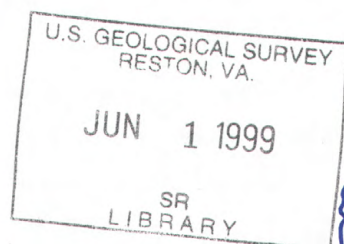


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Water Resources Data New Jersey Water Year 1996

Volume 2. Ground-Water Data



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-96-2
Prepared in cooperation with the New Jersey Department
of Environmental Protection and with other agencies

CALENDAR FOR WATER YEAR 1996

1995

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	11	12	13	14	15	16	17	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

1996

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3						1	2
7	8	9	10	11	12	13	4	5	6	7	8	9	10	3	4	5	6	7	8	9
14	15	16	17	18	19	20	11	12	13	14	15	16	17	10	11	12	13	14	15	16
21	22	23	24	25	26	27	18	19	20	21	22	23	24	17	18	19	20	21	22	23
28	29	30	31				25	26	27	28	29			24	25	26	27	28	29	30
														31						
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6				1	2	3	4							1
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						
JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3	1	2	3	4	5	6	7
7	8	9	10	11	12	13	4	5	6	7	8	9	10	8	9	10	11	12	13	14
14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21
2	22	23	24	25	26	27	18	19	20	21	22	23	24	22	23	24	25	26	27	28
28	29	30	31				25	26	27	28	29	30	31	29	30					



United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Water Resources Division
Mountain View Office Park
810 Bear Tavern Road, Suite 206
West Trenton, New Jersey 08628

I am pleased to announce the release of our Annual report "Water Resources Data for New Jersey, Water Year 1996". This report was prepared by the U.S. Geological Survey, in cooperation with the State of New Jersey as well as many local and federal government agencies.

This report is published in two volumes:

Volume 1.--Surface-water data.

Volume 2.--Ground-water data.

This volume contains ground-water data, such as measurements of water levels and water quality, made for wells in New Jersey. Current ground-water-level data are presented for active ground-water level sites followed by a table containing data for selected discontinued sites. Measurements of ground-water quality from two well networks also are included in the report. The water-level and water-quality sections are cross-referenced for ease in locating wells that have both water-quality and water-level data.

The New Jersey District of the U.S. Geological Survey has made a home page available on the world wide web. Ground-water hydrographs, summaries of hydrologic conditions, a data request form, and links to other sites of interest may be accessed. This information is available at:

<http://wwwnj.er.usgs.gov/>

Copies of this report are for sale through the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Data can also be provided by file transfer (ftp), or on floppy disk. When ordering, refer to U.S. Geological Survey Water-Data Report NJ-96-1 (for Volume 1) and NJ-96-2 (for Volume 2). For further information on this report, or to change or remove your address from our mailing list, please contact me at the above address, send e-mail to wbauers@usgs.gov, or telephone at (609) 771-3980.

Sincerely,

William R. Bauersfeld, Chief
Hydrologic Data Assessment Program



Water Resources Data New Jersey Water Year 1996

Volume 2. Ground-Water Data

by W.D. Jones and M.J. DeLuca



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT NJ-96-2
Prepared in cooperation with the New Jersey Department
of Environmental Protection and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, *Secretary*

GEOLOGICAL SURVEY

Gordon P. Eaton, *Director*

For information on the water program in New Jersey write to:

District Chief, Water Resources Division

U.S. Geological Survey

Mountain View Office Park

810 Bear Tavern Road, Suite 206

West Trenton, New Jersey 08628

PREFACE

This volume of the annual hydrologic data report of New Jersey is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

Hydrologic data for New Jersey are contained in 2 volumes:

Volume 1. Surface-Water Data

Volume 2. Ground-Water Data

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. The following individuals contributed significantly to the completion of the report.

Jacob Gibs

Kathleen L. Laubach

Darryl A. Pope

M.D. Morgan word processed the text of the report, and G.L. Simpson and D.K. Sun prepared the illustrations.

The data were collected, computed, and processed by the following U.S. Geological Survey personnel:

M. Campbell
G.L. Centinaro
V. Corcino, Jr.
J.F. Dudek

B. Gray
J.T. Hutchinson
K. Isaacs

D.S. Kauffman
R.C. McTigue
T.J. Reed

J.J. Scudder
G.C. Steckroath
K. VanNest

Some water-quality samples were collected by the following N.J. Department of Environmental Protection personnel:

R.F. Fenton

R. Maruska

J.R. Specht

J. Spiritosanto

This report was prepared in cooperation with the State of New Jersey and with other agencies under the general supervision of William R. Bauersfeld, Chief of the Hydrologic Data Assessment Program; David A. Stedfast, Assistant District Chief for Hydrologic Data Assessment and Information Management; Eric J. Evenson, District Chief, New Jersey; and William J. Carswell, Jr., Regional Hydrologist, Northeastern Region.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
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6. AUTHOR(S) W.D. Jones and M.J. DeLuca				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Geological Survey, Water Resources Division Mountain View Office Park 810 Bear Tavern Road, Suite 206 West Trenton, NJ 08628			8. PERFORMING ORGANIZATION REPORT NUMBER USGS-WDR-NJ-96-2	
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11. SUPPLEMENTARY NOTES Prepared in cooperation with the New Jersey Department of Environmental Protection and with other agencies.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT No restriction on distribution. This report may be purchased from National Technical Information Service, Springfield, Virginia 22161			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) Water-resources data for the 1996 water year for New Jersey are presented in two volumes, and consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground water. Volume 2 contains records of ground-water levels from 173 wells and water-quality analyses of ground water from 50 wells. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in New Jersey.				
14. SUBJECT TERMS *New Jersey, *Hydrologic data, *Ground water, *Water quality, Chemical analyses, Water temperature, Sampling sites, Water levels, Water analyses			15. NUMBER OF PAGES 218	
			16. PRICE CODE	
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GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVEL RECORDS

	<u>NJ-WRD</u> <u>WELL NUMBER</u>	<u>PAGE</u>
<u>ATLANTIC COUNTY</u>		
ACOW 2 Obs.....	01-710	22
Jobs Point Obs	01-578	23
Margate Firehouse 1 Obs.....	01-834	24
Burk Ave TW Obs	01-702	25
Galen Hall Obs.....	01-037	26
HTMUA 9 Obs	01-1219	27
Oceanville 1 Obs.....	01-180	28
FAA Pomona Obs	01-703	29
FAA Intermediate Obs	01-775	30
FAA Shallow Obs	01-776	31
Scholler 1 Obs.....	01-256	32
<u>BERGEN COUNTY</u>		
Saddle River 17 Obs	03-289	33
<u>BURLINGTON COUNTY</u>		
Mount Obs	05-570	34
Atsion 1 Obs	05-407	35
Atsion 2 Obs	05-408	36
Atsion 3 Obs	05-409	37
Penn SF Shallow Obs	05-628	38
Penn SF Deep Obs	05-630	39
Coyle Airport Obs.....	05-676	40
Butler Place 1 Obs	05-683	41
Butler Place 2 Obs	05-684	42
Lebanon SF 23-D Obs	05-689	43
Medford Twp MW-1 Obs.....	05-1155	44
Medford 1 Obs.....	05-258	45
Medford 2 Obs	05-259	46
Medford 5 Obs	05-261	47
Medford 4 Obs	05-262	48
Campbell 1 Obs.....	05-274	49
Willingboro 2 Obs.....	05-645	50
Willingboro 1 Obs.....	05-063	51
Rhodia 1 Obs.....	05-440	52
<u>CAMDEN COUNTY</u>		
New Brooklyn Park 1 Obs	07-476	53
New Brooklyn Park 2 Obs	07-477	54
New Brooklyn Park 3 Obs	07-478	55
Winslow 5 Obs.....	07-503	56
Elm Tree 2 Obs	07-412	57
Elm Tree 3 Obs	07-413	58
Hutton Hill 1 Obs.....	07-117	59
Hutton Hill 2 Obs.....	07-118	60
Egbert Obs	07-283	61
<u>CAPE MAY COUNTY</u>		
West Cape May 1 Obs.....	09-150	62
Traffic Circle Obs.....	09-020	63
Coast Guard 800 Obs.....	09-302	64
Canal 5 Obs.....	09-048	65
Higbee Beach 3 Obs.....	09-049	66
M-1 N Wildwood 800 Obs.....	09-337	67
Airport 7 Obs	09-060	68
Pump Pond N. Obs.....	09-333	69
Cape May 42 Obs.....	09-080	70
Cape May 23 Obs.....	09-081	71
Oyster 800 Obs	09-306	72

GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVEL RECORDS

	NJ-WRD WELL NUMBER	PAGE
<u>CAPE MAY COUNTY--Cont'd</u>		
Oyster Lab 4 Obs	09-089	73
Cape May County Park 8 Obs	09-099	74
<u>CUMBERLAND COUNTY</u>		
Heislerville 1 Obs	11-118	75
Heislerville 2 Obs	11-119	76
Jones Island 2 Obs	11-096	77
Jones Island 1 Obs	11-097	78
Sheppards 2 Obs	11-073	79
Ragovin 2100 Obs	11-137	80
Fair Grounds 3 Obs	11-163	81
Vocational School 2 Obs	11-042	82
Vocational School 1 Obs	11-043	83
Vocational School 3 Obs	11-044	84
Natural Area 1 Obs	11-237	85
<u>ESSEX COUNTY</u>		
Christ Church 2 Obs	13-095	86
Canoe Brook 30 Obs	13-013	87
Neutral Zone Obs	13-014	88
East Orange 28 Obs	13-094	89
East Orange Shallow Obs	13-096	90
<u>GLOUCESTER COUNTY</u>		
Glassboro ML-1 Obs	15-1126	91
USGS GSC Obs-1 shallow	15-1054	92
Newfield 2-A Obs	15-372	93
WTMUA Monitoring 1 Obs	15-1033	94
Mantua Shallow Obs	15-741	95
Mantua Deep Obs	15-742	96
Stefka 1 Obs	15-712	97
Stefka 2 Obs	15-713	98
Stefka 3 Obs	15-727	99
Stefka 4 Obs	15-728	100
Shell 5 Obs/sealed	15-296	101
Shell 6 Obs/sealed	15-297	102
Deptford Deep Obs	15-671	103
Eagle Point 3 Obs	15-323	104
<u>HUNTERDON COUNTY</u>		
Corsalo Rd TB 1 Obs	19-251	105
Bird Obs	19-002	106
Environmental Ctr 1 Obs	19-276	107
Readington School 11 Obs	19-270	108
<u>MERCER COUNTY</u>		
Civil Defense Obs	21-028	109
Bristol-Myers 100 Obs	21-289	110
Cranston Farms 15 Obs	21-364	111
Washington Crossing Pk 14 Obs	21-366	112
SBMWA Honey Branch 10 Obs	21-088	113
AT&T North Obs	21-365	114
<u>MIDDLESEX COUNTY</u>		
Plainsboro Pond Obs	23-273	115
Forsgate 3 Obs	23-228	116
Forsgate 4 Obs	23-229	117
Forsgate 1 Obs	23-291	118
Forsgate 2 Obs	23-292	119
Morrell 1 Obs	23-104	120
Runyon 1 Obs	23-194	121

GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVEL RECORDS

	<u>NJ-WRD</u>	<u>PAGE</u>
<u>MIDDLESEX COUNTY--Cont'd</u>	<u>WELL NUMBER</u>	
Fischer Obs	23-070	122
SWD 2 Obs	23-344	123
SWD 1 Obs	23-351	124
Duh Say 4 Obs	23-365	125
SRWD 2 Obs	23-439	126
Rutgers Golf 13 Obs	23-1165	127
American Cyanamid 1 Obs	23-482	128
<u>MONMOUTH COUNTY</u>		
DOE-Sea Girt Obs	25-486	129
Allaire State Park C Obs	25-429	130
Howell Twp 1 Obs	25-635	131
Howell Twp 2 Obs	25-636	132
Howell Twp 3 Obs	25-637	133
Howell Twp 4 Obs	25-638	134
Howell Twp 5 Obs	25-639	135
Fort Monmouth 1-NCO Obs	25-353	136
Village 215 Obs	25-250	137
Marlboro 1 Obs	25-272	138
AHWD B Obs	25-715	139
Sandy Hook SP 1 Obs	25-316	140
Keyport 4 Obs	25-206	141
<u>MORRIS COUNTY</u>		
Recreation Fld Obs	27-001	142
MBWD 4 Obs	27-017	143
Madison 8 Obs	27-1197	144
Briarwood School Obs	27-012	145
Exxon Obs	27-014	146
Drew University Farm Obs	27-1303	147
W B Driver 2 Obs	27-003	148
Morristown Arpt 2 Obs	27-015	149
Clemens Obs	27-004	150
Sandoz Obs	27-005	151
Mt Freedom 2 Obs	27-023	152
Black River 10 Obs	27-1190	153
Green Acres Obs	27-006	154
Troy Meadows 1 Obs	27-020	155
Roxbury 1 Obs	27-1191	156
Morris Maint Yd 22 Obs	27-1192	157
Berkshire Valley 9 Obs	27-027	158
Green Pond 5 Obs	27-028	159
<u>OCEAN COUNTY</u>		
Garden St Pky 1 Obs	29-513	160
Garden St Pky 2 Obs	29-514	161
Island Beach 1 Obs	29-017	162
Island Beach 2 Obs	29-018	163
Island Beach 3 Obs	29-019	164
Island Beach 4 Obs	29-020	165
DOE-Forked River Obs	29-585	166
Webbs Mills 2 Obs	29-425	167
Toms River 2 Obs	29-534	168
Toms River 84 Obs	29-085	169
Fort Dix RLF-30 Obs	29-1059	170
Mantoloking 6 Obs	29-503	171
LNAS-EC Obs	29-1060	172
Colliers Mills 1 Obs	29-138	173

GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

GROUND-WATER LEVEL RECORDS

	<u>NJ-WRD</u>	<u>PAGE</u>
<u>OCEAN COUNTY--Cont'd</u>	<u>WELL NUMBER</u>	
Colliers Mills 2 Obs.....	29-139	174
Colliers Mills 3 Obs.....	29-140	175
Colliers Mills 4 Obs.....	29-141	176
PPWD 6 Obs.....	29-530	177
<u>SALEM COUNTY</u>		
Salem 1 Obs.....	33-251	178
Salem 2 Obs.....	33-252	179
Salem 3 Obs.....	33-253	180
Horner Obs.....	33-020	181
Point Airy Obs.....	33-187	182
Penns Grove 14 Obs.....	33-348	183
<u>SUSSEX COUNTY</u>		
Byram Twp PW-1 Obs.....	37-359	184
Whittingham 19 Obs.....	37-203	185
Sparta Twp 6 Obs.....	37-204	186
Swartswood Park 5 Obs.....	37-205	187
Fairgrounds 7 Obs.....	37-206	188
Taylor Obs.....	37-202	189
Walpack Twp 4 Obs.....	37-207	190
<u>UNION COUNTY</u>		
White Lab 3 Obs.....	39-102	191
White Lab 4 Obs.....	39-115	192
Union County Park Obs.....	39-119	193
Schweitzer Obs.....	39-058	194

