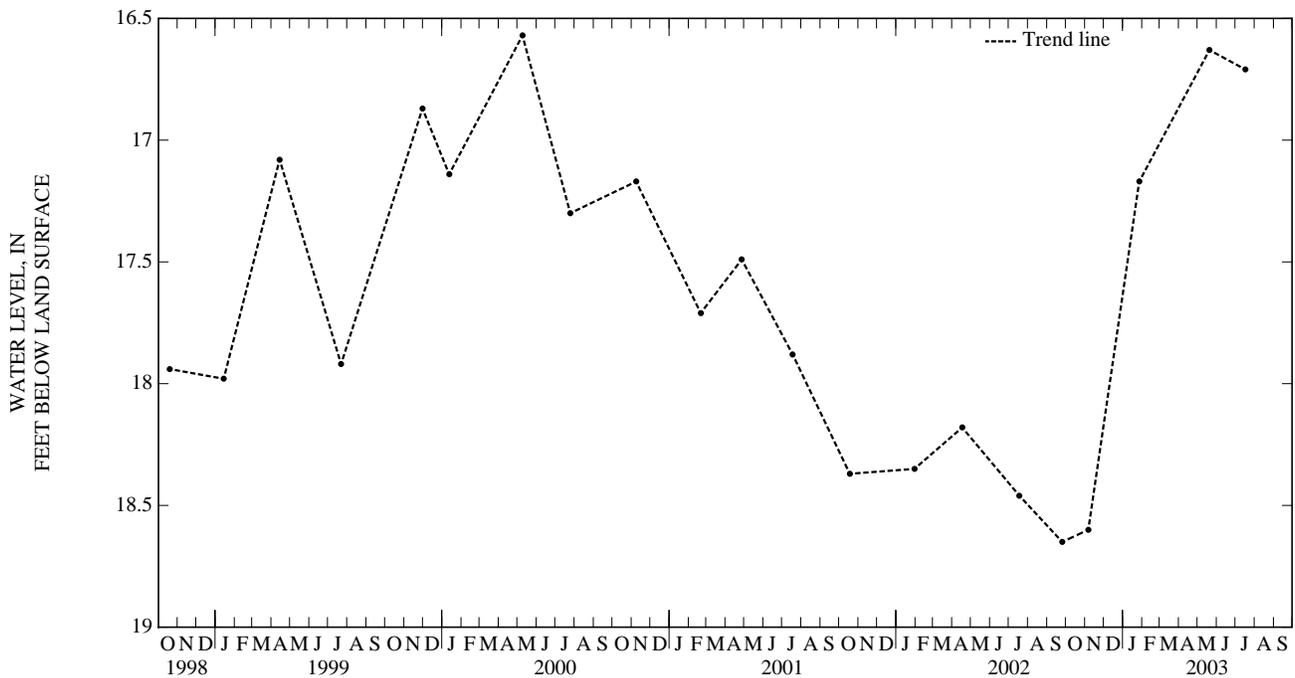
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Well reported dry several days in 1985-1990.

PERIOD OF RECORD.--June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.95 ft below land-surface datum, Apr. 19, 1984; lowest measured, 18.70 ft below land-surface datum, Oct. 11, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	18.60	JAN 27	17.17	MAY 20	16.63	JUL 17	16.71
WATER YEAR 2003 HIGHEST		16.63	MAY 20, 2003 LOWEST		18.60	NOV 06, 2002	



GROUND-WATER LEVELS
CITY OF SUFFOLK—Continued

364731076355502. Local number, 58C 62 SOW 159B.

LOCATION.--at 36°47'32", long 76°35'54", NAD83, Hydrologic Unit 02080208, 0.5 mi northwest of intersection of State Highways 622 and 634, 2.3 mi northwest of Elephant Fork. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 2 in., depth 575 ft, screened 555 to 575 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 26, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 40 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

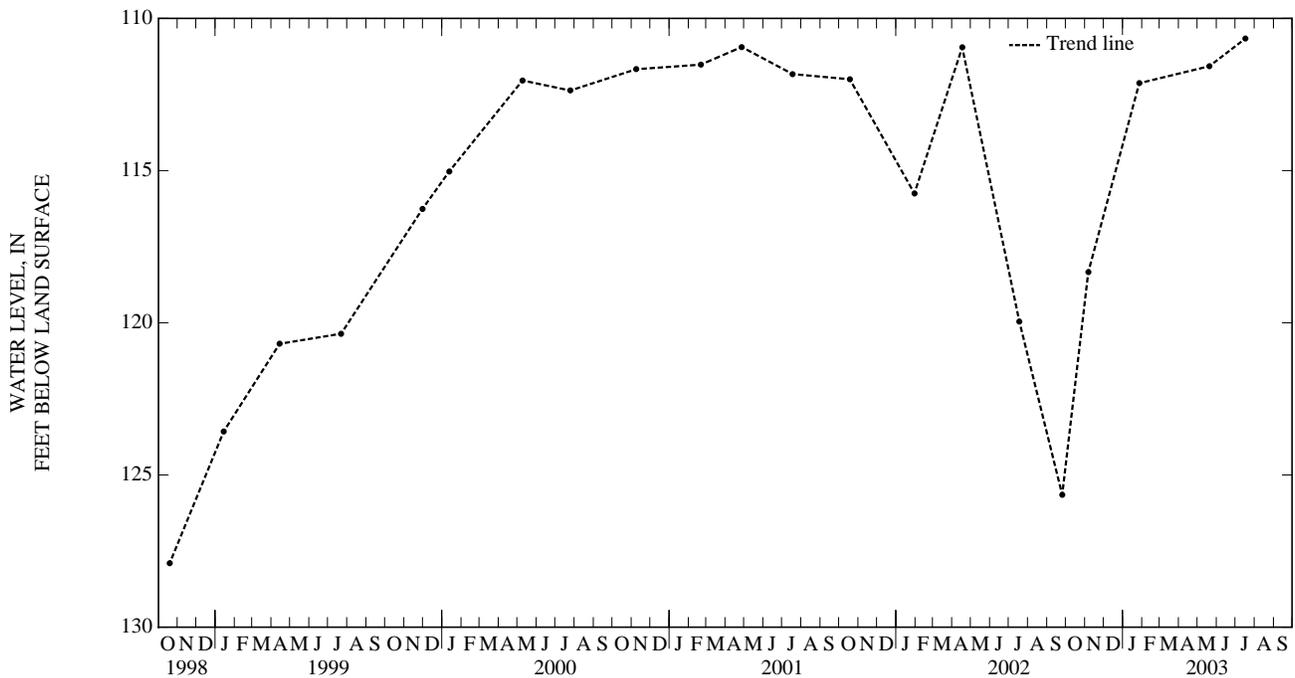
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level may be affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--June 1981 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 110.66 ft below land-surface datum, July 17, 2003; lowest measured, 169.26 ft below land-surface datum, Jan. 11, 1994.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 06	118.33	JAN 27	112.13	MAY 20	111.57	JUL 17	110.66
WATER YEAR 2003 HIGHEST 110.66 JUL 17, 2003		LOWEST 118.33		NOV 06, 2002			



SURRY COUNTY

370800076500701. Local number, 56F 2 SOW 039.

LOCATION.--Lat 37°08'01", long 76°50'06", NAD83, Hydrologic Unit 02080206, off State Highway 10, at Surry County Administration building in Surry.
 Owner: Town of Surry.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 367 ft, screened 350 to 362 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 8, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Jan. 10, 1976, to Oct. 7, 1985, occasional measurement with chalked tape. Mar. 15, 1971, to Jan. 10, 1976, continuous strip-chart recorder. Prior to Mar. 15, 1971, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 122 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.1 ft above land-surface datum.

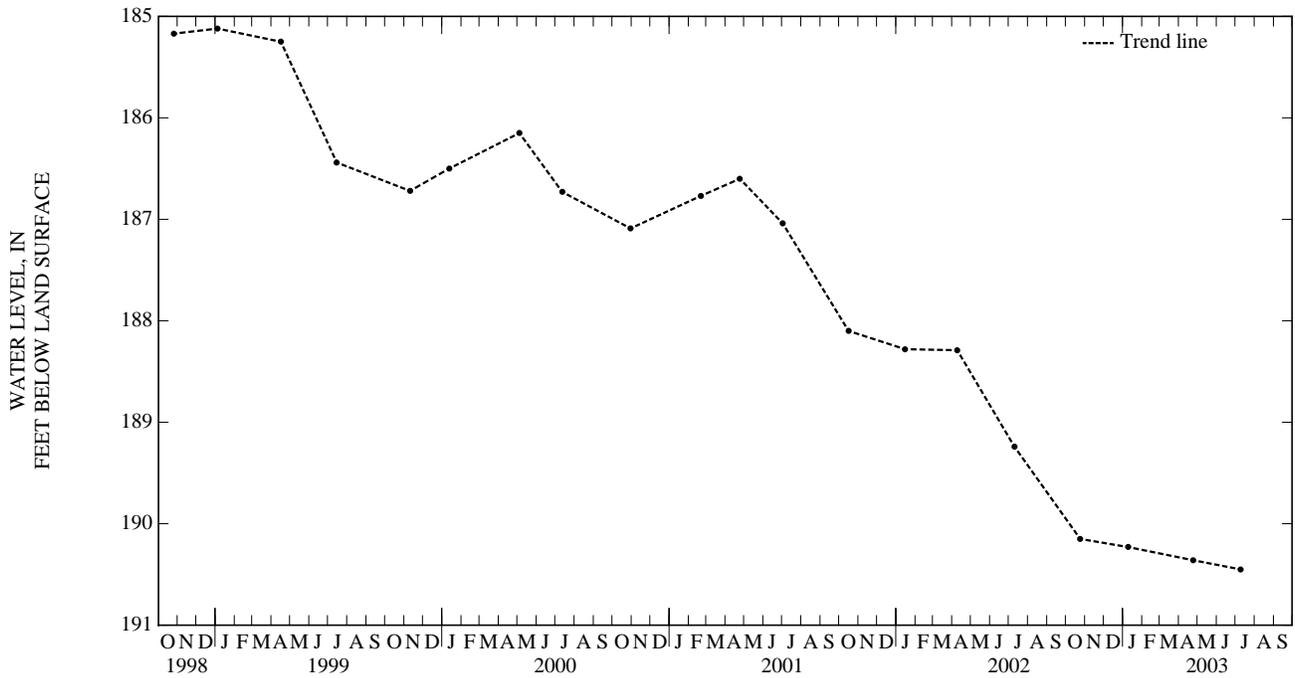
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1970 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 146.43 ft below land-surface datum, Mar. 25, 1971; lowest measured, 190.45 ft below land-surface datum, July 9, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	190.15	JAN 09	190.23	APR 24	190.36	JUL 09	190.45
WATER YEAR 2003 HIGHEST 190.15		OCT 24, 2002		LOWEST 190.45		JUL 09, 2003	



GROUND-WATER LEVELS
 SURRY COUNTY—Continued

370712076413201. Local number, 57E 11 SOW 094A.

LOCATION.--Lat 37°07'13", long 76°41'31", NAD83, Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle.
 Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 605 ft, screened 595 to 605 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

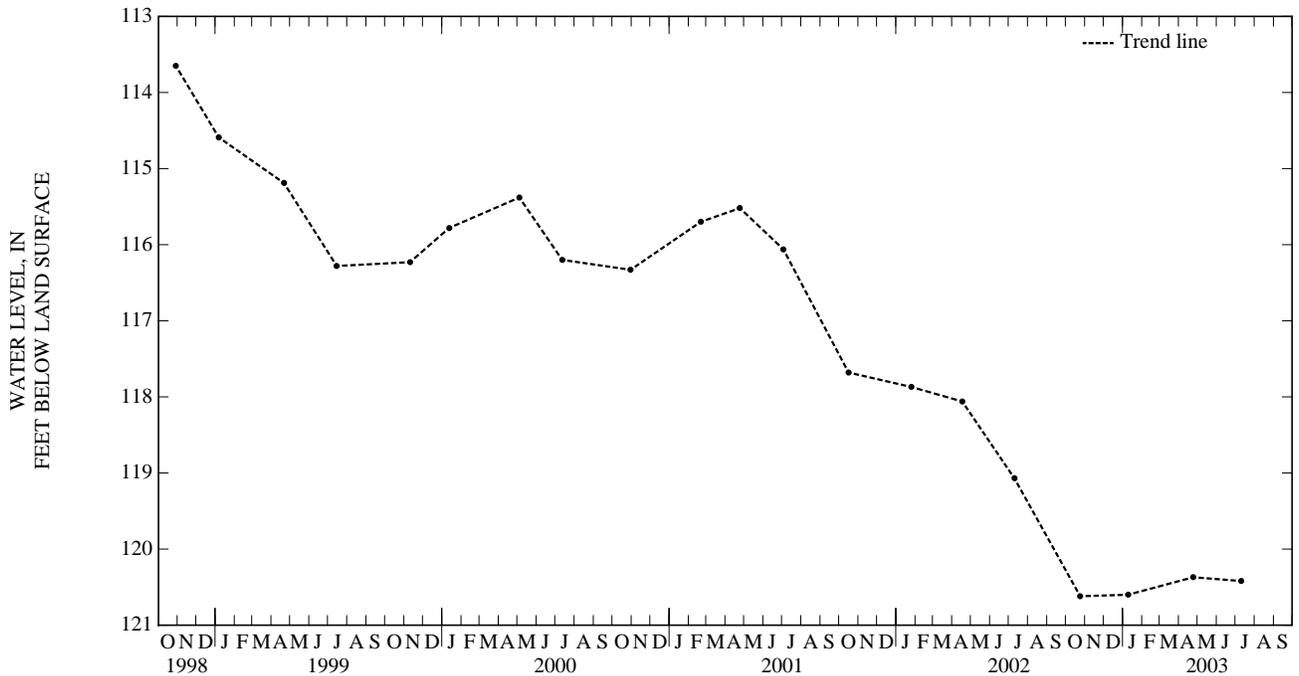
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 92.19 ft below land-surface datum, July 24, 1980; lowest measured, 120.62 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	120.62	JAN 09	120.60	APR 24	120.37	JUL 10	120.42
WATER YEAR 2003 HIGHEST		120.37 APR 24, 2003		LOWEST		120.62 OCT 24, 2002	



GROUND-WATER LEVELS
SURRY COUNTY—Continued

370712076413203. Local number, 57E 13 SOW 094C.

LOCATION.--Lat 37°07'13", long 76°41'31", NAD83, Hydrologic Unit 02080206, 0.5 mi east of State Highway 690, 2.5 mi northwest of Bacons Castle.
Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in. to 41 ft, diameter 3 in. from 41 to 46 ft, depth 46 ft, screened 41 to 46 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 45 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

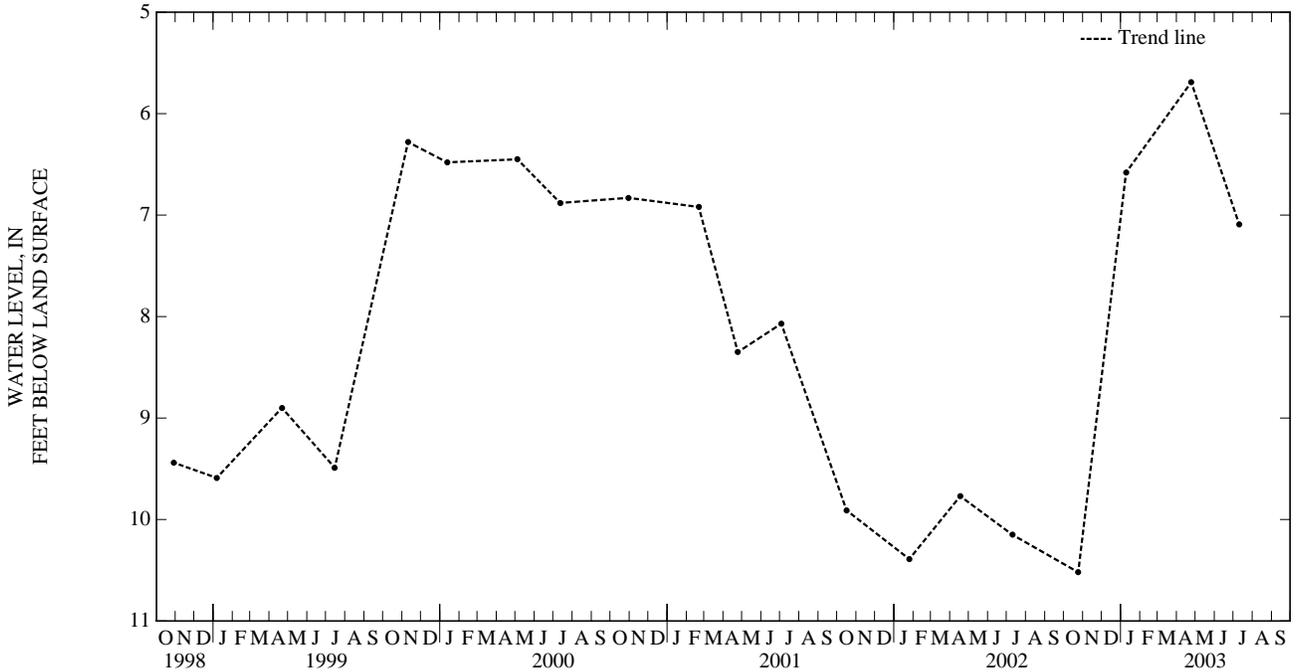
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.90 ft below land-surface datum, May 29, 1980; lowest measured, 11.17 ft below land-surface datum, Dec. 13, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	10.52	JAN 09	6.58	APR 24	5.69	JUL 10	7.09
WATER YEAR 2003 HIGHEST		5.69	APR 24, 2003 LOWEST		10.52	OCT 24, 2002	



GROUND-WATER LEVELS
 SURRY COUNTY—Continued

371132076405501. Local number, 57F 16 SOW 087A.

LOCATION.--Lat 37°11'33", long 76°40'54", NAD83, Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 1,206 ft, screened 1,170 to 1,185 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

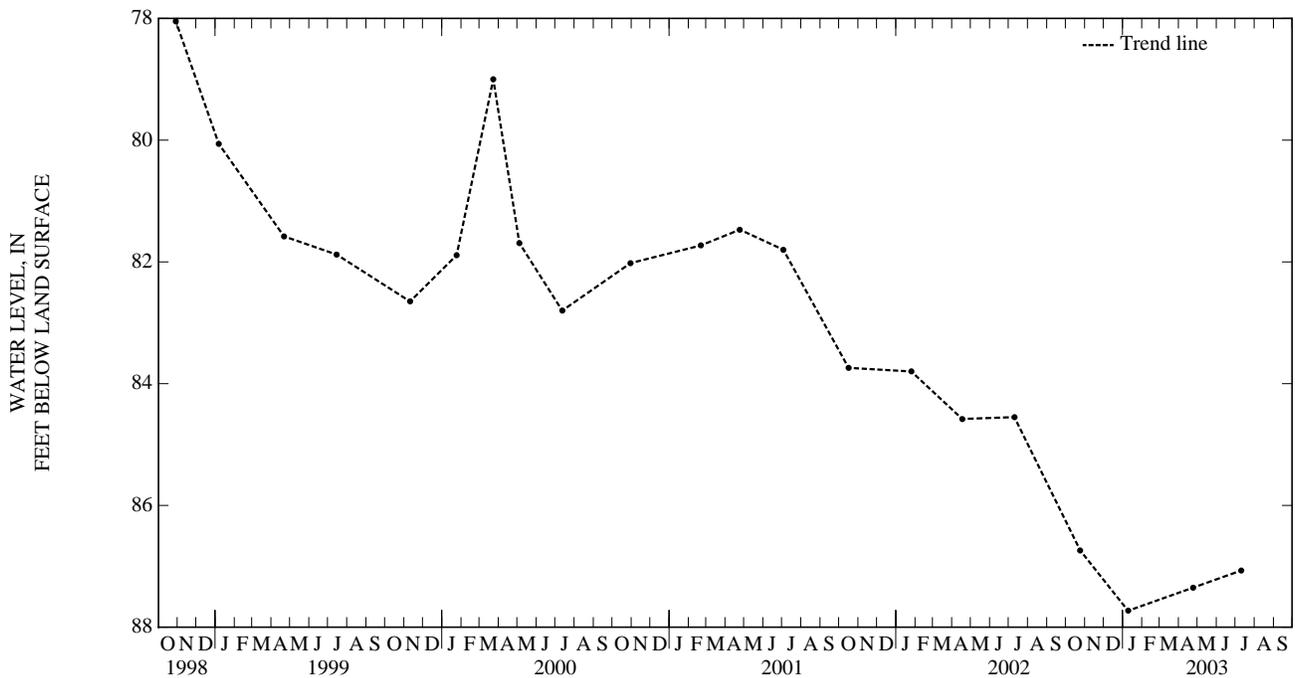
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 53.22 ft below land-surface datum, July 20, 1978; lowest measured, 87.73 ft below land-surface datum, Jan. 9, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	86.74	JAN 09	87.73	APR 24	87.35	JUL 10	87.07
WATER YEAR 2003 HIGHEST 86.74		OCT 24, 2002		LOWEST 87.73		JAN 09, 2003	



GROUND-WATER LEVELS
SURRY COUNTY—Continued

371132076405502. Local number, 57F 24 SOW 087B.

LOCATION.--Lat 37°11'33", long 76°40'54", NAD83, Hydrologic Unit 02080206, at the end of State Highway 650 in Homewood, 7.6 mi northeast of Bacons Castle. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 520 ft, screened 510 to 520 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 7, 1985, to July 10, 1995, bimonthly measurement with chalked tape. Prior to Oct. 7, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.0 ft above land-surface datum.

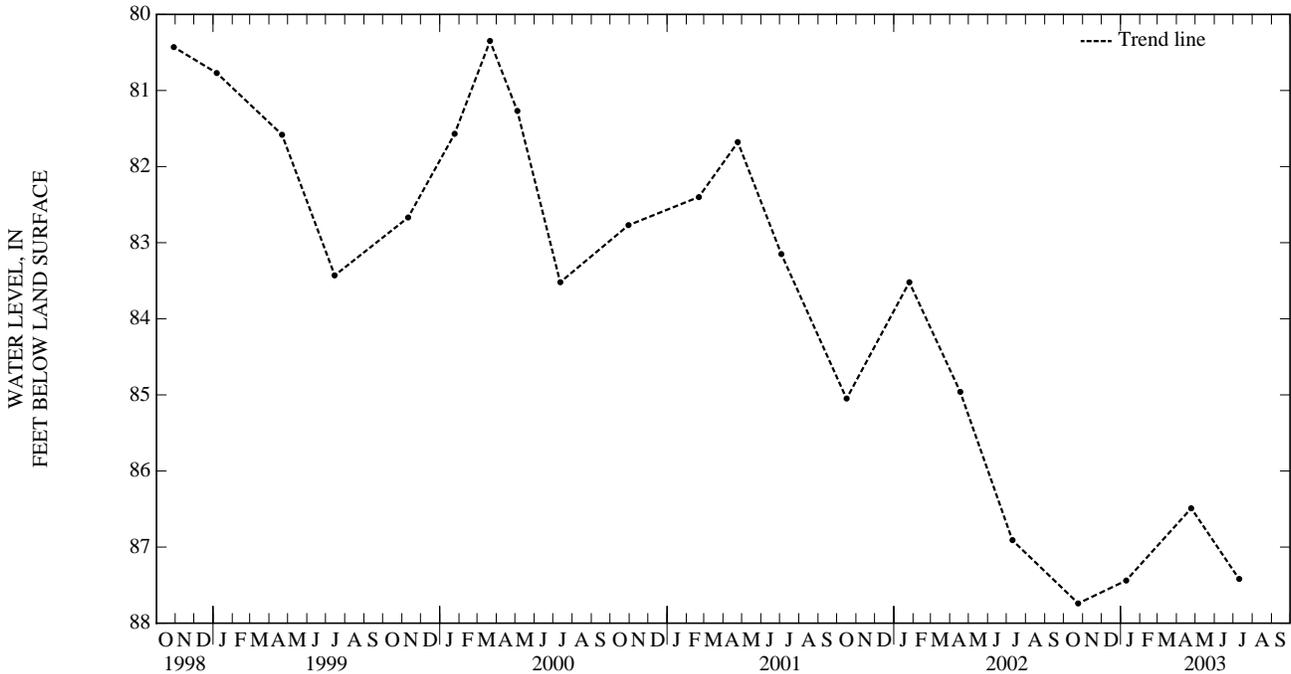
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--July 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.17 ft below land-surface datum, Aug. 17, 1982; lowest measured, 87.74 ft below land-surface datum, Oct. 24, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	87.74	JAN 09	87.44	APR 24	86.49	JUL 10	87.42
WATER YEAR 2003 HIGHEST		86.49	APR 24, 2003 LOWEST		87.74	OCT 24, 2002	



GROUND-WATER LEVELS

SUSSEX COUNTY

365530077104002. Local number, 53D 6 SOW 179A.

LOCATION.--Lat 36°55'31", long 77°10'39", NAD83, Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Lower Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 460 ft, diameter 2 in., 439 ft to 460 ft, depth 470 ft, screened 460 to 470 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder 60-minute punch.

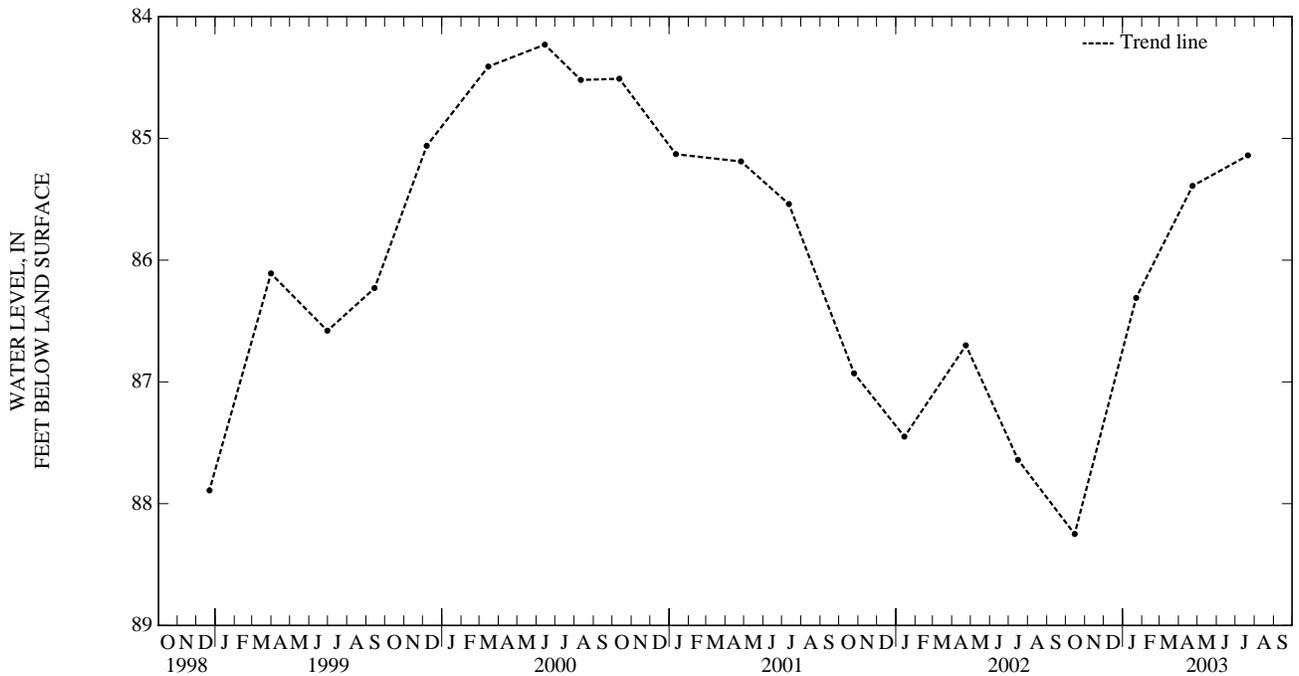
DATUM.--Elevation of land-surface datum is 90 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

PERIOD OF RECORD.--November 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 78.50 ft below land-surface datum, Feb. 12, 1988; lowest measured, 88.25 ft below land-surface datum, Oct. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	88.25	JAN 22	86.31	APR 23	85.39	JUL 21	85.14
WATER YEAR 2003 HIGHEST		85.14 JUL 21, 2003		LOWEST		88.25 OCT 15, 2002	



SUSSEX COUNTY—Continued

365530077104006. Local number, 53D 10 SOW 179E.

LOCATION.--Lat 36°55'31", long 77°10'39", NAD83, Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 130 ft, diameter 4 in. from 140 to 145 ft, depth 145 ft, screened 130 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.3 ft above land-surface datum.

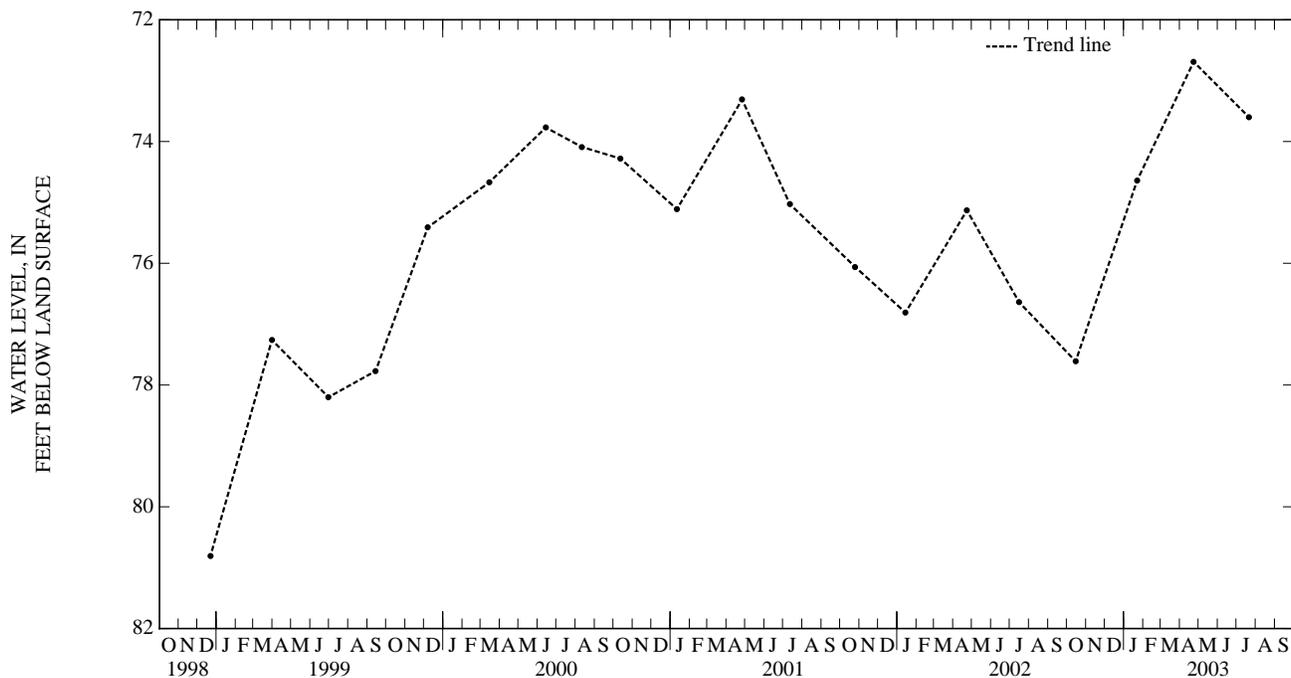
REMARKS.--Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 72.69 ft below land-surface datum, Apr. 23, 2003; lowest measured, 82.50 ft below land-surface datum, Sept. 12, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	77.61	JAN 22	74.64	APR 23	72.69	JUL 21	73.60
WATER YEAR 2003 HIGHEST		72.69 APR 23, 2003		LOWEST		77.61 OCT 15, 2002	



GROUND-WATER LEVELS
SUSSEX COUNTY—Continued

365530077104007. Local number, 53D 11 SOW 179F.

LOCATION.--Lat 36°55'31", long 77°10'39", NAD83, Hydrologic Unit 03010201, off State Highway 634, 1.4 mi south of State Highway 35, and 1.7 mi southeast of Homeville. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 82 ft, diameter 4 in. from 92 to 97 ft, depth 97 ft, screened 82 to 92 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1988, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 90 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

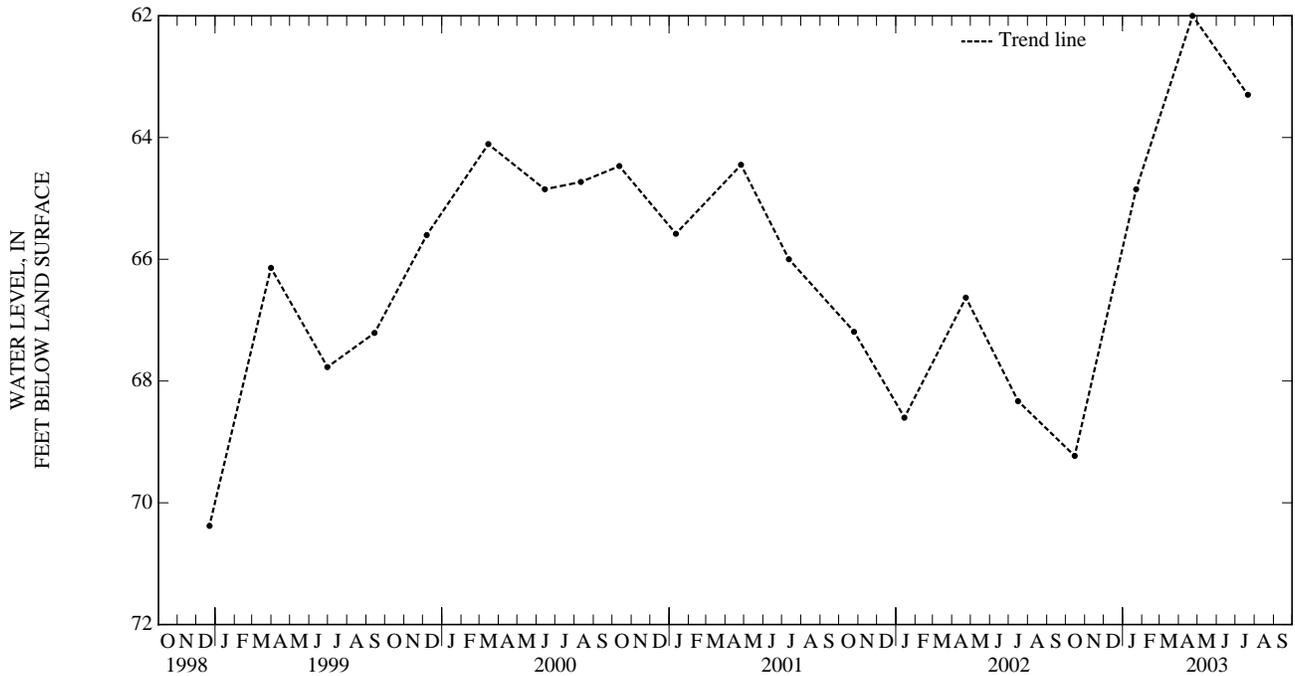
REMARKS.--Water level affected by local pumpage.

PERIOD OF RECORD.--December 1985 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.00 ft below land-surface datum, Apr. 23, 2003; lowest recorded, 77.16 ft below land-surface datum, Nov. 28 to Dec. 1, 1987.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	69.23	JAN 22	64.85	APR 23	62.00	JUL 21	63.30
WATER YEAR 2003 HIGHEST		62.00 APR 23, 2003		LOWEST		69.23 OCT 15, 2002	



SUSSEX COUNTY—Continued

365235077150501. Local number, 53E 5 SOW 045.

LOCATION.--Lat 37°02'38", long 77°11'29", NAD83, Hydrologic Unit 03010201, 400 ft northeast of State Highway 625, 2.5 mi north of Newville. Owner: Butler Lumber Company.

AQUIFER.--Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in., depth 172 ft, screened 162 to 172 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to Mar. 1, 1989, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 126.65 ft above NGVD of 1929. Measuring point: Top of casing, 0.3 ft above land-surface datum prior to Mar. 8, 1988; 1.2 ft thereafter.

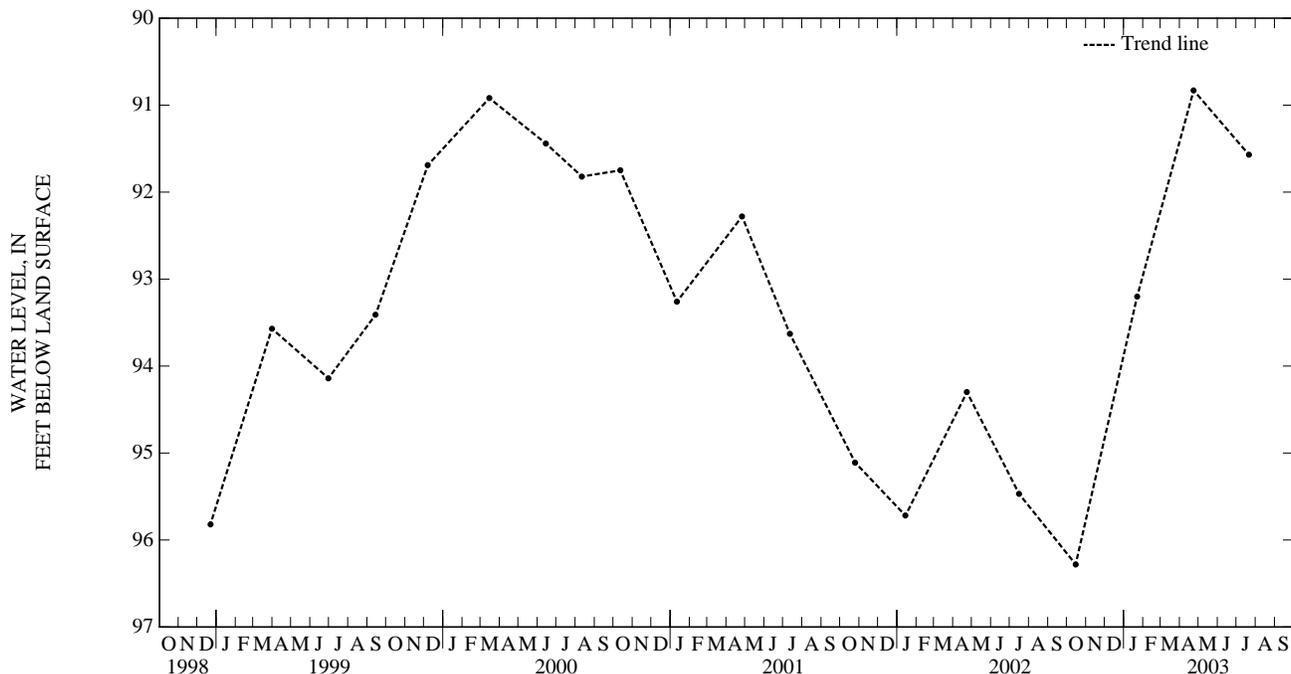
REMARKS.--Water level affected by local pumpage and regional drawdown.