GROUND WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

QUALITY OF GROUND WATER RECORDS

	<u>NJ-WRD</u>	<u>PAGE</u>
<u>ATLANTIC COUNTY</u>	<u>WELL NUMBER</u>	
Kienzile USGS-2	01-939	198
Kienzile USGS-3	01-940	198
<u>CAPE MAY COUNTY</u>		
Cape May F-35	09-187	198
Roslyn Ave Obs Deep	09-353	198
<u>GLOUCESTER COUNTY</u>		
Bridgeport 2	15-166	199
Country Club 1	15-183	199
#2	15-187	199
Shell Obs 7	15-279	199
Shell Ind 2/AKA150289	15-286	199
Pump Test 1	15-288	199
1	15-363	199
1	15-366	199
1964-S-1	15-392	199
Shiveler Lower	15-615	199
Shiveler Middle	15-616	199
Shiveler Upper	15-617	199
Deptford Deep Obs	15-671	199
Stefka 1 Obs	15-712	199
Stefka 2 Obs	15-713	199
Stefka 3 Obs	15-727	199
Stefka 4 Obs	15-728	199
Mantua Shallow Obs	15-741	199
Mantua Deep Obs	15-742	199
<u>OCEAN COUNTY</u>		
TRWC 21	29-058	200
TRWC 20	29-088	200
Dugans 24	29-094	200
Colliers Mills 4 Obs	29-141	201
Crestwood Vil 4	29-485	201
Garden St Pky 1 Obs	29-513	201
3	29-587	201
Lutheran 1	29-663	201
1	29-672	201
1	29-675	201
1	29-682	201
Tuckerton Park	29-684	201
Stuart Dr	29-711	201
OCUA 8	29-788	201
Cedar Brg Twr 1	29-789	201
Greenwood For 1	29-790	201
OCUA 11-1N	29-794	201
OCUA 12-1N	29-798	201
OCUA 13-1	29-802	201
OCUA 14-2E	29-804	201
TRWC 33	29-928	200
Bey Lea Golf Course 2	29-994	201
TRWC 38 Holly Pump Sta	29-1072	200
Oak St Treatment 14	29-1130	201
Memorial Sch Fld Irr	29-1178	201
OCUA Flint Rd CPS-9	29-1191	201
State Game Farm Dom Well	29-1192	201

INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, gathers a large amount of data pertaining to the water resources of New Jersey each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - New Jersey."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water. Volume 2 contains records of ground-water quality at 50 wells and ground-water levels in 173 wells. Locations of these wells are shown on figures 3 and 4. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in New Jersey.

This series of annual reports for New Jersey began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. For the 1975 through 1989 water years, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels. Beginning with the 1977 water year, these data were published in two volumes. Beginning with the 1990 water year, the report format was changed to include surface-water and surface-water-quality data in Volume 1 and ground-water-level and ground-water-quality data in Volume 2.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for New Jersey were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage, and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States, Part 1B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from the U.S. Geological Survey, Branch of Information Services, Box 25286, Denver, Colorado, 80225-0286.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report NJ-96-2." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information, Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the District Chief at the address given on the back of the title page or by telephone (609) 771-3900.

The U.S. Geological Survey, New Jersey District, is pleased to introduce its World Wide Web site which has water-resource related information for New Jersey and information on New Jersey District activities. We invite you to visit us at:

<http://www.nj.er.usgs.gov/>

COOPERATION

This report was prepared by the U.S. Geological Survey under cooperative agreement with the following organizations:

New Jersey Department of Environmental Protection,
Robert C. Shinn, Jr., Commissioner.

County of Gloucester, Charles E. Romick, Director of Planning.

Atlantic Highlands Water Department, Frank Dougherty, Superintendent.

Medford Township Department of Municipal Utilities,
Bruce Eichmann, Sr., Director.

Washington Township Municipal Utilities Authority,
Sheldon Belson, Executive Director.

SUMMARY OF HYDROLOGIC CONDITIONS

Ground-Water Levels

Ground-water levels fluctuate in response to such factors as recharge from precipitation, discharge of ground water to streams, changes in atmospheric pressure, evapotranspiration, and ground-water withdrawals from wells. In addition, tidal fluctuations affect water levels in aquifers near oceans, bays, and estuaries. When recharge to the ground-water system exceeds discharge, water levels rise; conversely, when discharge from wells, to surface-water bodies, or to the atmosphere through evapotranspiration exceeds recharge, water levels decline. Long-term water-level records are needed to evaluate the effects of climate changes on ground-water systems, to develop a data base that can be used to measure the effects of development, to facilitate the prediction of future ground-water supplies, and to provide data for ground-water resource management.

The U.S. Geological Survey (USGS) maintains a network of observation wells in New Jersey for the purpose of monitoring water-level changes throughout the State. These changes show the general response of the hydrologic system to natural climate changes and induced stresses. During the 1996 water year, ground-water levels were measured in 173 wells. These measurements, together with those made during previous years, show three general trends. Water levels in observation wells that tap some of the heavily pumped confined aquifers in the southern part of the Coastal Plain continued to undergo long-term net declines. Water levels continued to rise dramatically in the confined aquifers in the northern part of the Coastal Plain (Monmouth, eastern Middlesex, Ocean, and northeastern Burlington Counties). Long-term water-level declines in the Potomac-Raritan-Magothy aquifer system in Burlington, Camden, and Gloucester Counties have begun to abate.

Previous record low water levels were exceeded in 27 of the 173 wells in the Statewide observation-well network during the 1996 water year. Most of these record low water levels (19) were in wells located in the Coastal Plain; the remainder (8) were in wells located in the northern part of the State. The greatest exceedence of a previous low in an observation well in the 1996 water year occurred in the New Brooklyn Park 3 observation well (NJ-WRD well number 07-0478) where the previous record low was exceeded by 7.79 feet. This well is screened in the Wenonah-Mount Laurel aquifer in Camden County. The water level in this well has declined more than 57 feet since April 1983. Previous record high water levels were exceeded in 26 network observation wells during the 1996 water year. Ten of these wells are located in the northern part of the Coastal Plain in Middlesex, Monmouth, and Ocean Counties.

In 1986, the New Jersey Department of Environmental Protection (NJDEP) designated two "Critical Water-Supply Management Areas" in the New Jersey Coastal Plain. Ground-water withdrawals from specified aquifers in these areas were reduced, and new allocations may be limited. Critical Area 1 consists of the Wenonah-Mount Laurel aquifer, the Englishtown aquifer system, and the Upper and Middle Potomac-Raritan-Magothy aquifers in Middlesex, Monmouth, and Ocean Counties in the northern part of the New Jersey Coastal Plain. Pumpage restrictions in this area began in 1989. Critical Area 2 includes the Upper, Middle, and Lower Potomac-Raritan-Magothy aquifers in all of Camden County, most of Burlington and Gloucester Counties, and parts of Atlantic, Cumberland, Ocean, Monmouth, and Salem Counties. Pumping restrictions went into effect here in 1996.

Early in the 1991 water year, long-term declines in water levels reversed in several observation wells screened in the deep confined aquifers in the northern part of the Coastal Plain (Critical Area 1). Water levels in these wells continued to rise during the 1996 water year. This trend is a result, in part, of the substitution of surface water for the ground water previously used for public supply in parts of Middlesex and Monmouth Counties. In addition, some public water-supply purveyors have decreased withdrawals from the deep confined aquifers and increased withdrawals from the shallower confined aquifers and the unconfined aquifer. Since October 1990, the water level in the Marlboro 1 observation well (NJ-WRD well number 25-0272), screened in the Potomac-Raritan-Magothy aquifer system, has risen more than 65 feet; the water level in the DOE-Sea Girt observation well (NJ-WRD well number 25-0486), screened in the Wenonah-Mount Laurel aquifer, has risen more than 120 feet; and the water level in the Mantoloking 6 observation well (NJ-WRD well number 29-0503), screened in the Englishtown aquifer system, has risen more than 119 feet.

In Critical Area 2, the shift to withdrawals of surface water and of ground water from shallower confined and unconfined aquifers began in 1996. As a result, long-term water-level declines in observation wells screened in the Potomac-Raritan-Magothy aquifer system (NJ-WRD well numbers 05-0258, 05-0261, 05-0262, 05-0440, 07-0117, 07-0412, 07-0413, 07-0476, 07-0477, 15-0671, 15-0741, and 15-0742) have slowed, and the decline in water levels that typically occurs during the summer peak-usage months did not occur in 1996.

Figure 1 shows the effects of climate on daily mean water levels during water year 1996 in four observation wells open to unconfined aquifers. Monthly extreme and long-term-average water levels are shown for comparison. The Taylor well (NJ-WRD well number 37-0202) and the Cranston Farms 15 well (NJ-WRD well number 21-0364) are open to fractured-rock aquifers; the Lebanon State Forest 23-D well (NJ-WRD well number 05-0689) and the WTMUA Monitoring 1 well (NJ-WRD well number 15-1033) are screened in a sand and gravel aquifer. These wells are distant from pumping centers.

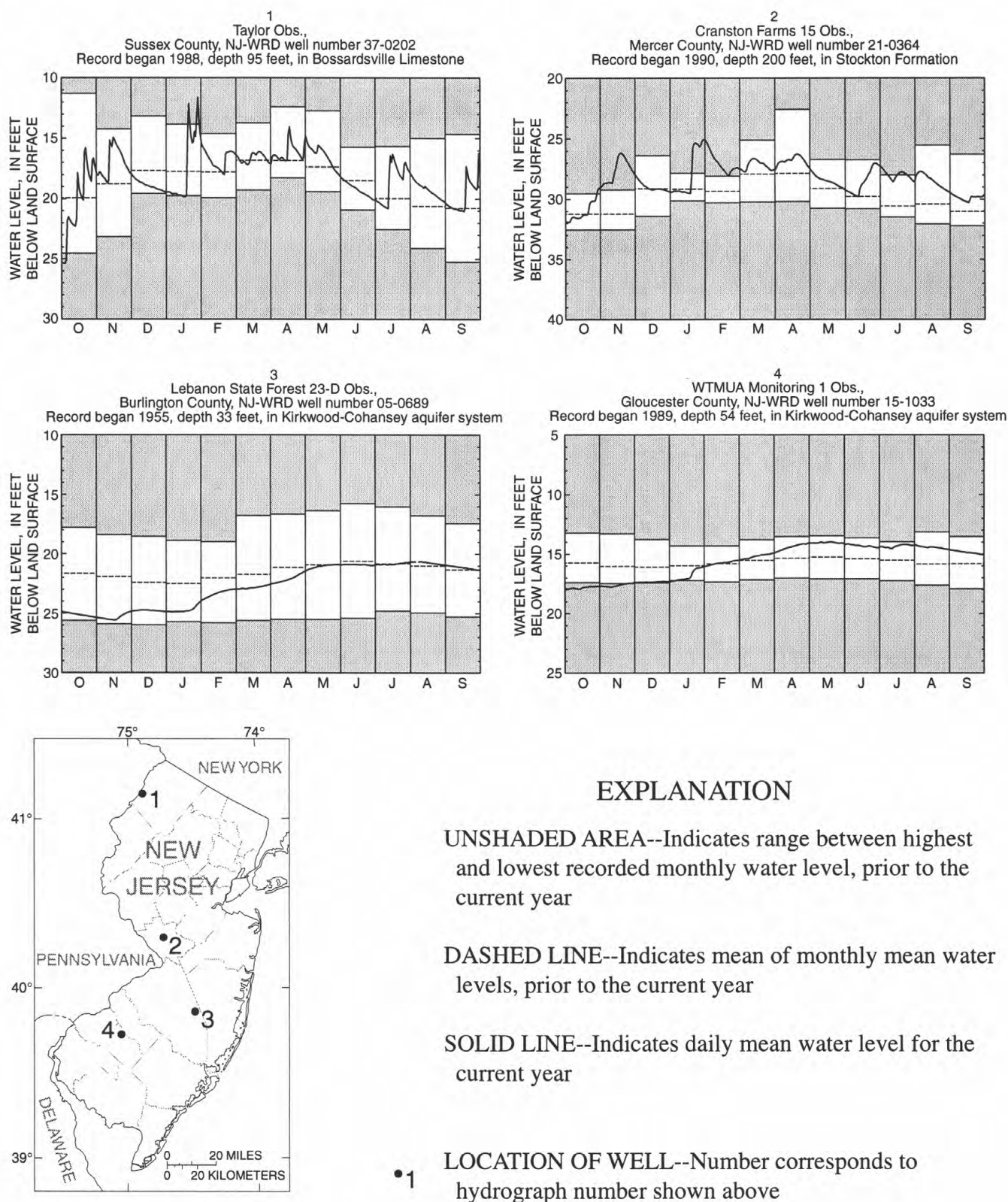


Figure 1. Ground-water levels at key observation wells in New Jersey.

Below-average precipitation throughout the 1995 water year caused water levels in many observation wells open to unconfined aquifers to decline to near-record-low levels by September. By early October 1995, water levels in many wells tapping unconfined aquifers had dropped to the lowest levels since 1989. However, the trend of declining water levels reversed early in the 1996 water year. Above-average precipitation throughout the 1996 water year caused water levels in many unconfined aquifers to rise for most of the year. Previous record high water levels were exceeded in 10 observation wells open to unconfined aquifers during the water year. By September 1996, water levels in most observation wells tapping unconfined aquifers were above their historical monthly means.

SALTWATER-MONITORING NETWORK

The potability of ground water in the Coastal Plain of New Jersey depends primarily on its chemical quality, including contamination with saltwater. Chloride concentration is an accurate index of the extent and degree of saltwater contamination. The presence of high concentrations of chloride, however, is not definitive proof of active saltwater intrusion. It may represent a natural static condition. Saltwater intrusion can be documented by analysis of periodically collected water samples. Saltwater intrusion is indicated by increases in chloride concentration over time rather than by a single concentration.

In the 1940's, the USGS established a saltwater-monitoring network in the Coastal Plain of New Jersey to document and evaluate the movement of saltwater into the freshwater aquifers. The USGS collects and analyzes water samples from USGS and NJDEP observation wells and selected domestic and agricultural-supply wells. These chloride measurements are augmented by chloride-concentration data reported to the NJDEP by owners of public- and industrial-supply wells. During the 1996 water year, the USGS sampled water from 28 wells in four counties. These chloride concentrations were supplemented by more than 6,000 additional values that were reported by hundreds of public- and industrial-supply well owners and are stored in NJDEP files.

Water samples from 19 wells tapping the Upper, Middle, and Lower Potomac-Raritan-Magothy aquifers in Gloucester County were analyzed for chloride to assess saltwater movement in this area. These chloride-concentration values have been tabulated and are being evaluated along with those provided by NJDEP. This is the first effort since 1958 to map the saltwater front in all three aquifers in Gloucester County.