PERIOD OF RECORD.--September 1971, October 1974 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.90 ft below land-surface datum, Mar. 16, 1976; lowest measured, 96.28 ft below land-surface datum, Oct. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 15	96.28	JAN 22	93.20	APR 23	90.83	JUL 21	91.57
WATER YEAR 2003 HIGHEST		90.83	APR 23, 2003 LOWEST		96.28	OCT 15, 2002	



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH

364920076093201. Local number, 61C 27 SOW 174A.

LOCATION.--Lat 36°49'21", long 76°09'28", NAD83, Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 175 ft, screened 160 to 170 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 9, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum.

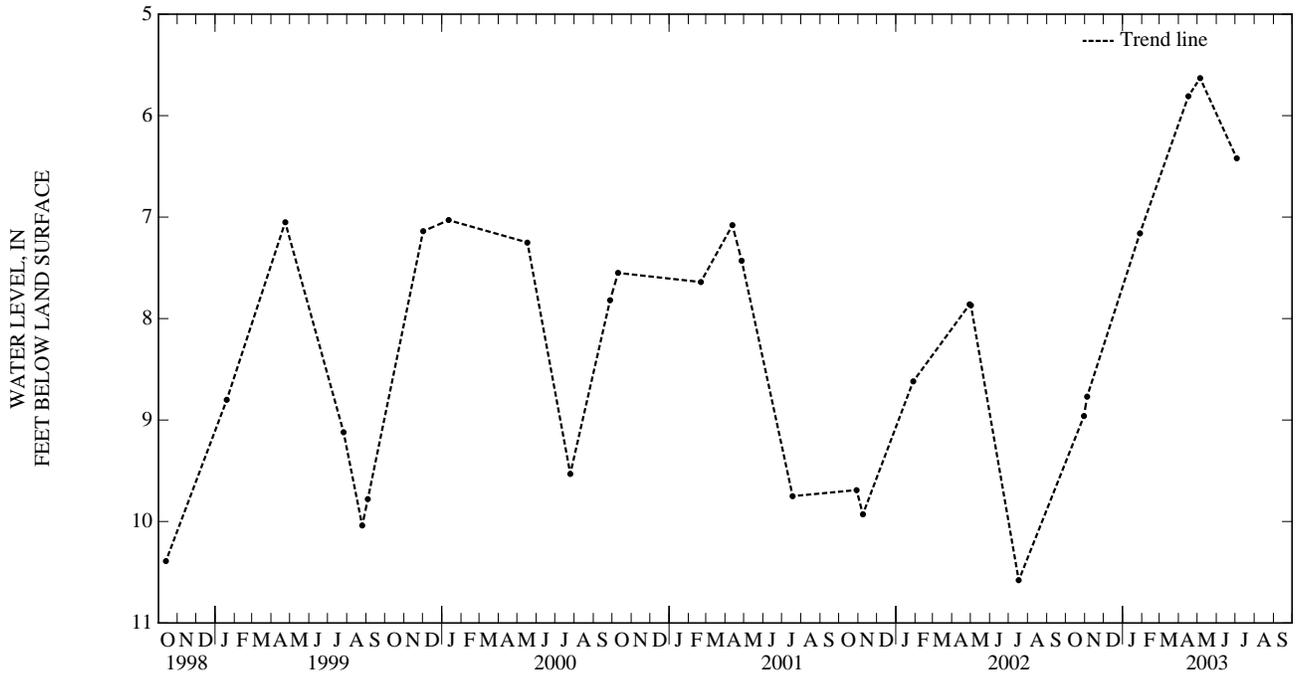
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.63 ft below land-surface datum, May 5, 2003; lowest measured, 11.73 ft below land-surface datum, Aug. 6, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	8.96	NOV 04	8.77	JAN 28	7.16	APR 16	5.81	MAY 05	5.63	JUL 03	6.42
WATER YEAR 2003 HIGHEST		5.63	MAY 05, 2003 LOWEST		8.96	OCT 30, 2002					



CITY OF VIRGINIA BEACH—Continued

364920076093202. Local number, 61C 28 SOW 174B.

LOCATION.--Lat 36°49'14", long 76°09'18", NAD83, Hydrologic Unit 02080208, at Kempsville High School in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 80 ft, screened 65 to 75 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 9, 1985 to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 13.10 ft above NGVD of 1929. Measuring point: Top of casing, 1.2 ft above land-surface datum prior to Nov. 6, 2001; 1.72 ft thereafter.

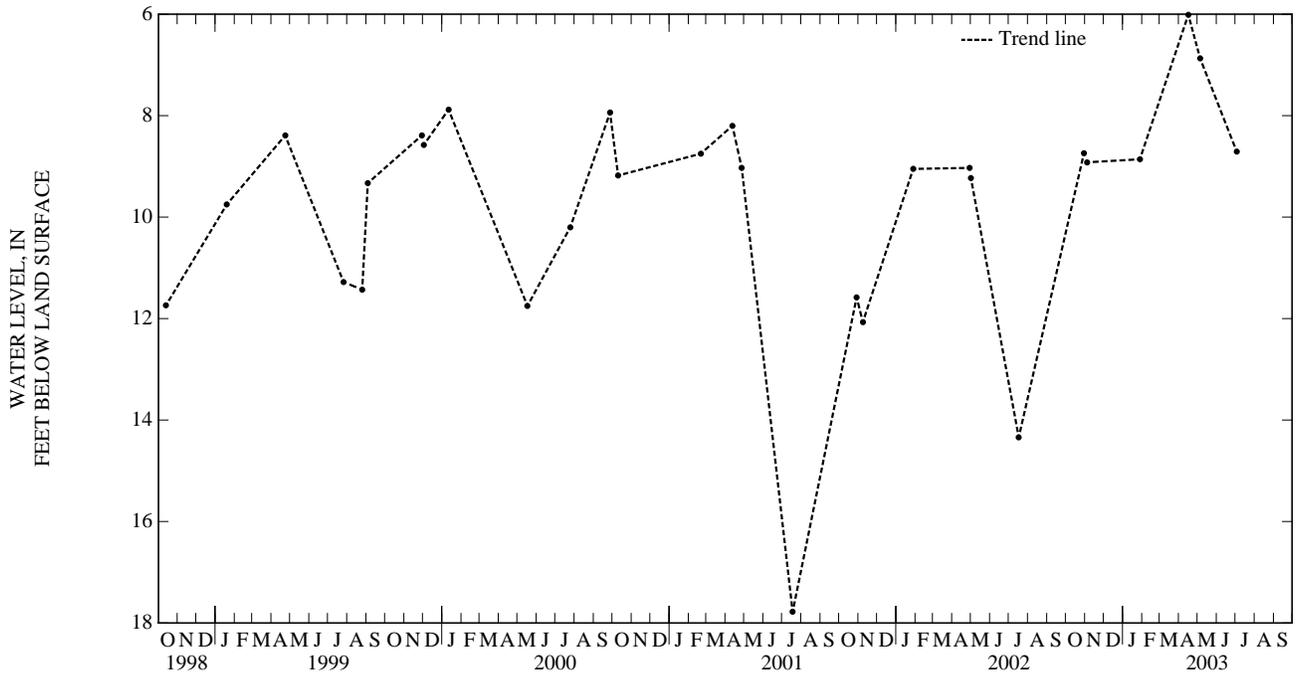
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.01 ft below land-surface datum, Apr. 16, 2003; lowest measured, 17.99 ft below land-surface datum, July 18, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	8.74	NOV 04	8.92	JAN 28	8.86	APR 16	6.01	MAY 05	6.87	JUL 03	8.71
WATER YEAR 2003 HIGHEST		6.01	APR 16, 2003 LOWEST		8.92	NOV 04, 2002					



364558076074501. Local number, 61C 43

LOCATION.--Lat 36°45'58", long 76°07'43", NAD83, Hydrologic Unit 03010205, 40 ft southeast from the northwest corner of Bellwood Estates Neighborhood Park Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 198 ft, screened 182 to 192 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 12, 2001, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 5.68 ft above NGVD of 1929. Measuring point: Top of casing, 2.19 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

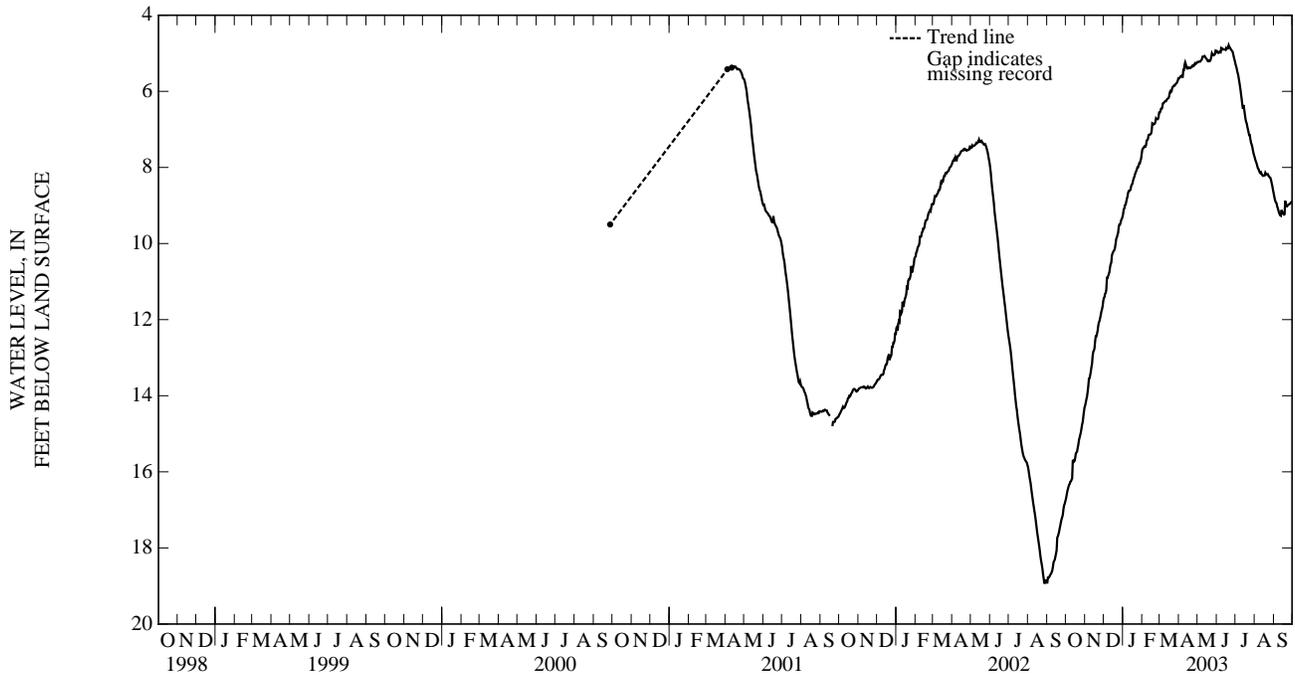
PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 4.75 ft below land-surface datum, June 19, 20, 2003; lowest recorded, 18.94 ft below land-surface datum, Aug. 28, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 4.75 ft below land-surface datum, June 19, 20; lowest instantaneous water level, 16.71 ft below land-surface datum, Oct. 1.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	16.40	13.89	11.21	8.98	7.44	6.43	5.59	5.22	4.96	5.55	7.96	8.94
10	16.21	13.37	10.75	8.62	7.25	6.26	5.30	5.09	4.90	6.09	8.15	9.23
15	15.71	12.81	10.26	8.45	7.11	6.18	5.40	5.14	4.91	6.48	8.22	9.18
20	15.36	12.37	9.99	8.19	6.86	6.00	5.38	5.20	4.79	6.93	8.18	8.96
25	14.96	11.96	9.56	8.00	6.73	5.85	5.33	5.03	4.93	7.27	8.26	8.97
EOM	14.30	11.52	9.30	7.64	6.56	5.66	5.24	4.94	5.21	7.69	8.65	8.92



CITY OF VIRGINIA BEACH—Continued

364558076074401. Local number, 61C 44

LOCATION.--Lat 36°45'58", long 76°07'43", NAD83, Hydrologic Unit 03010205, 40 ft southeast from the northwest corner of Bellwood Estates Neighborhood Park. Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 107 ft, screened 92 to 102 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 12, 2001, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 5.77 ft above NGVD of 1929. Measuring point: Top of casing, 2.80 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

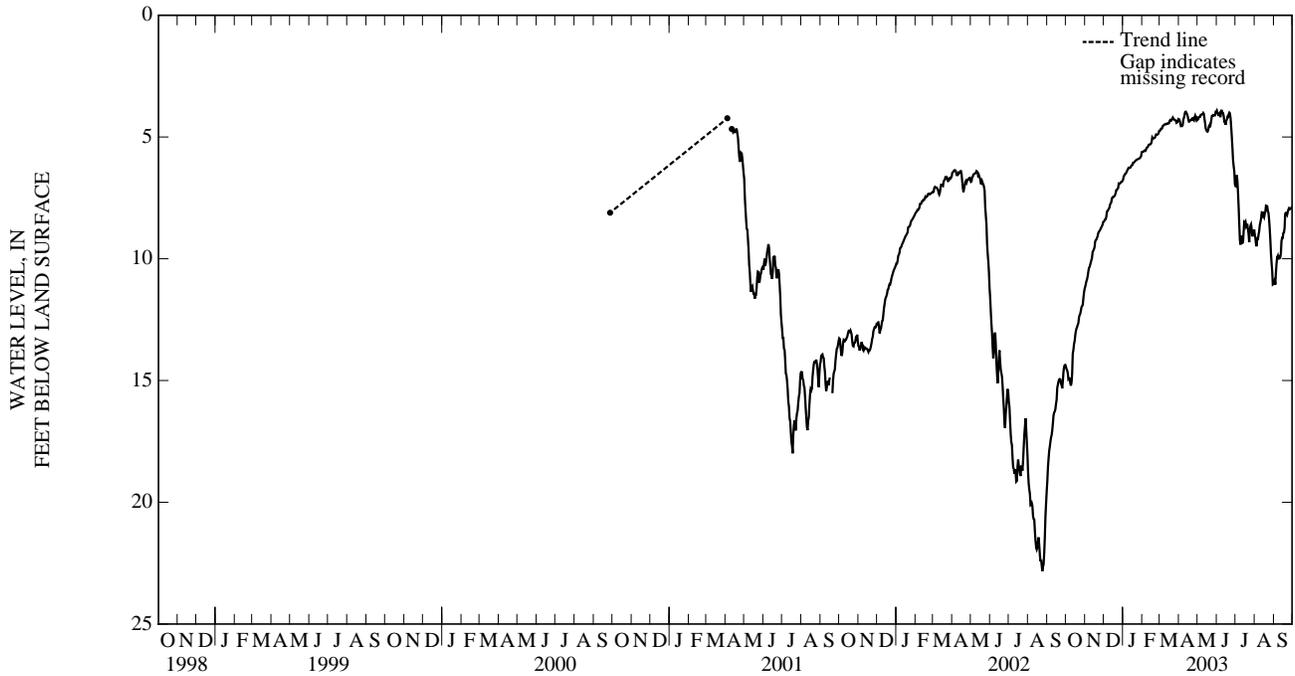
PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.86 ft below land-surface datum, May 31, June 1, 2003; lowest recorded, 22.83 ft below land-surface datum, Aug. 24, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 3.86 ft below land-surface datum, May 31, June 1; lowest instantaneous water level, 15.21 ft below land-surface datum, Oct. 9.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.96	10.71	8.28	6.51	5.56	4.63	4.54	4.17	4.04	7.28	9.12	10.20
10	15.07	10.15	7.90	6.26	5.40	4.48	4.08	4.01	4.00	9.06	8.51	9.90
15	13.38	9.61	7.50	6.16	5.27	4.44	4.15	4.71	4.50	8.50	8.22	9.14
20	12.71	9.14	7.30	6.00	5.05	4.32	4.30	4.52	4.06	8.60	7.83	8.12
25	12.13	8.82	6.91	5.91	4.90	4.30	4.32	4.12	5.00	8.65	8.75	7.93
EOM	11.24	8.49	6.80	5.62	4.75	4.26	4.23	3.98	6.94	8.80	11.04	7.95



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

365212076091201. Local number, 61C 45

LOCATION.--Lat 36°52'12", long 76°09'11", NAD83, Hydrologic Unit 02080108, at Bayside High School in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 168 ft, screened 138 to 158 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

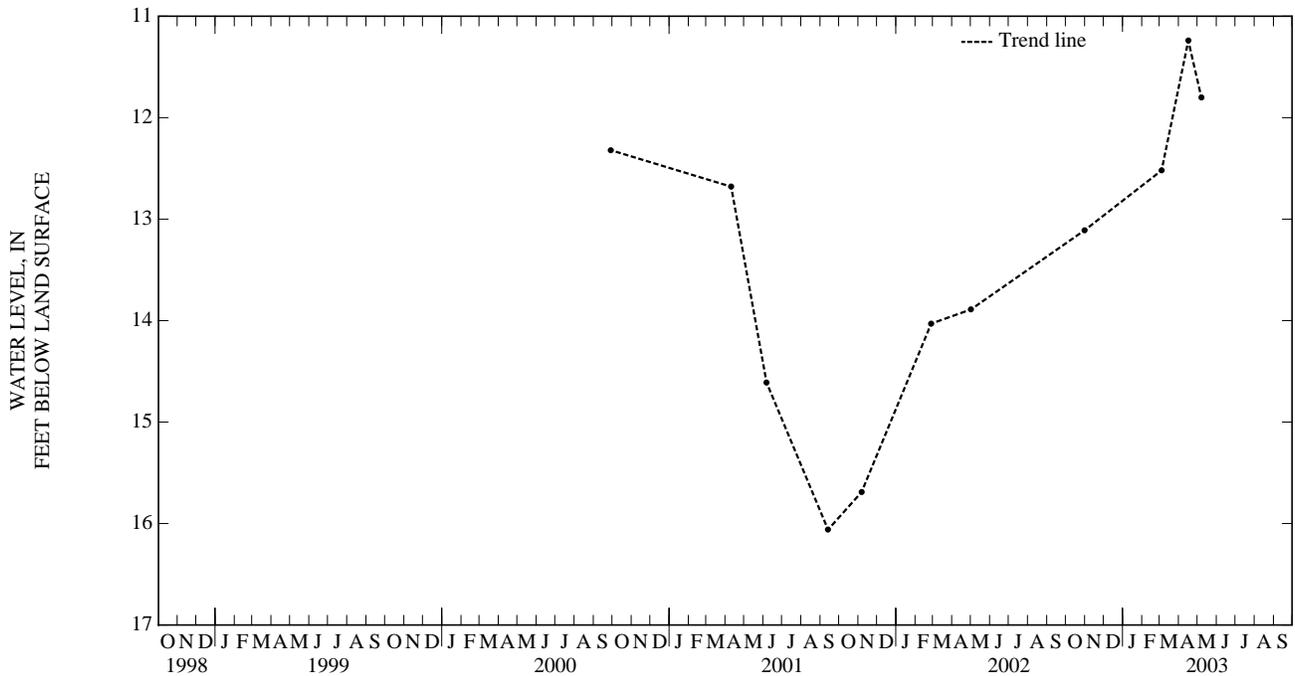
DATUM.--Elevation of land-surface datum is 20.41 ft above NGVD of 1929. Measuring point: Top of casing, 1.80 ft above land-surface datum.

PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.24 ft below land-surface datum, Apr. 16, 2003; lowest measured, 16.06 ft below land-surface datum, Sept. 13, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	13.11	MAR 04	12.52	APR 16	11.24	MAY 07	11.80
WATER YEAR 2003 HIGHEST		11.24	APR 16, 2003 LOWEST		13.11	OCT 31, 2002	



CITY OF VIRGINIA BEACH—Continued

365212076091202. Local number, 61C 46

LOCATION.--Lat 36°52'12", long 76°09'11", NAD83, Hydrologic Unit 02080108, at Bayside High School in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 77 ft, screened 62 to 72 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 13, 2001, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 20.37 ft above NGVD of 1929. Measuring point: Top of casing, 2.36 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

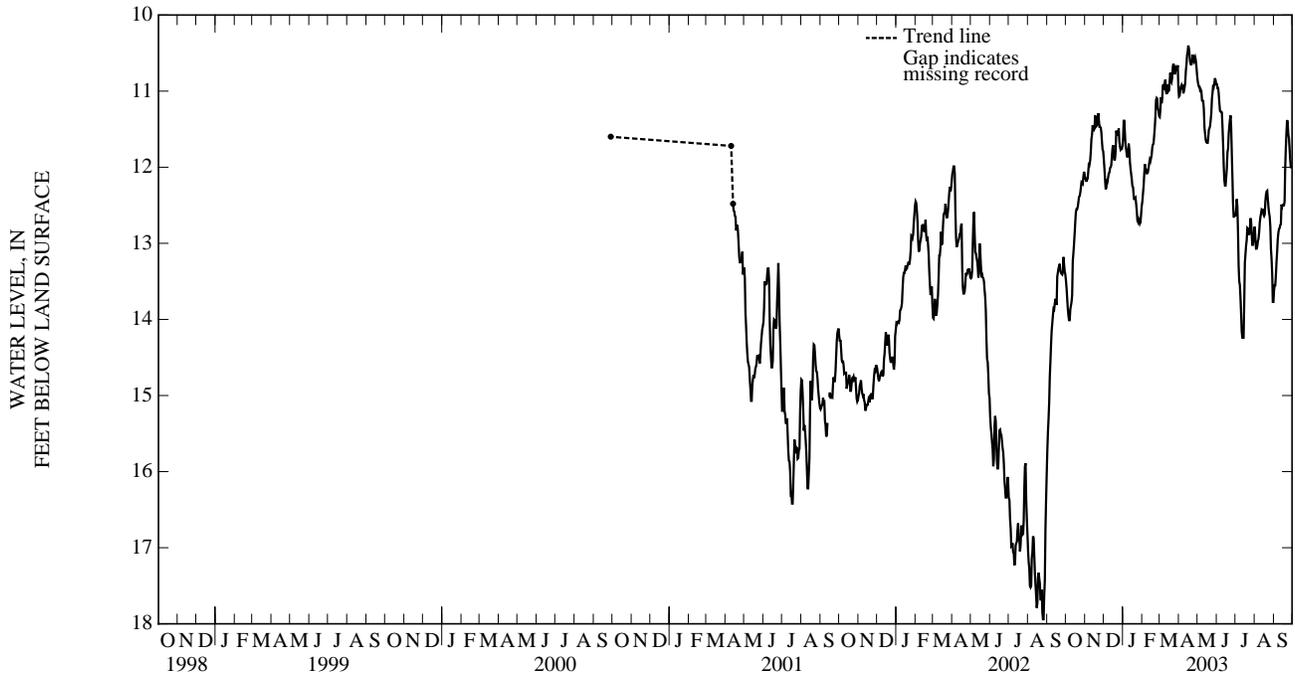
PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 10.35 ft below land-surface datum, Apr. 16, 2003; lowest recorded, 17.94 ft below land-surface datum, Aug. 25, 26, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 10.35 ft below land-surface datum, Apr. 16; lowest instantaneous water level, 14.24 ft below land-surface datum, July 12-14.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.95	12.15	12.27	11.72	11.96	11.10	10.92	10.99	11.16	12.86	13.04	13.24
10	13.77	11.80	12.07	11.69	12.06	10.85	10.95	11.13	11.46	13.93	12.66	12.80
15	12.87	11.51	11.75	12.16	11.88	11.00	10.48	11.67	12.24	13.77	12.62	12.50
20	12.52	11.45	11.78	12.41	11.59	10.88	10.65	11.49	11.56	12.80	12.32	11.74
25	12.27	11.47	11.49	12.72	11.10	10.78	10.61	11.02	11.83	12.67	12.65	11.62
EOM	12.09	11.79	11.72	12.51	11.33	10.96	10.78	10.91	12.63	12.81	13.77	11.99



CITY OF VIRGINIA BEACH—Continued

365425076105001. Local number, 61D 5 SOW 155.

LOCATION.--Lat 36°54'26", long 76°10'49", NAD83, Hydrologic Unit 02080108, 100 ft east of Ferry Road, 0.3 mi northwest of Diamond Springs Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 12 in. to 102 ft, diameter 6 in. from 102 to 150 ft, diameter 4 in. from 150 to 1,380 ft, depth 1,380 ft, screened 1,207 to 1,229 ft, 1,250 to 1,264 ft, 1,286 to 1,306 ft, 1,345 to 1,367 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 9, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 11 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

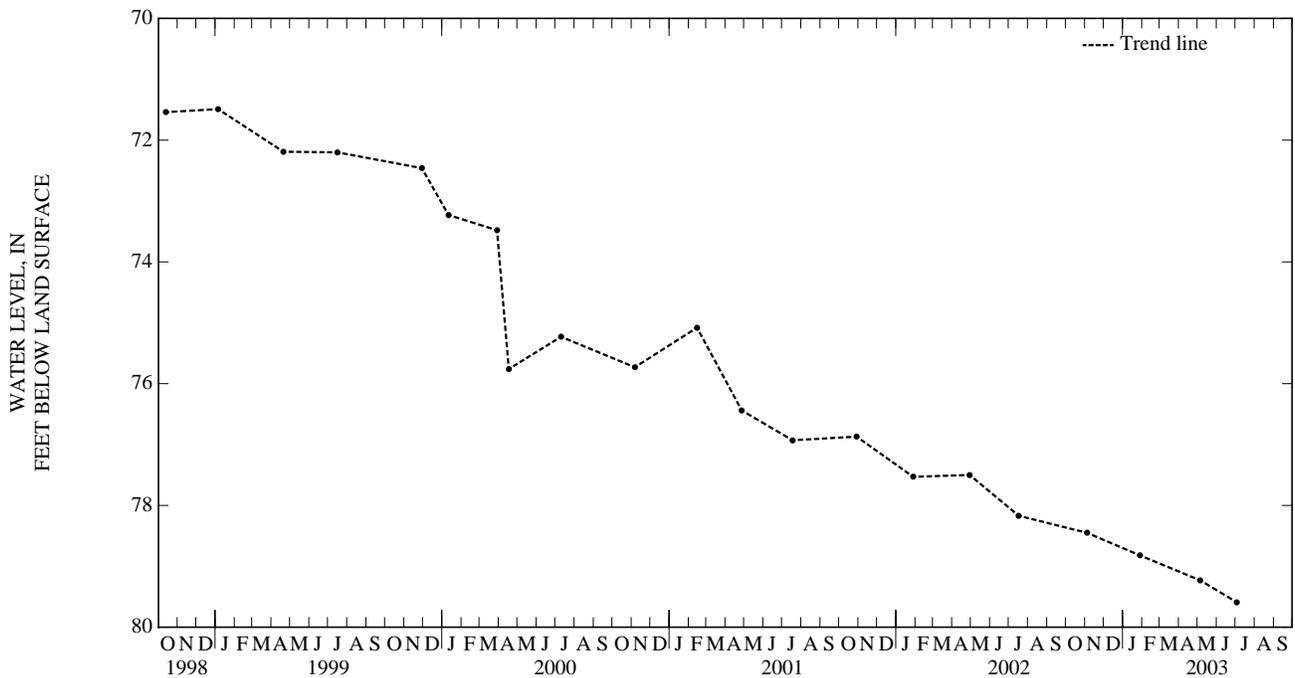
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--December 1980 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 49.75 ft below land-surface datum, Dec. 17, 1980; lowest measured, 79.59 ft below land-surface datum, July 3, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	78.45	JAN 28	78.82	MAY 05	79.23	JUL 03	79.59
WATER YEAR 2003 HIGHEST 78.45 NOV 04, 2002				LOWEST 79.59 JUL 03, 2003			



CITY OF VIRGINIA BEACH—Continued

365327076080501. Local number, 61D 6 SOW 124

LOCATION.--Lat 36°53'28", long 76°08'04", NAD83, Hydrologic Unit 02080108, at Thoroughgood Elementary School in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 40 ft, screened 25 to 30 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

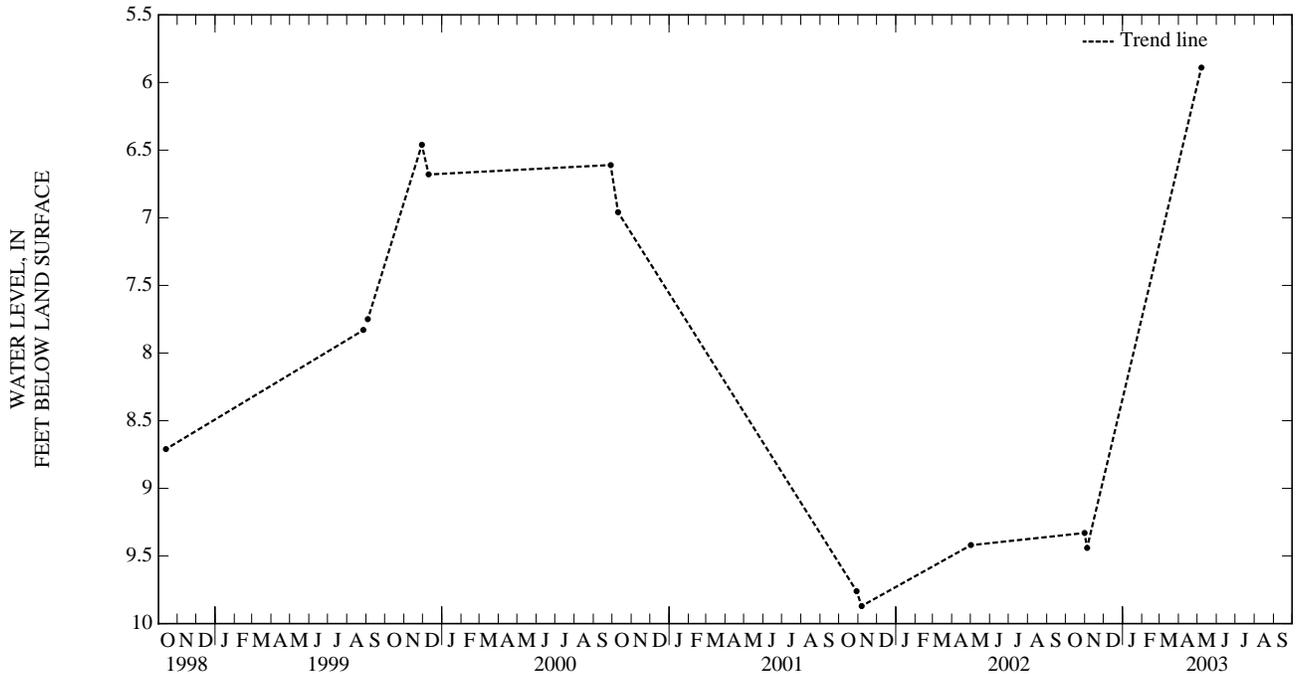
DATUM.--Elevation of land-surface datum is 22.56 ft above NGVD of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.85 ft below land-surface datum, Apr. 7, 1984; lowest measured, 10.72 ft below land-surface datum, Nov. 12, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	9.33	NOV 04	9.44	MAY 07	5.89
WATER YEAR 2003 HIGHEST 5.89 MAY 07, 2003 LOWEST 9.44 NOV 04, 2002					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

365231076094601. Local number, 61D 9

LOCATION.--Lat 36°52'31", long 76°09'45", NAD83, Hydrologic Unit 02080108, on golf course at the golf tunnel, at Cypress Point Country Club in Virginia Beach.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 35 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

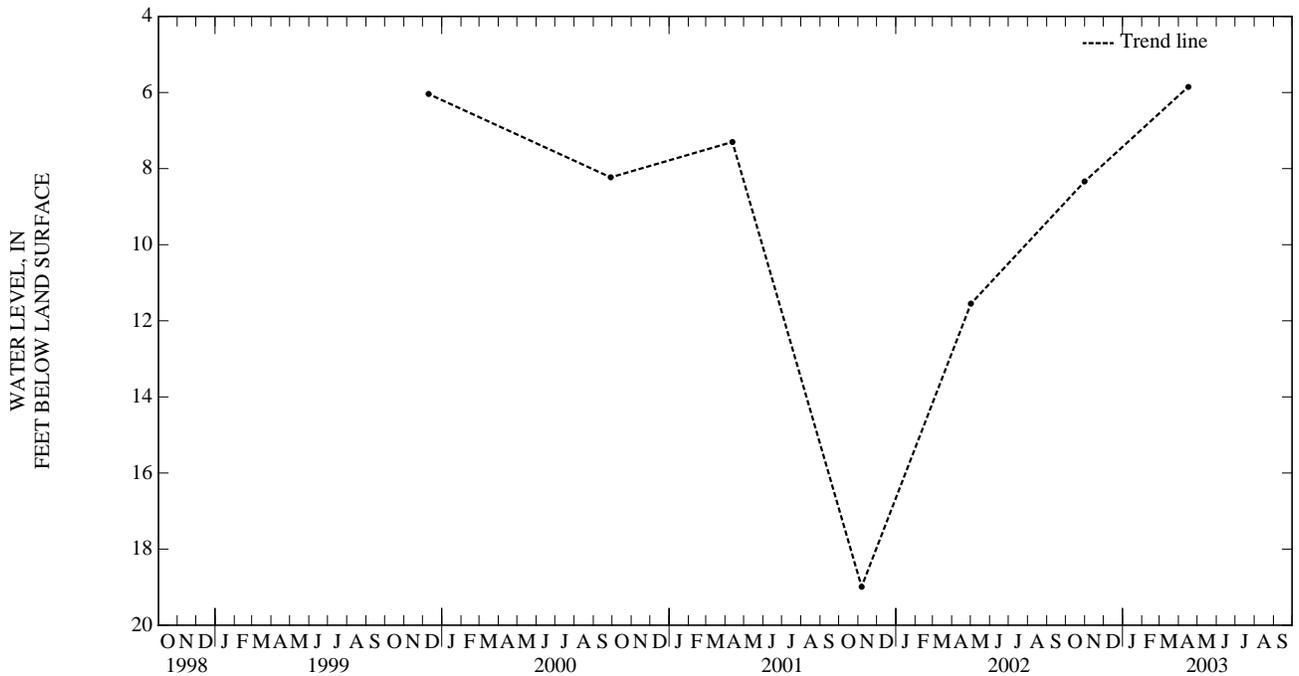
DATUM.--Elevation of land-surface datum is 14.87 ft above NGVD of 1929. Measuring point: Top of casing, 2.74 ft above land-surface datum.

PERIOD OF RECORD.--December 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 5.85 ft below land-surface datum, Apr. 16, 2003; lowest recorded, 18.99 ft below land-surface datum, Nov. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	8.34	APR 16	5.85
WATER YEAR 2003 HIGHEST 5.85		APR 16, 2003 LOWEST 8.34	
		OCT 31, 2002	



CITY OF VIRGINIA BEACH—Continued

363537076061001. Local number, 62A 2 SOW 097A.

LOCATION.--Lat 36°33'56", long 76°06'15", NAD83, Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Crag Causeway in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 76 ft, screened 66 to 76 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 9, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 7.57 ft above NGVD of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum prior to Aug. 3, 1988; at land-surface datum Aug. 3, 1988, to Mar. 13, 1989; 0.65 ft Mar. 13, 1989, to Apr. 1, 1991; 1.65 ft thereafter.

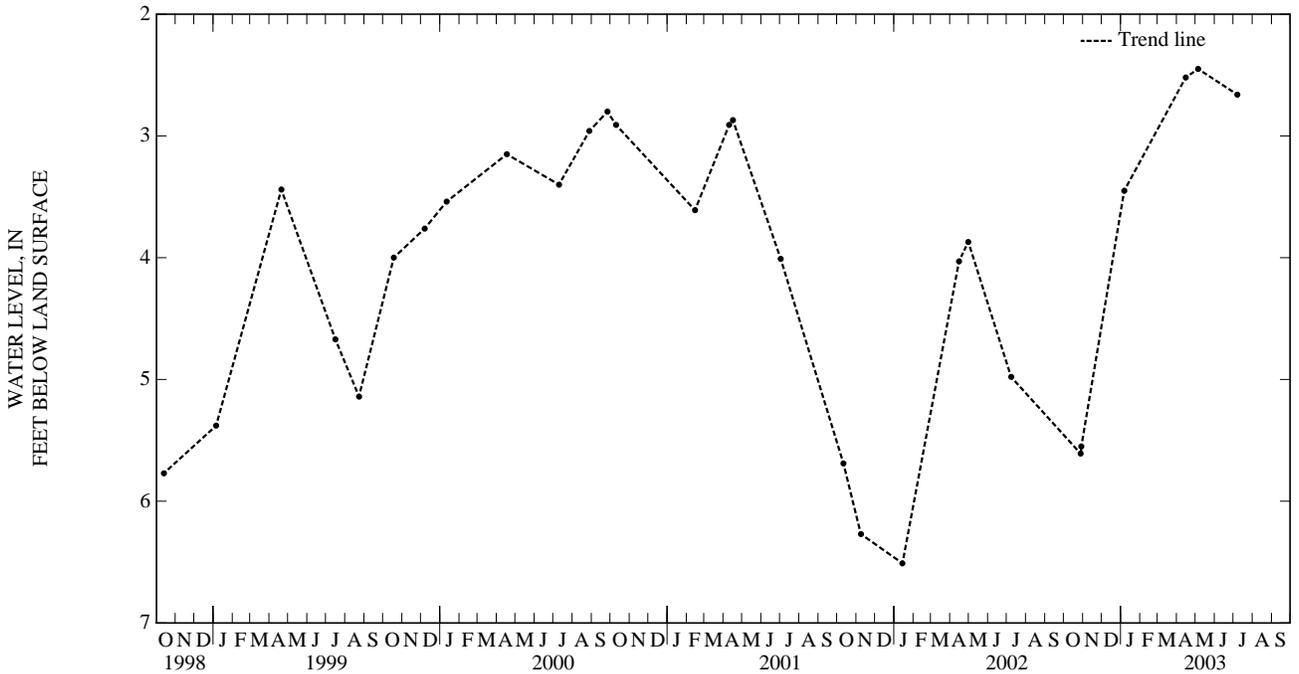
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.18 ft below land-surface datum, Apr. 30, 1980; lowest measured, 6.68 ft below land-surface datum, Nov. 28, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	5.61	OCT 29	5.55	JAN 06	3.45	APR 15	2.52	MAY 05	2.45	JUL 07	2.66
WATER YEAR 2003 HIGHEST		2.45	MAY 05, 2003 LOWEST		5.61	OCT 28, 2002					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

363537076061002. Local number, 62A 3 SOW 097B

LOCATION.--Lat 36°33'56", long 76°06'15", NAD83, Hydrologic Unit 03010205, 0.2 mi south of Baum Road, 0.25 mi west of Craggs Causeway in Virginia Beach Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

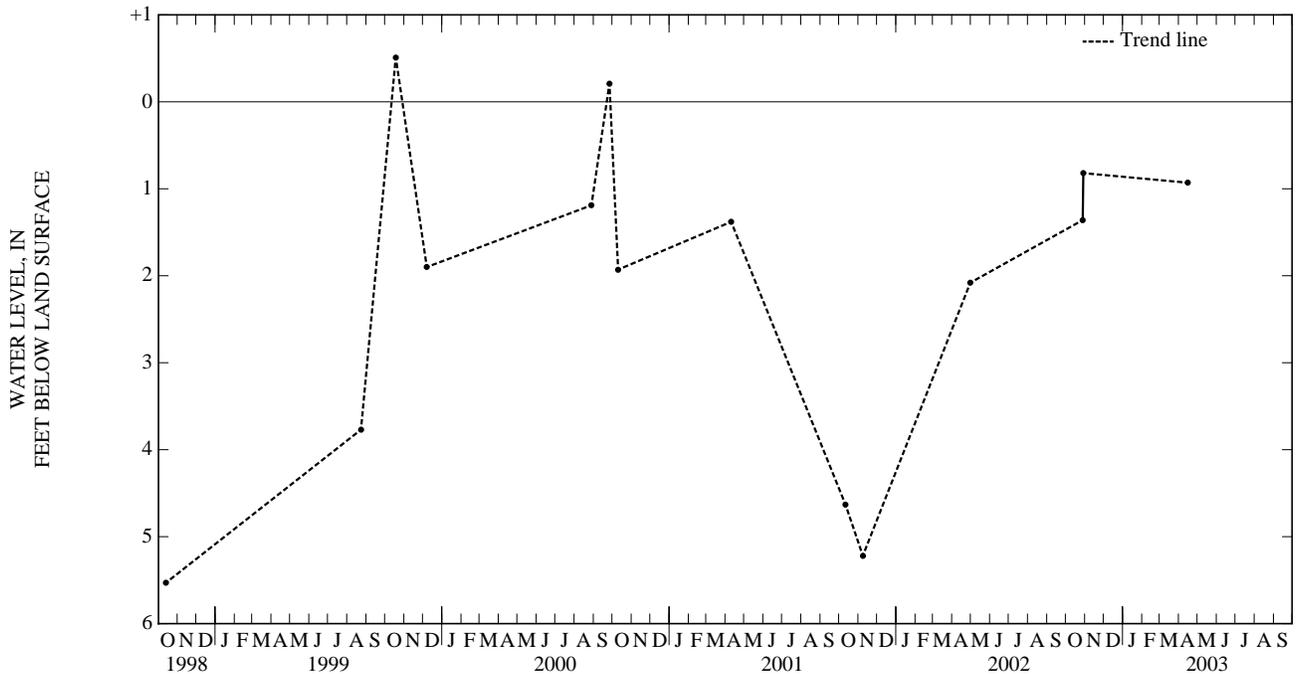
DATUM.--Elevation of land-surface datum is 7.76 ft above NGVD of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--July 1979 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.51 ft above land-surface datum, Oct. 18, 1999; lowest measured, 6.50 ft below land-surface datum, Oct. 17, 1983.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	1.36	OCT 29	.82	APR 15	.93
WATER YEAR 2003 HIGHEST		.82	OCT 29, 2002		LOWEST
					1.36
				OCT 28, 2002	



CITY OF VIRGINIA BEACH—Continued

363325076005201. Local number, 62A 5

LOCATION.--Lat 36°33'27", long 76°00'26", NAD83, Hydrologic Unit 03010205, at Seneca Camp Grounds in Virginia Beach, 5 mi south of intersection of Pungo Ferry Road and Princess Anne Road in Virginia Beach. Owner: Seneca Corp.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 88 ft, screened 58 to 83 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

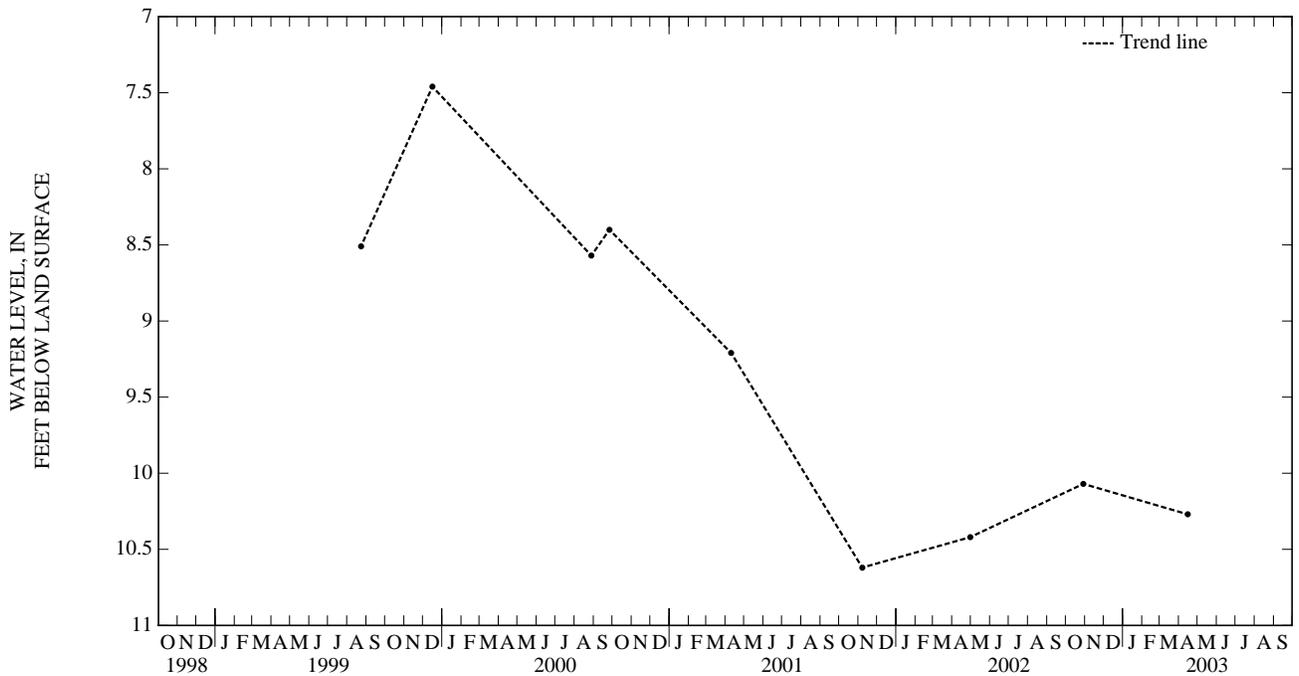
DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.92 ft above land-surface datum.

PERIOD OF RECORD.--1972, August 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land-surface datum, July 19, 1972; lowest recorded, 10.62 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	10.07	APR 15	10.27
WATER YEAR 2003 HIGHEST 10.07 OCT 29, 2002		LOWEST 10.27 APR 15, 2003	



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

363714076063501. Local number, 62A 22

LOCATION.--Lat 36°37'15", long 76°06'34", NAD83, Hydrologic Unit 03010205, at northeast corner of Blackwater Neighborhood Park, on Head of River Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 178 ft, screened 143 to 168 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. April 2001 to May 2002, electronic pressure transducer data logger 60-minute record interval. Prior to April 2001, occasional measurement with chalked tape by USGS personnel.

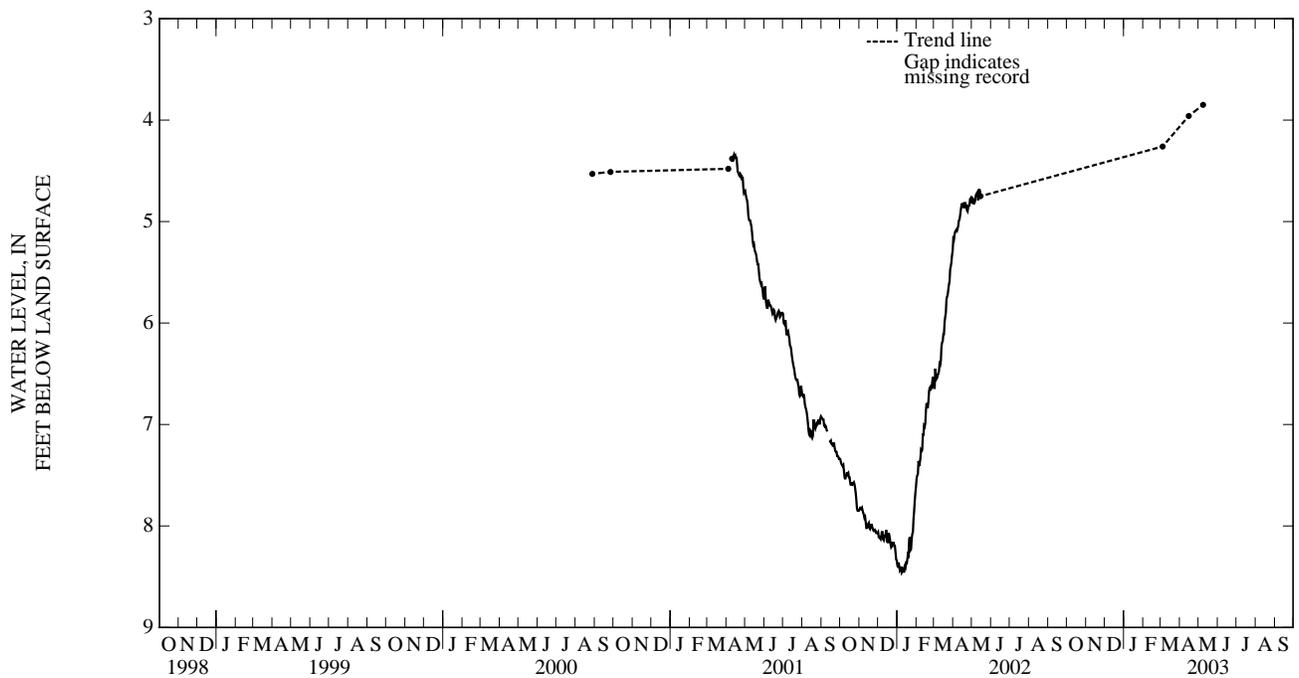
DATUM.--Elevation of land-surface datum is 10.46 ft above NGVD of 1929. Measuring point: Top of casing, 2.17 ft above land-surface datum.

PERIOD OF RECORD.--August 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.85 ft below land-surface datum, May 8, 2003; lowest recorded, 8.46 ft below land-surface datum, Jan. 8, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 04	4.26	APR 15	3.96	MAY 08	3.85
WATER YEAR 2003 HIGHEST 3.85 MAY 08, 2003 LOWEST 4.26 MAR 04, 2003					



CITY OF VIRGINIA BEACH—Continued

363714076063502. Local number, 62A 23

LOCATION.--Lat 36°37'15", long 76°06'34", NAD83, Hydrologic Unit 03010205, at northeast corner of Blackwater Neighborhood Park, on Head of River Road in Virginia Beach. Owner: City of Virginia Beach.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 100 ft, screened 88 to 98 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger 60-minute record interval. Prior to April 2001, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 10.39 ft above NGVD of 1929. Measuring point: Top of casing, 2.17 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction.

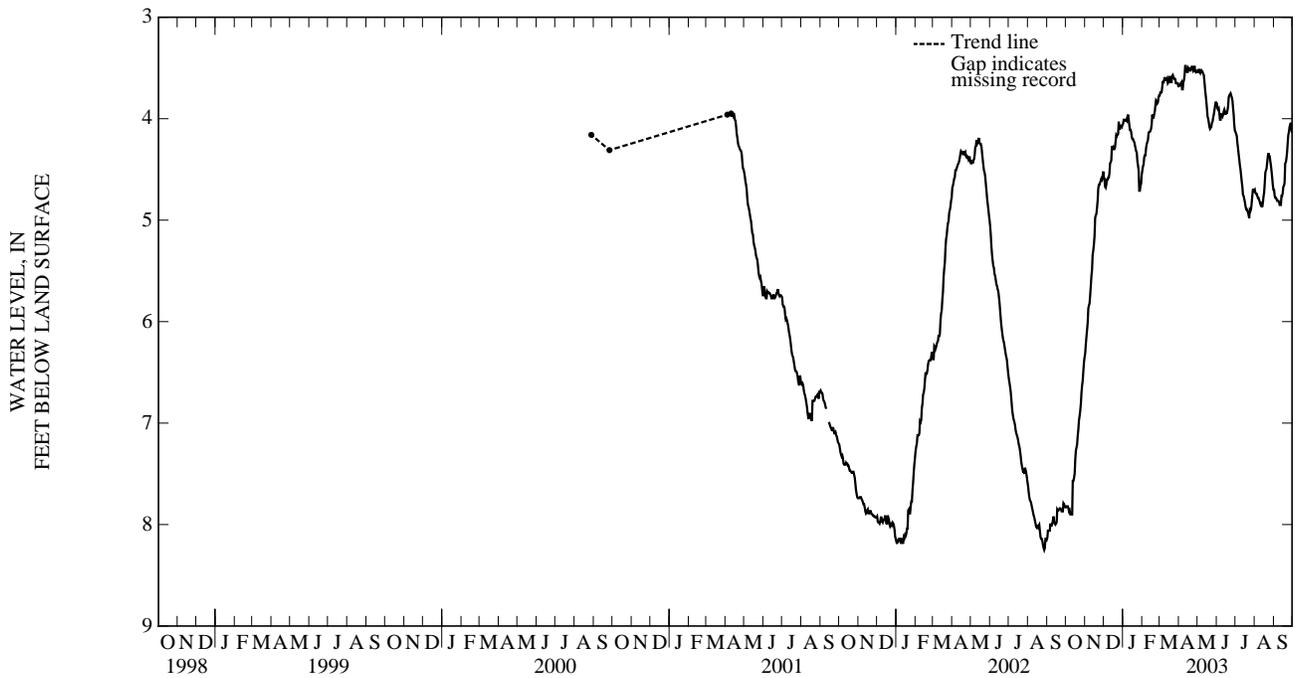
PERIOD OF RECORD.--August 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 3.42 ft below land-surface datum, Apr. 26, 2003; lowest recorded, 8.25 ft below land-surface datum, Aug. 27, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 3.42 ft below land-surface datum, Apr. 26; lowest instantaneous water level, 7.90 ft below land-surface datum, Dec. 8-11.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.84	6.01	4.65	4.02	4.36	3.69	3.64	3.55	3.95	4.29	4.76	4.79
10	7.90	5.65	4.54	4.01	4.21	3.62	3.57	3.56	3.98	4.56	4.84	4.85
15	7.50	5.24	4.29	4.18	4.10	3.64	3.54	3.83	3.96	4.79	4.77	4.73
20	7.12	4.88	4.22	4.26	3.96	3.64	3.52	4.08	3.79	4.91	4.49	4.43
25	6.81	4.63	4.03	4.46	3.85	3.61	3.52	4.03	3.79	4.91	4.37	4.13
EOM	6.35	4.52	4.06	4.55	3.77	3.68	3.54	3.84	4.12	4.71	4.70	4.14



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364126076003501. Local number, 62B 1 SOW 098A.

LOCATION.--Lat 36°41'28", long 76°00'34", NAD83, Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Beach Mosquito Control shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 24 ft, screened 20 to 24 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 9, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5.63 ft above NGVD of 1929. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.05 ft Mar. 2, 1988 to Sept. 8, 2003; 1.61 ft thereafter.

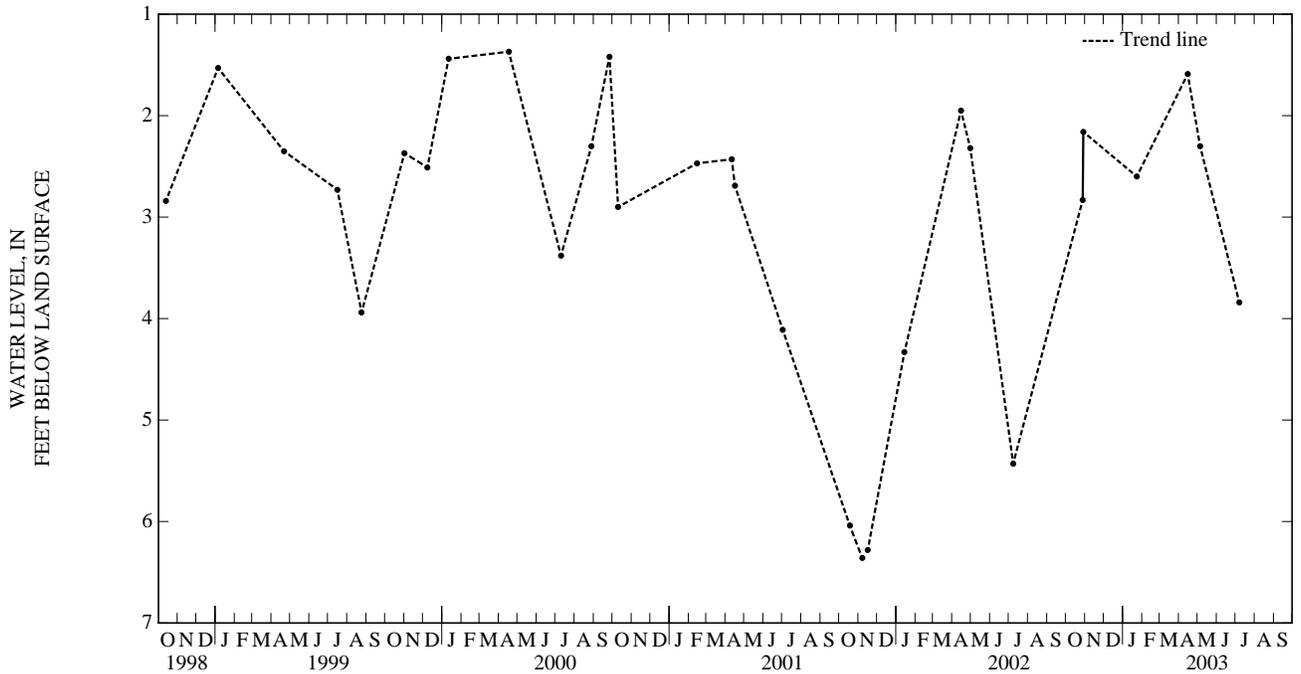
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.02 ft below land-surface datum, Apr. 1, 1991; lowest measured, 11.95 ft below land-surface datum, Sept. 16, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	2.83	OCT 29	2.16	JAN 23	2.60	APR 15	1.59	MAY 05	2.30	JUL 07	3.84
WATER YEAR 2003 HIGHEST		1.59 APR 15, 2003		LOWEST		3.84 JUL 07, 2003					



CITY OF VIRGINIA BEACH—Continued

364126076003502. Local number, 62B 2 SOW 098B.

LOCATION.--Lat 36°41'27", long 76°00'34", NAD83, Hydrologic Unit 03010205, on north side of Pleasant Ridge Road at the Virginia Beach Mosquito Control shop, 0.9 mi east of Pleasant Ridge in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 98 ft, screened 88 to 98 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 9, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 9, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 5.54 ft above NGVD of 1929. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Mar. 2, 1988; 1.2 ft above land-surface datum Mar. 2, 1988, to Dec. 9, 1994; 0.8 ft Dec. 9, 1994 to Nov. 16, 2001; 1.15 ft thereafter.

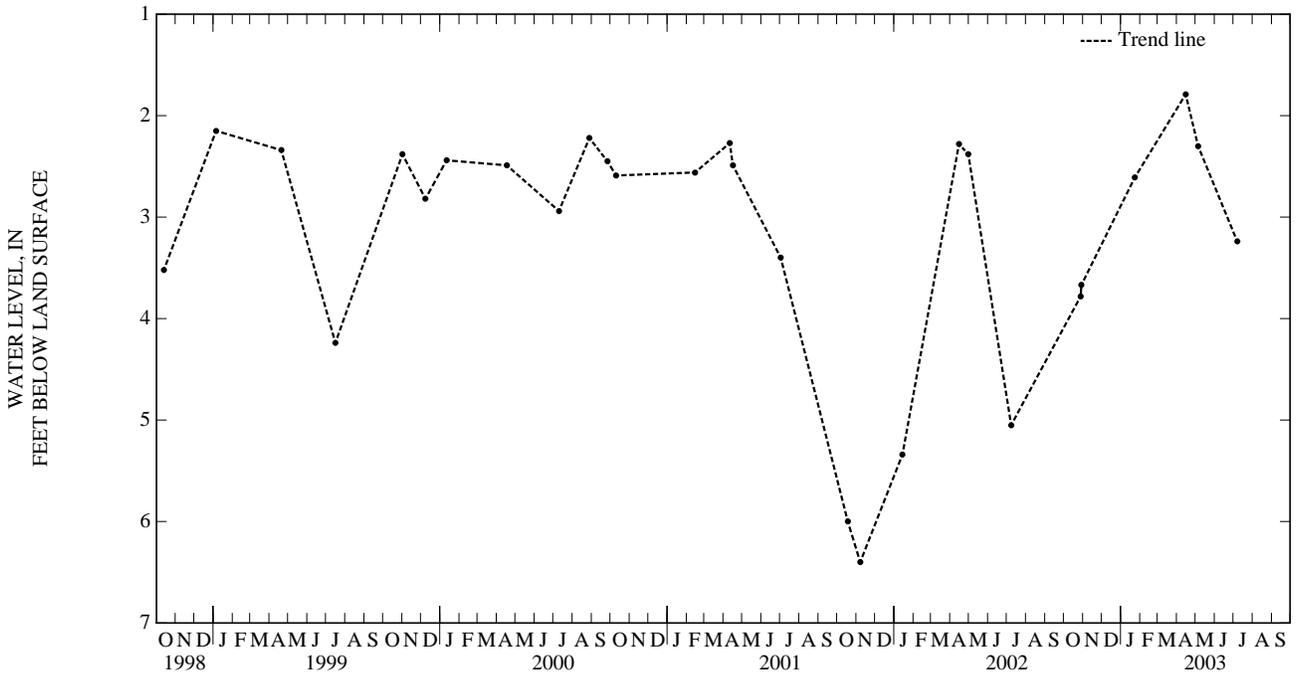
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--June 1979 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.70 ft below land-surface datum, Mar. 13, 1989, Jan. 10, 1990; lowest measured, 11.76 ft below land-surface datum, Sept. 16, 1980.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	3.78	OCT 29	3.67	JAN 23	2.61	APR 15	1.79	MAY 05	2.30	JUL 07	3.24
WATER YEAR 2003 HIGHEST		1.79	APR 15, 2003 LOWEST		3.78	OCT 28, 2002					



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

364401076003801. Local number, 62B 8

LOCATION.--Lat 36°44'02", long 76°00'37", NAD83, Hydrologic Unit 03010205, on Flannagans Lane 0.4 mi from the intersection of Flannagans Lane and Princess Anne Road. Owner: William Oliver, Jr.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 132 ft, screened 117 to 127 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

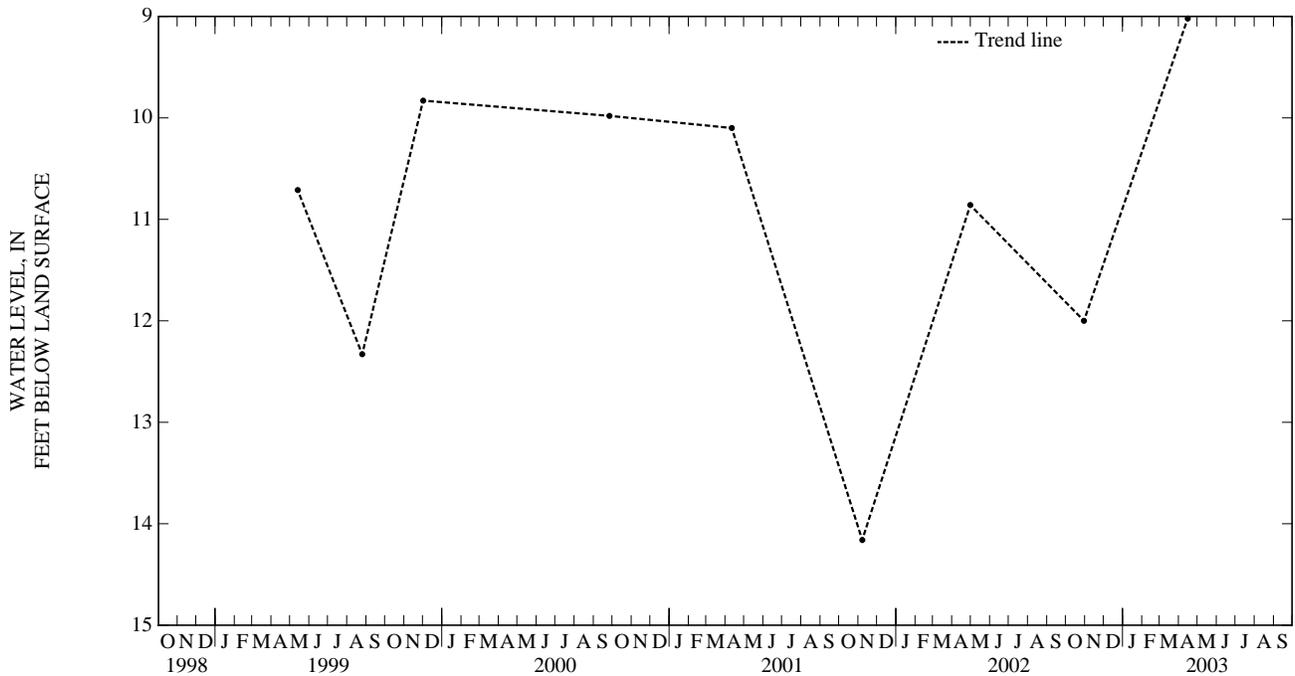
DATUM.--Elevation of land-surface datum is 8.8 ft NGVD of above 1929. Measuring point: Top of casing, 2.00 ft above land-surface datum.

PERIOD OF RECORD.--May 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.02 ft below land-surface datum, Apr. 15, 2003; lowest recorded, 14.16 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	12.00	APR 15	9.02
WATER YEAR 2003 HIGHEST 9.02 APR 15, 2003		LOWEST 12.00 OCT 30, 2002	



CITY OF VIRGINIA BEACH—Continued

364352076005401. Local number, 62B 9

LOCATION.--Lat 36°43'53", long 76°00'53", NAD83, Hydrologic Unit 03010205, Owner: William Oliver, Jr.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 67 ft, screened 52 to 62 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

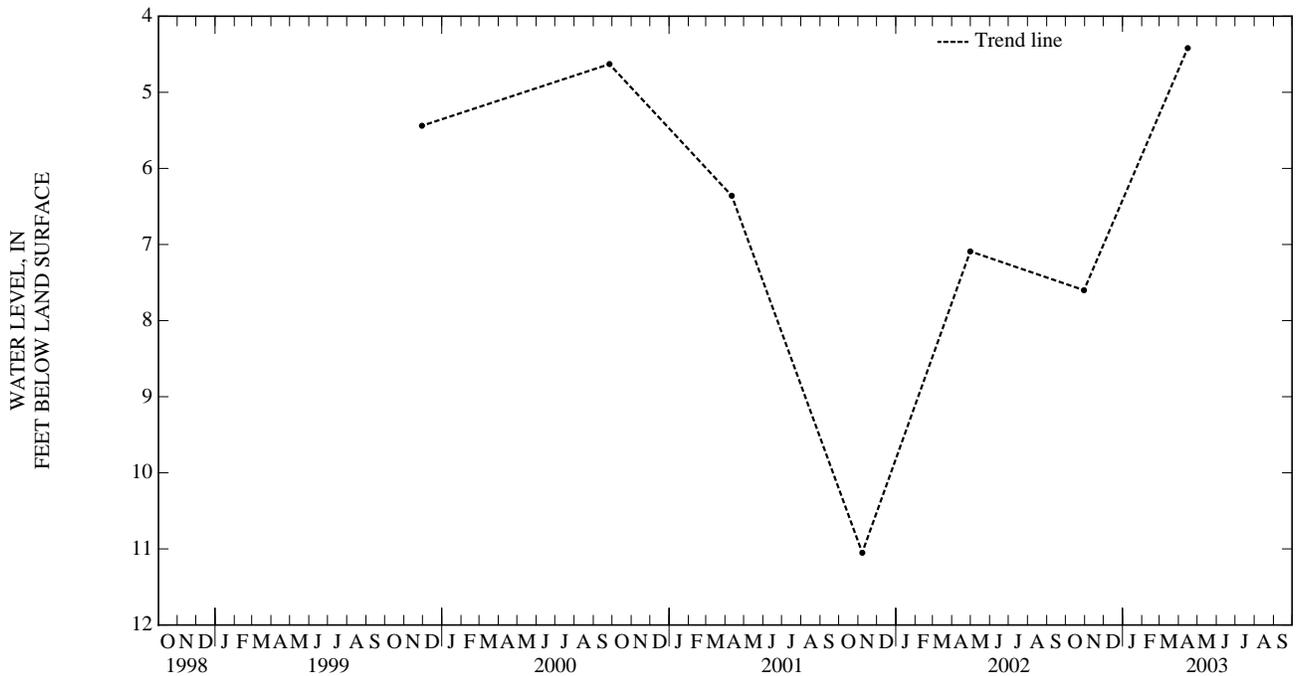
DATUM.--Elevation of land-surface datum is 10.7 ft above NGVD of 1929. Measuring point: Top of casing, 1.94 ft above land-surface datum.

PERIOD OF RECORD.--1981, November 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.42 ft below land-surface datum, Apr. 15, 2003; lowest measured, 11.05 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	7.60	APR 15	4.42
WATER YEAR 2003 HIGHEST 4.42 APR 15, 2003 LOWEST 7.60 OCT 30, 2002			



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

363812076021201. Local number, 62B 15

LOCATION.--Lat 36°38'13", long 76°02'10", NAD83, Hydrologic Unit 03010205, at Creeds Elementary School in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 77 ft, screened 65 to 75 ft.

INSTRUMENTATION.--Electronic pressure transducer data logger with 60-minute record interval. Prior to April 11, 2001, occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 14.00 ft above NGVD of 1929. Measuring point: Top of casing, 2.13 ft above land-surface datum.

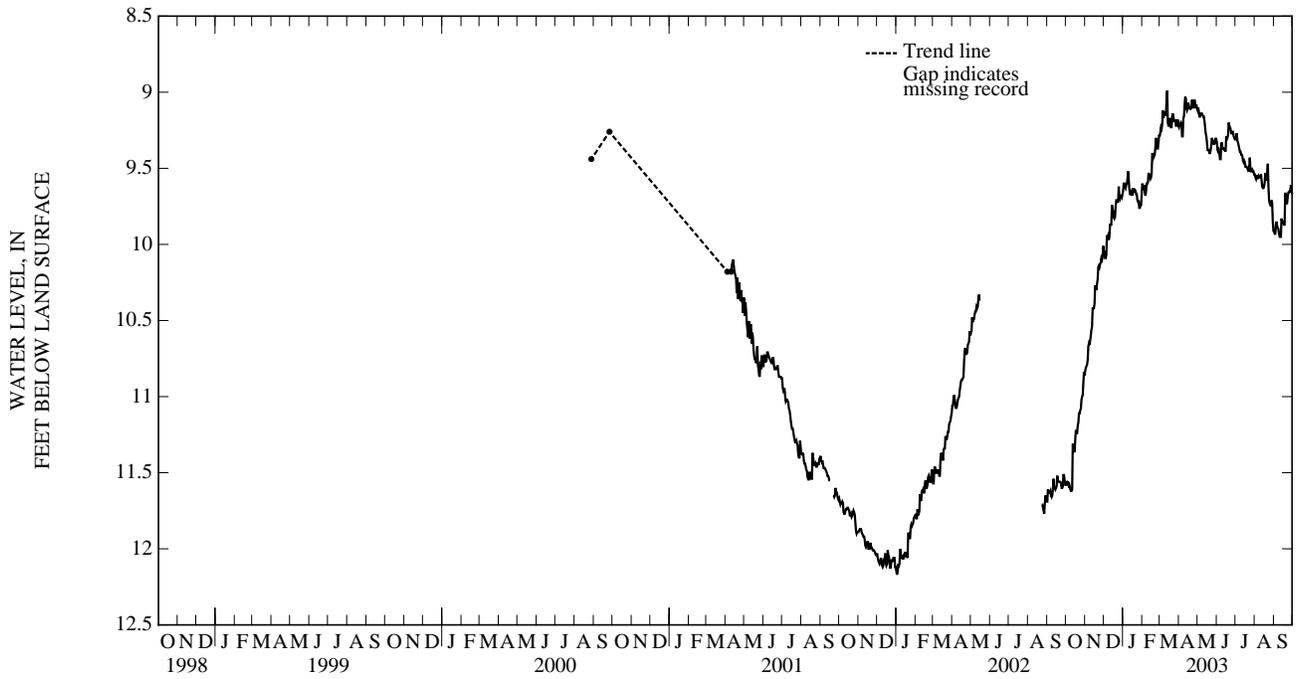
PERIOD OF RECORD.--August 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.93 ft below land-surface datum, Mar. 13, 2003; lowest recorded, 12.17 ft below land-surface datum, Jan. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 8.93 ft below land-surface datum, Mar. 13; lowest instantaneous water level, 11.62 ft below land-surface datum, Oct. 9, 10.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.56	10.76	10.07	9.63	9.66	9.21	9.21	9.16	9.40	9.33	9.55	9.85
10	11.62	10.60	9.95	9.57	9.59	9.15	9.09	9.16	9.37	9.41	9.56	9.95
15	11.36	10.42	9.77	9.67	9.56	9.22	9.11	9.29	9.39	9.45	9.63	9.85
20	11.19	10.26	9.75	9.64	9.42	9.23	9.11	9.40	9.20	9.50	9.58	9.70
25	11.08	10.13	9.62	9.72	9.37	9.19	9.10	9.32	9.27	9.50	9.73	9.66
EOM	10.86	10.01	9.67	9.67	9.28	9.22	9.11	9.31	9.31	9.54	9.91	9.67



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

364126076013401. Local number, 62B 18

LOCATION.--Lat 36°41'26", long 76°01'32", NAD83, Hydrologic Unit 03010205, at intersection of West Neck Road and Princess Anne Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

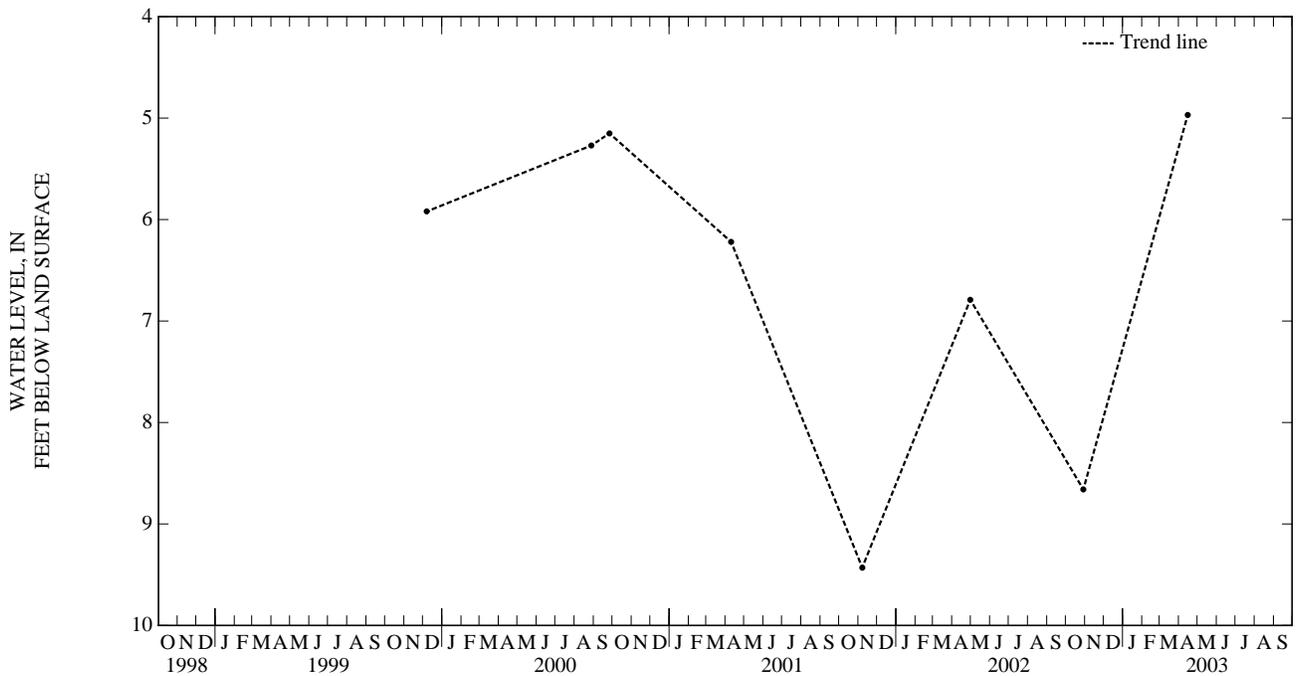
DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.24 ft above land-surface datum.