Water samples collected from a well (NJ-WRD well number 9-187) at the mouth of Fishing Creek in Cape May County were analyzed this year. The chloride concentration in water from this well increased from 160 mg/L in 1994 to 190 mg/L in 1996, indicating active saltwater intrusion.

EXPLANATION OF THE RECORDS

The ground-water level and ground-water quality data published in this report are for the 1996 water year that began October 1, 1995, and ended September 30, 1996. A calendar of the water year is provided on the inside of the front cover. The locations of the wells where data were collected are shown in figures 3 and 4. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each well in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given well and to no other. The number is assigned when a well is first established and is retained for that well indefinitely. The latitude-longitude system used by the U.S. Geological Survey to assign identification numbers to ground-water well sites is based on geographic location.

Latitude-Longitude System

The identification numbers for wells are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; the next seven digits denote degrees, minutes, and seconds of longitude; and the last two digits (assigned sequentially) identify the wells within a 1-second grid. This site-identification number, once assigned, is a pure number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the well will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure 2 below.)

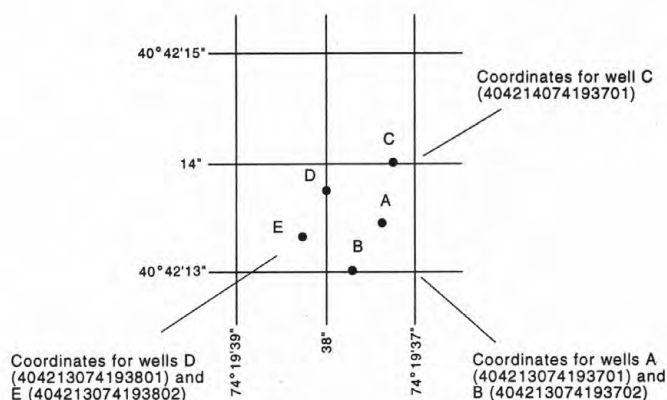


Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude)

Records of Ground-Water Levels

Water-level data from the New Jersey Observation-Well Network and other current ground water projects are given in this report. These data are intended to provide a historical record of water-level changes in the State's most important aquifers. The locations of these wells are shown in figure 3.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions. The methods of measurement are standardized to incorporate continuous precision. The equipment and measuring techniques used at each well ensure that measurements are of consistent accuracy and reliability.

Water-level data are presented by counties arranged in alphabetical order. The primary identification number for a given well is the NJ-WRD well number, a hyphenated 6 digit identification number assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. The first two digits are a code for the county in which the well is located and the last four digits are a sequence number. These NJ-WRD well numbers are used in the ground-water level descriptions, to identify ground-water quality sites, and on the corresponding location maps in this report. The secondary identification number for a given well is the 15-digit number described in the previous section.

Water levels are measured manually using steel tape or electric sensing device at regular time intervals. Some wells are equipped with digital water-level recorders or various pressure transducer-data logger combinations to observe daily fluctuations in water level. Beginning in the 1977 water year, water-level recorders were removed from some wells and replaced by water-level extremes recorders. The extremes are read from these recorders at about three month intervals, but the actual dates of occurrence of these extremes (highest and lowest water levels) are unknown. In this report, the water-level extremes are given together with the manually measured water levels.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd) or sea level datum. Land-surface datum is a datum plane that is approximately at land surface at each well. The altitude of the land-surface datum and the height of the measuring point (MP) above or below land-surface datum are given in each well description.

Data Presentation

Each water-level record consists of three parts: the well description, the data table of water levels observed during the current water year, and a hydrograph of the water levels for a selected time period including the

current water year. The comments to follow clarify information presented under the various headings of the well description.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; a description of the location; and the owner's name. The hydrologic unit number is a code for the river basin where the well is located (U.S. Geological Survey, 1974: Hydrologic Unit Map).

AQUIFER.--This entry designates by name and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter of screened interval or open hole segment, method of construction, use, and additional information known about the physical characteristics of the well.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface altitude at the well. The measuring point is described physically (such as top of coupling, top of recorder shelf, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface). The altitude of the land-surface datum is described in feet above sea level; it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It may give other important data relevant to the well site.

PERIOD OF RECORD.--This entry indicates the period for which there are records for the well. It reports the month and year of the start of collection of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, are noted.

EXTREMES FOR PERIOD OF RECORD.--This entry identifies the highest and lowest water levels during the period of record, with respect to either land-surface or sea level datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in reference to either land surface or sea level datum. For wells not equipped with continuous recorders, the table lists the

water levels and measurement dates. For wells equipped with continuous recorders, only abbreviated tables are published. Daily mean water-levels are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level. For wells equipped with water-level extremes recorders, the extremes (highest and lowest water levels) for each time period are given together with the manually measured water levels.

A hydrograph for a selected period of record follows each water-level table. One of three types of hydrographs is shown depending on the method of data collection. For wells equipped with continuous recorders, daily mean water levels are plotted as continuous line graphs. For wells equipped with maximum-minimum recorders, the graphs have horizontal lines representing the extremes (highest and lowest water level for each time period) and dashed vertical lines delineating each time period. The measured water levels are plotted as small circles at the date of each servicing interval. For wells without recorders, a scatter plot shows each individual water level measurement with no trend line connecting the measurements.

Records of Ground-Water Quality

Records of ground-water quality in this report usually consist of only one set of measurements for the water year. Because ground-water movement is normally slow compared to surface water, frequent measurements are not necessary for monitoring purposes. More frequent measurements may be necessary for studying ground-water problems, trends, or processes. Locations of wells for which water-quality data are published are shown in figure 4.

Data Collection and Computation

The records of ground-water quality in this report were obtained from water-quality monitoring studies in specific areas. Consequently, chemical analyses are presented for some counties but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey TWRI publications listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. All samples were obtained by trained personnel. The wells

sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled **QUALITY OF GROUND WATER** immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by county and are identified by NJ-WRD well number. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Quality-Control Data

Data generated from quality-control (QC) samples are a requisite for evaluating the quality of the sampling and processing techniques as well as data from the actual samples themselves. Without QC data, environmental sample data cannot be adequately interpreted because the errors associated with the sample data are unknown. The various types of QC samples collected by this district are described in the following section. Procedures have been established for the storage of water-quality-control data within the USGS. These procedures allow for storage of all derived QC data and are identified so that they can be related to corresponding environmental samples.

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collect in this district are:

Field blank - a blank solution that is subjected to all aspects of sample collection, field processing preservation, transportation, and laboratory handling as an environmental sample.

Trip blank - a blank solution that is put in the same type of bottle used for an environmental sample and kept with the set of sample bottles before and after sample collection.

Ambient blank - a blank solution that is put in the same type of bottle used for an environmental sample, kept with the set of sample bottles before sample collection, and opened at the site and exposed to the ambient conditions.

Equipment blank - a blank solution that is processed through all equipment used for collecting and processing an environmental sample (similar to a field blank but normally done in the more controlled conditions of the office).

Sampler blank - a blank solution that is poured or pumped through the same field sampler used for collecting an environmental sample.

Filter blank - a blank solution that is filtered in the same manner and through the same filter apparatus used for an environmental sample.

Splitter blank - a blank solution that is mixed and separated using a field splitter in the same manner and through the same apparatus used for an environmental sample.

Preservation blank - a blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory whose composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Sequential samples - a type of replicate sample in which the samples are collected one after the other, typically over a short time.

Split sample - a type of replicate sample in which a sample is split into subsamples contemporaneous in time and space.

Spike Samples- samples to which known quantities of a solution with one or more well-established analyte concentrations have been added. These samples are analyzed to determine the extent of matrix interference or degradation on the analyte concentration during sample processing and analysis.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT REMARK

E	Estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.

Dissolved Trace-Element Concentrations

*NOTE.--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter ($\mu\text{g/L}$) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's to 100's of nanograms per liter (ng/L). Data above the $\mu\text{g/L}$ level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at some stations in water year 1994.

CURRENT WATER RESOURCES PROJECTS IN NEW JERSEY

The Geological Survey is currently involved in a number of hydrologic investigations in the State of New Jersey. The following is a list of these investigations. Results are published at the conclusion of short-term projects or periodically in the case of long-term projects. Hydrologic data from these projects are entered into the WATSTORE data base. Subsequent sections contain information on recent publications and on WATSTORE.

A Watershed-Based Method for Relating Water Quality to Flow Characteristics

Barnegat Bay Non-Point Source

Compositional Modeling of Organic Transport and Biodegradation of Organic Compounds in the Unsaturated Zone and Ground Water

Distribution and Sources of Arsenic in Soils near the Imperial Oil Site, Monmouth County, New Jersey

Efficacy of Composted Biosolids Application in the New Jersey Pinelands for Disturbed Site Recovery

EPA Technical Assistance Program

Flood Characteristics of New Jersey Streams

Geohydrology of the Naval Air Warfare Center, West Trenton, New Jersey

Ground-Water Contamination with Chlorinated Volatile Organic Compounds at Picatinny Arsenal, Morris County, New Jersey

Ground-Water Data Collection Network

Ground-Water Levels and Chloride Concentrations in Major Aquifers of the Coastal Plain

Hydrologic Controls on Well-Contributing Areas in New Jersey

Hydrology of Surficial Aquifer Systems

Hydrology of Wetlands

Hydrogeologic Support to Fort Dix, Burlington County, New Jersey

Hydrogeologic Support to McGuire A.F.B., Burlington County, New Jersey

Hydrogeologic Support to Picatinny Arsenal, Morris County, New Jersey

Investigation of Contaminant Transport in a Fractured Rock Aquifer, Rutgers University, Busch Campus

Investigation of Water Quality in the Wanaque South Diversion Area, Morris and Passaic Counties, New Jersey

Lake Herbicides

Magnitude and Frequency of Floods at Roadway Sites in New Jersey

Modeling and Experimental Investigation of Hydrocarbon Transport and Biodegradation in the Unsaturated Zone

Multispecies Transport in Ground Water

New Jersey-Long Island National Water Quality Assessment

New Jersey Tidal Telemetry Network

New Jersey Water Use Program

Pesticide Vulnerability of Public Ground-Water Supplies

Radium and Trace Metal Leaching in the Kirkwood-Cohansey Aquifer System

Small Watershed Flood Data Collection

Quality of Water Data Collection Network

Regionalization of Low Flows for New Jersey Streams

Relations Between Streamflow, Salinity, and Water Quality in Estuaries of the Toms and Metedeconk Rivers, New Jersey

Removal of Volatile Ground-Water Contaminants by Inducing Air-Phase Transport

Review of Remedial Investigation for the Vineland Chemical Superfund Site

Small-Scale Watershed Delineation for GIS (14-Digit Hydrologic Unit Codes)

Somerset County Flood-Monitoring Network

Strategic Environmental Research Development Program, Biodegradation, Picatinny Arsenal

Surface Water Data Collection Network

Surfactant Sorption to Soil and its Effect on the Distribution of Anthropogenic Organic Compounds

Trends in the Water Quality of Streams in New Jersey

Vulnerability Assessment of the Kirkwood-Cohansey Aquifer System to Radium, Mercury, and Trace Metals

Water-Supply Availability in Salem and Gloucester Counties, New Jersey

WATER-RELATED REPORTS FOR NEW JERSEY COMPLETED BY THE GEOLOGICAL SURVEY IN RECENT YEARS

Ayers, M.A., Wolock, D.M., McCabe, G.J., Hay, L.E., and Tasker, G.D., 1993, Sensitivity of water resources in the Delaware River basin to climate variability and change: U.S. Geological Survey Open-File Report 92-52, 68 p.

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- Barringer, T.H., 1996, Magnitude and frequency of Jacks Run at the culvert on U.S. Route 206, Southampton Township, Burlington County, New Jersey: U.S. Geological Survey Open-File Report 96-319, 6 p.
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ACCESS TO WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products, ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- **Station Header File** - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- **Daily Values File** - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- **Peak Flow File** - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- **Water Quality File** - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- **Ground-Water Site Inventory Data Base** - Contains inventory data for over 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requestor will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey
National Water Data Exchange
421 USGS National Center
Reston, Virginia 22092

In addition to providing direct access to WATSTORE, data can be provided in various machine-readable formats on magnetic tape or floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division's District offices. (See address on the back of the title page.)

DEFINITION OF TERMS

Terms related to ground-water levels, ground-water quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Dissolved refers to that material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per liter ($\mu\text{G/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L , mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water.

NJ-WRD well number is a hyphenated, 6-digit identification number which the U.S. Geological Survey assigned to all New Jersey wells in the Ground Water Site Inventory (GWSI) data base. This numbering system was developed in 1978 to simplify identification of wells. The first two digits are a code for the county in which the well is located, and the last four digits are a sequence number. Each well added to GWSI is assigned the next higher sequence number for the county in which the well is located. These NJ-WRD well numbers are being used in the ground-water level descriptions, to identify ground-water quality sites, and on the corresponding location maps in this report.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Picocurie (PC, pCi) is one trillionth (1×10^{12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCB's) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C . Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from well to well, and it may vary in the same source with changes in the composition of the water.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water table is that surface in an unconfined ground-water body at which the pressure is atmospheric.

Water year in Geological Survey reports dealing with water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1985, is called the "1985 water year."

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Branch of Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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- 4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.
- 4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.
- 4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.
- 4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.
- 4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.
- 5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M.J. Fishman and L. C. Friedman, editors: USGS--TWRI Book 5, Chapter A1. 1989. 545 pages.

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- 5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.
- 5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R. L. Wershaw, M. J. Fishman, R. R. Grabbe, and L. E. Lowe: USGS--TWRI Book 5, Chapter A3. 1987. 80 pages.
- 5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, by L. J. Britton and P. E. Greenson, editors: USGS--TWRI Book 5, Chapter A4. 1989. 363 pages.
- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L.L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.
- 6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model*, by S. A. Leake and D. E. Prudic: USGS--TWRI Book 6, Chapter A2. 1991. 68 pages.
- 6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual*, by L. J. Torak: USGS--TWRI Book 6, Chapter A3. 1993. 136 pages.
- 6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions*, by R. L. Cooley: USGS--TWRI Book 6, Chapter A4. 1992. 108 pages.
- 6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details*, by L. J. Torak: USGS--TWRI Book 6, Chapter A5. 1993. 243 pages.
- 6-A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler. 1995. 125 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
- 7-C3. *A model for simulation of flow in singular and interconnected channels*, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.
- 8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.
- 8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.
- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

WATER RESOURCES DATA-NEW JERSEY, 1996

18

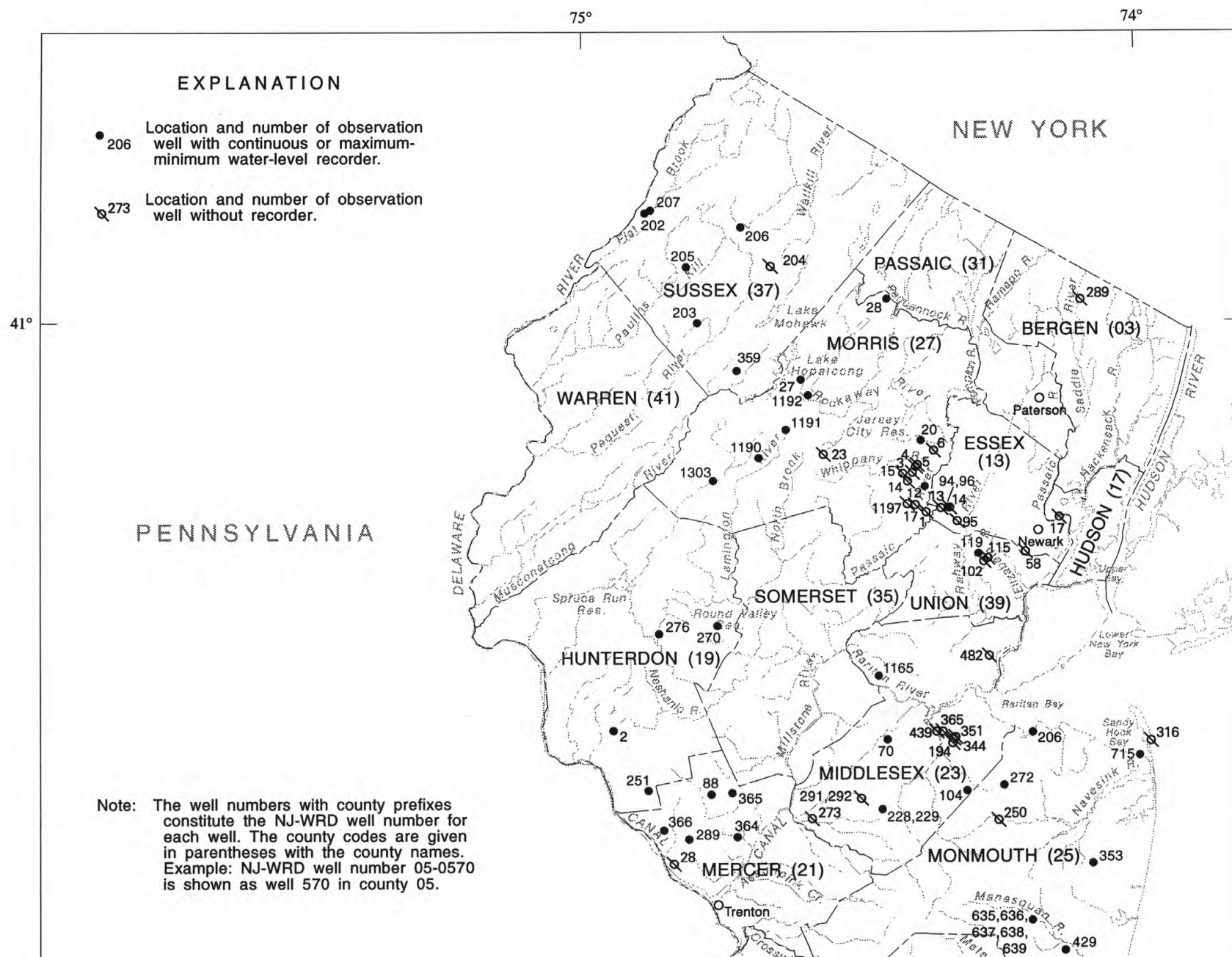
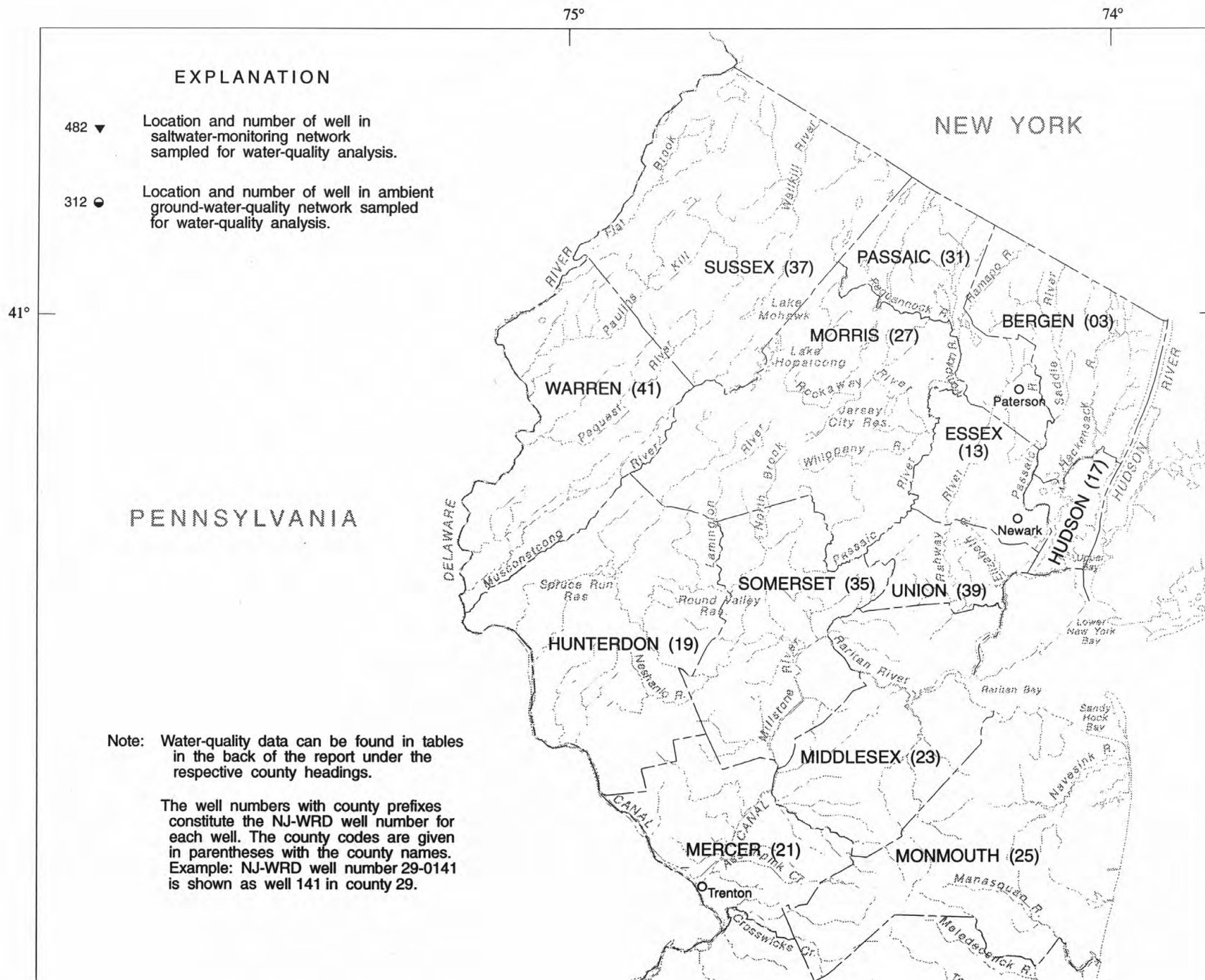




Figure 3. Location of ground-water-level observation wells in New Jersey.

WATER RESOURCES DATA-NEW JERSEY, 1996

20



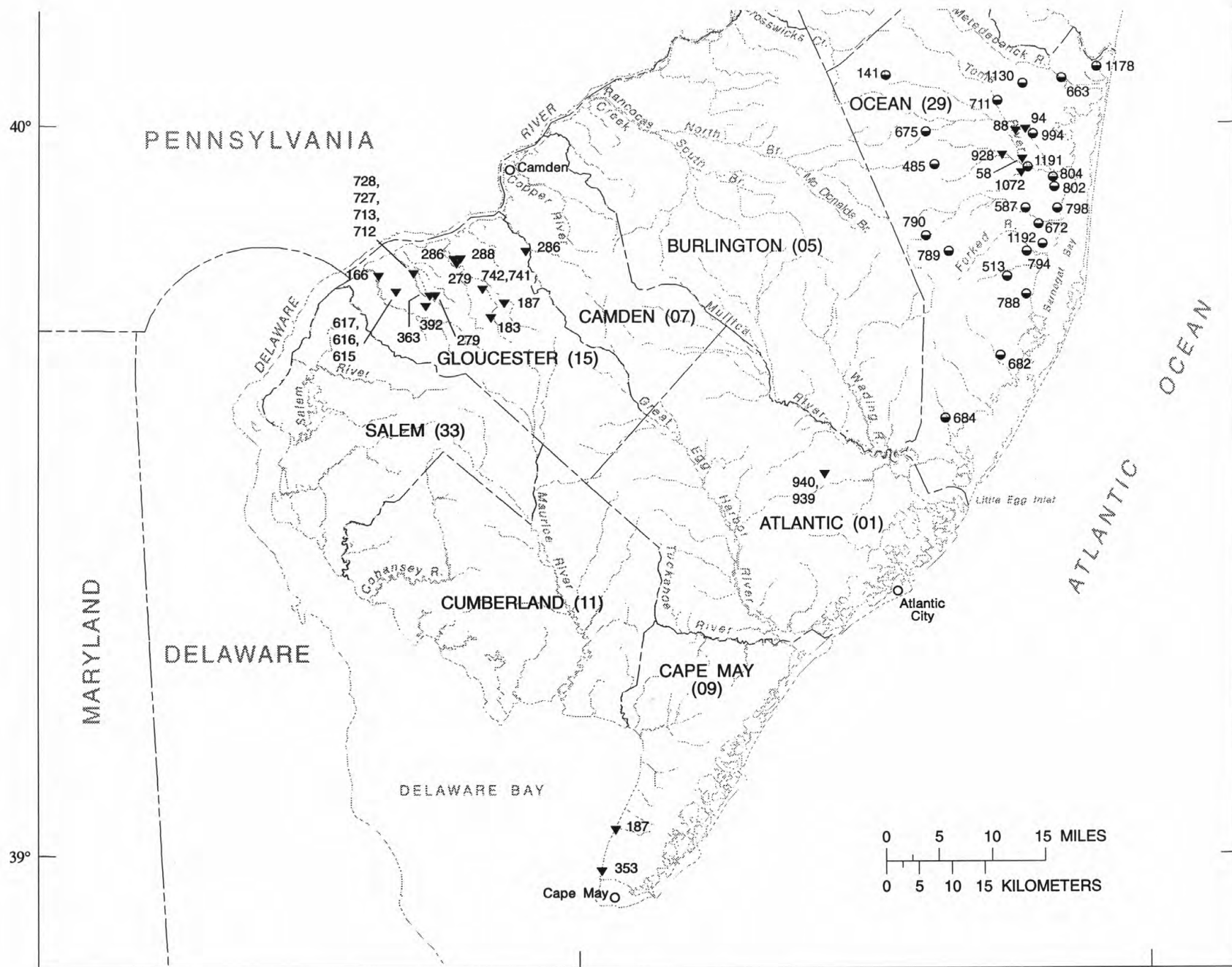


Figure 4. Locations of ground-water-quality sampling sites in New Jersey.

GROUND-WATER LEVELS

ATLANTIC COUNTY

391726074222101. Local I.D., ACOW 2 Obs. NJ-WRD Well Number 01-0710.

LOCATION.--Lat 39°17'26", long 74°22'21", in the Atlantic Ocean, 5.3 miles offshore of Atlantic City.
Owner: U.S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 4 in., depth 1,019 ft, screened 973 to 1,003 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--60 minute recording interval. Recorder is located on the sea floor, about 43 ft below sea level.

DATUM.-- 0.00 ft above sea level.

Measuring point: Deck of drilling platform at the time when the transducers were set at the bottom of the well.

REMARKS.--Water level affected by tidal fluctuation and regional pumping. Elevation of the pressure transducer was determined by direct measurement from the deck of the drilling platform. Elevation of the deck of the drilling platform was determined by survey by the U.S. Geological Survey, National Mapping Division.

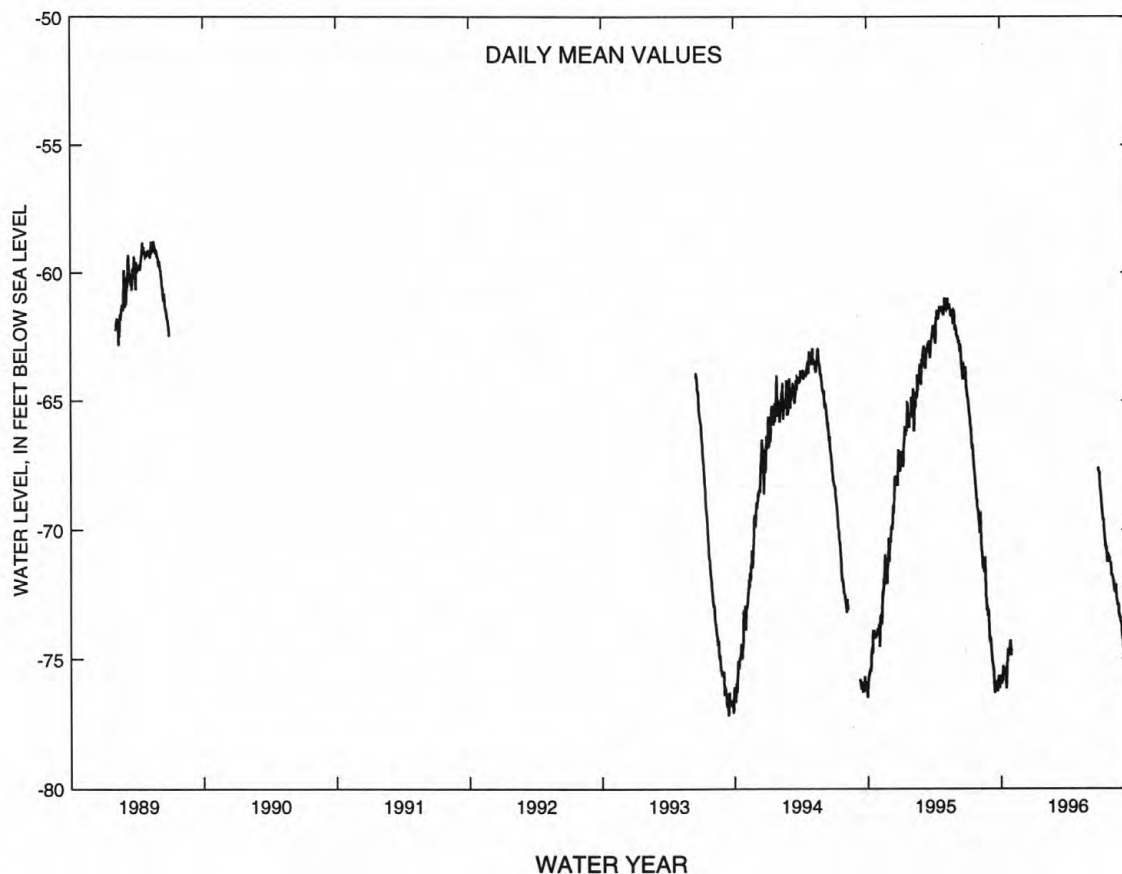
PERIOD OF RECORD.--Feb. to June 1989 and June 1993 to current year. Records for 1989, 1993 and 1995 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.43 ft below sea level, May 6, 1989; lowest, 79.38 ft below sea level, Sept. 15-16, 1993.