PERIOD OF RECORD.--December 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.97 ft below land-surface datum, Apr. 15, 2003; lowest measured, 9.43 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	8.66	APR 15	4.97
WATER YEAR 2003 HIGHEST	4.97	APR 15, 2003	LOWEST
		8.66	OCT 29, 2002



CITY OF VIRGINIA BEACH—Continued

364353076005401. Local number, 62B 21

LOCATION.--Lat 36°43'54", long 76°00'53", NAD83, Hydrologic Unit 03010205, 0.2 mi east on Flannagans Lane from the intersection of Flannagans Lane and Princess Anne Road Owner: William Oliver, Jr.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 65 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

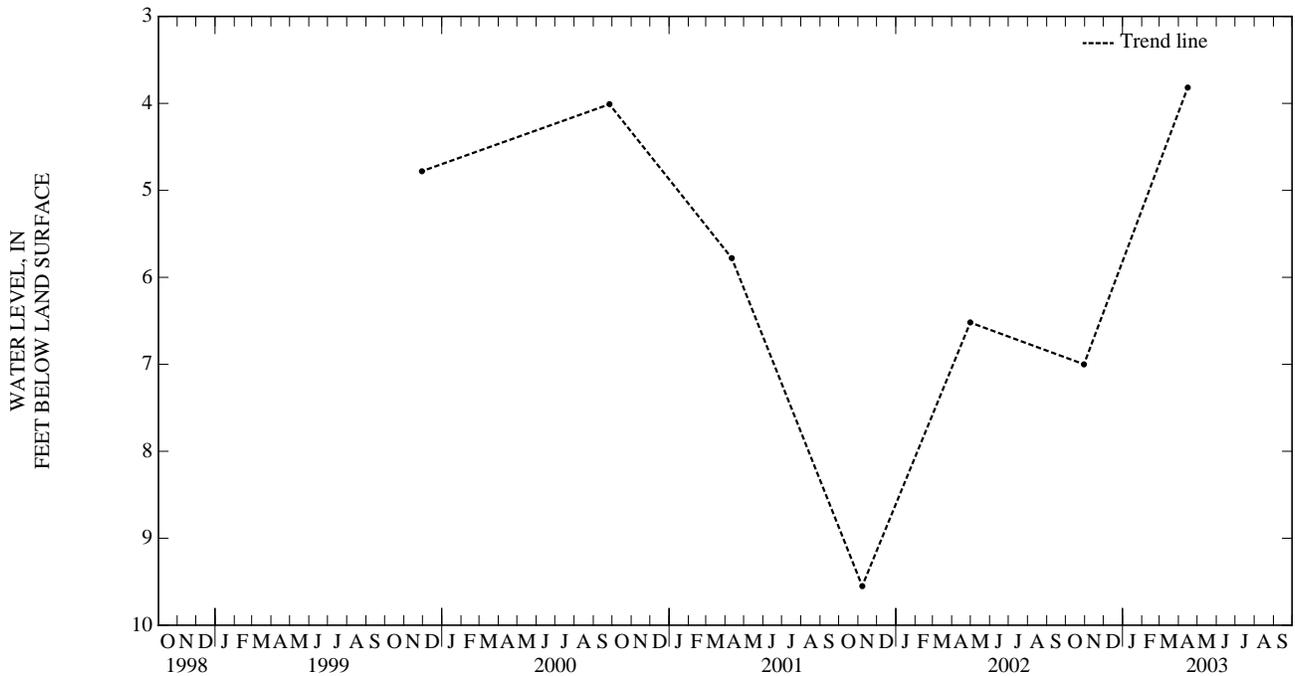
DATUM.--Elevation of land-surface datum is 10.2 ft above NGVD of 1929. Measuring point: Top of casing, 2.36 ft above land-surface datum.

PERIOD OF RECORD.--November 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.82 ft below land-surface datum, Apr. 15, 2003; lowest measured, 9.55 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	7.00	APR 15	3.82
WATER YEAR 2003 HIGHEST 3.82 APR 15, 2003		LOWEST 7.00 OCT 30, 2002	



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

364325076011501. Local number, 62B 22

LOCATION.--Lat 36°43'25", long 76°01'14", NAD83, Hydrologic Unit 03010205, 40 ft north of Indian River Road, 0.2 mi west of the intersection of Indian River Road and Princess Anne Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

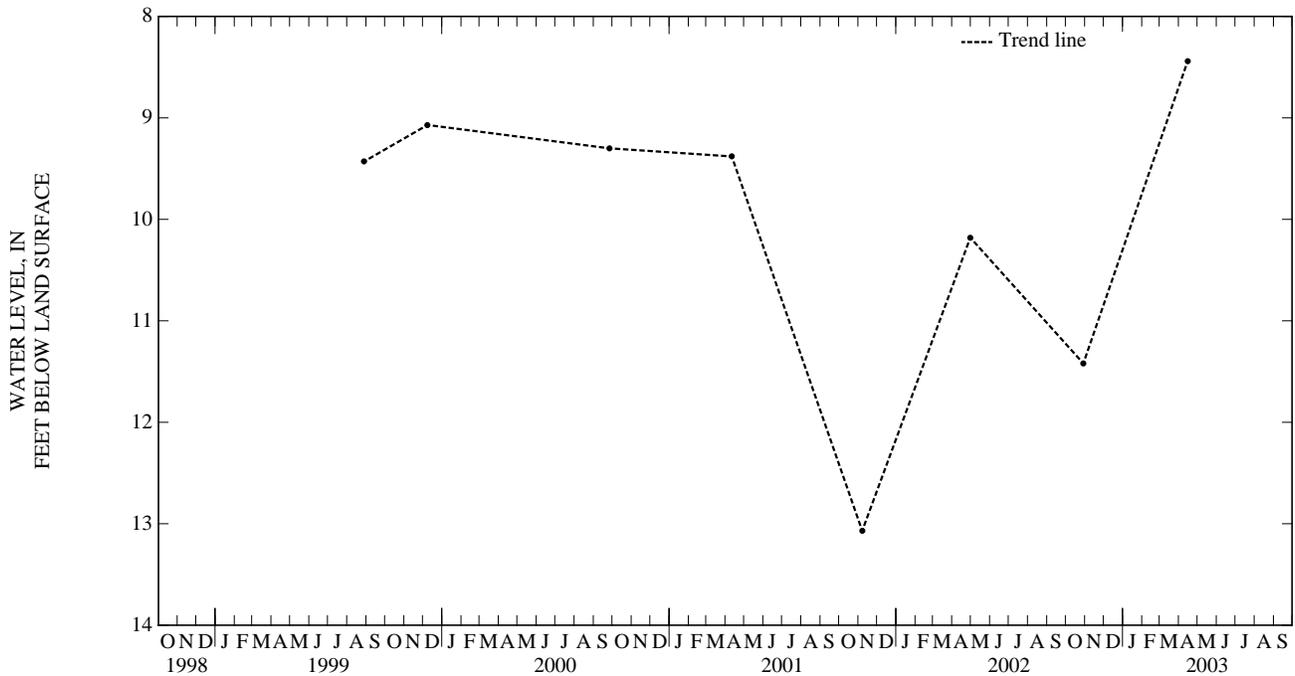
DATUM.--Elevation of land-surface datum is 10.0 ft above NGVD of 1929. Measuring point: Top of casing, 2.44 ft above land-surface datum.

PERIOD OF RECORD.--1981, August 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.40 ft below land-surface datum, Feb. 4, 1981; lowest measured, 13.07 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	11.42	APR 15	8.44
WATER YEAR 2003 HIGHEST 8.44		APR 15, 2003 LOWEST 11.42	
		OCT 29, 2002	



CITY OF VIRGINIA BEACH—Continued

364410076002801. Local number, 62B 23

LOCATION.--Lat 36°44'10", long 76°00'27", NAD83, Hydrologic Unit 03010205, 0.7 mi east on Flannagans Lane from the intersection of Flannagans Lane and Princess Anne Road. Owner: William Oliver, Jr.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 115 ft, screened 100 to 110 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

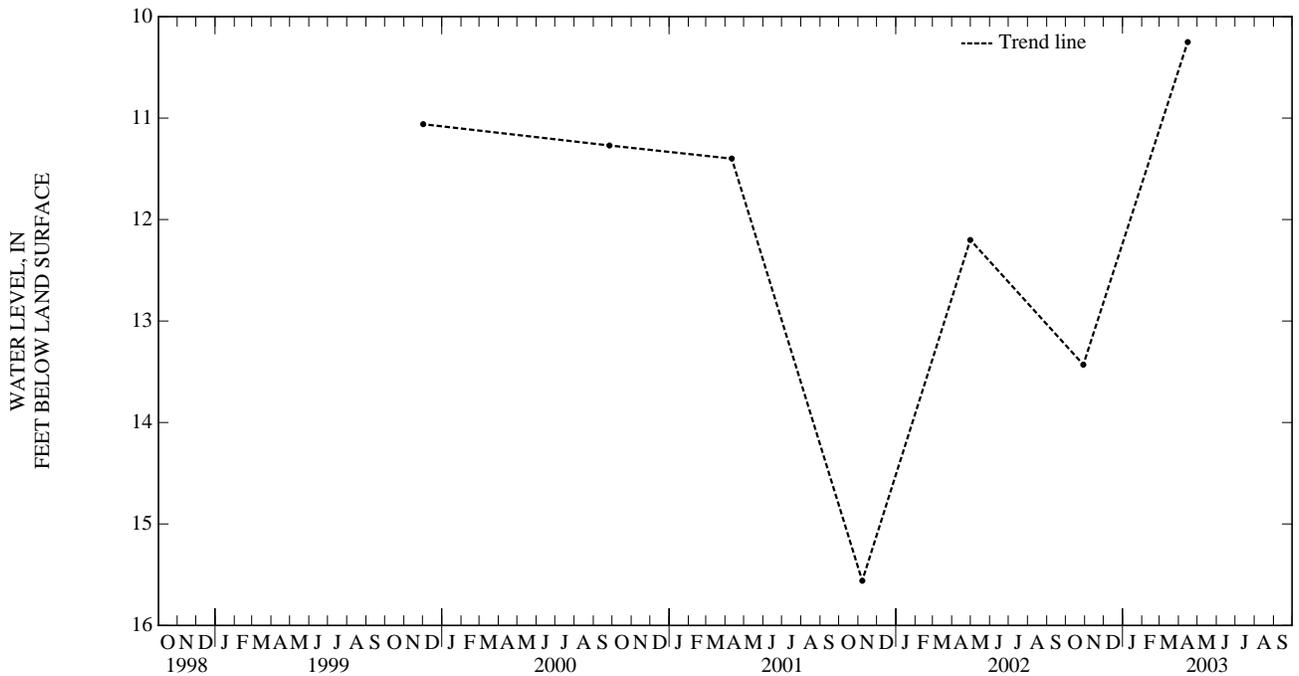
DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.58 ft above land-surface datum.

PERIOD OF RECORD.--1981, December 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.55 ft below land-surface datum, Feb. 25, 1981; lowest measured, 15.56 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	13.43	APR 15	10.25
WATER YEAR 2003 HIGHEST 10.25 APR 15, 2003		LOWEST 13.43 OCT 29, 2002	



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

364352076005402. Local number, 62B 24

LOCATION.--Lat 36°43'53", long 76°00'53", NAD83, Hydrologic Unit 03010205, 0.2 mi east on Flannagans Lane from the intersection of Flannagans Lane and Princess Anne Road Owner: William Oliver, Jr.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 30 ft, screened 20 to 25 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

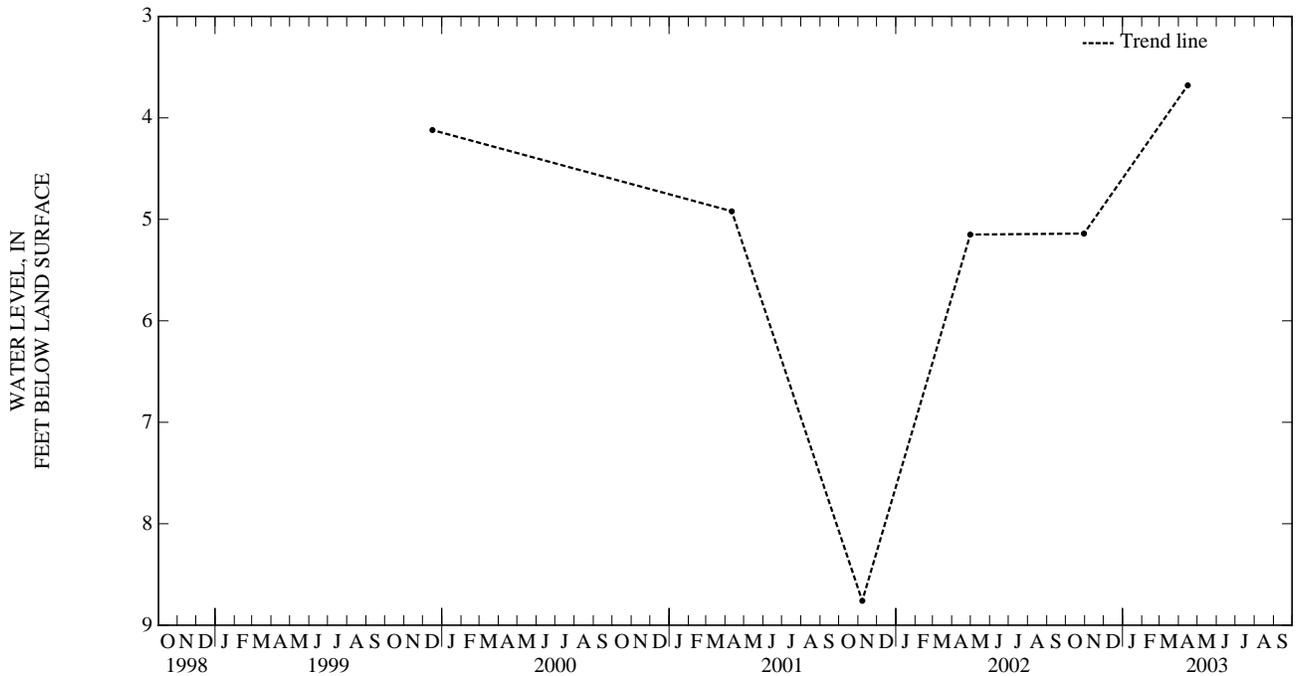
DATUM.--Elevation of land-surface datum is 10.5 ft above NGVD of 1929. Measuring point: Top of casing, 0.27 ft above land-surface datum.

PERIOD OF RECORD.--1981, December 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.68 ft below land-surface datum, Apr. 15, 2003; lowest measured, 8.76 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	
OCT 30	5.14	APR 15	3.68	
WATER YEAR 2003 HIGHEST		3.68 APR 15, 2003	LOWEST 5.14 OCT 30, 2002	



CITY OF VIRGINIA BEACH—Continued

364713076030701. Local number, 62C 2 SOW 092A.

LOCATION.--Lat 36°47'15", long 76°03'06", NAD83, Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 102 ft, screened 97 to 102 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 10, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.08 ft above land-surface datum prior to Mar. 2, 1988; 0.7 ft thereafter.

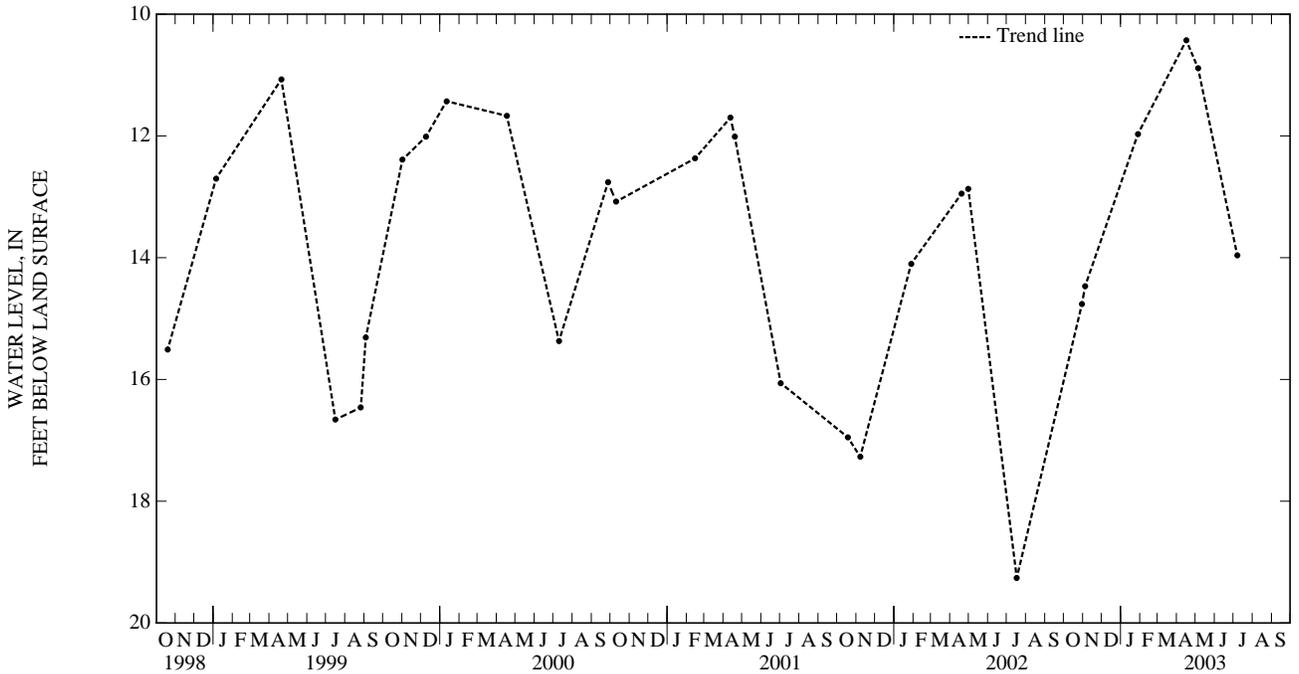
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--December 1977 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.00 ft below land-surface datum, Dec. 1, 1977; lowest measured, 19.26 ft below land-surface datum, July 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	14.76	NOV 04	14.47	JAN 28	11.97	APR 16	10.43	MAY 05	10.89	JUL 07	13.96
WATER YEAR 2003 HIGHEST		10.43	APR 16, 2003 LOWEST		14.76	OCT 30, 2002					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364715076030801. Local number, 62C 3 SOW 092B.

LOCATION.--Lat 36°47'15", long 76°03'06", NAD83, Hydrologic Unit 03010205, at entrance to Oceana Naval Air Station on London Bridge Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4 in., depth 58 ft, screened 53 to 58 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 10, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.05 ft above land-surface datum prior to Mar. 2, 1988; 0.9 ft thereafter.

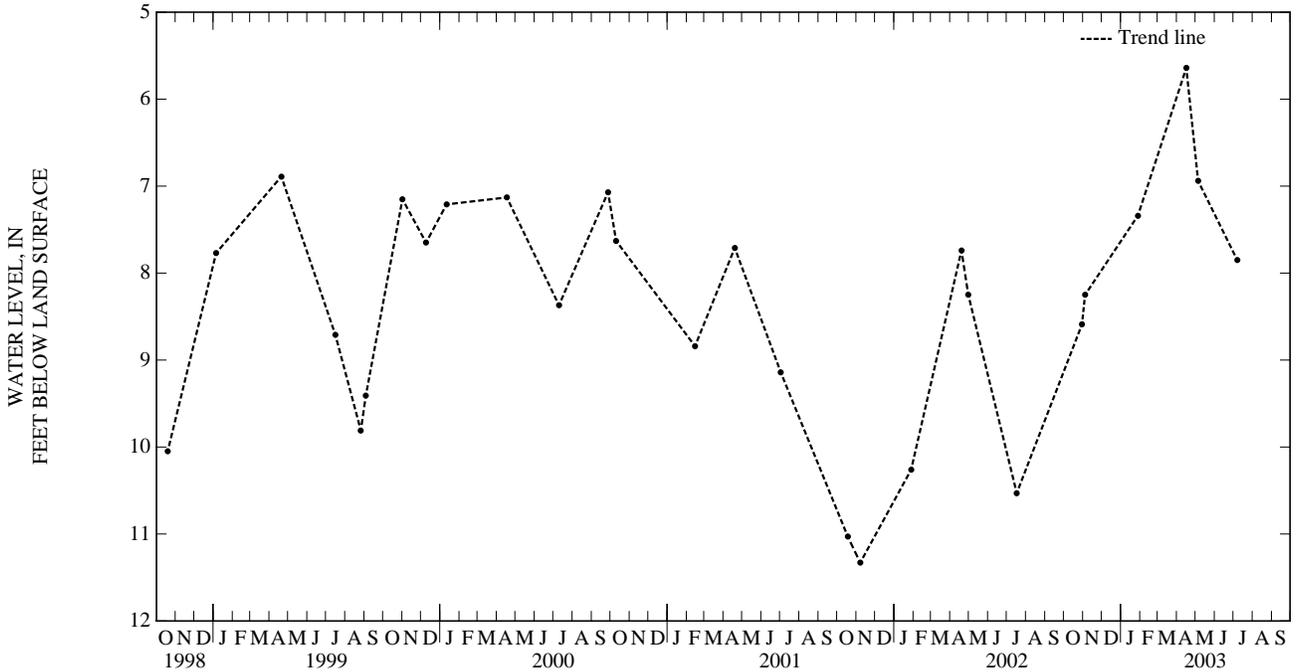
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--February 1978 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.36 ft below land-surface datum, Feb. 16, 1983; lowest measured, 11.55 ft below land-surface datum, July 14, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	8.59	NOV 04	8.25	JAN 28	7.34	APR 16	5.64	MAY 05	6.94	JUL 07	7.85
WATER YEAR 2003 HIGHEST		5.64	APR 16, 2003 LOWEST		8.59	OCT 30, 2002					



CITY OF VIRGINIA BEACH—Continued

364504076031301. Local number, 62C 5 SOW 093

LOCATION.--Lat 36°44'57", long 76°03'00", NAD83, Hydrologic Unit 03010205, behind Kellam Hardware and 500 feet southeast of the intersection of Princess Anne Road and North Landing Road Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 65 ft, screened 60 to 65 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

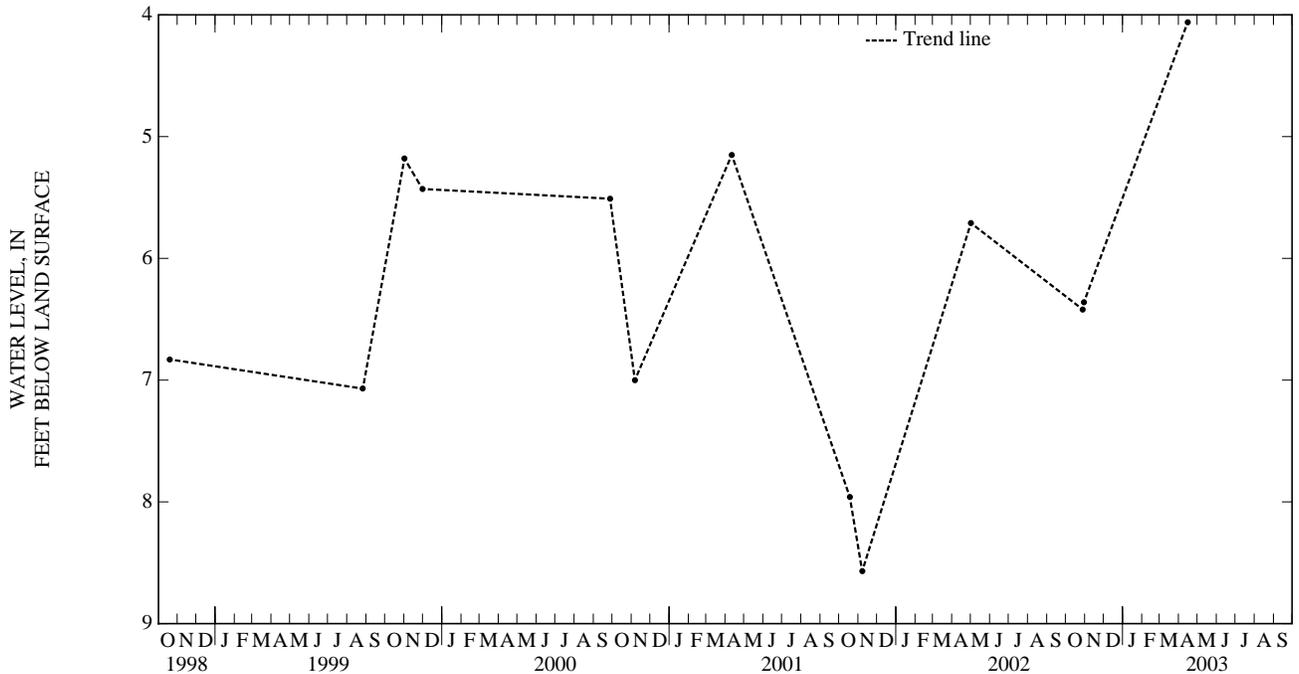
DATUM.--Elevation of land-surface datum is 14 ft above NGVD of 1929. Measuring point: Top of casing, 0.60 ft above land-surface datum.

PERIOD OF RECORD.--December 1977 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.84 ft below land-surface datum, Feb. 8, 1978; lowest measured, 8.57 ft below land-surface datum, Nov. 7, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 28	6.42	OCT 30	6.36	APR 15	4.06
WATER YEAR 2003 HIGHEST 4.06 APR 15, 2003 LOWEST 6.42 OCT 28, 2002					



CITY OF VIRGINIA BEACH—Continued

364529076031501. Local number, 62C 8 SOW 127

LOCATION.--Lat 36°45'34", long 76°03'19", NAD83, Hydrologic Unit 02080108, at Kellam High School in Virginia Beach Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 60 ft, screened 50 to 55 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to December 1984, Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division.

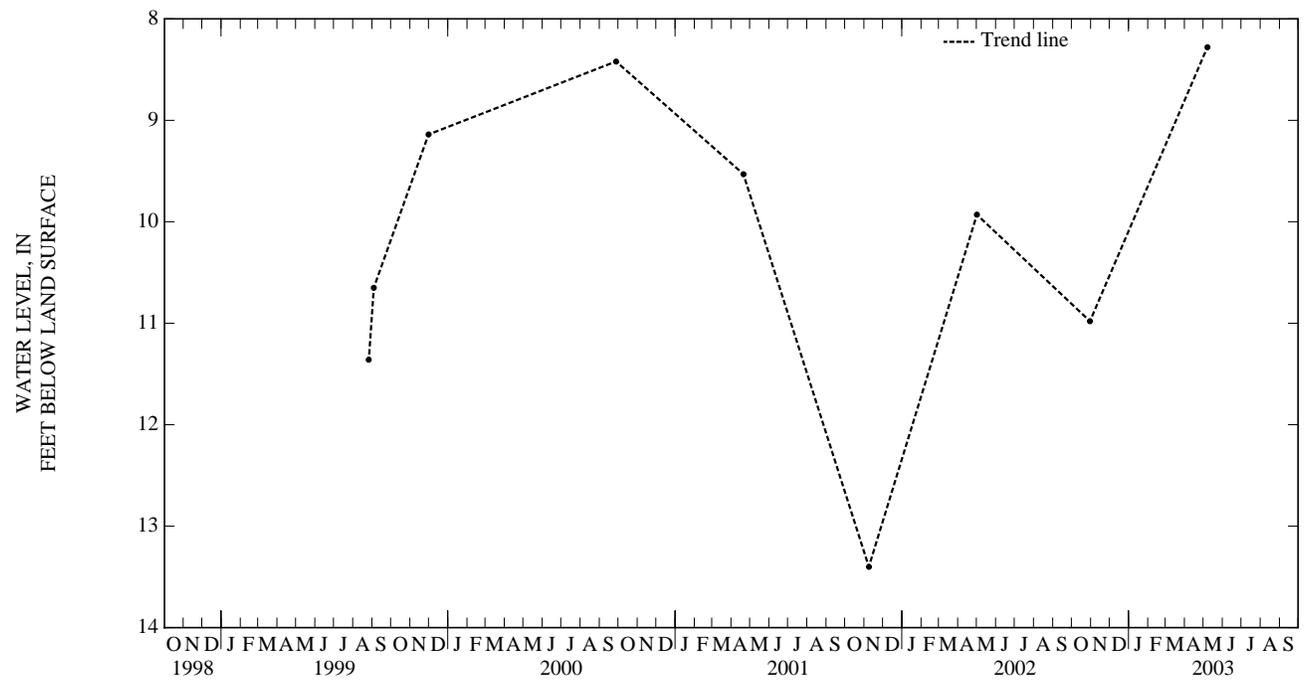
DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929. Measuring point: Top of casing, 0.10 ft above land-surface datum.

PERIOD OF RECORD.--April 1978 to December 1984, August 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.00 ft below land-surface datum, Feb. 28, 1979; lowest measured, 13.40 ft below land-surface datum, Nov. 28, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	10.98	MAY 07	8.28
WATER YEAR 2003 HIGHEST 8.28 MAY 07, 2003		LOWEST 10.98 OCT 30, 2002	



CITY OF VIRGINIA BEACH—Continued

364745076004301. Local number, 62C 9 SOW 172A

LOCATION.--Lat 36°47'46.05", long 76°00'41.64", NAD27, Hydrologic Unit 03010250, at end of Phantom Blvd, 0.3 mi south of intersection of Phantom Blvd and Harpers Road Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 170 ft, screened 155 to 165 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

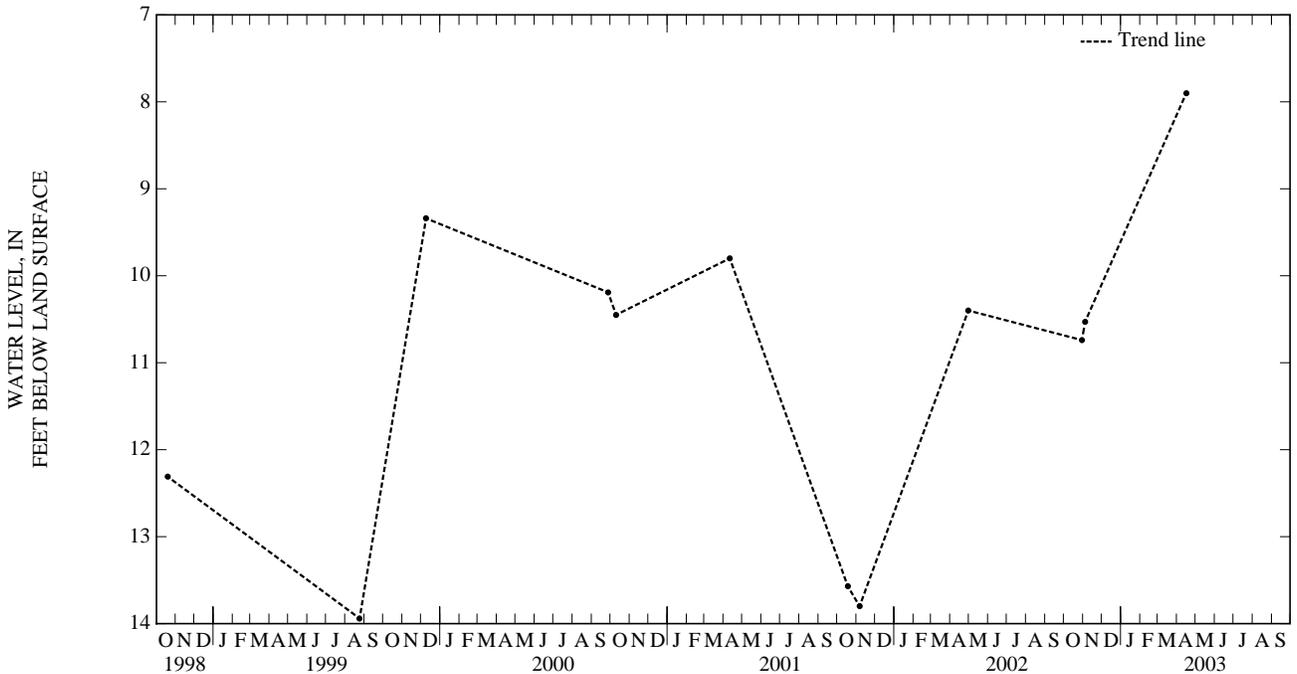
DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929. Measuring point: Top of casing, 1.60 ft above land-surface datum.

PERIOD OF RECORD.--April 1978 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.46 ft below land-surface datum, Apr. 25, 1984; lowest measured, 13.96 ft below land-surface datum, July 5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	10.74	NOV 04	10.53	APR 16	7.90
WATER YEAR 2003 HIGHEST 7.90 APR 16, 2003 LOWEST 10.74 OCT 30, 2002					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364745076004302. Local number, 62C 10 SOW 172B.

LOCATION.--Lat 36°47'46", long 76°00'42", NAD83, Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 280 ft, screened 270 to 280 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 10, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum.

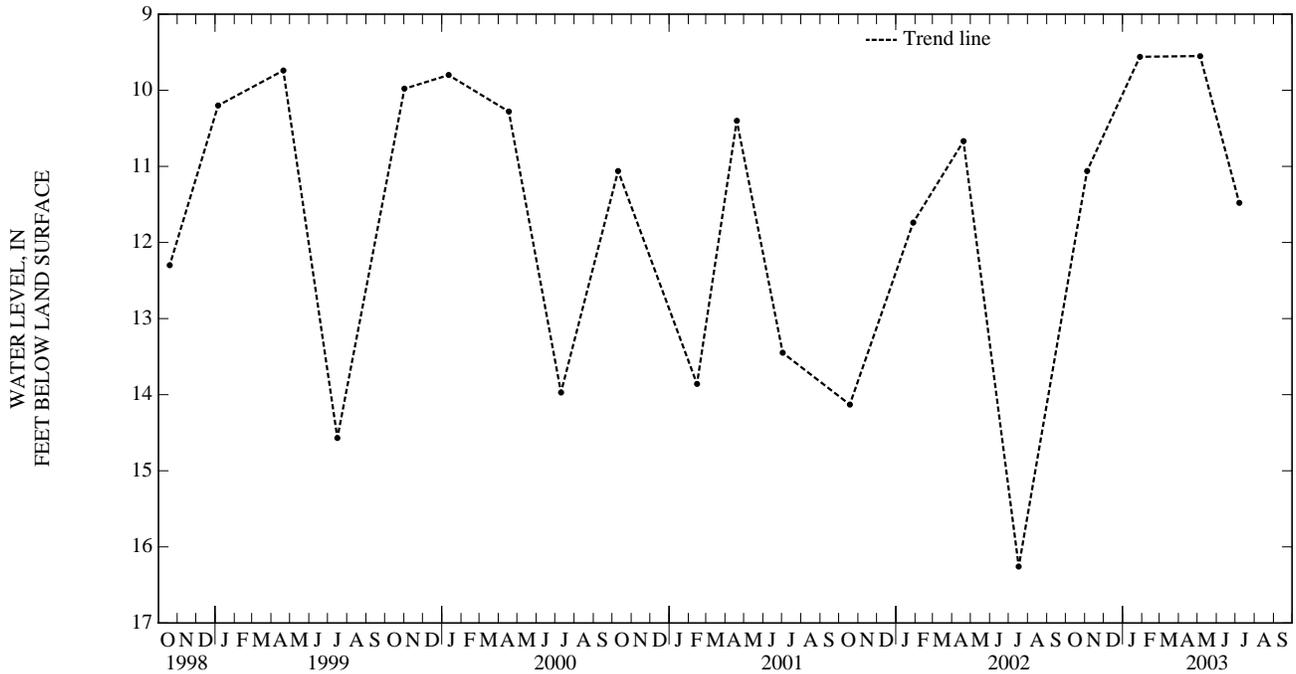
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.10 ft below land-surface datum, Jan. 30, 1991; lowest measured, 17.80 ft below land-surface datum, July 14, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 04	11.06	JAN 28	9.56	MAY 05	9.55	JUL 07	11.48
WATER YEAR 2003 HIGHEST		9.55	MAY 05, 2003 LOWEST		11.48	JUL 07, 2003	



CITY OF VIRGINIA BEACH—Continued

364745076004303. Local number, 62C 11 SOW 172C.

LOCATION.--Lat 36°47'47", long 76°00'42", NAD83, Hydrologic Unit 03010205, at the end of Phantom Boulevard, 0.25 mi south of Harpers Road and Oceana Naval Air Station in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 35 ft, screened 20 to 30 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 10, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 17.14 ft above NGVD of 1929. Measuring point: Top of casing, 1.7 ft above land-surface datum prior to Nov. 26, 2001; 2.27 ft thereafter.