WATER LEVEL, IN FEET BELOW SEA LEVEL, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-75.74	---	---	---	---	---	---	---	---	---	-71.93	-74.54
10	-75.33	---	---	---	---	---	---	---	---	-69.62	-72.37	-75.28
15	-75.76	---	---	---	---	---	---	---	---	-70.63	-72.64	-75.49
20	-74.67	---	---	---	---	---	---	---	---	-71.14	-72.94	-75.66
25	-74.60	---	---	---	---	---	---	---	---	-71.06	-73.36	-75.67
EOM	---	---	---	---	---	---	---	---	-68.10	-71.44	-74.20	-75.68
MEAN	-75.23	---	---	---	---	---	---	---	---	-70.43	-72.75	-75.26
WTR YR 1996	HIGH -65.52 JUN 29 LOW -78.20 SEPT 29											

NJ-WRD WELL NO. 01-0710



ATLANTIC COUNTY

391827074371001. Local I.D., Jobs Point Obs. NJ-WRD Well Number, 01-0578.

LOCATION.--Lat 39°18'26", long 74°37'09", Hydrologic Unit 02040302, on the west side of the Garden State Parkway at interchange 29, Somers Point City.

Owner U.S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 680 ft, screened 670 to 680 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to Feb. 1984. Periodic measurements, June 1975 to May 1977. Water-level recorder, Oct. 1959 to June 1975.

DATUM.--Land surface is 10.00 ft above sea level.

Measuring point: Top of recorder shelf, 9.34 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

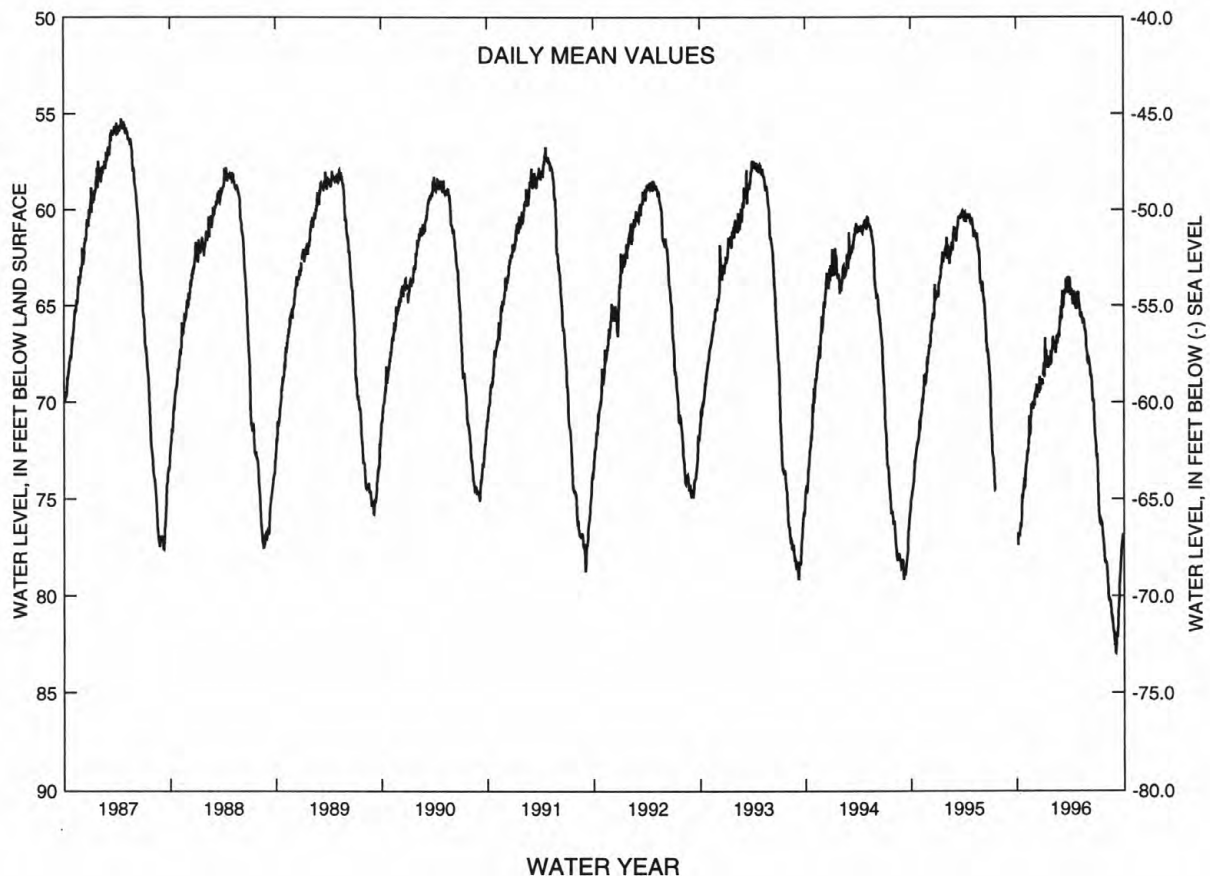
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 29.10 ft below land surface, Apr. 13, 1961; lowest, 83.70 ft below land surface, Sept. 3, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.38	73.04	69.51	68.68	67.17	65.15	64.28	65.23	67.83	73.56	78.51	82.83
10	76.86	72.40	69.39	67.74	67.24	65.05	64.42	65.39	68.59	75.97	79.95	81.99
15	76.24	71.42	69.40	68.12	66.92	64.18	64.60	65.93	68.96	76.29	80.30	80.29
20	75.27	70.58	68.67	68.16	66.67	63.65	64.94	65.95	69.84	76.49	80.90	78.61
25	74.55	70.04	68.88	68.10	66.62	63.99	64.71	66.36	71.51	77.40	81.45	77.45
EOM	74.05	69.94	68.85	67.22	65.82	63.87	64.28	67.79	72.56	78.27	82.30	77.02
MEAN	75.70	71.48	69.29	67.89	66.76	64.41	64.50	65.94	69.54	76.01	80.32	79.97
WTR YR 1996 MEAN 70.95 HIGH 61.96 MAR 19 LOW 83.70 SEP 3												

NJ-WRD WELL NO. 01-0578



GROUND-WATER LEVELS

ATLANTIC COUNTY

392017074300201. Local I.D., Margate Firehouse 1 Obs. NJ-WRD Well Number, 01-0834.

LOCATION.--Lat 39°20'17", long 74°30'02", Hydrologic Unit 02040302, behind Margate Firehouse No. 2, Fremont Ave., Margate City.
Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 997 ft, screened 970 to 991 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 5 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.00 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

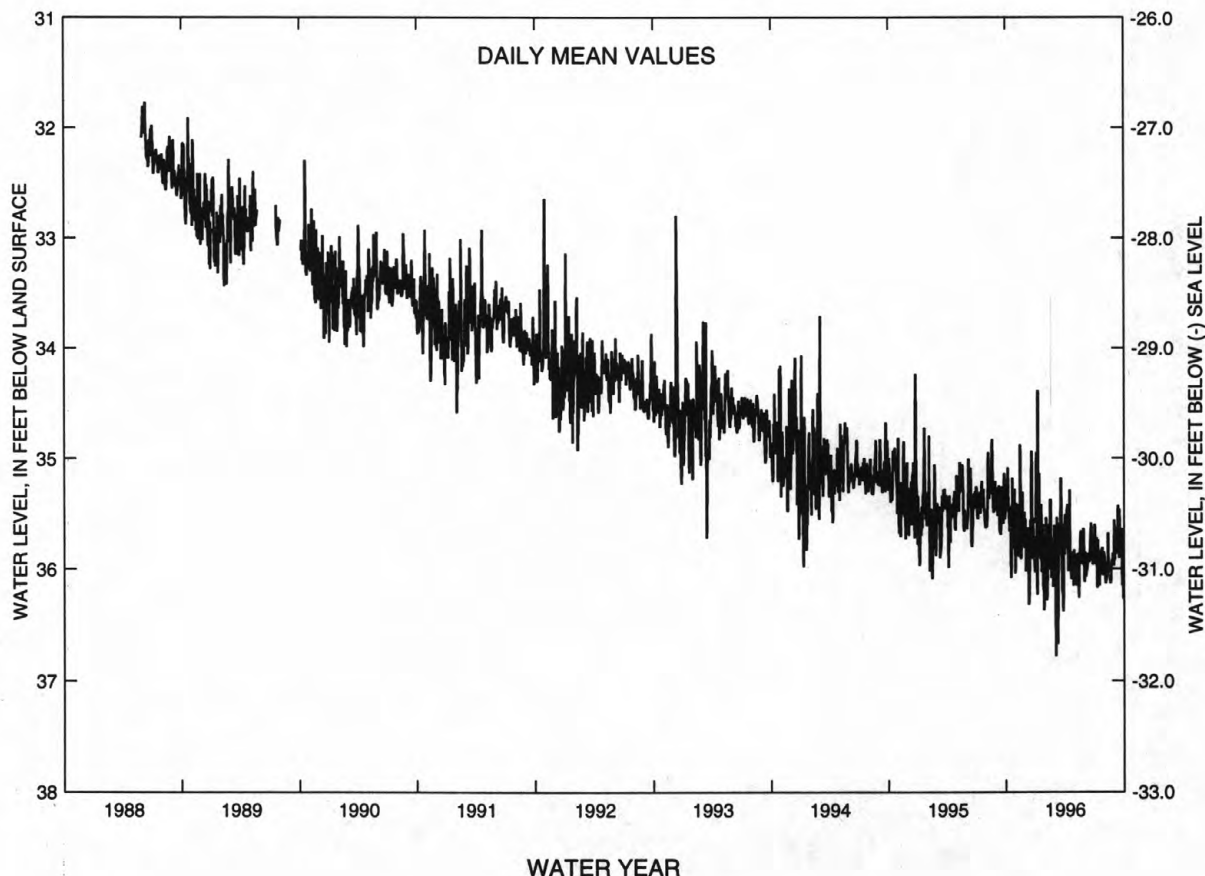
PERIOD OF RECORD.--May 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.05 ft below land surface, June 2, 1988; lowest, 37.24 ft below land surface, Mar. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.26	35.88	35.77	35.89	35.97	36.47	35.71	35.95	36.03	35.90	36.09	35.81
10	35.52	35.88	35.90	35.42	35.93	36.67	35.48	35.97	35.98	35.91	36.03	35.85
15	35.46	35.23	35.82	35.91	35.62	35.59	35.79	36.26	35.89	36.06	35.98	35.74
20	35.53	35.53	34.94	36.03	35.89	35.18	35.97	35.71	35.71	35.95	36.10	35.78
25	35.68	35.59	35.60	36.15	36.16	36.02	36.00	35.92	35.73	35.90	35.92	35.83
EOM	35.93	35.55	35.85	35.70	36.07	35.87	35.83	35.91	35.86	35.85	35.97	36.27
MEAN	35.56	35.62	35.77	35.67	35.84	35.94	35.79	35.92	35.89	35.92	35.99	35.79
WTR YR 1996	MEAN 35.81 HIGH 33.66 JAN 8 LOW 37.24 MAR 4											

NJ-WRD WELL NO. 01-0834



GROUND-WATER LEVELS

25

ATLANTIC COUNTY

392032074300801. Local I.D., Burk Ave TW Obs. NJ-WRD Well Number, 01-0702.

LOCATION.--Lat 39°20'32", long 74°30'08", Hydrologic Unit 02040302, about 20 ft south of the intersection of Burk Ave. and Fredericksburg Ave., Margate City.

Owner: U.S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 755 ft, screened 740 to 750 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Digital water-level recorder, Oct. 1985 to Jan. 1988.

DATUM.--Land surface is 5 ft above sea level, from topographic map.

Measuring point: Top of well shelter shelf, 2.30 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

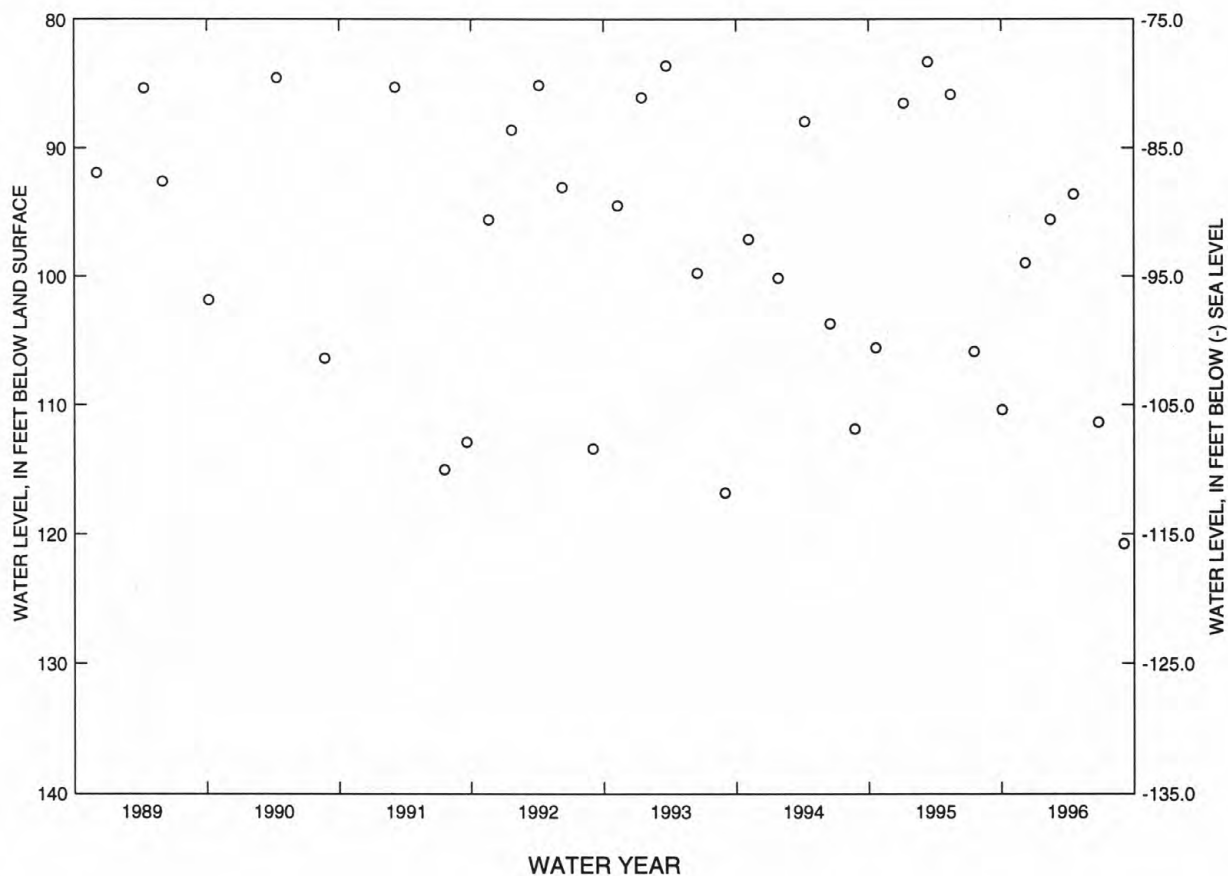
PERIOD OF RECORD.--October 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 73.20 ft below land surface, May 17, 1986; lowest, 120.76 ft below land surface, Sept. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	110.37	FEB 15	95.57	JUN 26	111.36
DEC 7	98.96	APR 19	93.60	SEP 4	120.76

NJ-WRD WELL NO. 01-0702



GROUND-WATER LEVELS

ATLANTIC COUNTY

392153074250101. Local I.D., Galen Hall Obs. NJ-WRD Well Number, 01-0037.

LOCATION.--Lat 39°21'51", long 74°24'59", Hydrologic Unit 02040302, near the intersection of Pacific Ave. and Congress Ave., Atlantic City.
Owner: Atlantic City Municipal Utilities Authority.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 842 ft, screened 782 to 837 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to July 1980. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, Jan. 1949 to Aug. 1975.