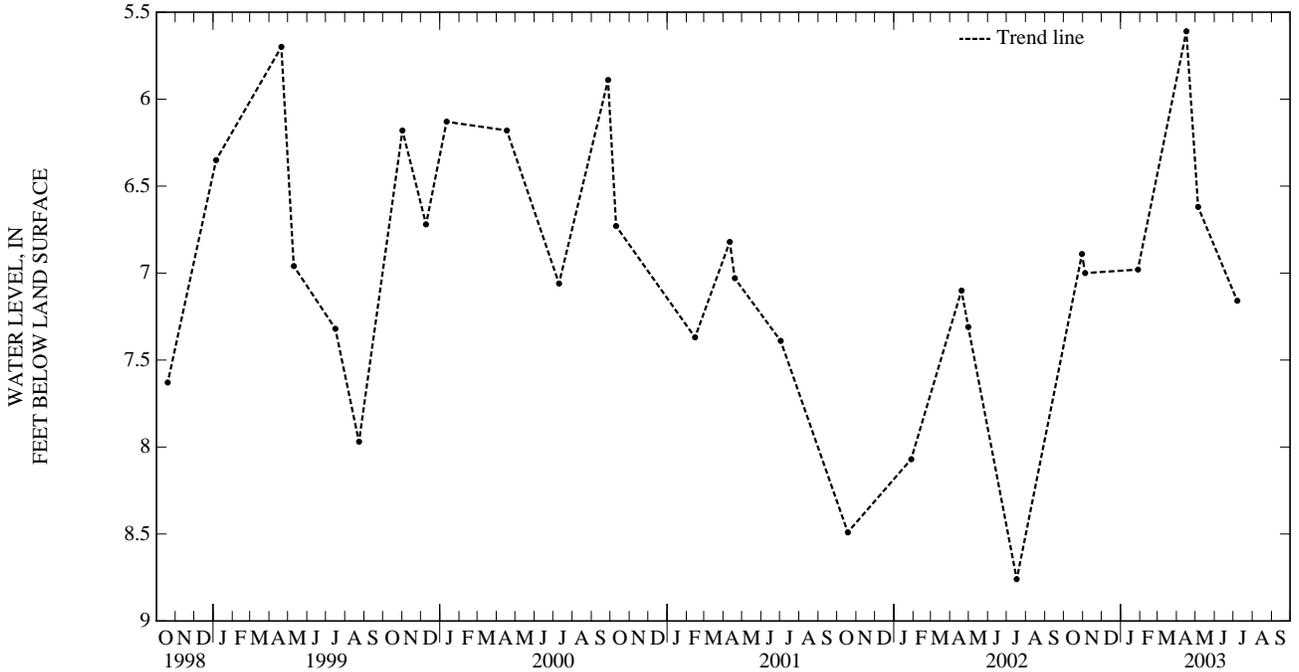
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--May 1984 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.89 ft below land-surface datum, Feb. 28, 1985; lowest measured, 8.76 ft below land-surface datum, July 17, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	6.89	NOV 04	7.00	JAN 28	6.98	APR 16	5.61	MAY 05	6.62	JUL 07	7.16
WATER YEAR 2003 HIGHEST		5.61	APR 16, 2003 LOWEST		7.16	JUL 07, 2003					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364745076004304. Local number, 62C 12 SOW 172D

LOCATION.--Lat 36°47'47", long 76°00'43", NAD83, Hydrologic Unit 03010250, at end of Phantom Blvd, 0.3 mi south of intersection of Phantom Blvd and Harpers Road Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 75 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

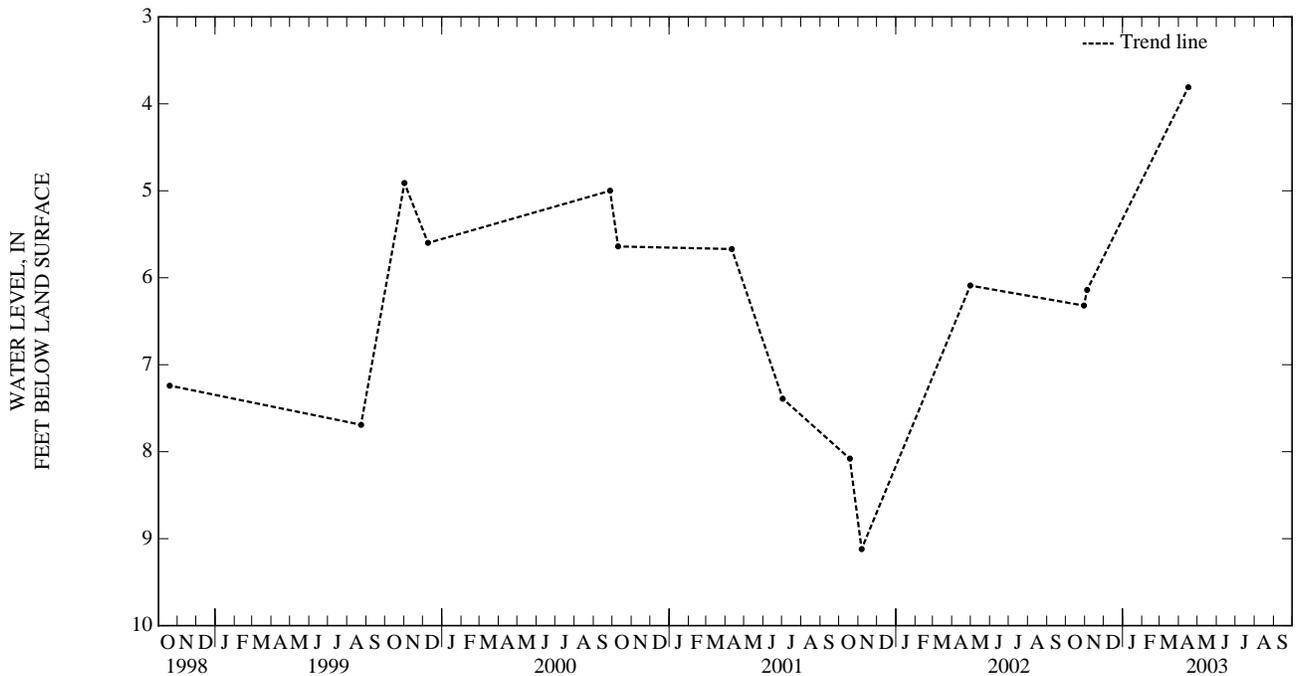
DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929. Measuring point: Top of casing, 2.90 ft above land-surface datum.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1987 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.56 ft below land-surface datum, Apr. 25, 1984; lowest measured, 9.12 ft below land-surface datum, Nov. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	6.32	NOV 04	6.14	APR 16	3.81
WATER YEAR 2003 HIGHEST		3.81	APR 16, 2003 LOWEST		6.32
			OCT 30, 2002		



CITY OF VIRGINIA BEACH—Continued

364708076024501. Local number, 62C 15

LOCATION.--Lat 36°47'08", long 76°02'46", NAD83, Hydrologic Unit 03010205, 500 ft north of Dam Neck Road, 0.3 mi east of intersection of London Bridge Road and Dam Neck Road in Virginia Beach Owner: Claude Brown.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 195 ft, screened 180 to 190 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

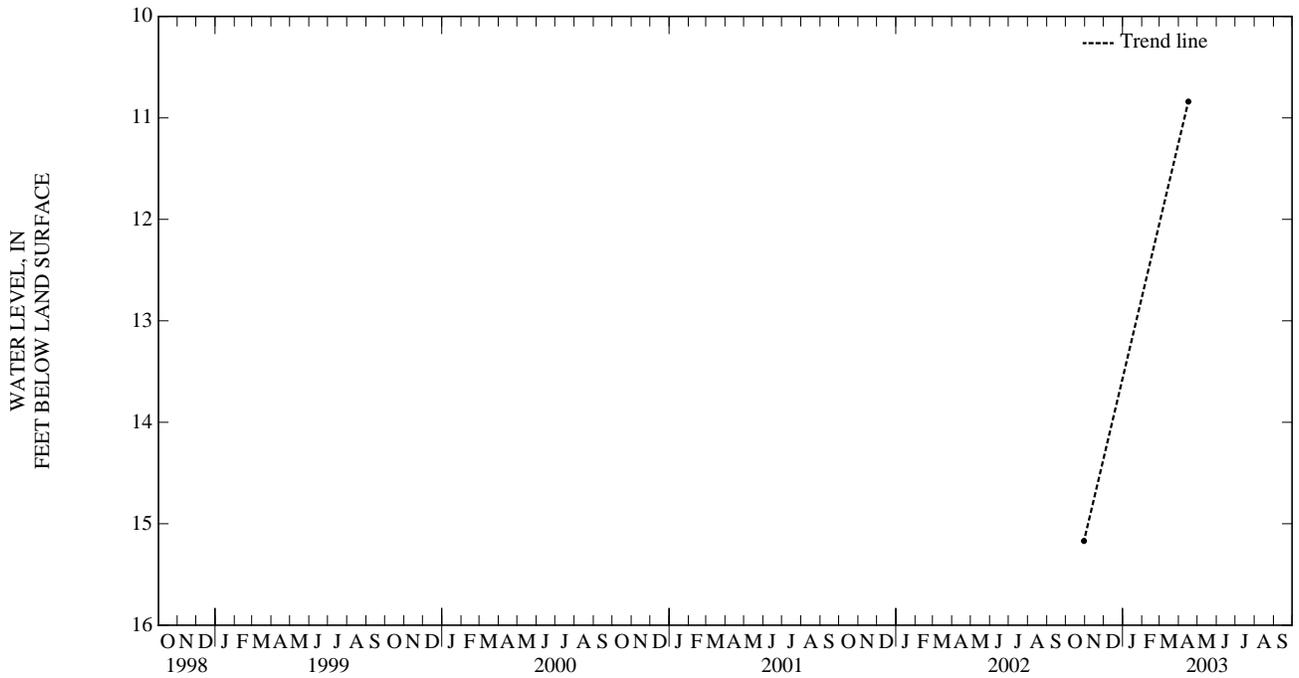
DATUM.--Elevation of land-surface datum is 15 ft above NGVD of 1929. Measuring point: Top of casing, 1.50 ft above land-surface datum.

PERIOD OF RECORD.--October 2002 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.84 ft below land-surface datum, Apr. 16, 2003; lowest measured, 15.17 ft below land-surface datum, Oct. 30, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	15.17	APR 16	10.84
WATER YEAR 2003 HIGHEST 10.84 APR 16, 2003		LOWEST 15.17 OCT 30, 2002	



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364916076051601. Local number, 62C 24

LOCATION.--Lat 36°49'17", long 76°05'15", NAD83, Hydrologic Unit 02080108, at Bow Creek Municipal Golf Course, at driving-range fence off the 18th fairway. Owner: City of Virginia Beach.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 135 ft, screened 120 to 130 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

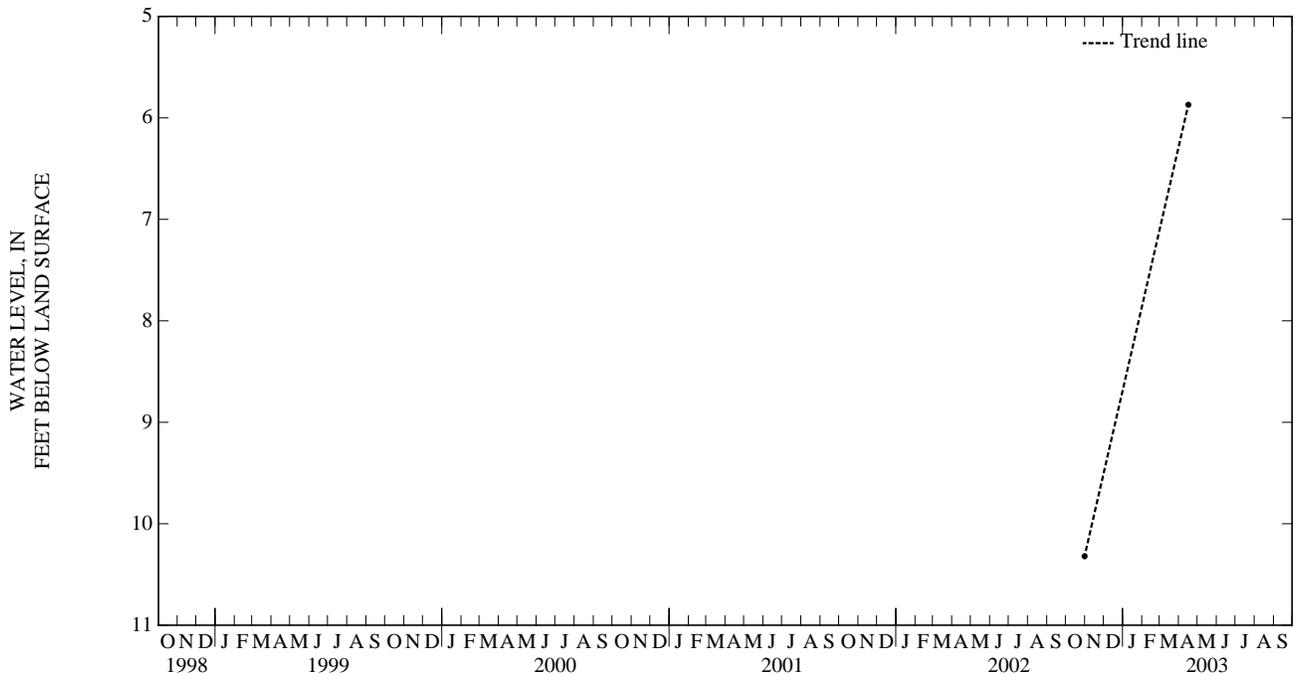
DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929. Measuring point: Top of casing, 0.80 ft above land-surface datum.

PERIOD OF RECORD.--October 2002 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.87 ft below land-surface datum, Apr. 16, 2003; lowest measured, 10.32 ft below land-surface datum, Oct. 31, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	10.32	APR 16	5.87
WATER YEAR 2003 HIGHEST	5.87	APR 16, 2003	LOWEST
			10.32
			OCT 31, 2002



CITY OF VIRGINIA BEACH—Continued

365046076041601. Local number, 62C 32

LOCATION.--Lat 36°50'47", long 76°04'15", NAD83, Hydrologic Unit 02080108, at Lynnhaven Pump Station in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 168 ft, screened 138 to 148 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

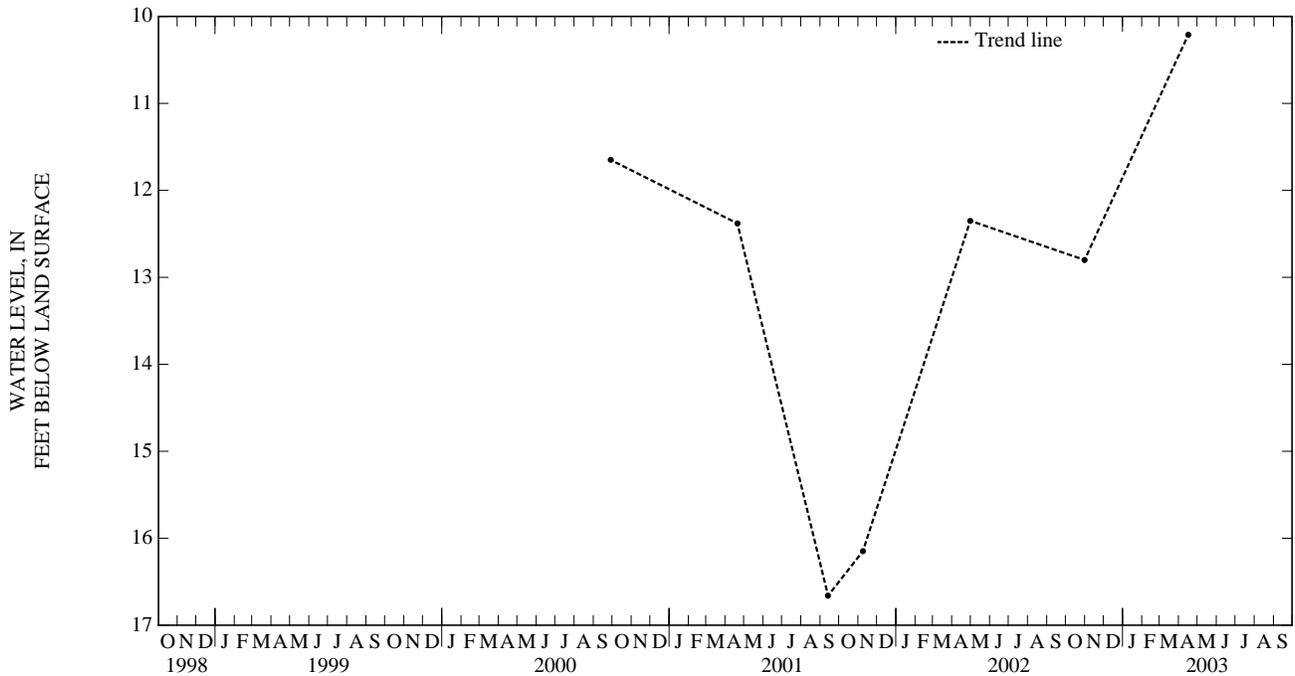
DATUM.--Elevation of land-surface datum is 12.69 ft above NGVD of 1929. Measuring point: Top of casing, 0.41 ft below land-surface datum.

PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.21 ft below land-surface datum, Apr. 16, 2003; lowest measured, 16.66 ft below land-surface datum, Sept. 13, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	12.80	APR 16	10.21
WATER YEAR 2003 HIGHEST 10.21		APR 16, 2003 LOWEST 16.66	
		OCT 31, 2002	



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

365046076041602. Local number, 62C 33

LOCATION.--Lat 36°50'47", long 76°04'14", NAD83, Hydrologic Unit 02080108, at Lynnhaven Pump Station in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 4 in., depth 85 ft, screened 70 to 80 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

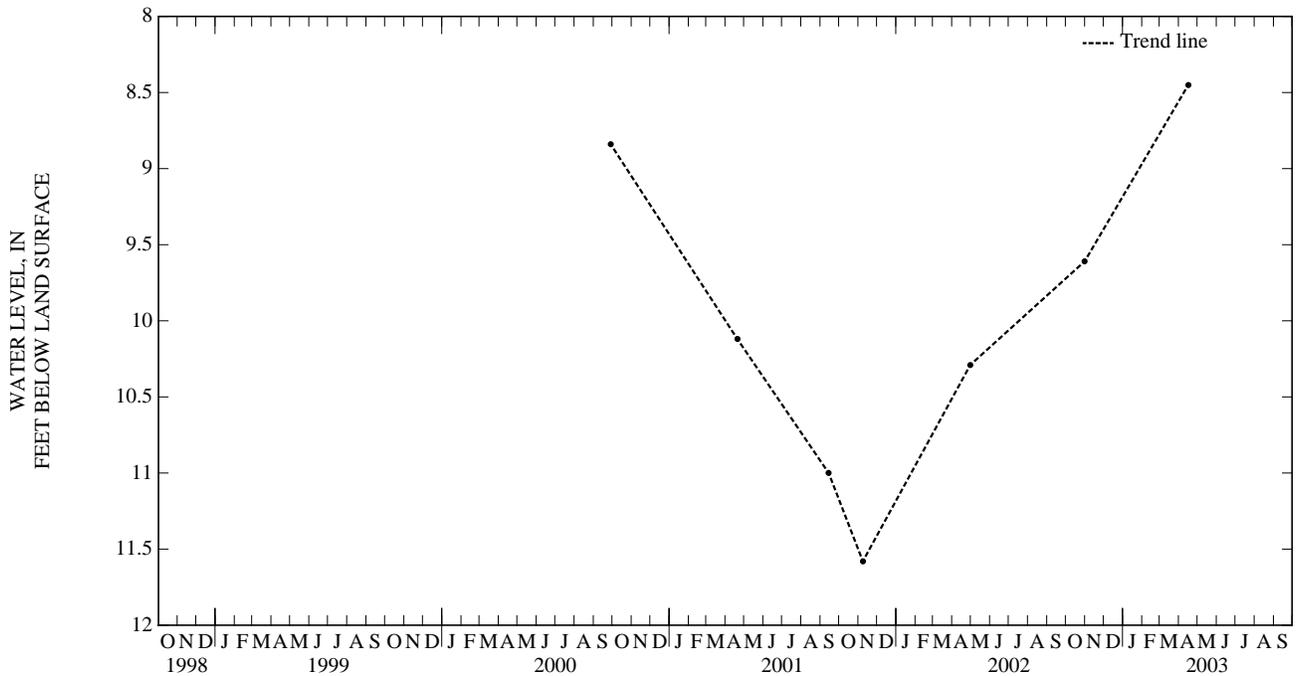
DATUM.--Elevation of land-surface datum is 12.74 ft above NGVD of 1929. Measuring point: Top of casing, 0.46 ft below land-surface datum.

PERIOD OF RECORD.--September 2000 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 8.45 ft below land-surface datum, Apr. 16, 2003; lowest recorded, 11.58 ft below land-surface datum, Nov. 8, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	9.61	APR 16	8.45
WATER YEAR 2003	HIGHEST 8.45	APR 16, 2003	LOWEST 9.61
		OCT 31, 2002	



CITY OF VIRGINIA BEACH—Continued

364909076051101. Local number, 62C 34

LOCATION.--Lat 36°49'21", long 76°05'19", NAD83, Hydrologic Unit 02080108, at Bow Creek Municipal Golf Course, near club house. Owner: City of Virginia Beach.

AQUIFER.--Columbia aquifer of Quarternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 75 ft, screened 60 to 70 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

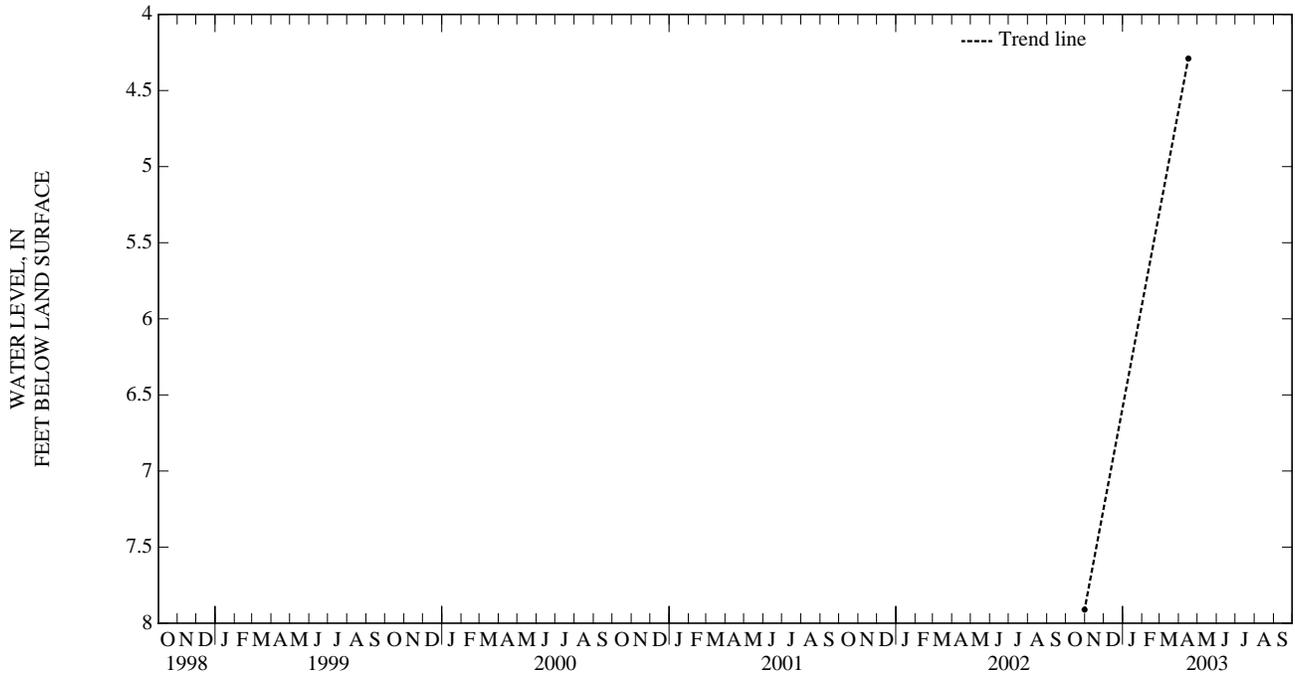
DATUM.--Elevation of land-surface datum is 10 ft above NGVD of 1929. Measuring point: Top of casing, 0.70 ft above land-surface datum.

PERIOD OF RECORD.--1981, October 2002 to September 2003.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.29 ft below land-surface datum, Apr. 16, 2003; lowest measured, 9.00 ft below land-surface datum, Jan. 19, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	7.91	APR 16	4.29
WATER YEAR 2003 HIGHEST	4.29	APR 16, 2003 LOWEST	7.91
		OCT 31, 2002	



CITY OF VIRGINIA BEACH—Continued

364613075583201. Local number, 63C 2 SOW 100B

LOCATION.--Lat 36°46'14", long 75°58'28", NAD83, Hydrologic Unit 03010205, at Hampton Roads Sanitation District Atlantic plant in Virginia Beach
 Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 1 in., depth 54 ft , screened 49 to 54 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to September 1995, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

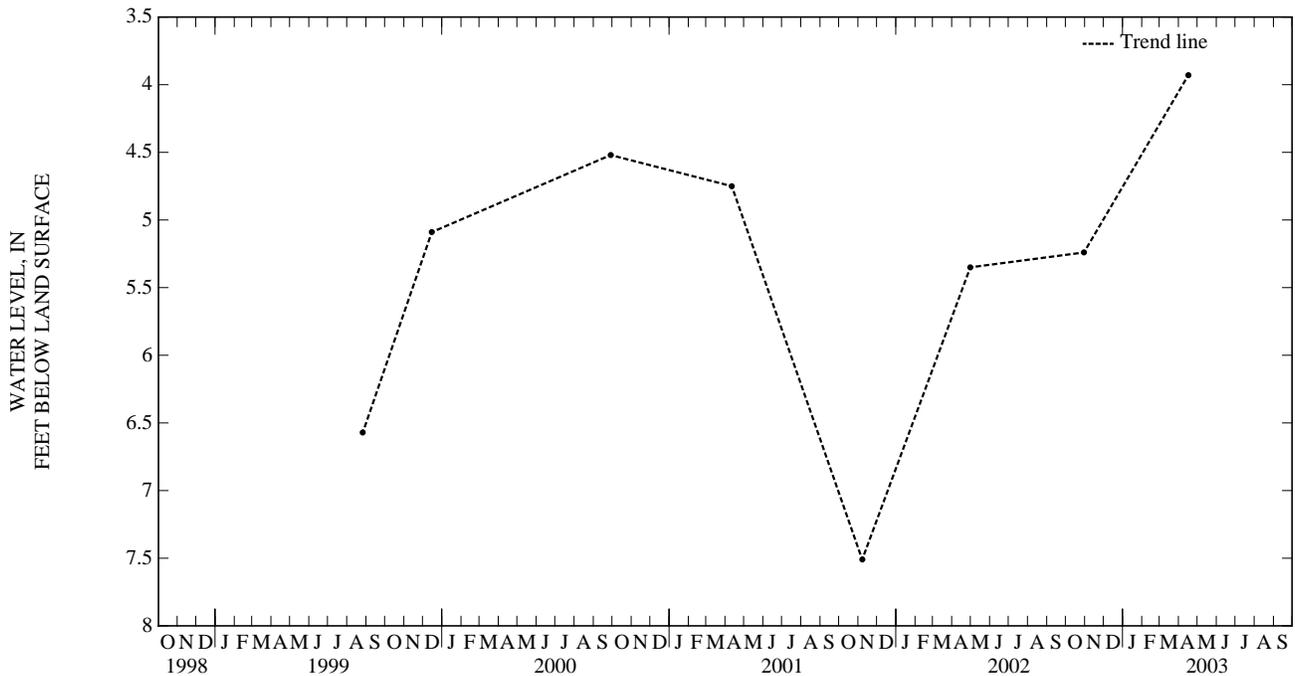
DATUM.--Elevation of land-surface datum is 7.93 ft above NGVD of 1929. Measuring point: Top of casing, 2.85 ft above land-surface datum prior to September 1995; 2.35 ft thereafter.

PERIOD OF RECORD.--March 1981 to September 1995, August 1999 to current year. Unpublished records available August 1999 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.66 ft below land-surface datum, Nov. 10, 1992; lowest measured, 10.58 ft below land-surface datum, Mar. 20, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	5.24	APR 16	3.93
WATER YEAR 2003 HIGHEST	3.93	APR 16, 2003	LOWEST
	5.24	OCT 30, 2002	



CITY OF VIRGINIA BEACH—Continued

364613075583202. Local number, 63C 3 SOW 100C

LOCATION.--Lat 36°46'14", long 75°58'28", NAD83, Hydrologic Unit 03010205, at Hampton Roads Sanitation District Atlantic plant in Virginia Beach
 Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 1 in., depth 35 ft , screened 30 to 35 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel. Prior to September 1995, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

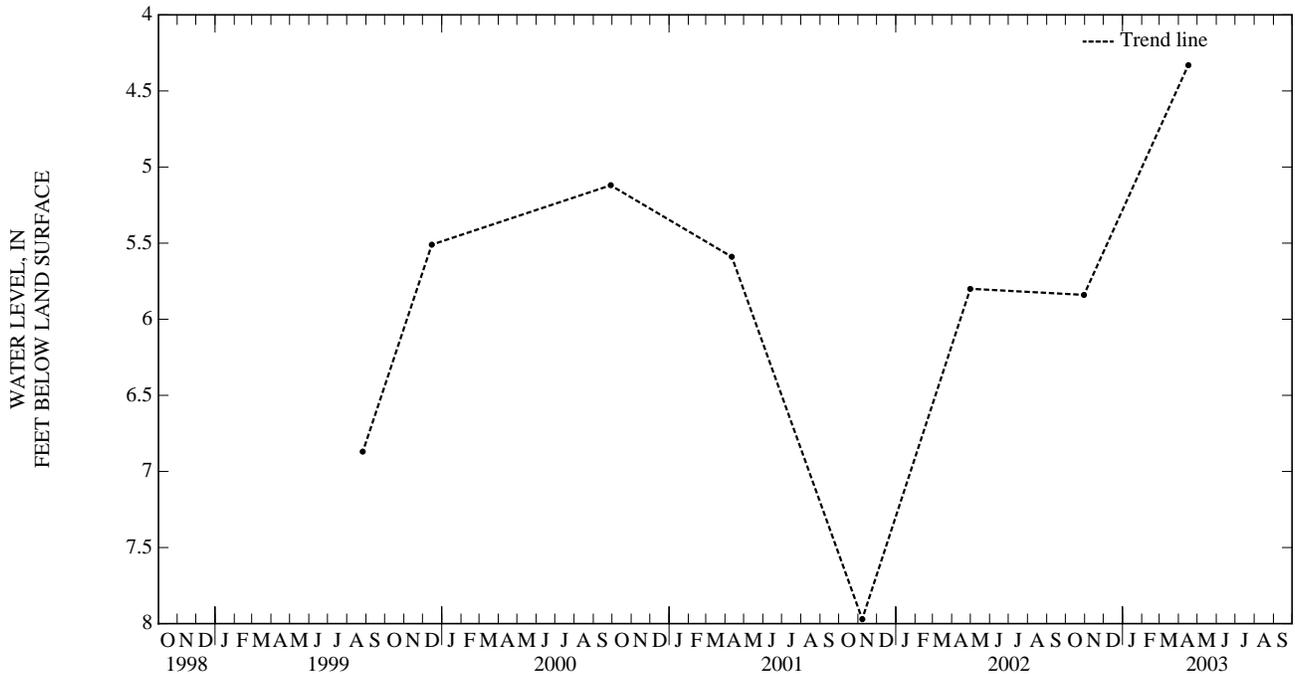
DATUM.--Elevation of land-surface datum is 8 ft above NGVD of 1929. Measuring point: Top of casing, 2.63 ft above land-surface datum.

PERIOD OF RECORD.--April 1981 to September 1995, August 1999 to current year. Unpublished records available August 1999 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.63 ft below land-surface datum, Jan. 4, 1994; lowest measured, 12.35 ft below land-surface datum, Apr. 20, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	5.84	APR 16	4.33
WATER YEAR 2003 HIGHEST 4.33 APR 16, 2003 LOWEST 5.84 OCT 30, 2002			



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364722075591801. Local number, 63C 4 SOW 173A.

LOCATION.--Lat 36°47'22", long 75°59'15", NAD83, Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 3 in., depth 291 ft, screened 281 to 291 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division and USGS personnel. Oct. 10, 1985, to July 5, 1995, bimonthly measurement with chalked tape. Prior to Oct. 10, 1985, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 8 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.8 ft above land-surface datum prior to Nov. 16, 2001; 1.35 ft thereafter.

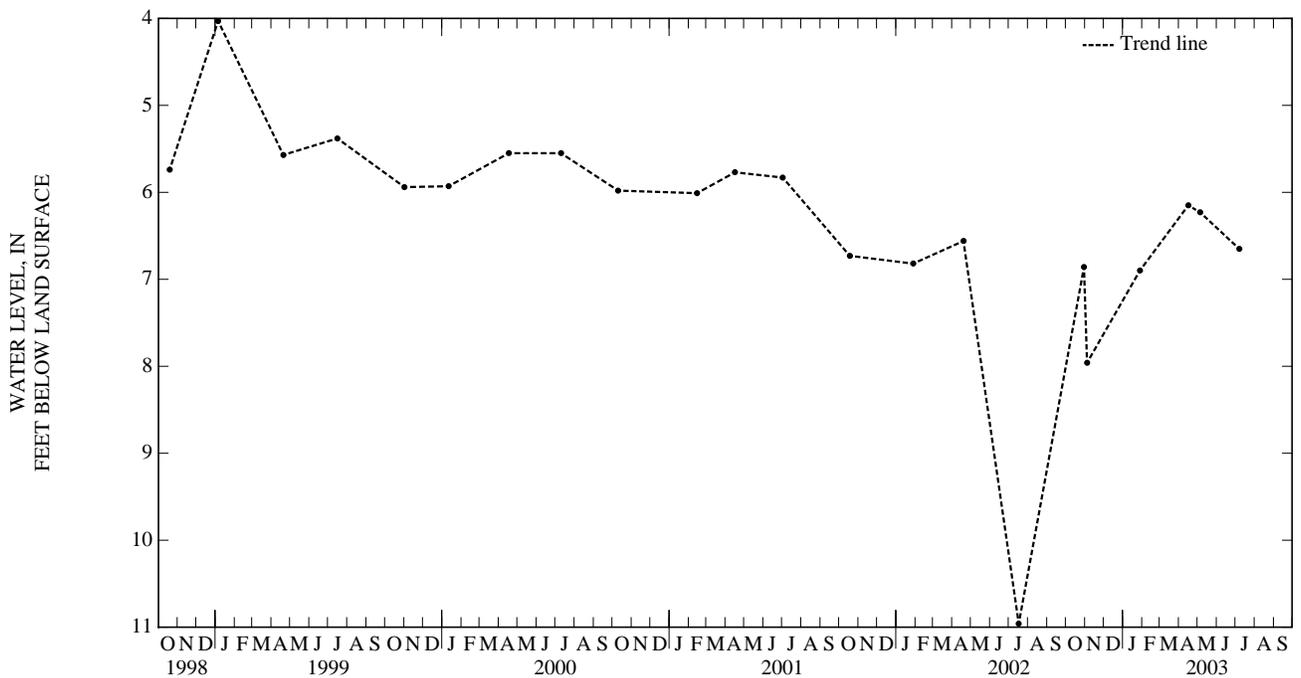
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level of July 17, 2002 result of well having been recently pumped.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.10 ft below land-surface datum, June 21, 1989; lowest measured, 7.96 ft below land-surface datum, Nov. 4, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	6.86	NOV 04	7.96	JAN 28	6.90	APR 16	6.15	MAY 05	6.23	JUL 07	6.65
WATER YEAR 2003 HIGHEST		6.15	APR 16, 2003		LOWEST		7.96	NOV 04, 2002			



CITY OF VIRGINIA BEACH—Continued

364722075591802. Local number, 63C 5 SOW 173B

LOCATION.--Lat 36°47'23", long 75°59'17", NAD83, Hydrologic Unit 02080108, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown confining unit of Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 95 ft, screened 80 to 90 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel. Prior to August 1999, occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel.

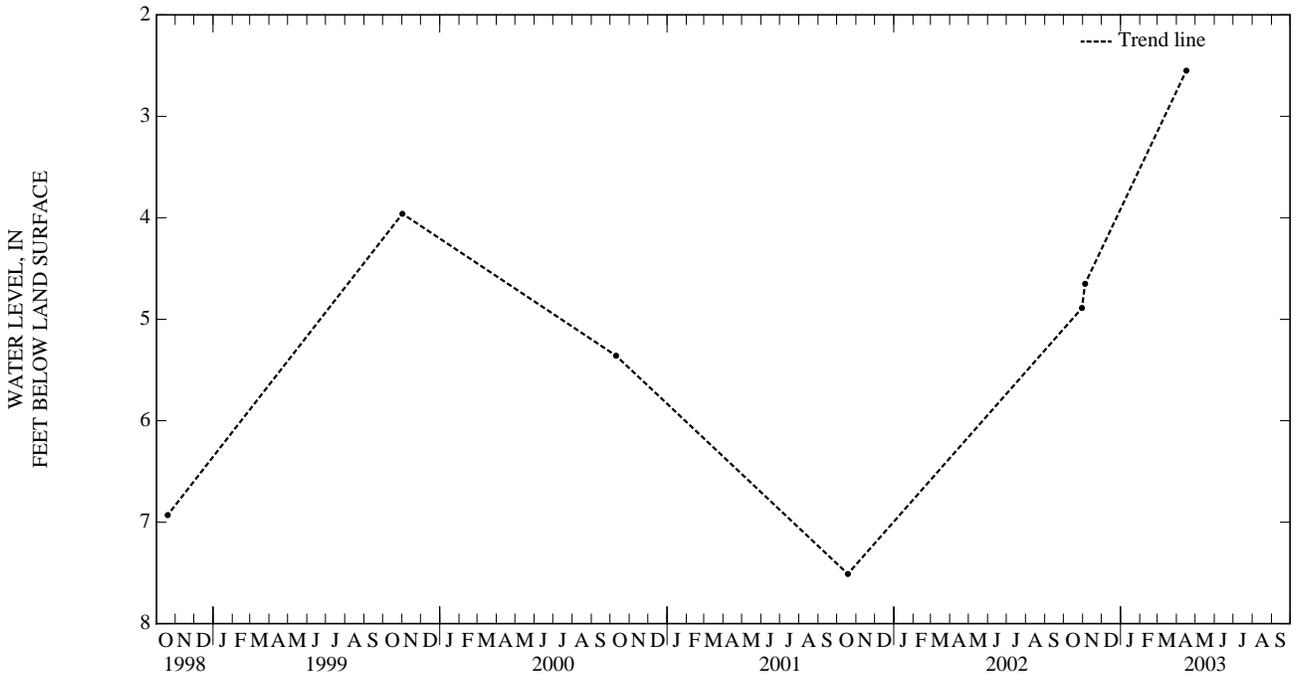
DATUM.--Elevation of land-surface datum is 9 ft above NGVD of 1929. Measuring point: Top of casing, 0.90 ft above land-surface datum.

PERIOD OF RECORD.--April 1984 to current year. Unpublished records available October 1995 to September 2002 and prior to October 1985 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.00 ft below land-surface datum, Mar. 20, 1989; lowest measured, 8.86 ft below land-surface datum, July 5, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	4.89	NOV 04	4.65	APR 16	2.55
WATER YEAR 2003 HIGHEST 2.55 APR 16, 2003 LOWEST 4.89 OCT 30, 2002					



GROUND-WATER LEVELS

CITY OF VIRGINIA BEACH—Continued

364728075591401. Local number, 63C 11

LOCATION.--Lat 36°47'29", long 75°59'13", NAD83, Hydrologic Unit 03010205, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 85 ft, screened 70 to 80 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

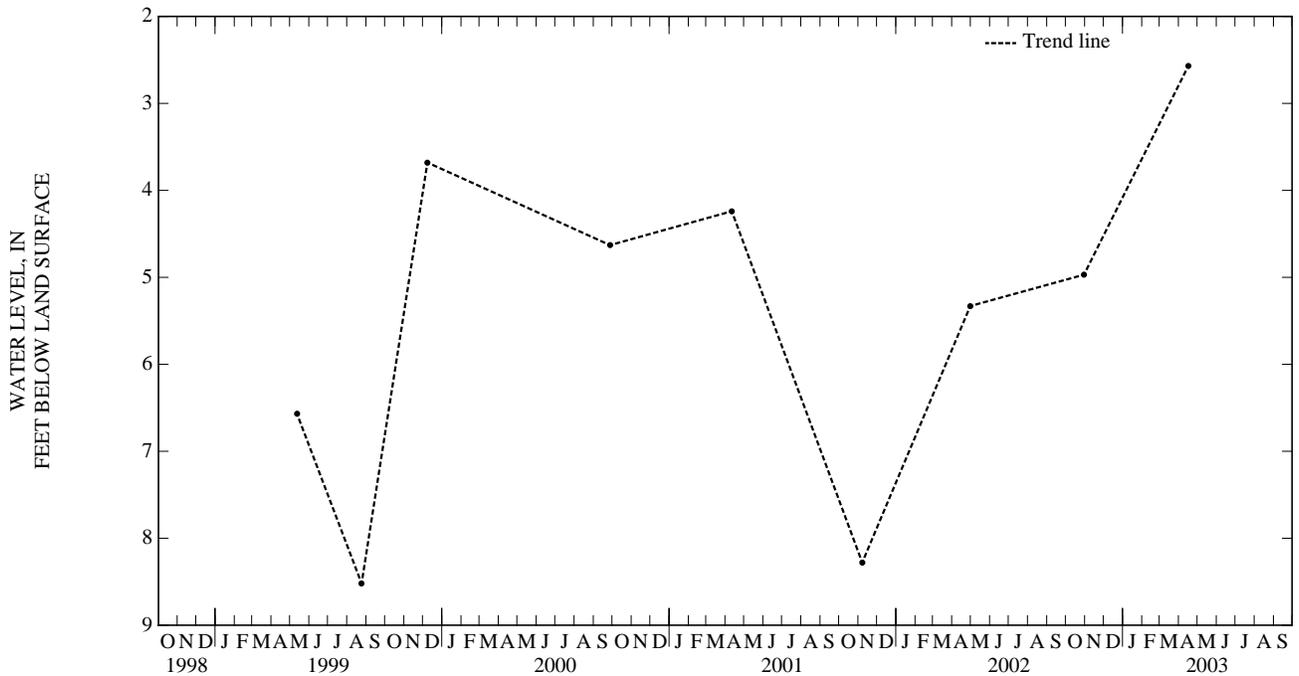
DATUM.--Elevation of land-surface datum is 9.1 ft above NGVD of 1929. Measuring point: Top of casing, 0.83 ft above land-surface datum.

PERIOD OF RECORD.--May 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.57 ft below land-surface datum, Apr. 16, 2003; lowest measured, 8.52 ft below land-surface datum, Aug. 24, 1999.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	4.97	APR 16	2.57
WATER YEAR 2003 HIGHEST	2.57	APR 16, 2003	LOWEST
			4.97
			OCT 30, 2002



CITY OF VIRGINIA BEACH—Continued

364721075591601. Local number, 63C 13

LOCATION.--Lat 36°47'21", long 75°59'15", NAD83, Hydrologic Unit 03010205, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 205, screened 190 to 200.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

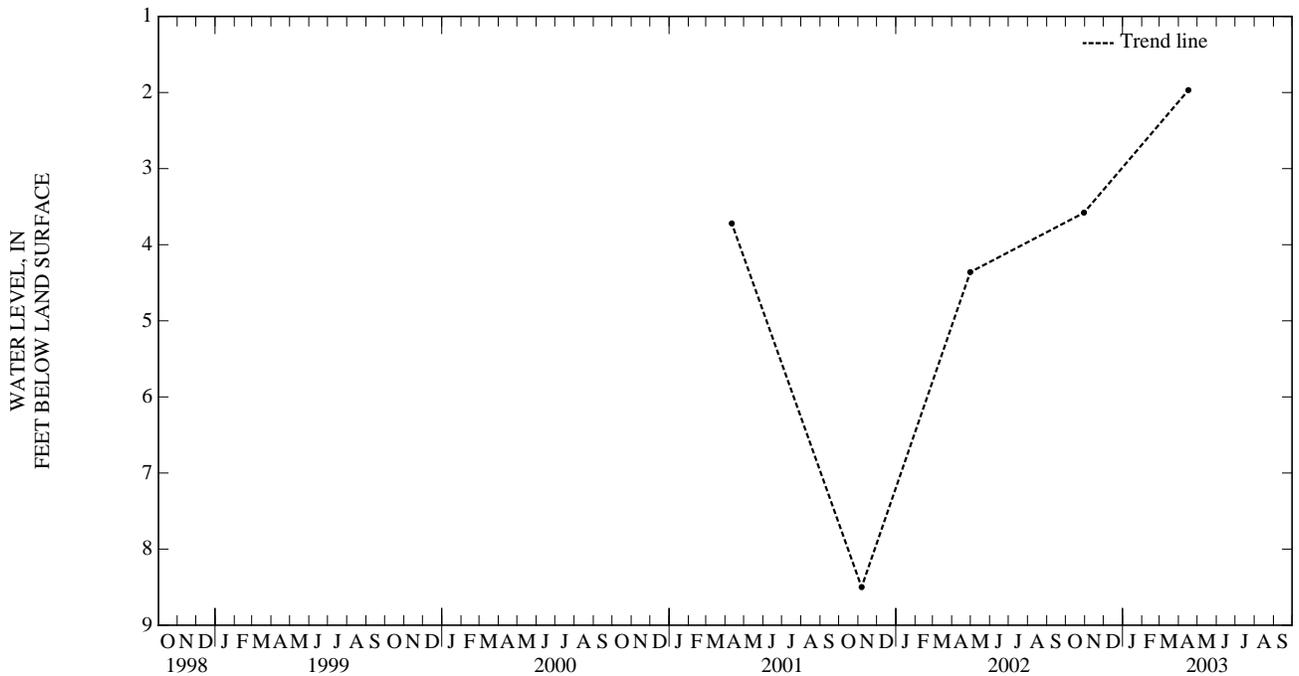
DATUM.--Elevation of land-surface datum is 7.5 ft NGVD of 1929. Measuring point: Top of casing, 0.85 ft above land-surface datum.

PERIOD OF RECORD.--April 2001 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.97 ft below land-surface datum, Apr. 16, 2003; lowest recorded, 8.50 ft below land-surface datum, Nov. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	3.58	APR 16	1.97
WATER YEAR 2003 HIGHEST 1.97 APR 16, 2003		LOWEST 3.58 OCT 30, 2002	



GROUND-WATER LEVELS
CITY OF VIRGINIA BEACH—Continued

364721075591701. Local number, 63C 19

LOCATION.--Lat 36°47'22", long 75°59'15", NAD83, Hydrologic Unit 03010205, at Redwing Park, 0.7 mi northeast of intersection of Oceana Boulevard and Dam Neck Road in Virginia Beach Owner: City of Virginia Beach.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled water well, diameter 3 in., depth 30, screened 25 to 30.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

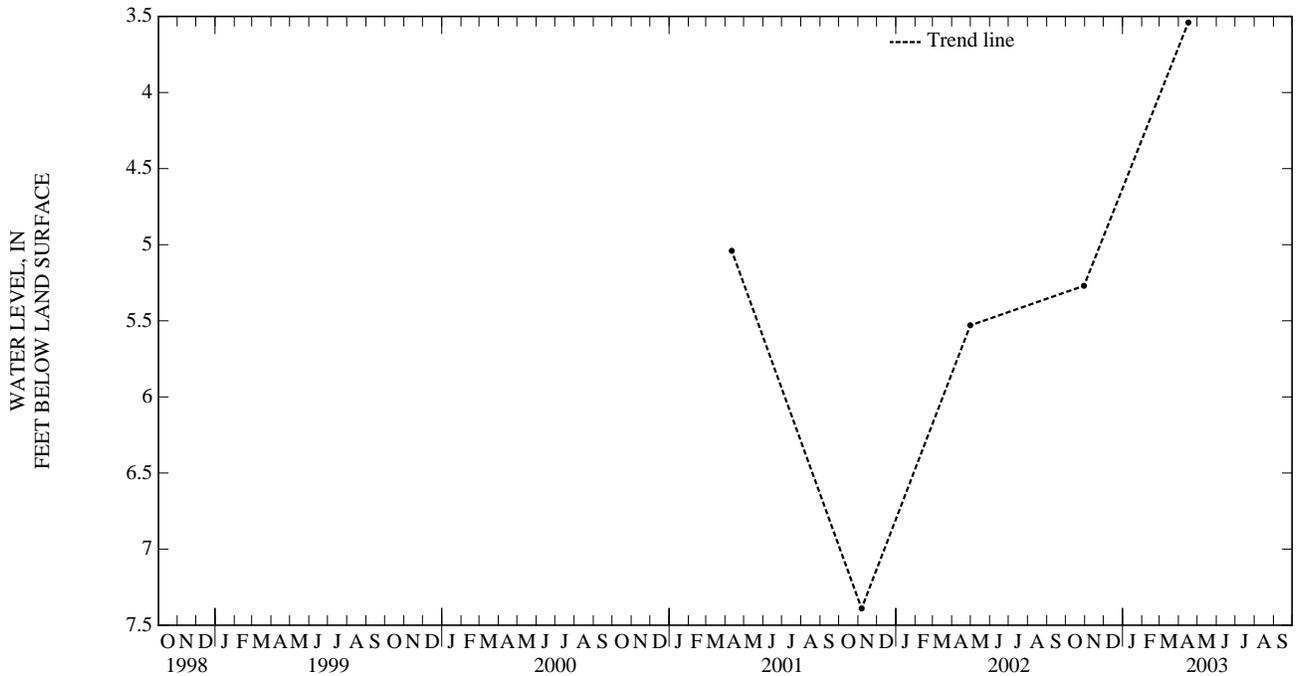
DATUM.--Elevation of land-surface datum is 9 ft NGVD of 1929. Measuring point: Top of casing, 0.67 ft above land-surface datum.

PERIOD OF RECORD.--1981, April 2001 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.54 ft below land-surface datum, Apr. 16, 2003; lowest measured, 7.39 ft below land-surface datum, Nov. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	5.27	APR 16	3.54
WATER YEAR 2003 HIGHEST 3.54 APR 16, 2003		LOWEST 5.27 OCT 30, 2002	



CITY OF VIRGINIA BEACH—Continued

365045075585301. Local number, 63C 20

LOCATION.--Lat 36°50'45", long 75°58'51", NAD83, Hydrologic Unit 03010205, at Sir Afton Inn, 516 19th Street in Virginia Beach Owner: Richard Neathery.

AQUIFER.--Columbia aquifer of Quaternary age..

WELL CHARACTERISTICS.--Drilled water well, diameter 1 in., depth 39 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

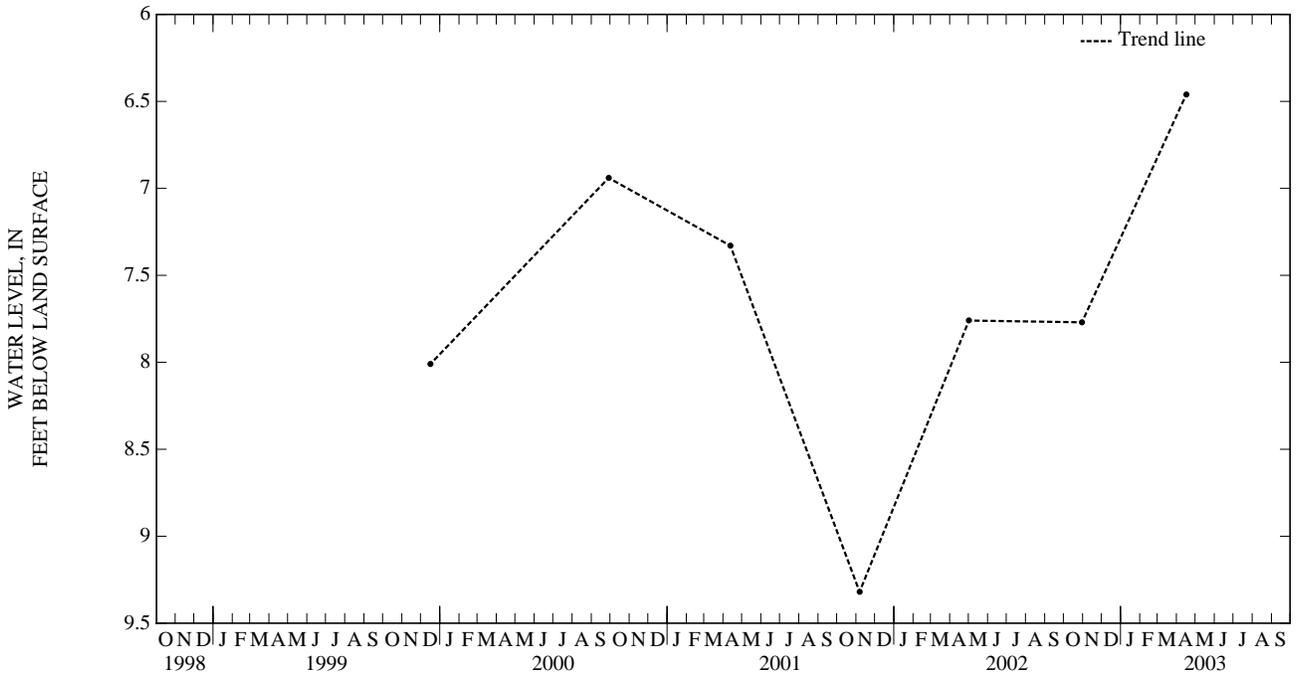
DATUM.--Elevation of land-surface datum is 5 ft above NGVD of 1929. Measuring point: Top of casing, 0.60 ft above land-surface datum.

PERIOD OF RECORD.--December 1999 to current year. Unpublished records available prior to October 2002 in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.46 ft below land-surface datum, Apr. 16, 2003; lowest measured, 9.32 ft below land-surface datum, Nov. 6, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	7.77	APR 16	6.46
WATER YEAR 2003 HIGHEST 6.46 APR 16, 2003		LOWEST 7.77 OCT 30, 2002	



GROUND-WATER LEVELS
WESTMORELAND COUNTY

381110076550501. Local number, 55P 5.

LOCATION.--Lat 38°11'10", long 76°55'04", NAD83, Hydrologic Unit 02070011, behind craft shop at George Washington Birthplace National Monument, 3.8 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER.--Middle Potomac aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 6 in., depth 471 ft, screened 451 to 466 ft.

INSTRUMENTATION.--Electronic data logger 60-minute record interval. Apr. 24, 1979 to Nov. 2, 1999, digital recorder 60-minute punch. Prior to Apr. 24, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 24 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 3.0 ft above land-surface datum.

REMARKS.--Missing record due to recorder malfunction. Water level affected by local pumpage and regional drawdown.

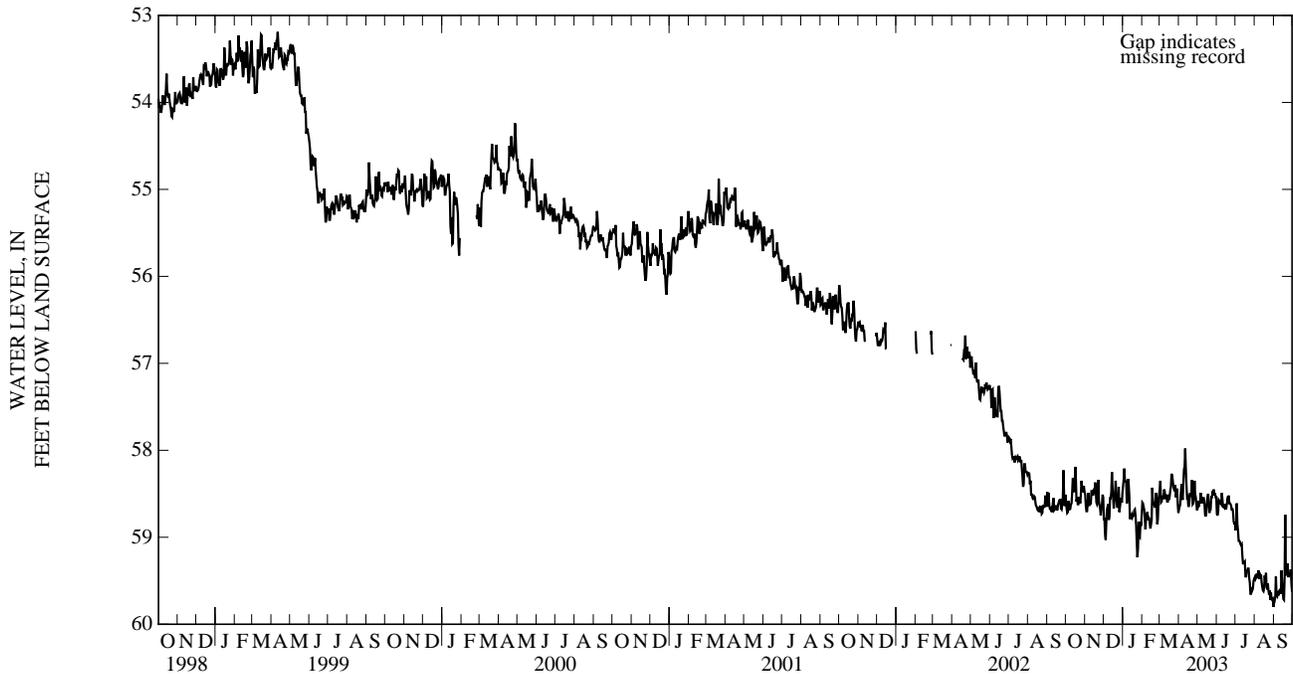
PERIOD OF RECORD.--June 1974 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.05 ft below land-surface datum, June 24, 1974; lowest recorded, 59.80 ft below land-surface datum, Aug. 31, 2003.

EXTREMES FOR CURRENT YEAR.--Highest instantaneous water level, 57.53 ft below land-surface datum, Apr. 10; lowest instantaneous water level, 59.80 ft below land-surface datum, Aug. 31.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.58	58.60	58.83	58.36	58.80	58.54	58.39	58.60	58.58	58.92	59.46	59.67
10	58.61	58.62	58.76	58.39	58.80	58.56	58.19	58.55	58.57	59.09	59.45	59.61
15	58.40	58.44	58.43	58.74	58.85	58.51	58.53	58.72	58.67	59.29	59.62	59.62
20	58.62	58.62	58.35	58.68	58.62	58.27	58.51	58.72	58.52	59.40	59.57	59.43
25	58.51	58.67	58.42	59.13	58.85	58.47	58.55	58.47	58.69	59.65	59.61	59.43
EOM	58.48	58.54	58.49	58.74	58.51	58.72	58.69	58.54	58.84	59.48	59.80	59.63



WESTMORELAND COUNTY—Continued

381132076551001. Local number, 55P 9.

LOCATION.--Lat 38°11'32", long 76°55'09", NAD83, Hydrologic Unit 02070011, at George Washington Birthplace National Monument, 500 ft east of park road, 0.6 mi north of the end of State Highway 204, and 3.4 mi southeast of Colonial Beach. Owner: National Park Service.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Dug unused water well, diameter 36 in., depth 22.6 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 17 ft above NGVD of 1929, from topographic map. Measuring point: Top of concrete hatch on well casing, 2.25 ft above land-surface datum. Prior to July 3, 1995, top of concrete lip on casing, 1.65 ft above land-surface datum.

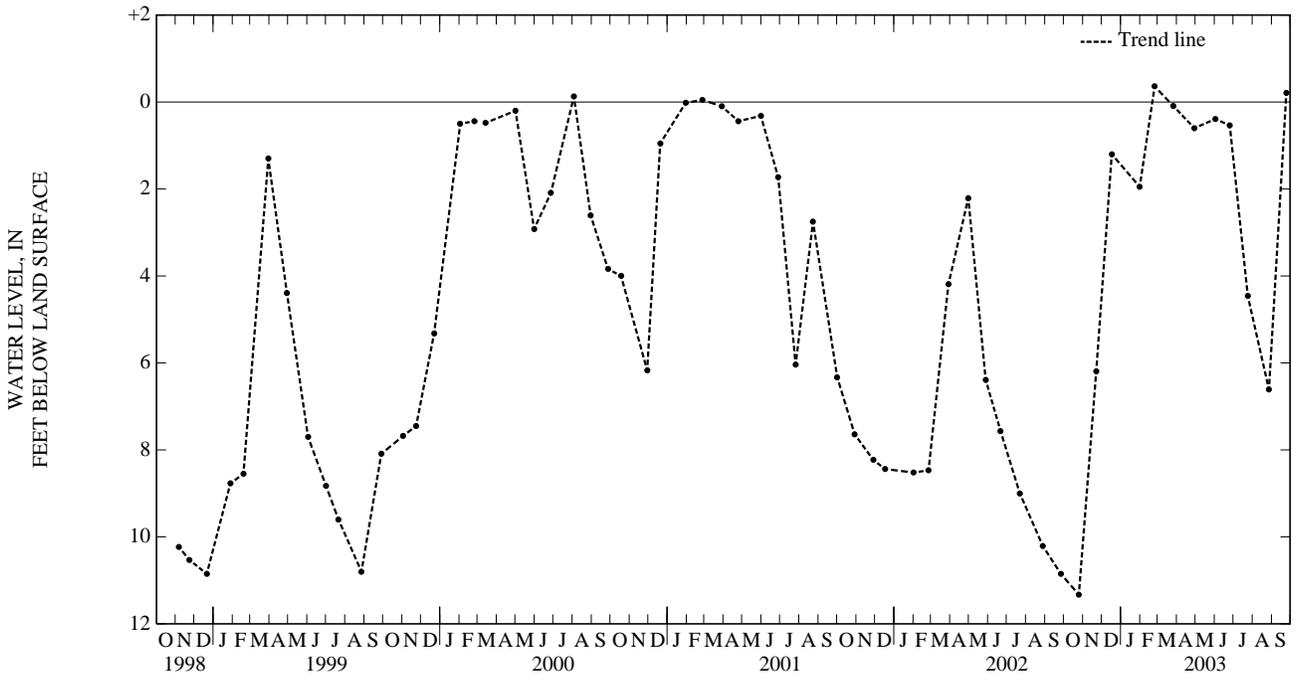
PERIOD OF RECORD.--July 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.36 ft above land-surface datum, Feb. 24, 2003; lowest measured, 12.80 ft below land-surface datum, Dec. 27, 1988.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+"), WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL										
OCT 25	11.33	DEC 17	1.20	FEB 24	+0.36	APR 29	.60	JUN 25	.54	AUG 27	6.61
NOV 22	6.19	JAN 31	1.95	MAR 26	.09	JUN 02	.39	JUL 24	4.46	SEP 24	+2.1

WATER YEAR 2003 HIGHEST +0.36 FEB 24, 2003 LOWEST 11.33 OCT 25, 2002



GROUND-WATER LEVELS

WESTMORELAND COUNTY—Continued

380538076490801. Local number, 56N 1 SOW 016.

LOCATION.--Lat 38°05'38", long 76°49'07", NAD83, Hydrologic Unit 02080104, at Washington and Lee School, 0.5 mi east of Montross. Owner: Westmoreland County Public Schools.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 4 in. to 189 ft, diameter 2 in. from 189 to 641 ft, depth 641 ft, screened 608 to 628 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 3, 1985, to July 11, 1995, bimonthly measurement with chalked tape. Mar. 31, 1979, to Oct. 2, 1985, occasional measurement with chalked tape. Prior to Mar. 31, 1979, continuous strip-chart recorder.

DATUM.--Elevation of land-surface datum is 149 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.0 ft above land-surface datum.

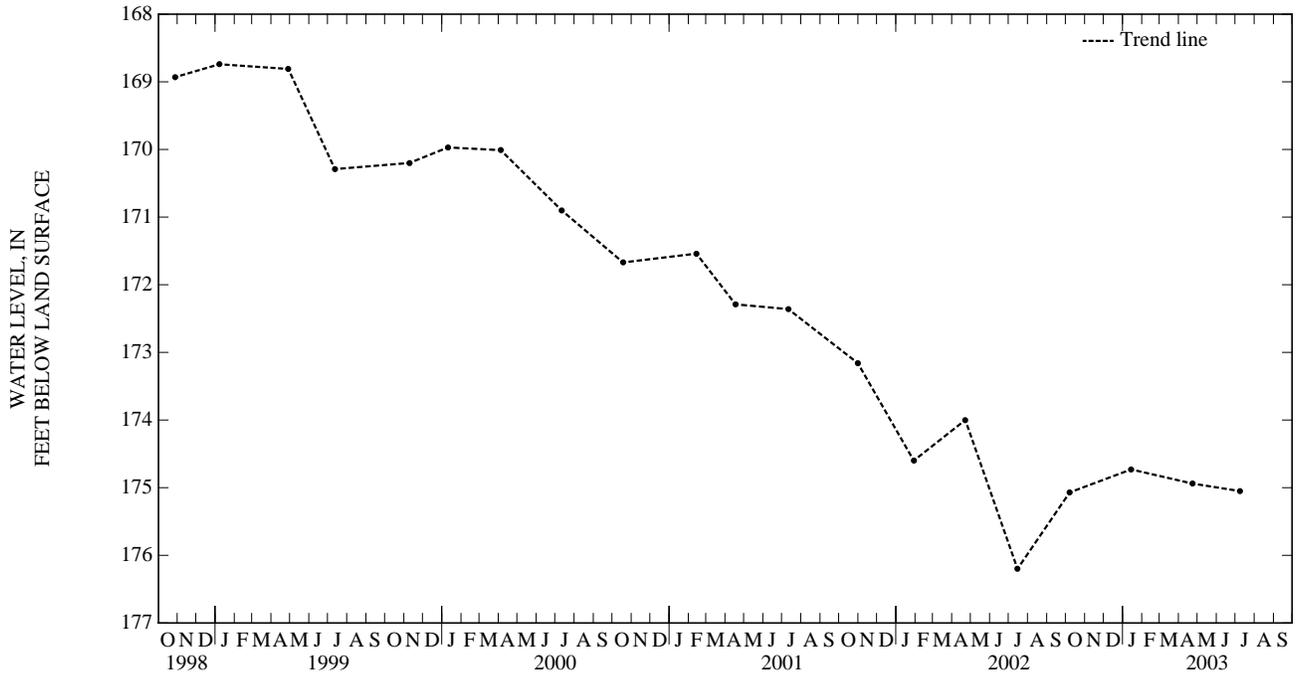
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water level affected by regional drawdown.

PERIOD OF RECORD.--August 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 133.47 ft below land-surface datum, Aug. 28, 1967; lowest measured, 176.20 ft below land-surface datum, July 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 07	175.07	JAN 14	174.73	APR 23	174.94	JUL 08	175.05
WATER YEAR 2003 HIGHEST		174.73 JAN 14, 2003		LOWEST		175.07 OCT 07, 2002	



CITY OF WINCHESTER

39113807811901. Local number, 45X 7.

LOCATION.--Lat 39°11'38.24", long 78°11'19.02", NAD83, Hydrologic Unit 02070004, 0.20 mi. northeast of the intersection of U.S. Highway 50 and Linden Drive and 100 ft east of Linden Drive. Owner: Linden Drive Properties LLC.

AQUIFER.--Elbrook Formation of Middle to Upper Cambrian age.

WELL CHARACTERISTICS.--Drilled domestic water well, diameter 6 in., depth unknown, length of casing unknown.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

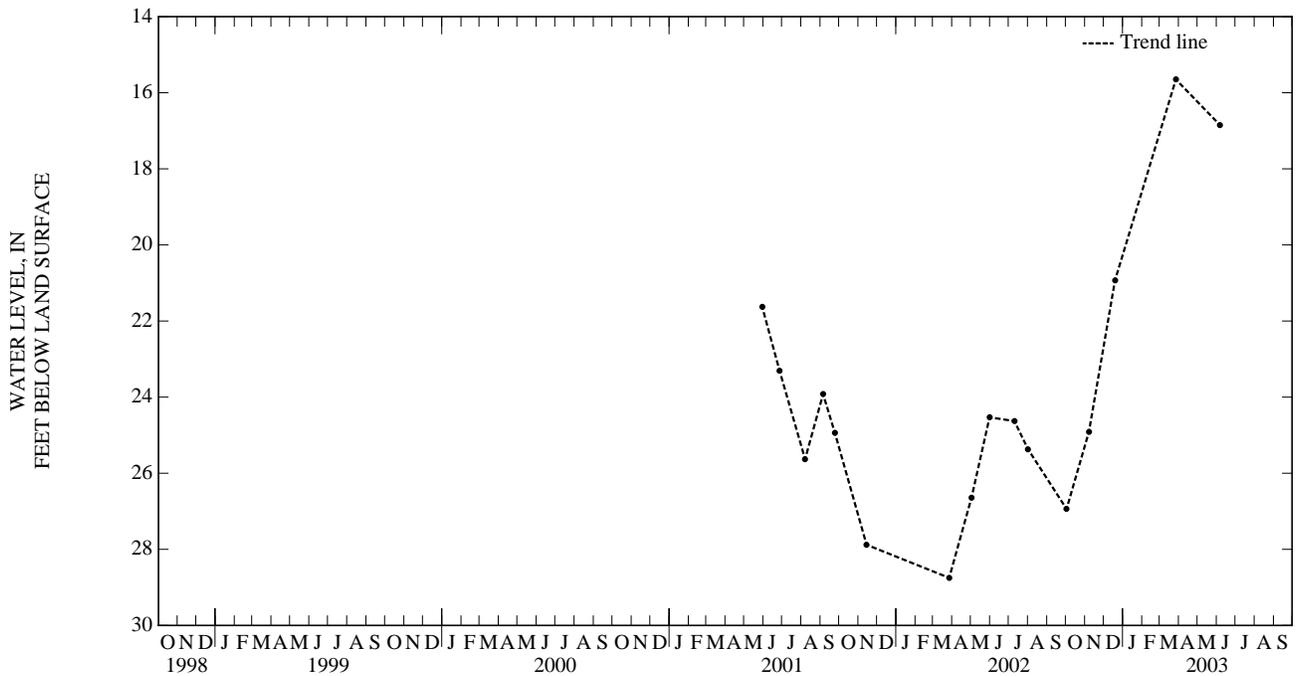
DATUM.--Elevation of land-surface datum is 800 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 3.15 ft below land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.65 ft below land-surface datum, Mar. 27, 2003; lowest measured, 28.75 ft below land-surface datum, Mar. 27, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	26.94	NOV 07	24.91	DEC 19	20.93	MAR 27	15.65	JUN 06	16.85
WATER YEAR 2003		HIGHEST	15.65	MAR 27, 2003	LOWEST	28.75	OCT 02, 2002		



GROUND-WATER LEVELS
CITY OF WINCHESTER—Continued

391122078102401. Local number, 45X 8.

LOCATION.--Lat 39°11'22.20", long 78°10'24.22", NAD83, Hydrologic Unit 02070004, 980 ft north of the intersection of Selma Drive and U.S. Highway 50. Owner: John W. Truban.

AQUIFER.--Conococheague Limestone of Upper Cambrian to Lower Ordovician age.

WELL CHARACTERISTICS.--Drilled water well, diameter 6 in., depth 280 ft, cased to 23 ft, open hole 23 to 280 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by USGS personnel.

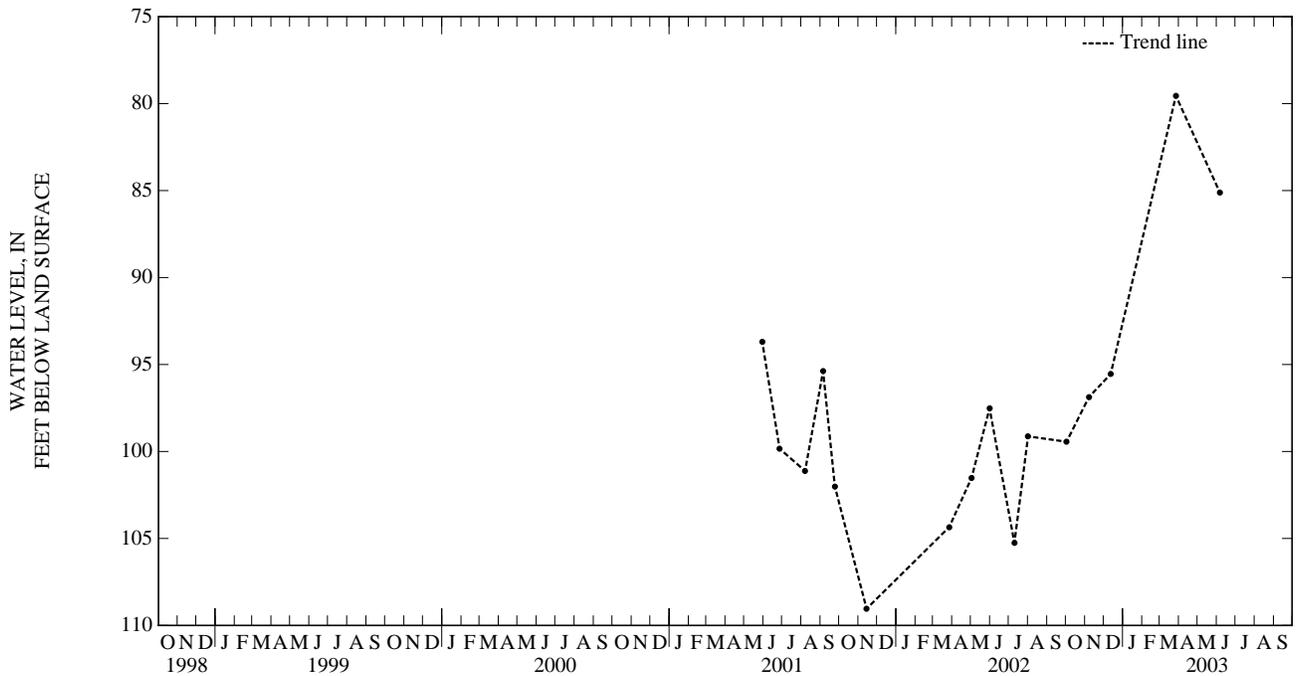
DATUM.--Elevation of land-surface datum is 825 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.7 ft above land-surface datum.

PERIOD OF RECORD.--May 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 79.55 ft below land-surface datum, Mar. 27, 2003; lowest measured, 109.04 ft below land-surface datum, Nov. 14, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 02	99.44	NOV 07	96.87	DEC 12	95.55	MAR 27	79.55	JUN 06	85.12
WATER YEAR 2003		HIGHEST	79.55	MAR 27, 2003	LOWEST	99.44	OCT 02, 2002		



YORK COUNTY

371654076401601. Local number, 57G 17 SOW 068.

LOCATION.--Lat 37°16'55", long 76°40'15", NAD83, Hydrologic Unit 02080107, 250 ft east of State Highway 716 at Parkway Estates, 0.5 mi east of Williamsburg. Owner: Sydnor Hydrodynamics.

AQUIFER.--Brightseat-upper Potomac aquifer of Cretaceous-Paleocene age and Aquia aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 8 in., depth 452.3 ft, screened 411 to 426 ft, 442.2 to 452.3 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 1, 1985, to July 7, 1995, bimonthly measurement with chalked tape. Apr. 30, 1978, to Sept. 30, 1985, occasional measurement with chalked tape. Jan. 15, 1974, to Apr. 30, 1978, continuous strip-chart recorder. Prior to Jan. 15, 1974, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 60 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 0.85 ft above land-surface datum.

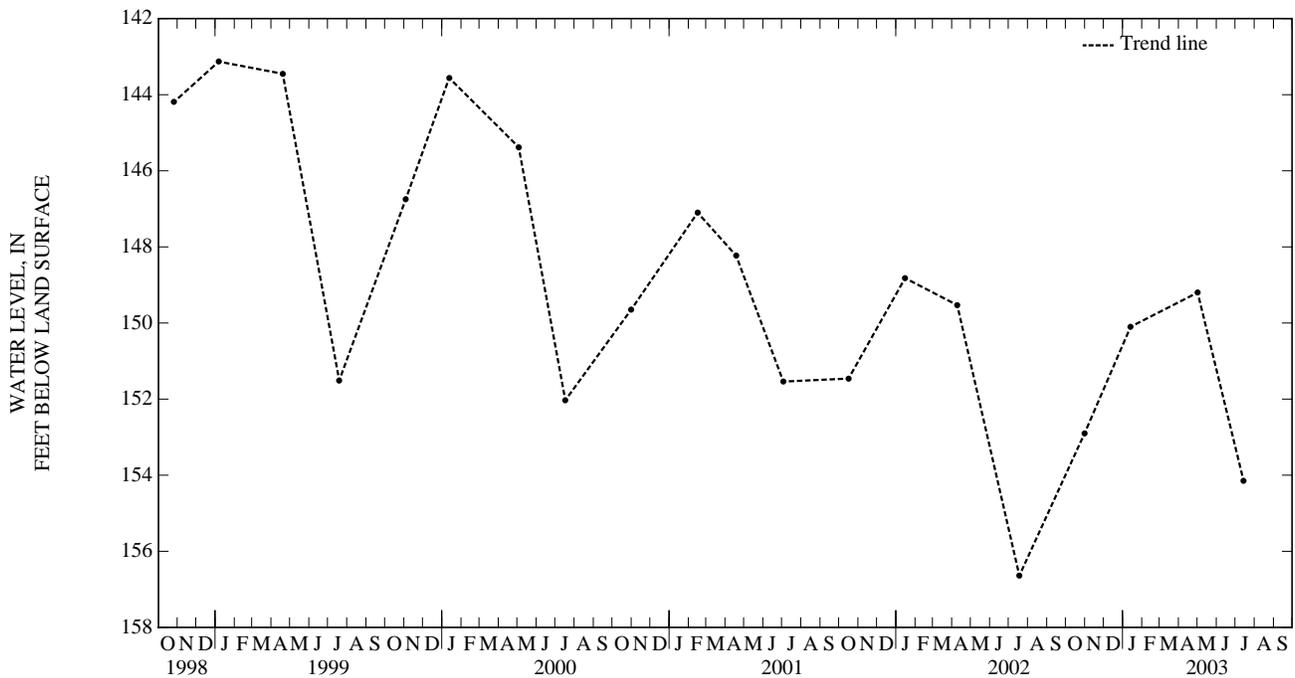
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L. Water level affected by regional drawdown.

PERIOD OF RECORD.--November 1972 to current year. Unpublished records available prior to October 1985 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.09 ft below land-surface datum, Nov. 22, 1972; lowest measured, 156.64 ft below land-surface datum, July 18, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	152.90	JAN 13	150.10	MAY 01	149.20	JUL 14	154.15
WATER YEAR 2003 HIGHEST		149.20 MAY 01, 2003		LOWEST		154.15 JUL 14, 2003	



GROUND-WATER LEVELS
YORK COUNTY—Continued

371045076310702. Local number, 58F 62 SOW 187A.

LOCATION.--Lat 37°10'46", long 76°31'06", NAD83, Hydrologic Unit 02080206, 300 ft north of State Highway 105, 1.8 mi east of intersection of State Highways 105 and 143, and 3.1 mi southeast of Lee Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Eastover-Calvert confining unit of Miocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 140 ft, screened 120 to 140 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 10, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.5 ft above land-surface datum.