DATUM.--Land surface is 9.54 ft above sea level.

Measuring point: Top of recorder shelf, 2.75 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

PERIOD OF RECORD.--Jan. 1949 to current year. Records for 1949 to 1976 are unpublished and are available in files of the New Jersey District Office.

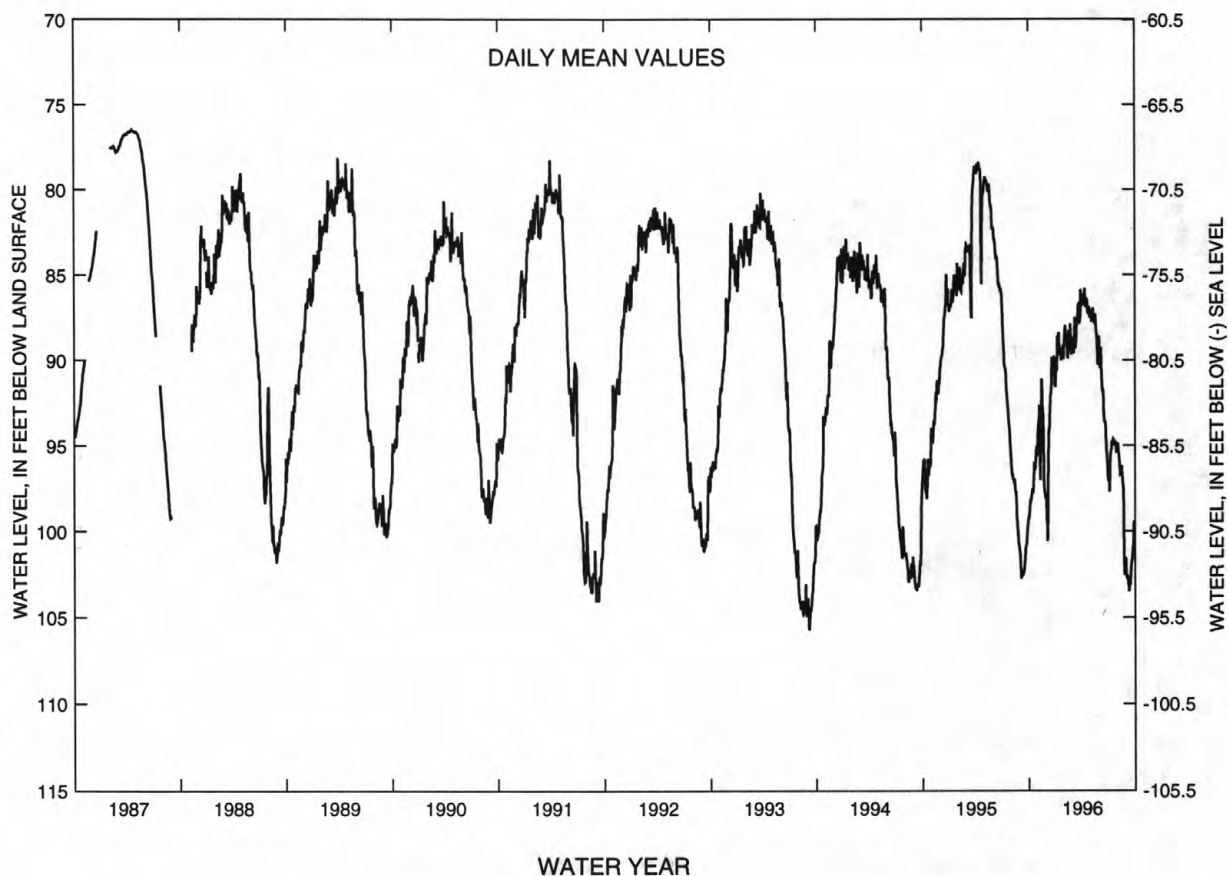
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.58 ft below land surface, Mar. 7, 1962; lowest, 105.81 ft below land surface, Sept. 6-7, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	98.72	93.62	100.55	90.17	88.28	89.55	86.32	87.64	90.19	97.14	95.29	102.75
10	98.18	97.01	93.93	88.76	89.12	88.97	86.45	86.97	91.59	95.35	96.20	103.17
15	97.54	91.10	92.09	89.48	89.19	88.05	86.91	87.78	92.29	94.79	96.57	102.95
20	96.53	93.14	89.88	89.59	89.11	86.81	86.50	87.99	93.60	94.67	97.06	101.85
25	96.07	97.68	90.58	89.34	89.39	87.85	87.03	89.06	94.91	94.77	101.20	100.89
EOM	95.39	97.87	91.52	88.93	88.75	86.77	87.16	88.58	96.75	95.22	101.64	100.31
MEAN	97.26	94.80	93.39	89.58	88.84	87.96	86.68	88.07	92.68	95.46	97.57	102.08

WTR YR 1996 MEAN 92.87 HIGH 85.58 APR 12 LOW 103.66 SEP 11

NJ-WRD WELL NO. 01-0037



GROUND-WATER LEVELS

27

ATLANTIC COUNTY

392640074372401. Local I.D., HTMUA 9 Obs. NJ-WRD Well Number, 01-1219.

LOCATION.--Lat 39°26'40", long 74°37'24", Hydrologic Unit 02040302, about 700 ft north of the Black Horse Pike (US 40 and 322) and 25 ft east of Lowell Ave., Hamilton Township.

Owner: Hamilton Township Municipal Utilities Authority.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 742 ft, screened 722 to 742 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 68 ft above sea level, from topographic map.

Measuring point: Top of protective casing, 2.20 ft above land surface.

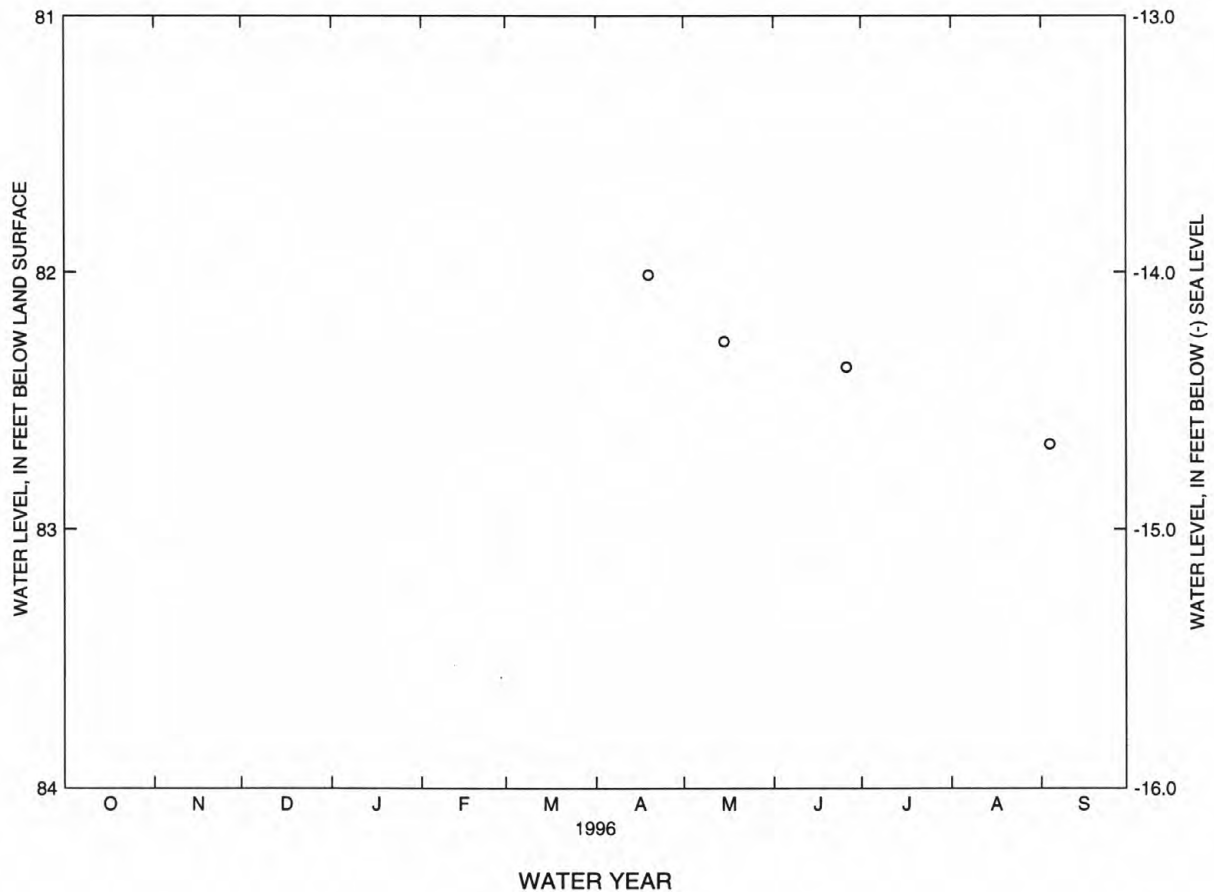
PERIOD OF RECORD.--April 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 82.01 ft below land surface, Apr. 19, 1996; lowest, 82.67 ft below land surface, Sept. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 19	82.01	MAY 15	82.27	JUN 26	82.37	SEP 4	82.67

NJ-WRD WELL NO. 01-1219



GROUND-WATER LEVELS

ATLANTIC COUNTY

392754074270101. Local I.D., Oceanville 1 Obs. NJ-WRD Well Number, 01-0180.

LOCATION.--Lat 39°27'54", long 74°27'01", Hydrologic Unit 02040302, at the Edwin B. Forsythe National Wildlife Refuge, Brigantine Division, Oceanville, Galloway Township.
Owner: U.S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 570 ft, screened 560 to 570 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Apr. 1977 to Feb. 1984. Periodic measurements, Aug. 1975 to Apr. 1977. Water-level recorder, Oct. 1959 to Aug. 1975.

DATUM.--Land surface is 27 ft above sea level, from topographic map.
Measuring point: Top of bushing, 2.30 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

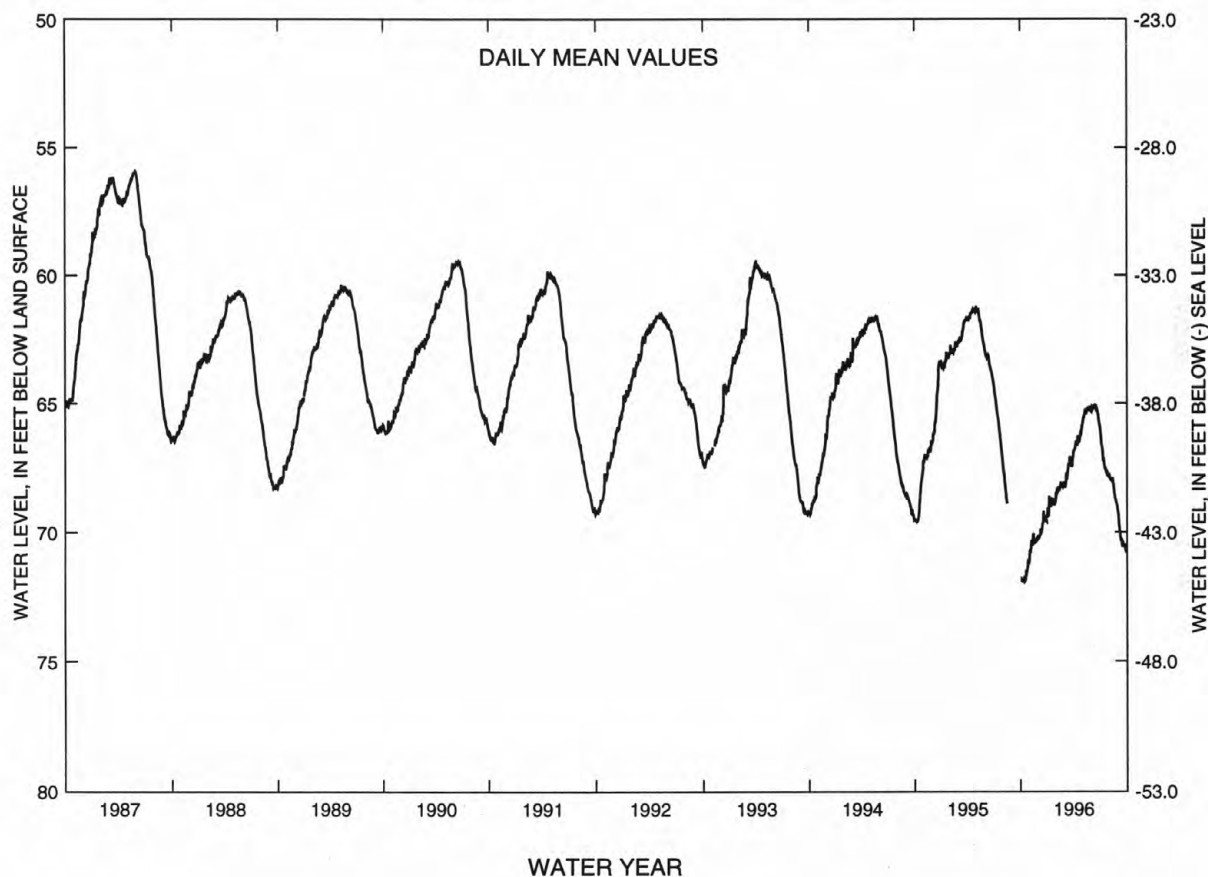
PERIOD OF RECORD.--Oct. 1959 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.62 ft below land surface, Apr. 13, 1961; lowest, 72.10 ft below land surface, Oct. 5, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.94	70.72	70.21	69.29	68.41	68.20	66.81	65.59	65.19	66.47	67.93	69.74
10	71.91	70.46	69.91	68.85	68.32	67.95	66.46	65.38	65.13	66.92	67.98	70.27
15	71.71	70.06	69.80	68.89	68.27	67.41	66.57	65.42	65.13	67.36	68.07	70.47
20	71.71	70.39	69.18	68.89	68.22	67.07	66.48	65.19	65.19	67.54	68.54	70.53
25	71.43	70.32	69.41	68.89	68.19	67.36	66.23	65.28	65.45	67.72	68.78	70.57
EOM	71.19	70.22	69.52	68.58	68.18	67.10	65.87	65.25	65.86	67.77	69.17	70.64
MEAN	71.64	70.42	69.76	68.91	68.27	67.58	66.48	65.37	65.30	67.19	68.33	70.24
WTR YR 1996	MEAN 68.26 HIGH 64.91 JUN 3-4 LOW 72.10 OCT 5											

NJ-WRD WELL NO. 01-0180



GROUND-WATER LEVELS

29

ATLANTIC COUNTY

393232074263901. Local I.D., FAA Pomona Obs. NJ-WRD Well Number, 01-0703.

LOCATION.--Lat 39°26'39", long 74°32'32", Hydrologic Unit 02040302, at the NAFEC Atlantic City Airport, Egg Harbor Township.
Owner: U.S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 575 ft, screened 560 to 570 ft.