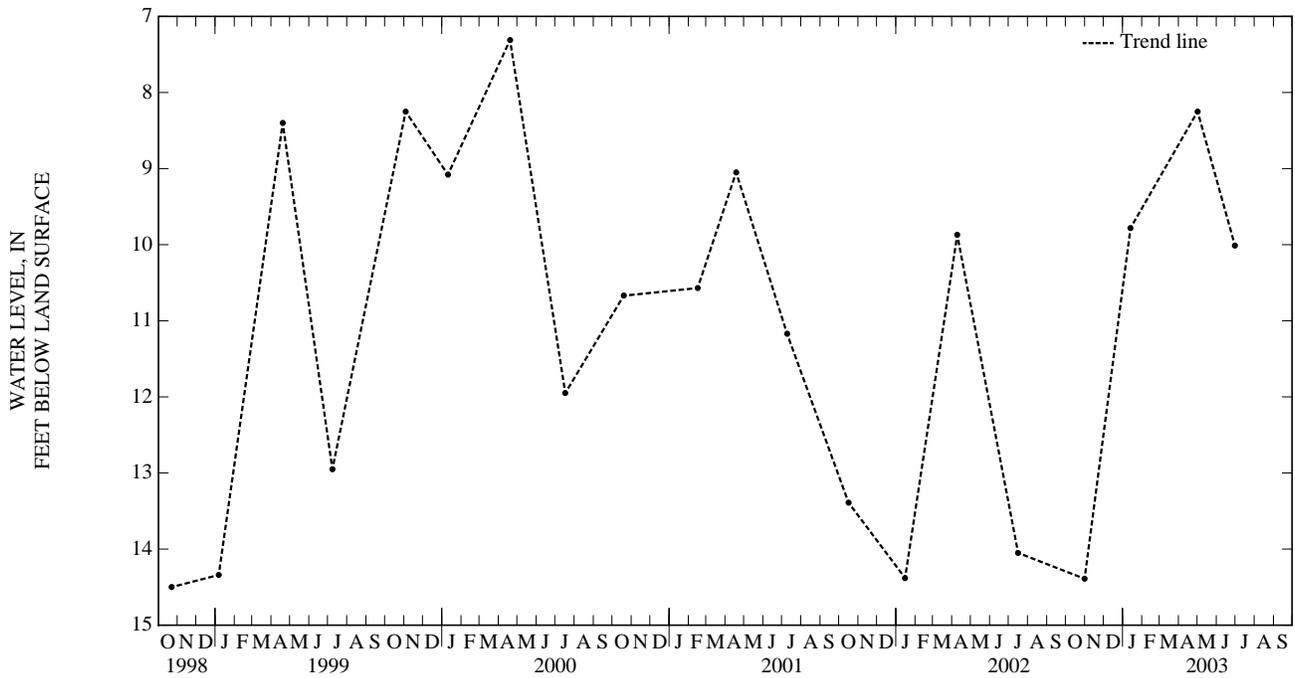
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.08 ft below land-surface datum, Apr. 6, 1994; lowest measured, 14.83 ft below land-surface datum, Nov. 6, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	14.39	JAN 13	9.78	MAY 01	8.25	JUN 30	10.01
WATER YEAR 2003 HIGHEST		8.25 MAY 01, 2003		LOWEST		14.39 OCT 31, 2002	



YORK COUNTY—Continued

371045076310703. Local number, 58F 63 SOW 187B.

LOCATION.--Lat 37°10'46", long 76°31'06", NAD83, Hydrologic Unit 02080206, 300 ft north of State Highway 105, 1.8 mi east of intersection of State Highways 105 and 143, and 3.1 mi southeast of Lee Hall. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 28 ft, screened 18 to 28 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 10, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

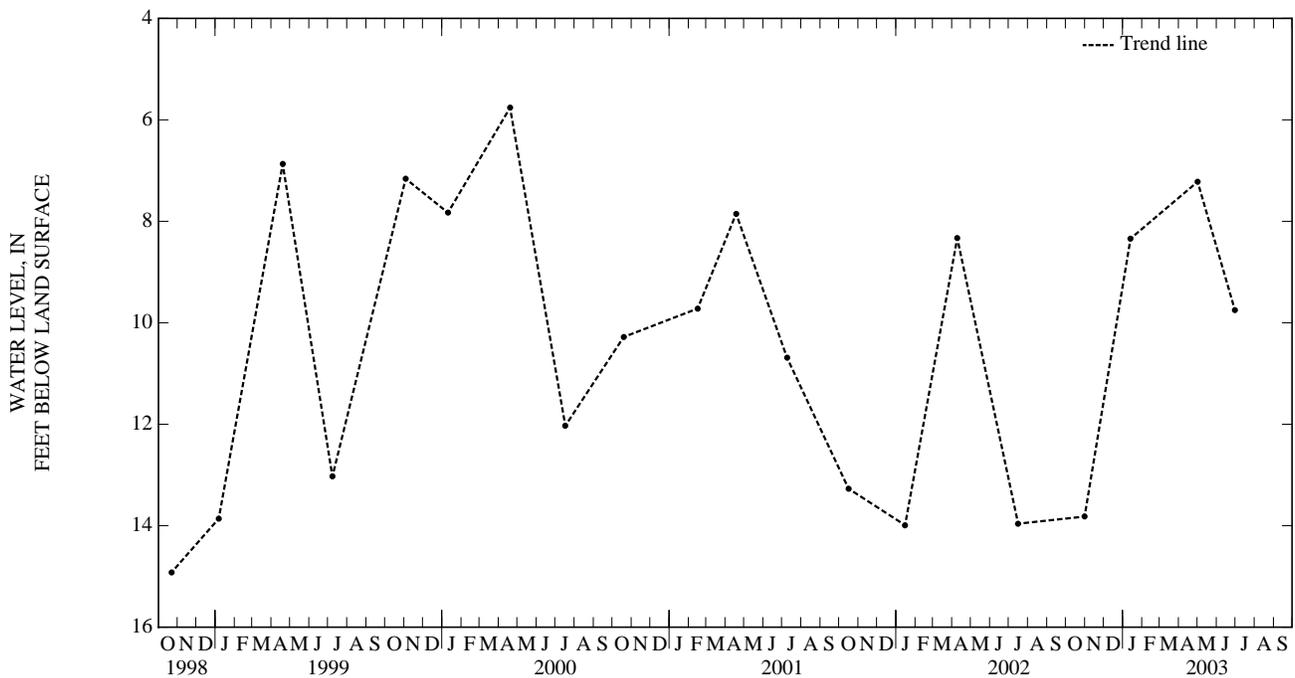
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.76 ft below land-surface datum, Apr. 19, 2000; lowest measured, 14.95 ft below land-surface datum, Jan. 18, 1996.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	13.82	JAN 13	8.34	MAY 01	7.22	JUN 30	9.75
WATER YEAR 2003 HIGHEST		7.22	MAY 01, 2003 LOWEST		13.82	OCT 31, 2002	



GROUND-WATER LEVELS
YORK COUNTY—Continued

371250076300502. Local number, 58F 65 SOW 191A.

LOCATION.--Lat 37°12'51", long 76°30'04", NAD83, Hydrologic Unit 02080107, 300 ft east of State Highway 704, 1.2 mi north of intersection of State Highway 704 and U.S. Highway 17, and 1.5 mi south of Yorktown. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 110 ft, screened 90 to 110 ft.

INSTRUMENTATION.--Occasional measurement with chalked taped by Virginia Department of Environmental Quality - Water Division personnel. May 7, 1991 to Oct. 17, 1995, continuous strip-chart recorder since May 7, 1991. Occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 55 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.8 ft above land-surface datum prior to May 7, 1991; 1.70 ft thereafter.

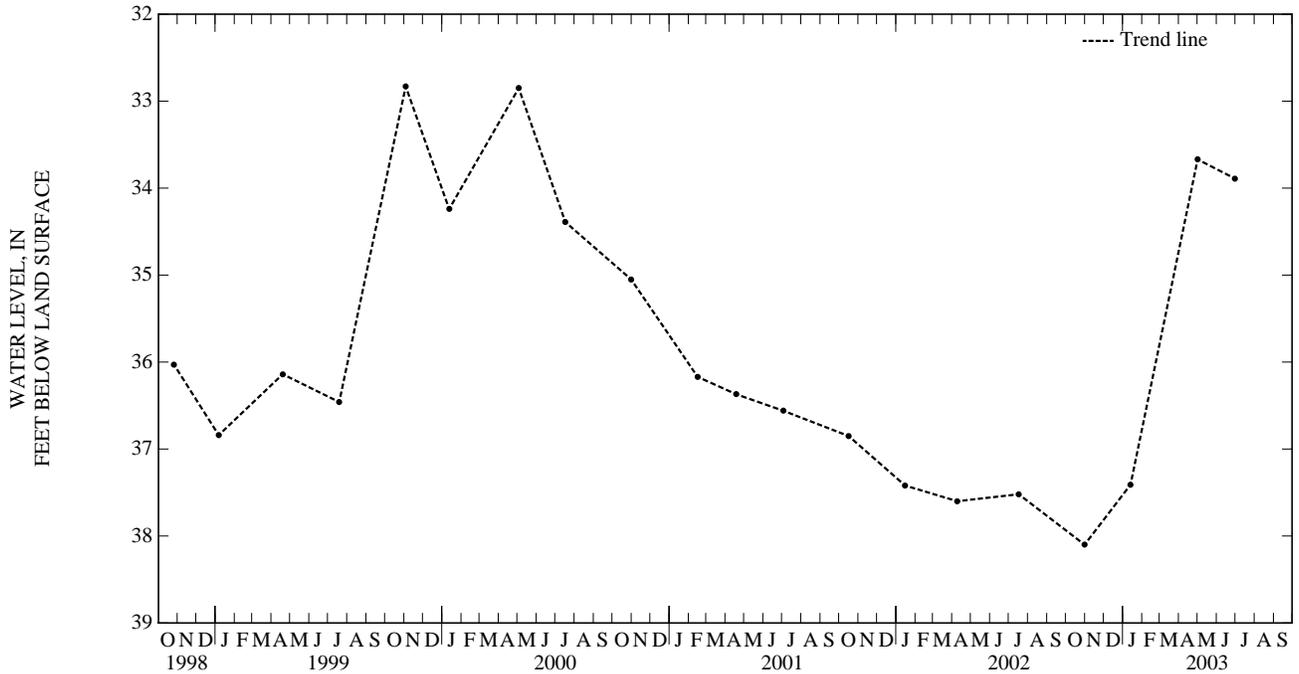
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--November 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.47 ft below land-surface datum, Apr. 16, 1998; lowest recorded, 38.38 ft below land-surface datum, Mar. 13, 1992.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	38.10	JAN 13	37.41	MAY 01	33.67	JUN 30	33.89
WATER YEAR 2003 HIGHEST		33.67	MAY 01, 2003 LOWEST		38.10	OCT 31, 2002	



371535076373501. Local number, 59F 1 SOW 027.

LOCATION.--Lat 37°13'05", long 76°29'18", NAD83, Hydrologic Unit 02080107, at U.S. Naval Supply Center, 1.6 mi southeast of Yorktown. Owner: U.S. Naval Supply Center.

AQUIFER.--Chickahominy-Piney Point aquifer of Eocene-Oligocene age.

WELL CHARACTERISTICS.--Drilled unused water well, diameter 10 in., depth 446 ft, screened 421 to 446 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Oct. 11, 1985, to July 7, 1995, bimonthly measurement with chalked tape. Sept. 10, 1971, to Oct. 10, 1985, occasional measurement with chalked tape. Apr. 10, 1970, to Sept. 10, 1971, continuous strip-chart recorder. Prior to Apr. 10, 1970, occasional measurement with chalked tape.

DATUM.--Elevation of land-surface datum is 50 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 2.8 ft above land-surface datum prior to Jan. 15, 2002; 2.40 ft thereafter.

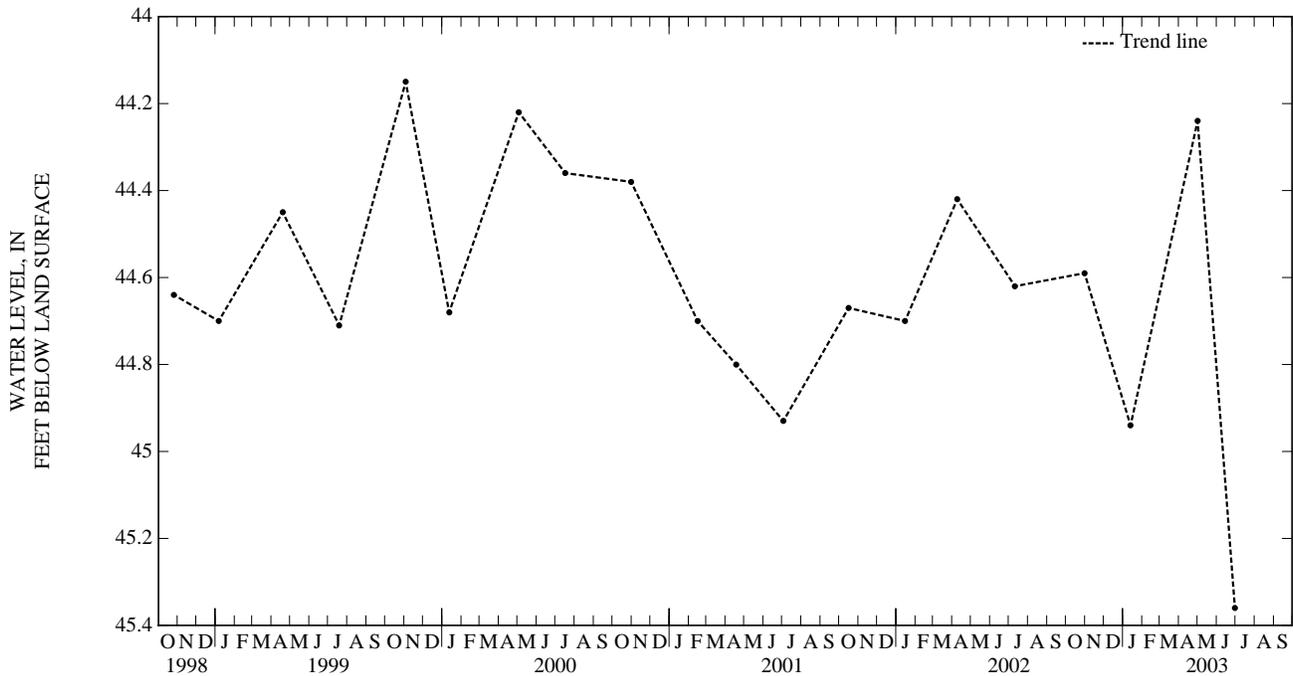
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--October 1969 to current year. Unpublished records available prior to October 1987 in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 40.00 ft below land-surface datum, Oct. 27, 1969; lowest measured, 45.36 ft below land-surface datum, June 30, 2003.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	44.59	JAN 13	44.94	MAY 01	44.24	JUN 30	45.36
WATER YEAR 2003 HIGHEST		44.24	MAY 01, 2003 LOWEST		45.36	JUN 30, 2003	



GROUND-WATER LEVELS
YORK COUNTY—Continued

370841076275202. Local number, 59F 72 SOW 184A

LOCATION.--Lat 37°08'42", long 76°27'51", NAD83, Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 98 ft, diameter 3.5 in. from 98 to 131 ft, depth 131 ft, screened 121 to 131 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 12, 1991, to July 7, 1995, bimonthly measurement with chalked tape. Prior to Sept. 12, 1991, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 42 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.8 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter.

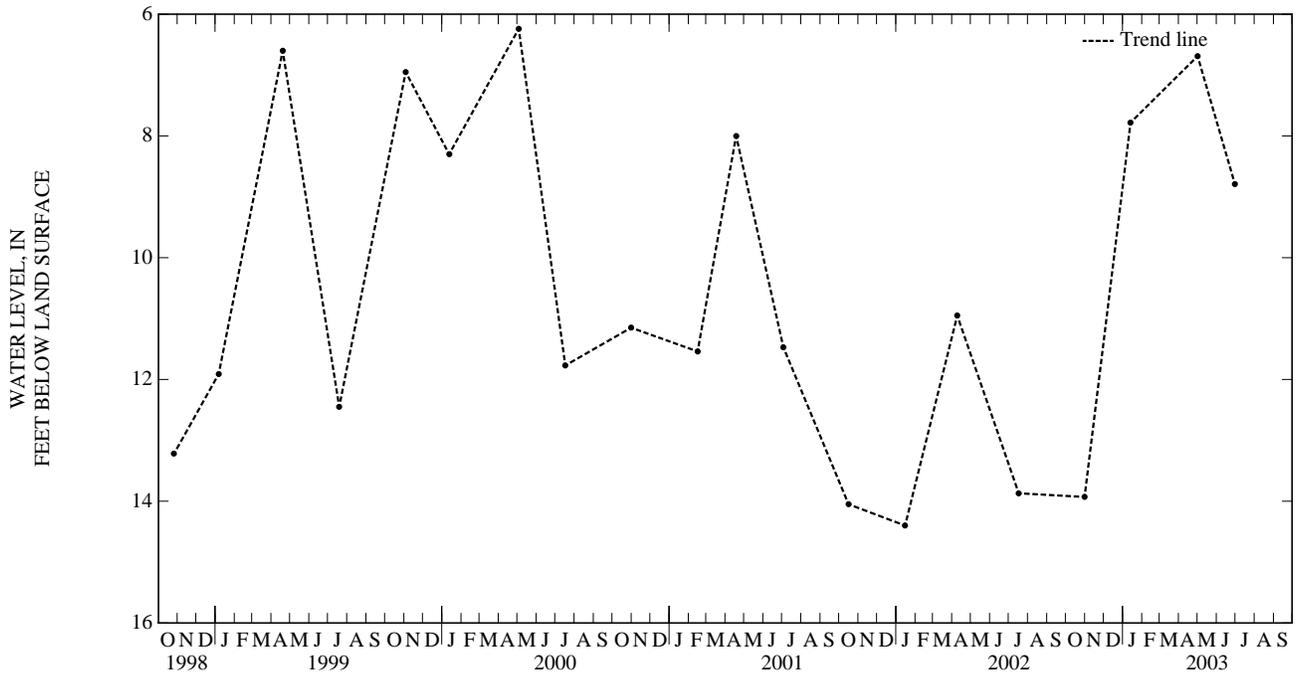
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 2.46 ft below land-surface datum, Apr. 29, 1997; lowest recorded, 14.40 ft below land-surface datum, Jan. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	13.93	JAN 13	7.78	MAY 01	6.69	JUN 30	8.79
WATER YEAR 2003 HIGHEST		6.69	MAY 01, 2003 LOWEST		13.93	OCT 31, 2002	



YORK COUNTY—Continued

370841076275203. Local number, 59F 73 SOW 184B.

LOCATION.--Lat 37°08'42", long 76°27'51", NAD83, Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Cornwallis Cave aquifer of Pliocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in. to 39 ft, diameter 2.0 in. from 39 to 60 ft, depth 60 ft, screened 50 to 60 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 42 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.7 ft above land-surface datum.

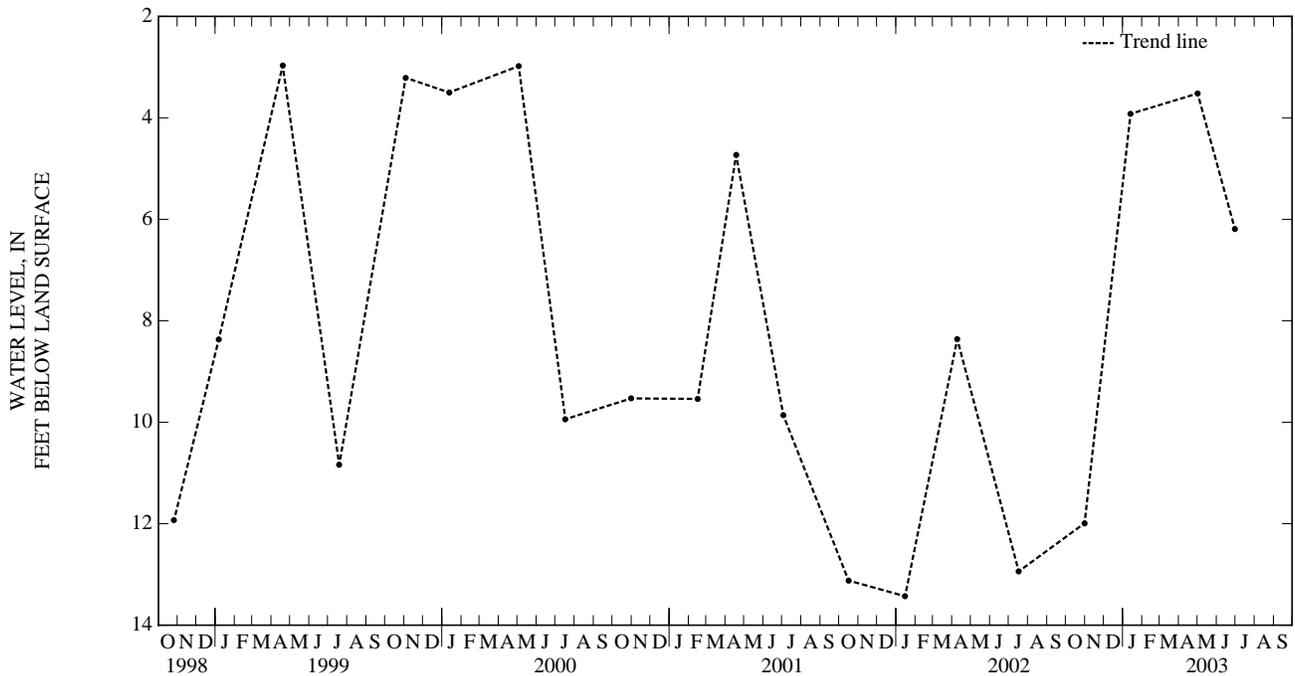
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.03 ft below land-surface datum, Feb. 15, 1994; lowest measured, 13.43 ft below land-surface datum, Jan. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	11.99	JAN 13	3.92	MAY 01	3.52	JUN 30	6.19
WATER YEAR 2003 HIGHEST		3.52 MAY 01, 2003		LOWEST		11.99 OCT 31, 2002	



GROUND-WATER LEVELS
YORK COUNTY—Continued

370841076275204. Local number, 59F 74 SOW 184C.

LOCATION.--Lat 37°08'42", long 76°27'51", NAD83, Hydrologic Unit 02080108, 800 ft south of State Highway 620, 0.4 mi southwest of intersection of State Highway 620 and U.S. Highway 17, and 2.2 mi southwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 20 ft, screened 10 to 20 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 12, 1991, to July 7, 1995, bimonthly measurement with chalked tape. Prior to Sept. 12, 1991, digital recorder 60-minute punch.

DATUM.--Elevation of land-surface datum is 42 ft above NGVD of 1929, from topographic map. Measuring point: Top of recorder shelf, 2.8 ft above land-surface datum prior to Nov. 6, 1991; top of casing, 1.80 ft thereafter.

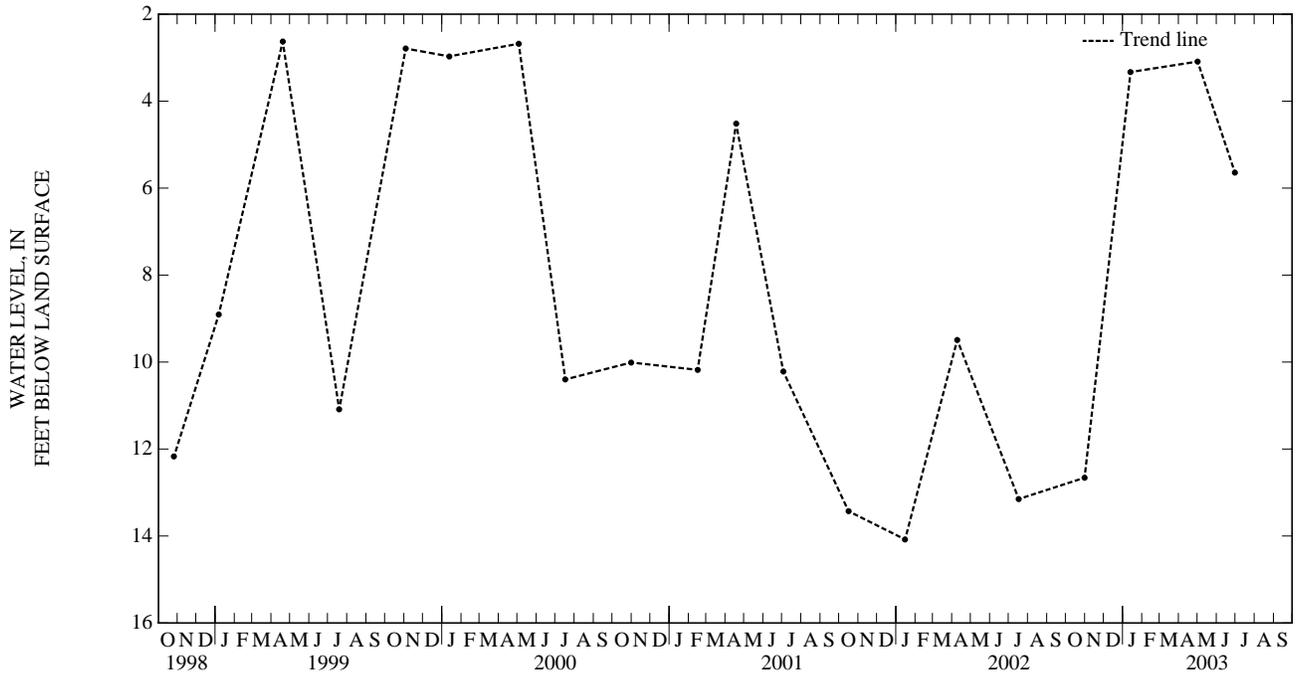
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--July 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level recorded, 1.19 ft below land-surface datum, Oct. 9, 1996; lowest recorded, 14.08 ft below land-surface datum, Jan. 15, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	12.66	JAN 13	3.33	MAY 01	3.09	JUN 30	5.64
WATER YEAR 2003 HIGHEST		3.09	MAY 01, 2003 LOWEST		12.66	OCT 31, 2002	



YORK COUNTY—Continued

370958076291502. Local number, 59F 81 SOW 186A.

LOCATION.--Lat 37°09'59", long 76°29'14", NAD83, Hydrologic Unit 02080108, 100 ft south of State Highway 173, 0.8 mi southwest of intersection of U.S. Highway 17 and State Highway 173, and 2.8 mi west of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 132 ft, screened 112 to 132 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 50.77 ft above NGVD of 1929. Measuring point: Top of casing, 1.6 ft above land-surface datum.

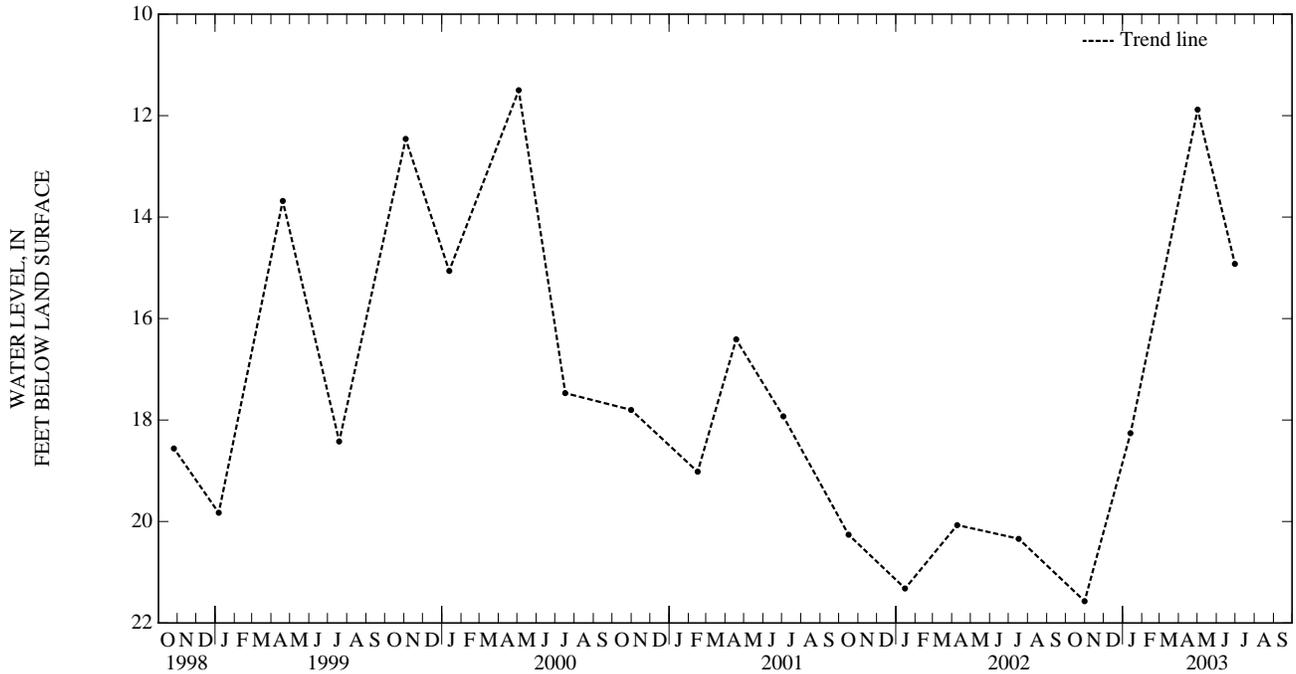
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.73 ft below land-surface datum, Apr. 6, 1994; lowest measured, 21.57 ft below land-surface datum, Oct. 31, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	21.57	JAN 13	18.26	MAY 01	11.88	JUN 30	14.92
WATER YEAR 2003 HIGHEST		11.88	MAY 01, 2003 LOWEST		21.57	OCT 31, 2002	



GROUND-WATER LEVELS
YORK COUNTY—Continued

371207076265502. Local number, 59F 86 SOW 188A.

LOCATION.--Lat 37°12'08", long 76°26'54", NAD83, Hydrologic Unit 02080107, 200 ft north of State Highway 718, 0.3 mi east of intersection of State Highways 173 and 718, and 2.3 mi northwest of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--York County shallow aquifer system (undivided) of Miocene-Holocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 99 ft, screened 79 to 99 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 7 ft above NGVD of 1929, from topographic map. Measuring point: Top of casing, 1.6 ft above land-surface datum.

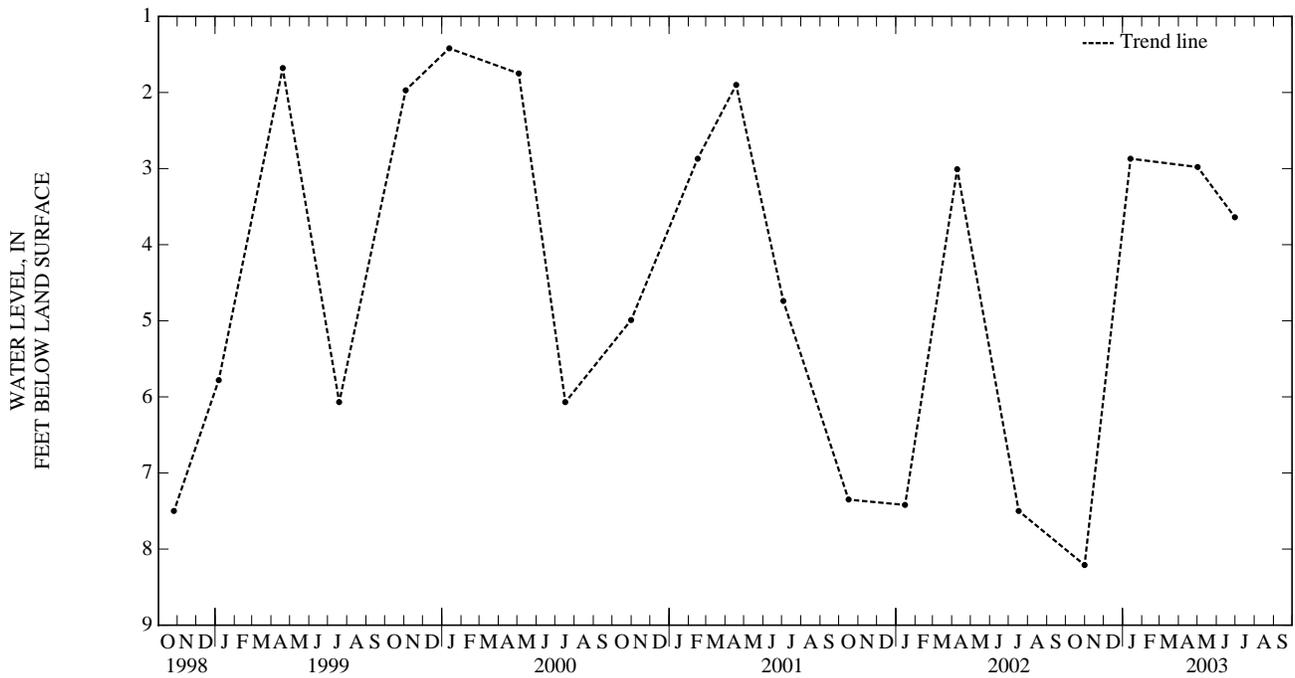
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.37 ft below land-surface datum, Feb. 15, 1994; lowest measured, 8.21 ft below land-surface datum, Oct. 31, 2002.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	8.21	JAN 13	2.87	MAY 01	2.98	JUN 30	3.64
WATER YEAR 2003 HIGHEST		2.87	JAN 13, 2003 LOWEST		8.21	OCT 31, 2002	



YORK COUNTY—Continued

371053076252202. Local number, 59F 89 SOW 189A.

LOCATION.--Lat 37°10'54", long 76°25'21", NAD83, Hydrologic Unit 02080108, 500 ft north of State Highway 617, 0.6 mi northeast of intersection of State Highways 620 and 617, and 1.3 mi northeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Yorktown-Eastover aquifer of Miocene-Pliocene age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 97 ft, screened 77 to 97 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 4.63 ft above NGVD of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum.

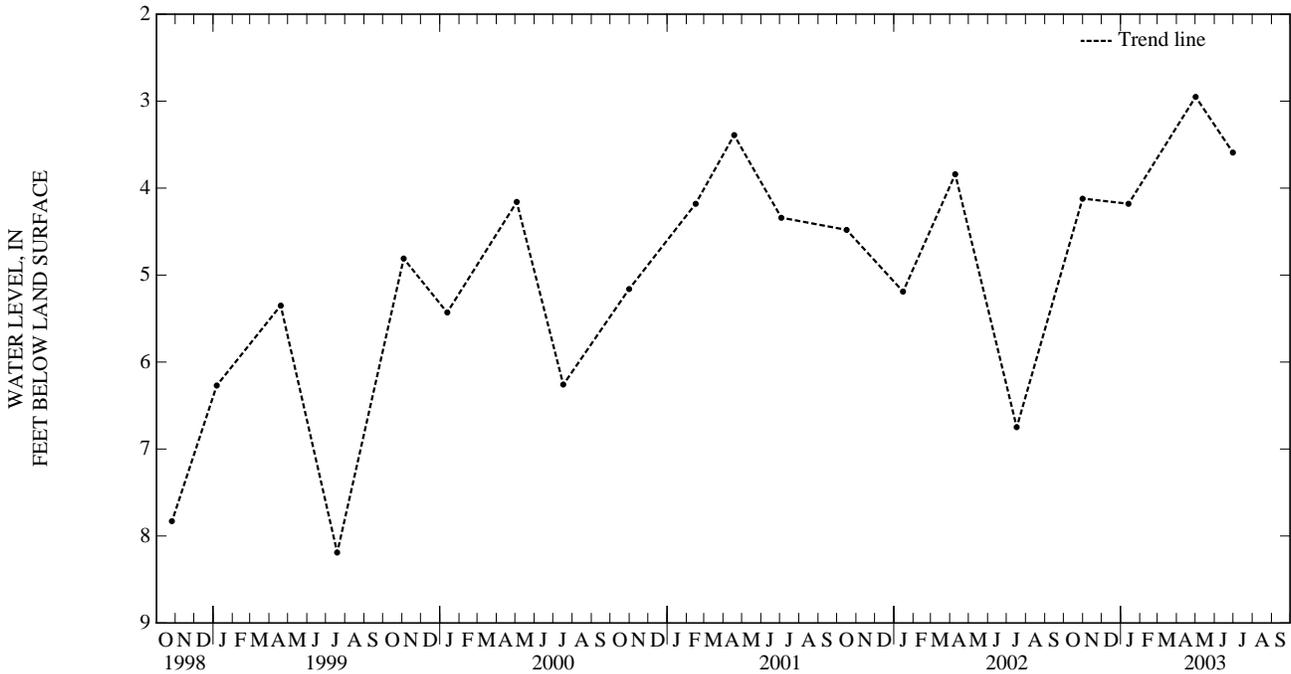
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.95 ft below land-surface datum, May 1, 2003; lowest measured, 9.11 ft below land-surface datum, May 4, 1995.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	4.12	JAN 13	4.18	MAY 01	2.95	JUN 30	3.59
WATER YEAR 2003 HIGHEST		2.95	MAY 01, 2003 LOWEST		4.18	JAN 13, 2003	



GROUND-WATER LEVELS
YORK COUNTY—Continued

371053076252203. Local number, 59F 96 SOW 189B.

LOCATION.--Lat 37°10'54", long 76°25'21", NAD83, Hydrologic Unit 02080108, 500 ft north of State Highway 617, 0.6 mi northeast of intersection of State Highways 620 and 617, and 1.3 mi northeast of Dare. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 4.77 ft above NGVD of 1929. Measuring point: Top of casing, 1.6 ft above land-surface datum.

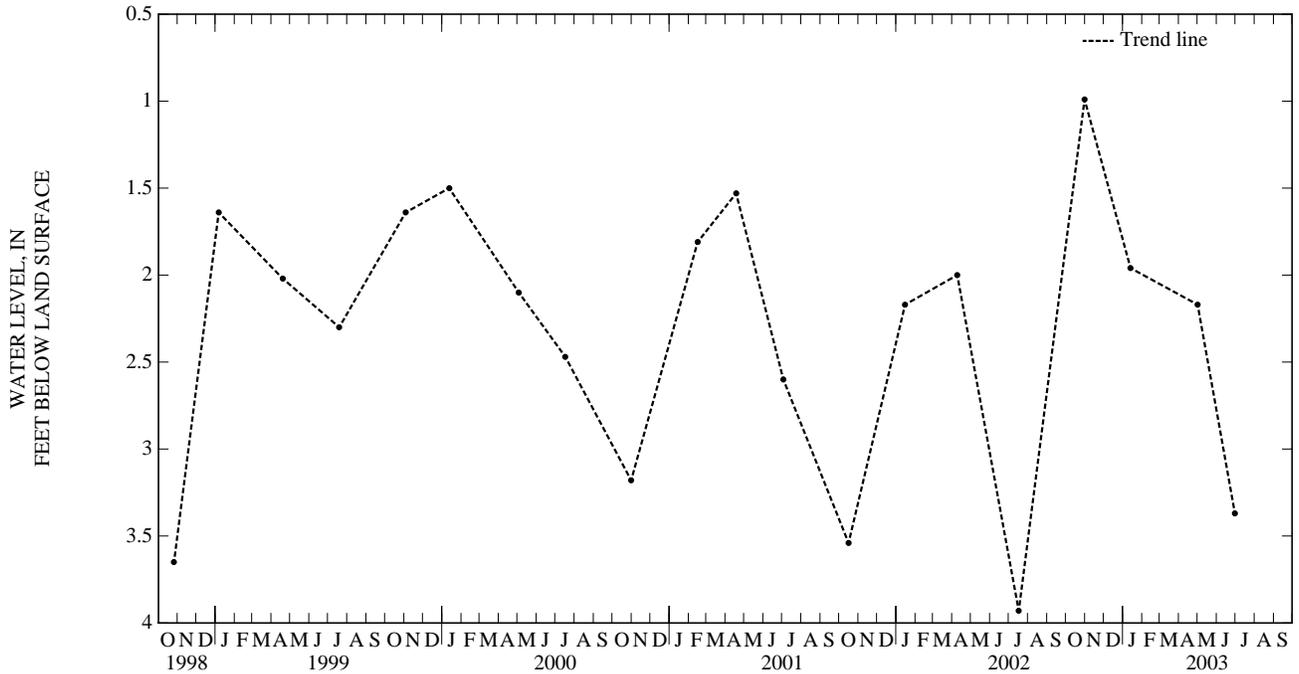
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.70 ft below land-surface datum, Apr. 29, 1997; lowest measured, 4.68 ft below land-surface datum, June 11, 1991.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	.99	JAN 13	1.96	MAY 01	2.17	JUN 30	3.37
WATER YEAR 2003 HIGHEST		.99	OCT 31, 2002	LOWEST		3.37	JUN 30, 2003



YORK COUNTY—Continued

371314076252203. Local number, 59F 99 SOW 190B.

LOCATION.--Lat 37°13'14", long 76°25'24", NAD83, Hydrologic Unit 02080107, 50 ft north of State Highway 629, 0.8 mi northeast of intersection of State Highways 173 and 629, and 1.8 mi north of Seaford. Owner: Virginia Department of Environmental Quality.

AQUIFER.--Columbia aquifer of Quaternary age.

WELL CHARACTERISTICS.--Drilled observation water well, diameter 4.5 in., depth 15 ft, screened 5 to 15 ft.

INSTRUMENTATION.--Occasional measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Sept. 4, 1991, to July 7, 1995, bimonthly measurement with chalked tape by Virginia Department of Environmental Quality - Water Division personnel. Prior to Sept. 4, 1991, occasional measurement with chalked tape by USGS and Virginia Department of Environmental Quality - Water Division personnel.

DATUM.--Elevation of land-surface datum is 3.49 ft above NGVD of 1929. Measuring point: Top of casing, 1.5 ft above land-surface datum.

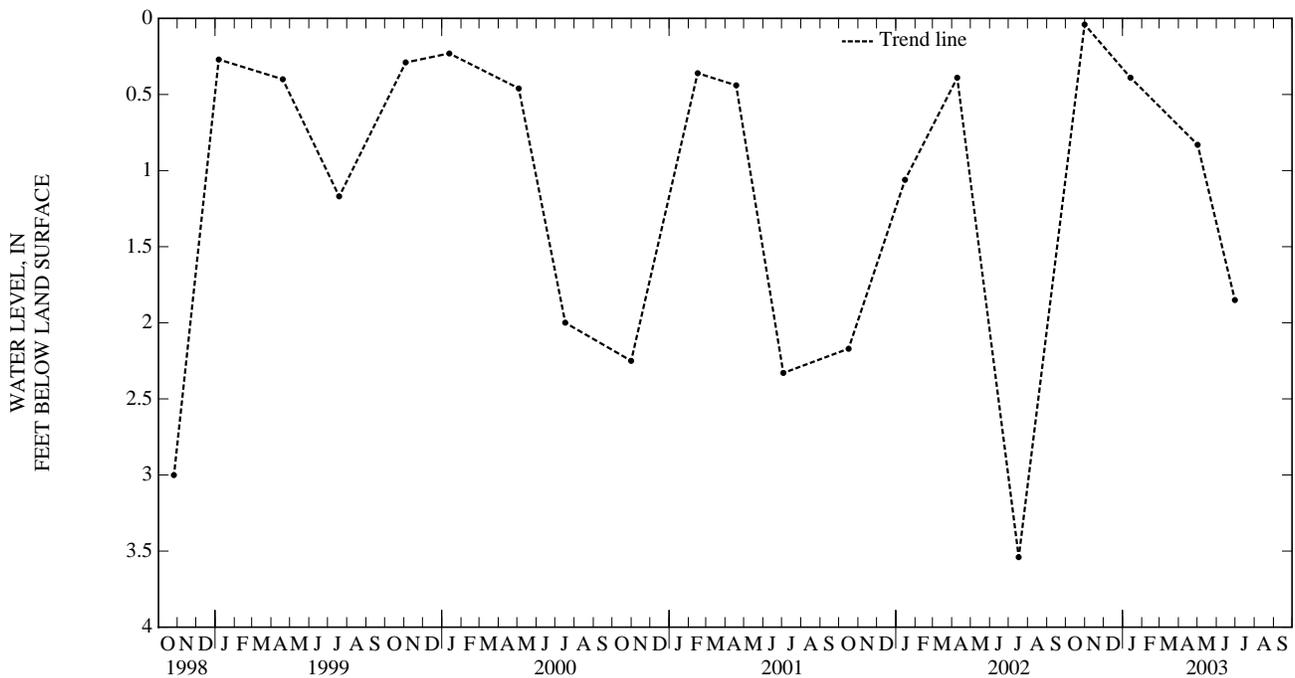
REMARKS.--Records provided by the Virginia Department of Environmental Quality - Water Division. Water from this well is known to contain concentrations of dissolved solids greater than 1,000 mg/L.

PERIOD OF RECORD.--September 1990 to current year. Unpublished records available in files of the Virginia Department of Environmental Quality - Water Division.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft below land-surface datum, Apr. 29, 1997, Feb. 15, 1994, Oct. 31, 2002; lowest measured, 3.62 ft below land-surface datum, June 11, 1991, Aug. 18, 1993.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	.04	JAN 13	.39	MAY 01	.83	JUN 30	1.85
WATER YEAR 2003 HIGHEST		.04 OCT 31, 2002		LOWEST		1.85 JUN 30, 2003	



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GROUND-WATER-QUALITY RECORDS

The following remark codes may appear with the water-quality data in this section:

PRINTED OUTPUT	REMARK
E	Estimated value.
M	Constituent was detected but not quantified.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.
M	Constituent was detected but not quantified.

The following geologic unit codes or aquifer codes may appear with the water-quality data in this section:

CODE	GEOLOGIC UNIT/AQUIFER
000MMPS	METAMORPHOSED SEDIMENTARY ROCKS
000MPVS	METAMORPHOSED VOLCANIC AND SEDIMENTARY ROCKS
110QRNR	COLUMBIA AQUIFER
121CSPKU	YORKTOWN-EASTOVER AQUIFER
124EOCN	CHICKAHOMINY-PINEY POINT AQUIFER
125PLCN	AQUIA AQUIFER
211CRCSU	UPPER POTOMAC AQUIFER
217PPSC	MIDDLE POTOMAC AQUIFER
217PTXN	LOWER POTOMAC AQUIFER
231BLBF	BALLS BLUFF FORMATION
231MNSS	MANASSAS FORMATION
231VINT	VINTA FORMATION
231NWRK	NEWARK GROUP
324NRTN	NORTON FORMATION
324WISE	WISE FORMATION
327LEE	LEE FORMATION
330MSSP	MISSISSIPPIAN SYSTEM
331BLFD	BLUEFIELD FORMATION
340HRVL	HUNTERVILLE CHERT
341BRLR	BRALLIER FORMATION
341CMNG	CHEMUNG FORMATION
341MLBR	MILLBORO SHALE
347DVSL	DEVONIAN-SILURIAN SYSTEMS
361MRBG	MARTINSBURG SHALE
364EGLS	EGGLESTON FORMATION
364MCSN	MOCCASIN FORMATION
371ELBK	ELBROOK FORMATION
377ROME	ROME FORMATION
377SHDY	SHADY FORMATION
400GRGS	GRANITE GNEISS
400PCMB	PRECAMBRIAN ERATHEM

QUALITY OF GROUND WATER

DATA LISTED BY COUNTY

MULTIPLE STATION ANALYSES

Local identifier	Station number	Geologic unit	Date	Time	Sample type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
CAROLINE COUNTY									
51M 22	375729077254301	121CSPKU	04-21-03	1130	Environmental	13.4	13	11	5.01
51M 23	375729077254302	121CSPKU	04-21-03	1155	Environmental	11.5	11	9.2	4.83
51M 24	375729077254303	121CSPKU	04-21-03	1215	Environmental	7.5	7.5	2.7	4.74
50M 27	375806077322301	400PCMB	04-03-03	1030	Environmental	24.8	25	20	19.83
50M 26	375807077322101	400PCMB	04-03-03	1120	Environmental	9.1	8.9	6.9	2.79
50M 31	375807077322102	111SDMN	04-03-03	1135	Environmental	6.75	6.0	4.4	2.65
50M 32	375807077322103	111SDMN	04-03-03	1150	Environmental	4.30	3.5	1.9	1.98
50M 25	375808077322001	110QRNR	04-03-03	1245	Environmental	3.6	3.4	1.4	0.22
50M 21	375810077321901	400PCMB	04-03-03	1525	Environmental	10.1	9.9	7.9	4.74
50M 22	375810077321902	400PCMB	04-03-03	1540	Environmental	7.6	7.4	5.4	3.17
50M 14	375842077321301	400PCMB	04-16-03	1150	Environmental	47.5	47	42	4.89
		400PCMB	04-16-03	1155	Replicate	47.5	47	42	4.89
		400PCMB	04-16-03	1200	Replicate	47.5	47	42	4.89
50M 15	375842077321302	121CSPKU	04-16-03	1230	Environmental	27.0	27	25	4.79
51M28	375845077253701	121CSPKU	04-22-03	1000	Environmental	13.3	13	7.8	-0.11
		121CSPKU	04-22-03	1005	Replicate	13.3	13	7.8	-0.11
51M29	375845077253702	121CSPKU	04-22-03	1055	Environmental	4.4	3.9	2.3	0.43
51M30	375845077253703	121CSPKU	04-22-03	1030	Environmental	2.3	1.8	0.20	0.51
		121CSPKU	04-22-03	1035	Replicate	2.3	1.8	0.20	0.51
50M 13	375853077315903	121CSPKU	04-16-03	1010	Environmental	10.2	10	8.0	1.20
50M 9	375904077315401	400PCMB	04-15-03	1610	Environmental	10.35	10	9.2	2.89
50M 8	375908077314801	121CSPKU	04-15-03	1450	Environmental	8.5	8.3	6.0	-0.25
51M 21	385748077255801	121CSPKU	04-16-03	1420	Environmental	17.53	18	13	7.97
51M 20	385759077254501	121CSPKU	04-17-03	1000	Environmental	14.89	15	9.9	6.07
50M 7	385806077322501	400PCMB	04-03-03	0945	Environmental	46.28	46	41	23.73
50M 4	385812077321801	400PCMB	04-03-03	1400	Environmental	15.49	15	10	4.72
50M 18	385812077321802	400PCMB	04-03-03	1415	Environmental	14.7	14	12	4.59
50M 19	385812077321803	121CSPKU	04-03-03	1425	Environmental	11.5	11	9.3	4.34
50M 20	385812077321804	111SDMN	04-03-03	1455	Environmental	8.55	8.1	6.5	3.51
50M 2	385814077321401	400PCMB	04-15-03	1004	Environmental	39.94	40	35	9.45
50M 3	385814077321402	121CSPKU	04-15-03	1050	Environmental	25.14	25	20	6.30
50M 16	385814077321403	121CSPKU	04-15-03	1120	Environmental	16.2	16	11	3.43
50M 17	385814077321404	121CSPKU	04-15-03	1140	Environmental	10.5	10	4.7	3.23
51M 17	385819077254501	121CSPKU	04-21-03	1555	Environmental	13.98	14	9.0	6.45
51M 15	385832077253501	121CSPKU	04-21-03	1350	Environmental	25.29	25	20	13.16
CLARKE COUNTY									
46WS 1	390405078014201	371CCCG	08-13-03	0930	Environmental	--	--	--	--
46WS 22	390457078033801	367BKMN	08-13-03	1520	Environmental	--	--	--	--
46WS 3	390519078023701	371CCCG	08-13-03	1150	Environmental	--	--	--	--
46WS 2	390653078041401	367BKMN	08-20-03	1555	Environmental	--	--	--	--
46XS 8	391029078012701	367BKMN	08-13-03	1755	Environmental	--	--	--	--
FREDERICK COUNTY									
FAY SPRING VAUCLUSE SPRING	01616075	364EDBG	08-11-03	1450	Environmental	--	--	--	--
44W 8	01635070	367BKMN	08-12-03	1830	Environmental	--	--	--	--
45Y 5	390226078170601	367BKMN	08-15-03	1045	Environmental	155	--	--	--
	391757078095402	361MRBG	08-12-03	1415	Environmental	200	--	--	--
GLOUCESTER COUNTY									
57H 22	372621076404203	125PLCN	02-11-03	1040	Environmental	370	370	350	88.25
JAMES CITY COUNTY									
56GS 3	371524076480801	110QRNR	05-13-03	1345	Environmental	--	--	--	--
56H 40	372313076480602	211CRCSU	01-30-03	1615	Environmental	490	480	400	187.00
56H 28 SOW 177D	372506076511704	125PLCN	02-14-03	1040	Environmental	321	300	290	179.49

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered, uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
CAROLINE COUNTY											
51M 22	04-21-03	110	--	--	--	755	3.9	38	5.0	218	--
51M 23	04-21-03	110	--	--	--	755	6.2	60	4.5	239	--
51M 24	04-21-03	110	--	--	--	754	5.2	51	5.4	328	--
50M 27	04-03-03	240	--	--	--	749	8.3	82	4.8	125	--
50M 26	04-03-03	215	--	--	--	749	5.7	51	4.8	76	--
50M 31	04-03-03	215	--	--	--	749	1.2	11	4.6	83	--
50M 32	04-03-03	215	--	--	--	749	7.3	65	6.2	51	--
50M 25	04-03-03	210	--	--	--	749	5.5	49	--	70	--
50M 21	04-03-03	220	--	--	--	749	4.1	36	--	45	--
50M 22	04-03-03	220	--	--	--	749	0.7	6	--	33	--
50M 14	04-16-03	265	--	--	--	--	7.3	--	5.5	36	--
	04-16-03	265	--	--	--	--	7.3	--	5.5	36	--
	04-16-03	265	--	--	--	--	7.3	--	5.5	36	--
50M 15	04-16-03	265	--	--	--	--	7.6	--	4.2	23	--
51M28	04-22-03	175	--	--	--	747	1.7	16	4.6	231	--
	04-22-03	175	--	--	--	747	1.7	16	4.6	231	--
51M29	04-22-03	175	--	--	--	746	1.7	17	5.5	224	--
51M30	04-22-03	175	--	--	--	747	3.9	42	6.2	234	--
	04-22-03	175	--	--	--	747	3.9	42	6.2	234	--
50M 13	04-16-03	240	--	--	--	--	5.4	--	5.6	18	--
50M 9	04-15-03	215	--	--	--	--	<0.3	--	5.4	324	--
50M 8	04-15-03	200	--	--	--	--	M	--	6.5	455	--
51M 21	04-16-03	185	--	--	--	--	3.9	--	4.8	75	--
51M 20	04-17-03	115	--	--	--	--	2.9	--	4.8	314	--
50M 7	04-03-03	240	--	--	--	749	0.5	5	6.3	66	--
50M 4	04-03-03	235	--	--	--	749	6.7	62	--	43	--
50M 18	04-03-03	235	--	--	--	749	6.0	55	--	63	--
50M 19	04-03-03	235	--	--	--	749	6.1	53	--	46	--
50M 20	04-03-03	235	--	--	--	749	3.0	26	--	70	--
50M 2	04-15-03	250	--	--	--	--	2.2	--	6.1	52	--
50M 3	04-15-03	250	--	--	--	--	3.9	--	5.2	52	--
50M 16	04-15-03	250	--	--	--	--	4.2	--	4.6	49	--
50M 17	04-15-03	250	--	--	--	--	4.0	--	4.0	46	--
51M 17	04-21-03	130	--	--	--	750	3.5	33	6.0	158	--
51M 15	04-21-03	190	--	--	--	--	5.4	--	4.3	73	--
CLARKE COUNTY											
46WS 1	08-13-03	470	--	--	--	--	7.8	--	6.8	569	--
46WS 22	08-13-03	535	--	--	--	--	2.6	--	6.8	604	--
46WS 3	08-13-03	510	--	--	--	--	6.2	--	6.7	563	--
46WS 2	08-20-03	608	--	--	--	--	0.9	--	6.3	533	--
46XS 8	08-13-03	580	--	--	--	--	5.2	--	6.7	659	--
FREDERICK COUNTY											
FAY SPRING VAUCLUSE SPRING	08-11-03	--	--	--	--	--	6.5	--	6.9	694	--
	08-12-03	--	--	--	--	--	6.5	--	6.8	546	--
44W 8	08-15-03	735	--	--	--	--	5.8	--	6.8	720	--
45Y 5	08-12-03	770	--	--	--	--	0.3	--	7.0	840	--
GLOUCESTER COUNTY											
57H 22	02-11-03	6	2.9	105	110	757	1.0	10	8.8	821	4.1
JAMES CITY COUNTY											
56GS 3	05-13-03	45	--	--	--	765	1.5	15	6.9	348	--
56H 40	01-30-03	105	3.4	250	190	762	0.4	4	7.9	829	1.3
56H 28 SOW 177D	02-14-03	103	2.8	107	220	759	1.7	18	7.9	580	3.5

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Bromide water, fltrd, mg/L (71870)	Chloride, water, fltrd, mg/L (00940)
CAROLINE COUNTY											
51M 22	04-21-03	13.7	--	--	--	--	--	--	--	--	--
51M 23	04-21-03	14.0	--	--	--	--	--	--	--	--	--
51M 24	04-21-03	14.4	--	--	--	--	--	--	--	--	--
50M 27	04-03-03	14.0	--	--	--	--	--	--	--	--	--
50M 26	04-03-03	9.9	--	--	--	--	--	--	--	--	--
50M 31	04-03-03	9.2	--	--	--	--	--	--	--	--	--
50M 32	04-03-03	9.3	--	--	--	--	--	--	--	--	--
50M 25	04-03-03	9.4	--	--	--	--	--	--	--	--	--
50M 21	04-03-03	9.3	--	--	--	--	--	--	--	--	--
50M 22	04-03-03	8.5	--	--	--	--	--	--	--	--	--
50M 14	04-16-03	17.5	--	--	--	--	--	--	--	--	--
	04-16-03	17.5	--	--	--	--	--	--	--	--	--
	04-16-03	17.5	--	--	--	--	--	--	--	--	--
50M 15	04-16-03	17.5	--	--	--	--	--	--	--	--	--
51M28	04-22-03	12.0	--	--	--	--	--	--	--	--	--
	04-22-03	12.0	--	--	--	--	--	--	--	--	--
51M29	04-22-03	13.2	--	--	--	--	--	--	--	--	--
51M30	04-22-03	17.5	--	--	--	--	--	--	--	--	--
	04-22-03	17.5	--	--	--	--	--	--	--	--	--
50M 13	04-16-03	14.6	--	--	--	--	--	--	--	--	--
50M 9	04-15-03	17.0	--	--	--	--	--	--	--	--	--
50M 8	04-15-03	15.6	--	--	--	--	--	--	--	--	--
51M 21	04-16-03	14.2	--	--	--	--	--	--	--	--	--
51M 20	04-17-03	12.5	--	--	--	--	--	--	--	--	--
50M 7	04-03-03	14.6	--	--	--	--	--	--	--	--	--
50M 4	04-03-03	11.1	--	--	--	--	--	--	--	--	--
50M 18	04-03-03	10.7	--	--	--	--	--	--	--	--	--
50M 19	04-03-03	8.8	--	--	--	--	--	--	--	--	--
50M 20	04-03-03	8.3	--	--	--	--	--	--	--	--	--
50M 2	04-15-03	15.5	--	--	--	--	--	--	--	--	--
50M 3	04-15-03	16.8	--	--	--	--	--	--	--	--	--
50M 16	04-15-03	13.0	--	--	--	--	--	--	--	--	--
50M 17	04-15-03	13.3	--	--	--	--	--	--	--	--	--
51M 17	04-21-03	12.0	--	--	--	--	--	--	--	--	--
51M 15	04-21-03	13.8	--	--	--	--	--	--	--	--	--
CLARKE COUNTY											
46WS 1	08-13-03	13.0	--	--	--	--	--	--	--	--	--
46WS 22	08-13-03	12.3	--	--	--	--	--	--	--	--	--
46WS 3	08-13-03	12.2	--	--	--	--	--	--	--	--	--
46WS 2	08-20-03	13.6	--	--	--	--	--	--	--	--	--
46XS 8	08-13-03	12.5	--	--	--	--	--	--	--	--	--
FREDERICK COUNTY											
FAY SPRING VAUCLUSE SPRING	08-11-03	13.0	--	--	--	--	--	--	--	--	--
	08-12-03	12.8	--	--	--	--	--	--	--	--	--
44W 8	08-15-03	14.6	--	--	--	--	--	--	--	--	--
45Y 5	08-12-03	13.4	--	--	--	--	--	--	--	--	--
GLOUCESTER COUNTY											
57H 22	02-11-03	18.1	1.63	0.530	7.04	206	515	607	10	0.03	6.71
JAMES CITY COUNTY											
56GS 3	05-13-03	14.9	68.0	1.06	0.94	3.55	162	198	<1	0.03	8.48
56H 40	01-30-03	18.7	3.74	1.24	7.83	202	384	465	1	0.19	46.2
56H 28 SOW 177D	02-14-03	18.4	9.37	3.00	10.2	118	314	381	<1	0.06	11.4

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Sulfide water, unfltrd field, mg/L (99119)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phosphate, water, fltrd, mg/L as P (00671)
CAROLINE COUNTY											
51M 22	04-21-03	--	--	--	--	--	E.09	<0.015	6.53	<0.002	<0.007
51M 23	04-21-03	--	--	--	--	--	E.09	<0.015	10.9	<0.002	<0.007
51M 24	04-21-03	--	--	--	--	--	0.12	<0.015	17.1	<0.002	<0.007
50M 27	04-03-03	--	--	--	--	--	<0.10	<0.015	7.51	<0.002	0.009
50M 26	04-03-03	--	--	--	--	--	<0.10	<0.015	3.80	<0.002	<0.007
50M 31	04-03-03	--	--	--	--	--	E.09	<0.015	2.45	<0.002	<0.007
50M 32	04-03-03	--	--	--	--	--	0.22	0.038	E.015	<0.002	<0.007
50M 25	04-03-03	--	--	--	--	--	E.06	E.013	2.45	<0.002	<0.007
50M 21	04-03-03	--	--	--	--	--	E.09	E.009	<0.022	<0.002	<0.007
50M 22	04-03-03	--	--	--	--	--	E.09	E.011	<0.022	<0.002	<0.007
50M 14	04-16-03	--	--	--	--	--	<0.10	<0.015	0.295	<0.002	<0.007
	04-16-03	--	--	--	--	--	<0.10	<0.015	0.288	<0.002	<0.007
	04-16-03	--	--	--	--	--	<0.10	<0.015	0.30	<0.002	<0.007
50M 15	04-16-03	--	--	--	--	--	<0.10	<0.015	0.672	<0.002	<0.007
51M28	04-22-03	--	--	--	--	--	E.08	<0.015	16.8	<0.002	<0.007
	04-22-03	--	--	--	--	--	E.09	<0.015	17.0	<0.002	<0.007
51M29	04-22-03	--	--	--	--	--	0.22	E.009	16.4	E.002	<0.007
51M30	04-22-03	--	--	--	--	--	0.23	E.010	16.0	<0.002	<0.007
	04-22-03	--	--	--	--	--	0.19	E.008	15.1	<0.002	<0.007
50M 13	04-16-03	--	--	--	--	--	<0.10	<0.015	0.090	<0.002	<0.007
50M 9	04-15-03	--	--	--	--	--	1.3	1.29	E.015	<0.002	<0.007
50M 8	04-15-03	--	--	--	--	--	9.9	8.17	E.019	<0.002	<0.007
51M 21	04-16-03	--	--	--	--	--	E.06	<0.015	<0.022	<0.002	<0.007
51M 20	04-17-03	--	--	--	--	--	0.14	0.021	7.00	0.006	<0.007
50M 7	04-03-03	--	--	--	--	--	E.06	E.008	0.096	<0.002	0.036
50M 4	04-03-03	--	--	--	--	--	<0.10	<0.015	3.40	<0.002	<0.007
50M 18	04-03-03	--	--	--	--	--	<0.10	<0.015	2.29	<0.002	<0.007
50M 19	04-03-03	--	--	--	--	--	<0.10	<0.015	2.85	<0.002	<0.007
50M 20	04-03-03	--	--	--	--	--	0.17	0.034	<0.06	<0.002	<0.007
50M 2	04-15-03	--	--	--	--	--	E.06	<0.015	0.317	<0.002	<0.007
50M 3	04-15-03	--	--	--	--	--	<0.10	<0.015	2.82	<0.002	<0.007
50M 16	04-15-03	--	--	--	--	--	<0.10	<0.015	3.24	<0.002	<0.007
50M 17	04-15-03	--	--	--	--	--	<0.10	<0.015	2.88	<0.002	<0.007
51M 17	04-21-03	--	--	--	--	--	0.17	E.009	8.83	<0.002	<0.007
51M 15	04-21-03	--	--	--	--	--	<0.10	<0.015	2.62	<0.002	<0.007
CLARKE COUNTY											
46WS 1	08-13-03	--	--	--	--	--	--	--	--	--	--
46WS 22	08-13-03	--	--	--	--	--	--	--	--	--	--
46WS 3	08-13-03	--	--	--	--	--	--	--	--	--	--
46WS 2	08-20-03	--	--	--	--	--	--	--	--	--	--
46XS 8	08-13-03	--	--	--	--	--	--	--	--	--	--
FREDERICK COUNTY											
FAY SPRING VAUCLUSE SPRING	08-11-03	--	--	--	--	--	--	--	--	--	--
44W 8	08-15-03	--	--	--	--	--	--	--	--	--	--
45Y 5	08-12-03	--	--	--	--	--	--	--	--	--	--
GLOUCESTER COUNTY											
57H 22	02-11-03	2.90	15.6	6.5	0.020	543	--	--	--	--	--
JAMES CITY COUNTY											
56GS 3	05-13-03	<0.17	13.0	9.3	--	211	<0.10	E.011	1.23	E.002	0.200
56H 40	01-30-03	2.13	26.7	27.3	0.010	532	--	--	--	--	--
56H 28 SOW 177D	02-14-03	1.62	21.1	10.1	<0.005	371	--	--	--	--	--

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Phos- phorus, water, fltrd, mg/L (00666)	Iron, water, fltrd, ug/L (01046)	Mangan- ese, water, fltrd, ug/L (01056)	Tritium 2-sigma water unfltrd pCi/L (75985)	Tritium water unfltrd pCi/L (07000)
CAROLINE COUNTY						
51M 22	04-21-03	E.003	--	--	--	--
51M 23	04-21-03	E.003	--	--	--	--
51M 24	04-21-03	0.006	--	--	--	--
50M 27	04-03-03	0.010	--	--	--	--
50M 26	04-03-03	<0.004	--	--	--	--
50M 31	04-03-03	<0.004	--	--	--	--
50M 32	04-03-03	E.003	--	--	--	--
50M 25	04-03-03	<0.004	--	--	--	--
50M 21	04-03-03	E.003	--	--	--	--
50M 22	04-03-03	<0.004	--	--	--	--
50M 14	04-16-03	E.004	--	--	--	--
	04-16-03	E.003	--	--	--	--
	04-16-03	E.004	--	--	--	--
50M 15	04-16-03	<0.004	--	--	--	--
51M28	04-22-03	<0.004	--	--	--	--
	04-22-03	<0.004	--	--	--	--
51M29	04-22-03	E.004	--	--	--	--
51M30	04-22-03	E.003	--	--	--	--
	04-22-03	E.003	--	--	--	--
50M 13	04-16-03	<0.004	--	--	--	--
50M 9	04-15-03	<0.004	--	--	--	--
50M 8	04-15-03	0.025	--	--	--	--
51M 21	04-16-03	E.003	--	--	--	--
51M 20	04-17-03	E.002	--	--	--	--
50M 7	04-03-03	0.037	--	--	--	--
50M 4	04-03-03	<0.004	--	--	--	--
50M 18	04-03-03	<0.004	--	--	--	--
50M 19	04-03-03	<0.004	--	--	--	--
50M 20	04-03-03	<0.004	--	--	--	--
50M 2	04-15-03	0.006	--	--	--	--
50M 3	04-15-03	E.002	--	--	--	--
50M 16	04-15-03	E.002	--	--	--	--
50M 17	04-15-03	<0.004	--	--	--	--
51M 17	04-21-03	E.003	--	--	--	--
51M 15	04-21-03	<0.004	--	--	--	--
CLARKE COUNTY						
46WS 1	08-13-03	--	--	--	1.6	24
46WS 22	08-13-03	--	--	--	1.3	23
46WS 3	08-13-03	--	--	--	1.6	26
46WS 2	08-20-03	--	--	--	1.6	26
46XS 8	08-13-03	--	--	--	1.6	24
FREDERICK COUNTY						
FAY SPRING VAUCLUSE SPRING	08-11-03	--	--	--	1.6	25
44W 8	08-12-03	--	--	--	1.6	24
45Y 5	08-15-03	--	--	--	1.6	28
	08-12-03	--	--	--	1.9	29
GLOUCESTER COUNTY						
57H 22	02-11-03	--	39	2.4	--	--
JAMES CITY COUNTY						
56GS 3	05-13-03	0.20	<10	<2.0	--	--
56H 40	01-30-03	--	34	8.5	--	--
56H 28 SOW 177D	02-14-03	--	25	12.4	--	--

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Station number	Geologic unit	Date	Time	Sample type	Depth of well, feet below LSD (72008)	Depth to bot sample intrval feet below LSD (72016)	Depth to top sample intrval feet below LSD (72015)	Depth to water level, feet below LSD (72019)
KING WILLIAM COUNTY									
56J 13	373317076490401	217PTXN	02-13-03	1130	Environmental	1,280	1,280	938	--
55J 17	373523076523403	211CRCSU	03-05-03	0915	Environmental	495	490	470	217.10
WARREN COUNTY									
46VS 1	385338078063901	400CTCN	08-14-03	1440	Environmental	--	--	--	--
46V 1	385341078063301	400CTCN	08-14-03	1700	Environmental	--	--	--	--
45VS 2	385843078110701	364LCLR	08-21-03	1140	Environmental	--	--	--	--
45VS 1	385937078082901	367BKMN	08-14-03	1030	Environmental	--	--	--	--
CITY OF CHESAPEAKE									
61B 2 SOW 091A	364227076074701	121CSPKU	08-20-03	1620	Environmental	97.0	97	92	8.60
61B 7 SOW 091D	364227076074704	110QRNR	08-20-03	1515	Environmental	22.0	22	17	2.72
CITY OF NEWPORT NEWS									
58F 7	370908076343501	211CRCSU	05-02-03	1130	Environmental	543	543	493	115.00
CITY OF SUFFOLK									
57C 22 SOW 099B	364703076383702	217PPSC	08-27-03	1145	Environmental	694	694	684	171.13
57C 23 SOW 099C	364703076383703	211CRCSU	06-11-03	1520	Environmental	478	478	468	171.20
CITY OF VIRGINIA BEACH									
62B 18	364126076013401	121CSPKU	08-26-03	1250	Environmental	135	130	120	6.13
62B 22	364325076011501	121CSPKU	08-25-03	1505	Environmental	135	130	120	10.71
		121CSPKU	08-25-03	1520	Replicate	135	130	120	10.71
62C 2 SOW 092A	364713076030701	121CSPKU	08-21-03	1330	Environmental	102	102	97	13.46
62C 3 SOW 092B	364715076030801	121CSPKU	08-21-03	1500	Environmental	58	58	53	7.60
62C 9 SOW 172A	364745076004301	121CSPKU	08-19-03	1040	Environmental	170	165	155	10.32
62C 10 SOW 172B	364745076004302	121CSPKU	08-19-03	1250	Environmental	280	280	270	13.80
62C 11 SOW 172C	364745076004303	--	08-20-03	0920	Blank	--	--	--	--
		110QRNR	08-20-03	0925	Environmental	--	30	20	21.40
62C 22	364746076004301	121CSPKU	08-19-03	1510	Environmental	145	140	130	12.45
CITY OF WINCHESTER									
OLD TOWN SPRING	01615515	371CCCG	08-12-03	1000	Environmental	--	--	--	--

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Altitude of land surface feet (72000)	Flow rate, instantaneous gal/min (00059)	Pump or flow period prior to sampling, minutes (72004)	Sampling depth, feet (00003)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)
KING WILLIAM COUNTY											
56J 13	02-13-03	27	1,500	--	--	--	759	0.3	3	7.9	1,440
55J 17	03-05-03	90	34.0	43	--	--	752	--	--	8.1	440
WARREN COUNTY											
46VS 1	08-14-03	1,790	--	--	--	--	--	10.0	--	5.6	60
46V 1	08-14-03	1,790	--	--	--	--	--	11.0	--	7.1	120
45VS 2	08-21-03	500	--	--	--	--	--	5.0	--	6.3	560
45VS 1	08-14-03	550	--	--	--	--	--	4.3	--	6.8	450
CITY OF CHESAPEAKE											
61B 2 SOW 091A	08-20-03	15	4.1	45	50.0	--	--	2.1	23	7.4	1,690
61B 7 SOW 091D	08-20-03	15	2.7	40	19.0	--	--	0.5	5	5.9	325
CITY OF NEWPORT NEWS											
58F 7	05-02-03	31	480	1,640	210	--	755	0.3	3	7.8	2,100
CITY OF SUFFOLK											
57C 22 SOW 099B	08-27-03	72	3.5	329	175	--	759	1.8	20	8.1	730
57C 23 SOW 099C	06-11-03	72	4.5	140	190	--	759	0.1	1	8.0	640
CITY OF VIRGINIA BEACH											
62B 18	08-26-03	10	0.80	--	48.0	--	762	1.9	21	8.2	946
62B 22	08-25-03	10	4.1	50	48.0	--	763	0.5	6	7.9	355
	08-25-03	10	4.1	50	48.0	--	763	0.5	6	7.9	355
62C 2 SOW 092A	08-21-03	14	4.0	80	49.0	--	--	0.8	8	7.3	690
62C 3 SOW 092B	08-21-03	14	2.7	73	47.0	35	--	0.2	2	6.4	225
62C 9 SOW 172A	08-19-03	17	5.4	55	50.0	--	766	0.5	6	7.8	427
62C 10 SOW 172B	08-19-03	17	3.7	70	60.0	--	766	5.8	62	7.6	5,190
62C 11 SOW 172C	08-20-03	19	--	--	--	--	--	--	--	--	--
	08-20-03	19	2.6	35	28.0	--	--	0.2	2	6.8	252
62C 22	08-19-03	17	4.1	43	50.0	--	766	0.2	3	7.6	428
CITY OF WINCHESTER											
OLD TOWN SPRING	08-12-03	--	--	--	--	--	--	6.2	--	6.8	690

QUALITY OF GROUND WATER
DATA LISTED BY COUNTY—Continued

MULTIPLE STATION ANALYSES

Local identifier	Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate, water, fltrd, mg/L (00945)	Sulfide water, unfltrd field, mg/L (99119)	Residue	Iron, water, fltrd, ug/L (01046)	Manganese, water, fltrd, ug/L (01056)	Tritium 2-sigma water unfltrd pCi/L (75985)	Tritium water unfltrd pCi/L (07000)
							on evap. at 180degC wat flt mg/L (70300)				
KING WILLIAM COUNTY											
56J 13	02-13-03	128	3.50	19.0	31.0	<0.005	870	21	12.1	--	--
55J 17	03-05-03	2.64	2.26	31.9	6.9	0.125	319	<10	2.8	--	--
WARREN COUNTY											
46VS 1	08-14-03	--	--	--	--	--	--	--	--	1.6	24
46V 1	08-14-03	--	--	--	--	--	--	--	--	1.9	30
45VS 2	08-21-03	--	--	--	--	--	--	--	--	1.6	27
45VS 1	08-14-03	--	--	--	--	--	--	--	--	1.3	24
CITY OF CHESAPEAKE											
61B 2 SOW 091A	08-20-03	358	0.2	42.4	14.1	0.055	930	599	14.0	--	--
61B 7 SOW 091D	08-20-03	8.08	<0.2	17.4	63.4	0.133	201	29,500	388	--	--
CITY OF NEWPORT NEWS											
58F 7	05-02-03	412	2.89	16.8	52.3	<0.005	1,190	87	4.1	--	--
CITY OF SUFFOLK											
57C 22 SOW 099B	08-27-03	8.13	4.7	20.2	5.6	<0.005	450	598	10.2	--	--
57C 23 SOW 099C	06-11-03	4.44	5.8	14.3	3.4	<0.005	385	8	2.5	--	--
CITY OF VIRGINIA BEACH											
62B 18	08-26-03	124	0.7	19.8	6.5	<0.005	533	28	7.6	--	--
62B 22	08-25-03	30.4	<0.2	23.0	28.4	--	215	214	55.3	--	--
	08-25-03	30.9	<0.2	22.9	28.4	--	223	216	55.2	--	--
62C 2 SOW 092A	08-21-03	60.8	<0.2	37.7	<0.2	0.023	428	2,560	26.7	--	--
62C 3 SOW 092B	08-21-03	19.9	0.3	55.4	14.9	--	165	9,120	167	--	--
62C 9 SOW 172A	08-19-03	29.7	<0.2	39.2	E.1	0.006	279	562	14.1	--	--
62C 10 SOW 172B	08-19-03	1,420	0.4	19.6	101	<0.005	2,850	481	8.0	--	--
62C 11 SOW 172C	08-20-03	21.8	<0.2	0.62	<0.2	--	269	29	1.8	--	--
	08-20-03	11.9	<0.2	43.3	4.3	0.017	172	5,580	211	--	--
62C 22	08-19-03	22.6	<0.2	39.7	<0.2	0.008	247	743	25.5	--	--
CITY OF WINCHESTER											
OLD TOWN SPRING	08-12-03	--	--	--	--	--	--	--	--	1.6	24

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CONVERSION FACTORS

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
Area		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
Volume		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
Mass		
ton (short)	9.072×10^{-1}	megagram or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$\text{°F} = (1.8 \times \text{°C}) + 32$$