INSTRUMENTATION.--Digital water-level recorder--60 minute punch.

DATUM.--Land surface is 38 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.75 ft above land surface.

REMARKS.--Water level is affected by nearby pumping. Water level was affected by New Jersey-American Water Company aquifer test, Aug. 23-31, 1993.

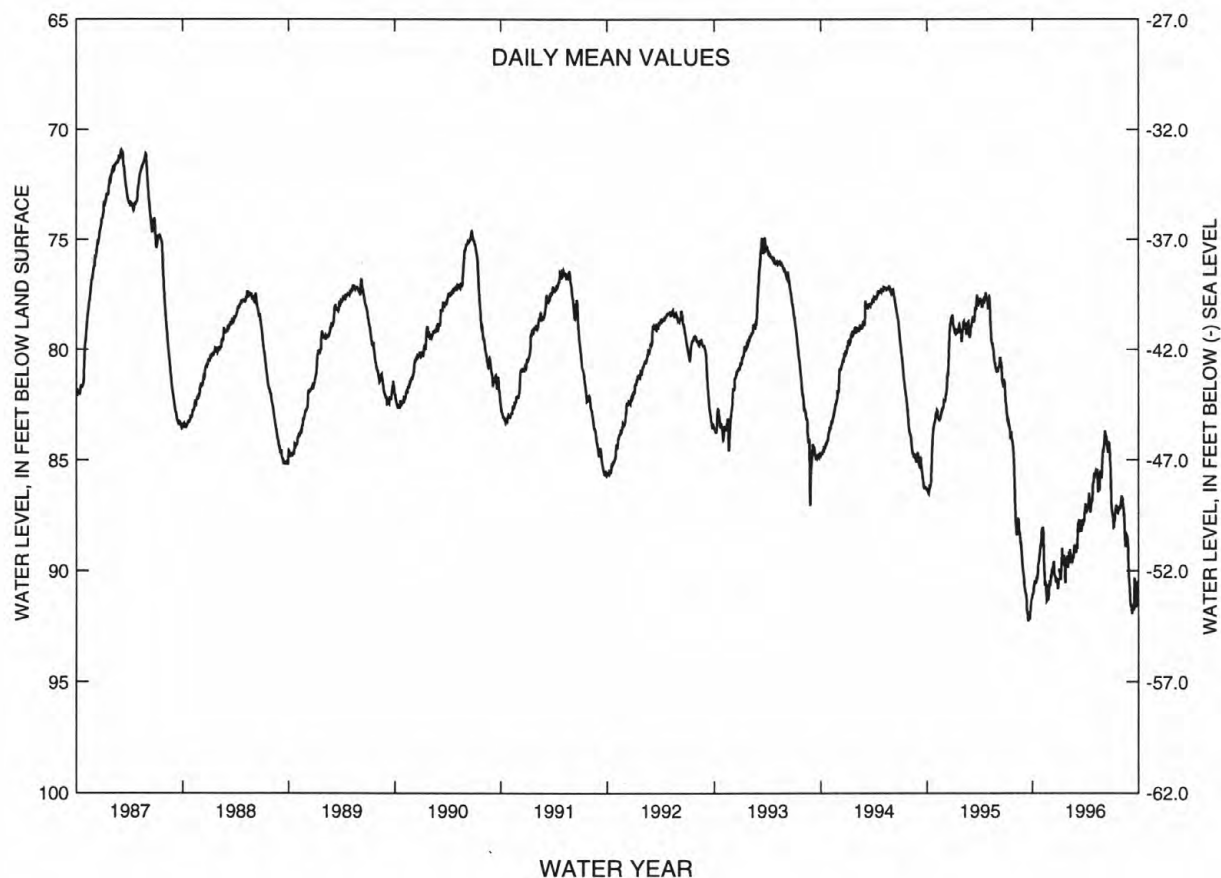
PERIOD OF RECORD.--Oct. 1985 to current year. Records for 1985 to 1986 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.74 ft below land surface, Mar. 18, 1986; lowest, 92.27 ft below land surface, Sept. 15-17, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	90.89	88.14	90.35	90.38	89.40	88.54	87.28	85.81	84.35	87.54	86.63	91.52
10	90.50	89.85	89.95	89.56	89.66	88.25	87.14	85.67	83.92	87.77	87.13	91.89
15	90.32	90.49	89.77	89.69	89.66	88.15	86.90	86.48	84.27	87.15	88.11	91.62
20	90.06	91.36	90.34	89.48	89.38	87.91	87.10	86.31	84.43	87.30	88.63	90.80
25	89.34	91.33	90.41	89.76	88.96	87.82	86.87	85.69	84.67	87.29	88.45	90.99
EOM	88.90	90.70	90.36	89.71	89.19	87.28	85.89	84.67	86.91	87.10	90.51	91.07
MEAN	90.11	90.05	90.26	89.78	89.30	88.05	86.90	85.72	84.55	87.40	88.07	91.26
WTR YR 1996	MEAN 88.45	HIGH 83.62	JUN 8	LOW 92.00	SEP 9-11							

NJ-WRD WELL NO. 01-0703



GROUND-WATER LEVELS

ATLANTIC COUNTY

393232074263902. Local I.D., FAA Intermediate Obs. NJ-WRD Well Number, 01-0775.

LOCATION.--Lat 39°26'39", long 74°32'32", Hydrologic Unit 02040302, at the NAFEC Atlantic City Airport, Egg Harbor Township.

Owner: Atlantic City Municipal Utilities Authority.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 182 ft, screened 132 to 182 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 38.1 ft above sea level.

Measuring point: Top of PVC casing, 1.25 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

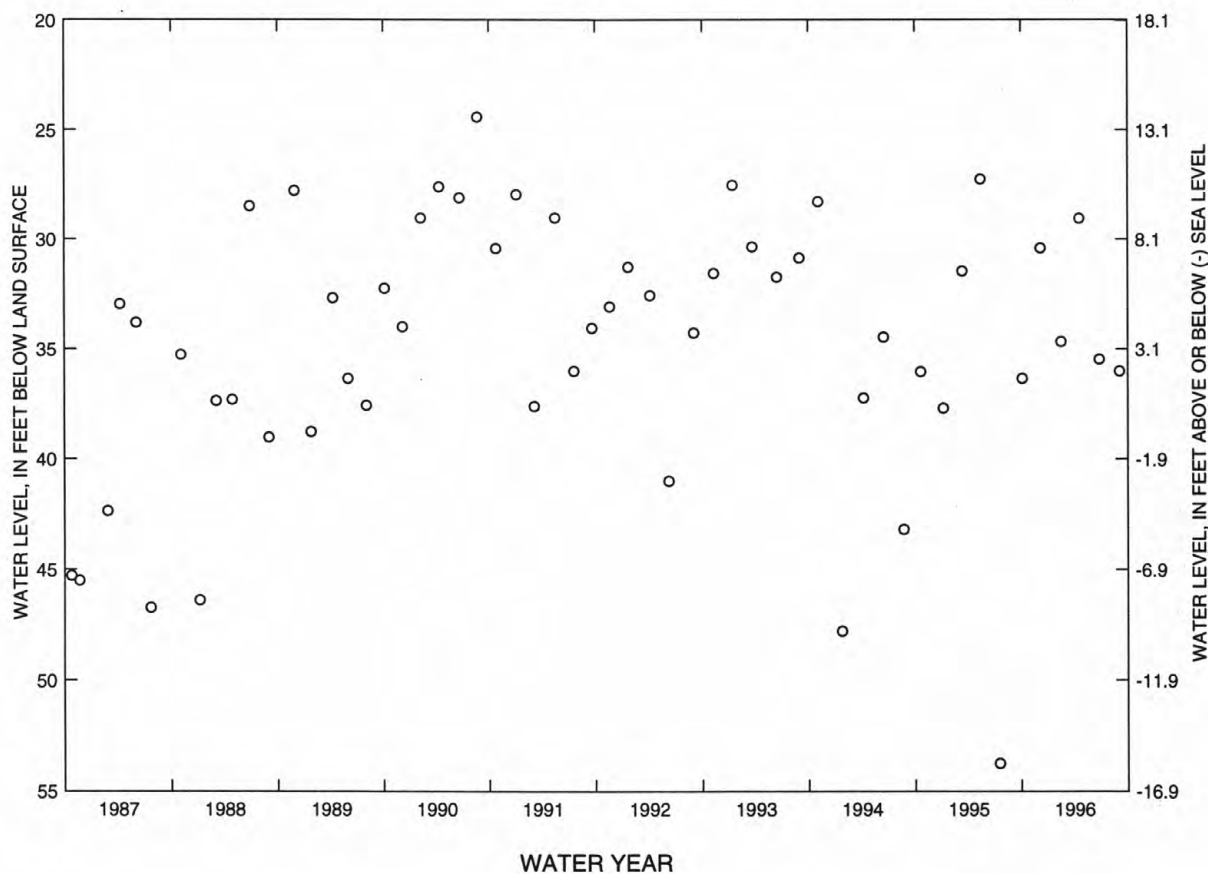
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.06 ft below land surface, May 29, 1985; lowest, 53.76 ft below land surface, July 18, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	36.35	FEB 15	34.67	JUN 26	35.48
DEC 7	30.41	APR 19	29.05	SEP 4	36.03

NJ-WRD WELL NO. 01-0775



GROUND-WATER LEVELS

31

ATLANTIC COUNTY

393232074263903. Local I.D., FAA Shallow Obs. NJ-WRD Well Number, 01-0776.

LOCATION.--Lat 39°26'39", long 74°32'32", Hydrologic Unit 02040302, at the NAFEC Atlantic City Airport, Egg Harbor Township.
Owner: Atlantic City Municipal Utilities Authority.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 93 ft, screened 73 to 93 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 38.1 ft above sea level.

Measuring point: Top of PVC casing, 0.95 ft above land surface.

REMARKS.--Water level is affected by the stage of the Atlantic City Reservoir.

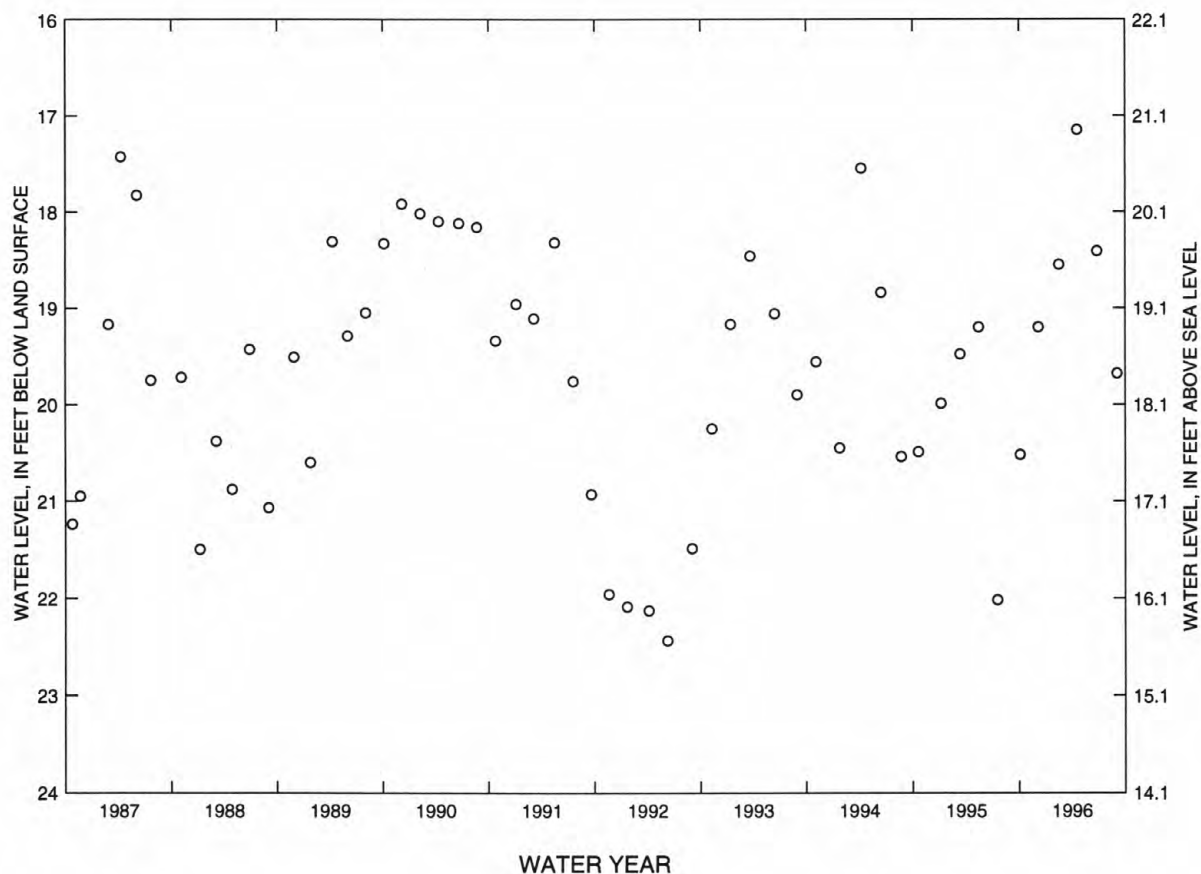
PERIOD OF RECORD.--May 1985 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.86 ft below land surface, May 29, 1985; lowest, 22.44 ft below land surface, June 9, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 4	20.52	FEB 15	18.55	JUN 26	18.41
DEC 7	19.20	APR 19	17.15	SEP 4	19.68

NJ-WRD WELL NO. 01-0776



GROUND-WATER LEVELS

ATLANTIC COUNTY

39333074442401. Local I.D., Scholler 1 Obs. NJ-WRD Well Number, 01-0256.

LOCATION.--Lat 39°33'33", long 74°44'26", Hydrologic Unit 02040302, inside the boiler room at Scholler Inc., Weymouth Rd. and Blueberry Rd., Elwood, Hamilton Township.

Owner: Scholler Incorporated.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 275 ft, screened 254 to 275 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, May 1977 to Apr. 1984. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, Apr. 1962 to Aug. 1975.

DATUM.--Land surface is 93.19 ft above sea level.

Measuring point: Top of recorder shelf, 2.66 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

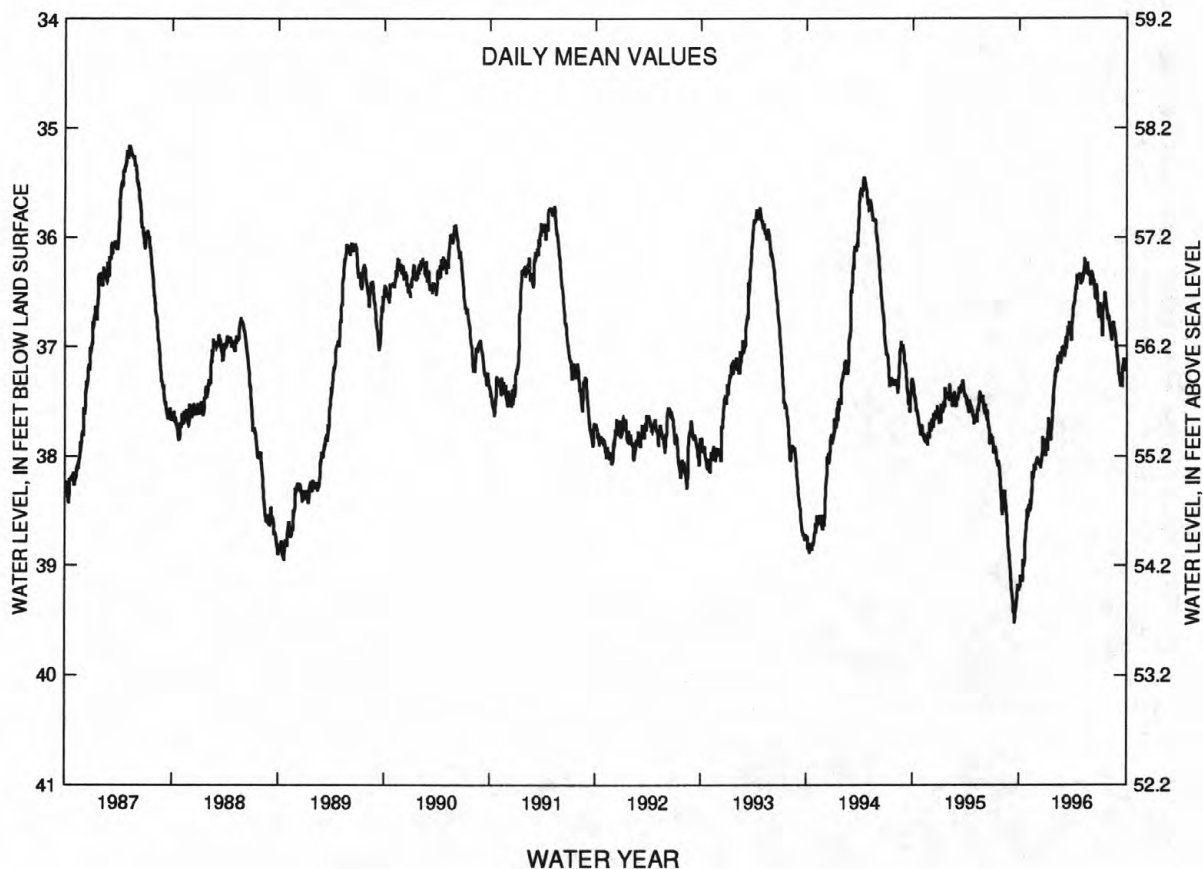
PERIOD OF RECORD.--Apr. 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.18 ft below land surface, Mar. 20, 1963; lowest, 39.56 ft below land surface, Sept. 13, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.14	38.51	38.08	37.93	37.23	37.06	36.62	36.36	36.32	36.67	36.80	37.26
10	39.14	38.48	38.03	37.75	37.13	37.03	36.45	36.27	36.38	36.82	36.89	37.36
15	38.94	38.14	38.05	37.82	37.10	36.82	36.48	36.34	36.47	36.62	36.80	37.36
20	38.94	38.13	37.82	37.71	37.15	36.77	36.35	36.24	36.44	36.51	36.84	37.18
25	38.64	38.11	37.90	37.49	37.02	36.88	36.36	36.34	36.53	36.64	36.92	37.16
EOM	38.55	38.06	37.95	37.25	37.05	36.75	36.38	36.39	36.70	36.74	37.10	37.21
MEAN	38.92	38.26	37.99	37.68	37.12	36.91	36.46	36.31	36.47	36.67	36.87	37.23
WTR YR 1996	MEAN 37.24 HIGH 36.16 MAY 11-12 LOW 39.22 OCT 4											

NJ-WRD WELL NO. 01-0256



GROUND-WATER LEVELS

33

BERGEN COUNTY

410155074060201. Local I.D., Saddle River 17 Obs. NJ-WRD Well Number, 03-0289.

LOCATION.--Lat 41°01'55", long 74°06'02", Hydrologic Unit 02030103, at the Saddle River Fire Station, East Saddle Rd. and East Allendale Rd., Saddle River Boro.

Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 175 ft, open hole 165 to 175 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 148.9 ft above sea level.

Measuring point: Top of casing, 2.00 ft above land surface.

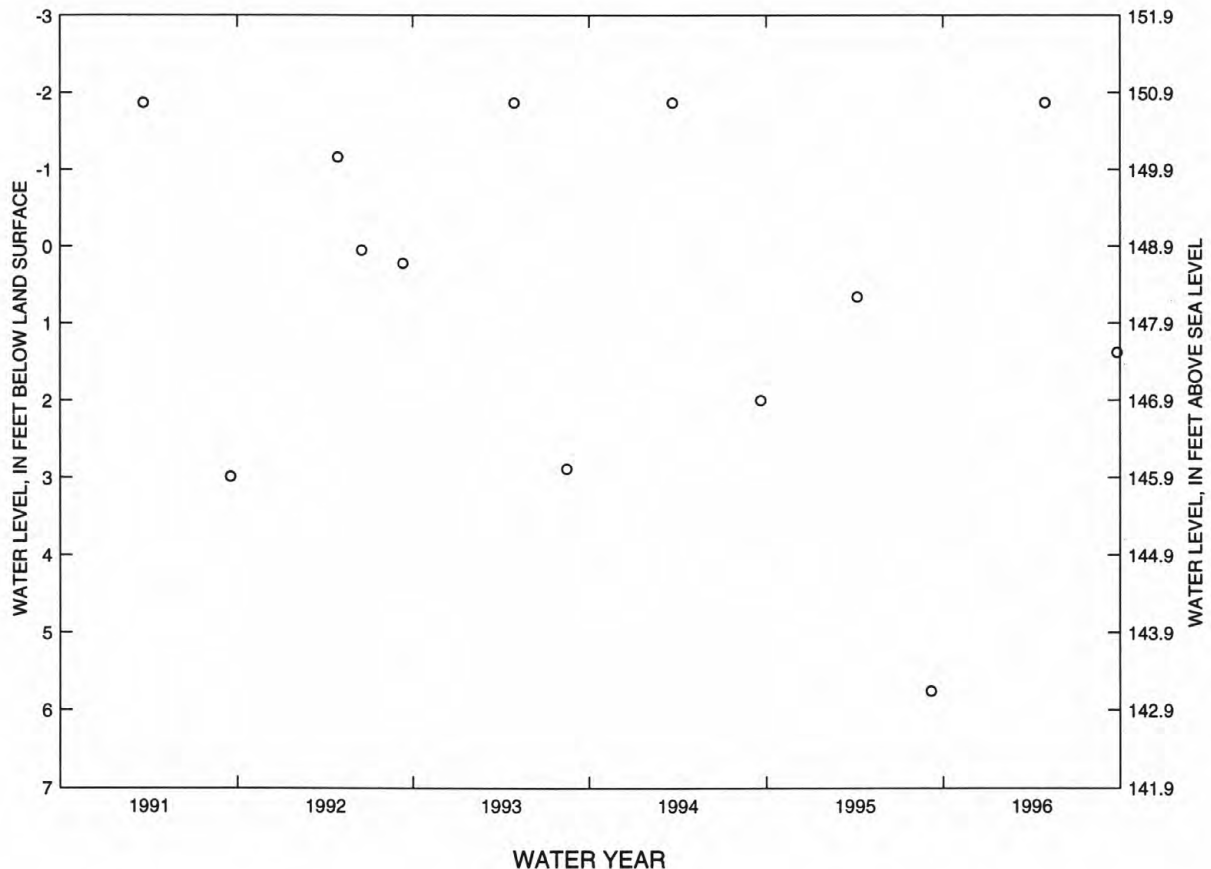
PERIOD OF RECORD.--Mar. 1991 to current year

EXTREMES FOR PERIOD OF RECORD.--Highest water level, greater than 1.87 ft above land surface, (flowing), Mar. 21, 1991, Apr. 29, 1993, Mar. 22, 1994, Apr. 29, 1996; lowest, 5.76 ft below land surface, Sept. 6, 1995.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 29	-1.87	SEP 25	1.38

NJ-WRD WELL NO. 03-0289



GROUND-WATER LEVELS

BURLINGTON COUNTY

394106074362501. Local I.D., Mount Obs. NJ-WRD Well Number, 05-0570.

LOCATION.--Lat 39°41'06", long 74°36'23", Hydrologic Unit 02040301, at Mount in Wharton State Forest, Washington Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 25 ft, open-end concrete casing.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Digital water-level recorder, Sept. 1977 to Apr. 1987. Periodic measurements, July 1970 to Sept. 1977. Water-level recorder, Sept. 1955 to July 1970.

DATUM.--Land surface is 63.24 ft above sea level.

Measuring point: Top of concrete casing, 0.60 ft above land surface.

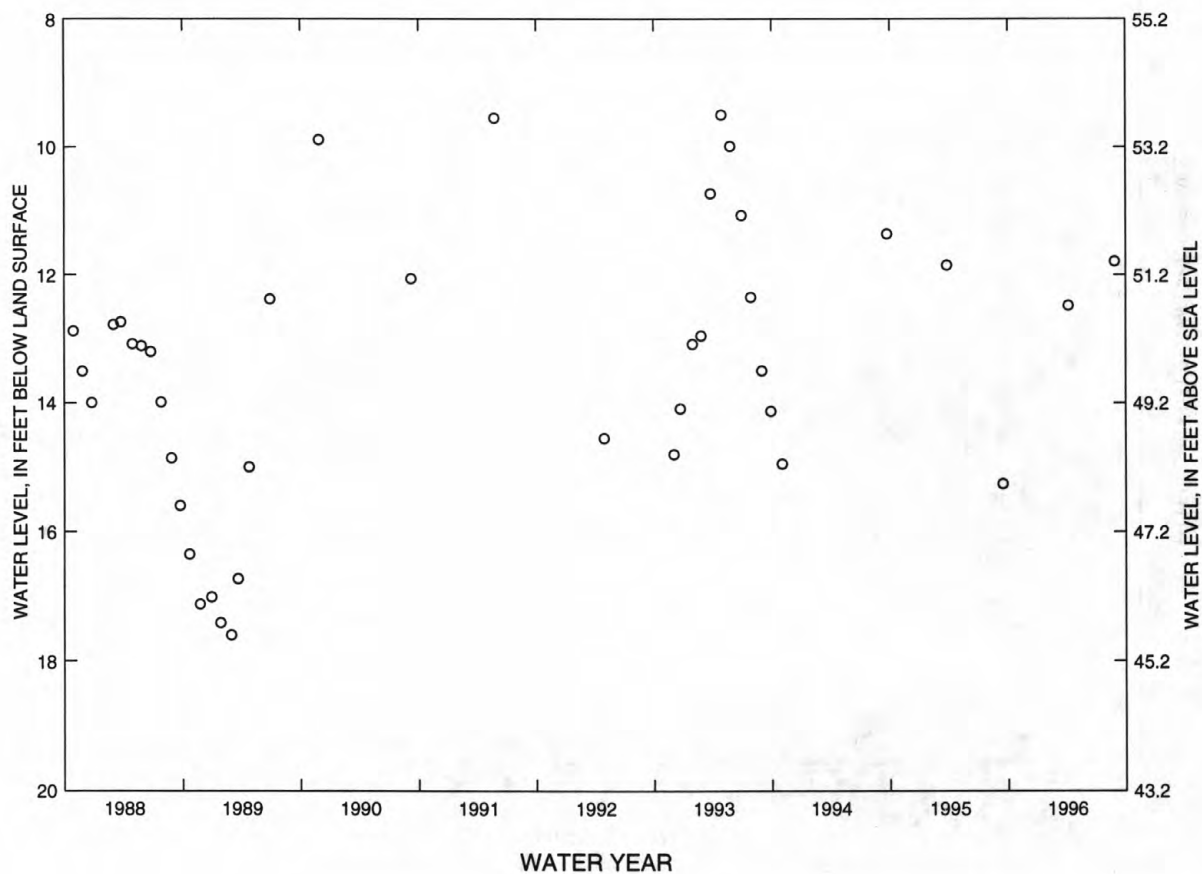
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1977 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.92 ft below land surface, Aug. 26, 1958; lowest, 18.51 ft below land surface, Sept. 30-Oct. 6, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	12.48	AUG 29	11.79

NJ-WRD WELL NO. 05-0570



GROUND-WATER LEVELS

35

BURLINGTON COUNTY

394422074430901. Local I.D., Atsion 1 Obs. NJ-WRD Well Number, 05-0407.

LOCATION.--Lat 39°44'22", long 74°43'09", Hydrologic Unit 02040301, about 2,200 ft east of Rt. 206, in Atsion, Shamong Township.
Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 260 ft, screened 240 to 260 ft.

INSTRUMENTATION.--None: periodic measurements with a 6 ft ruler.

DATUM.--Land surface is 46.76 ft above sea level.

Measuring point: Top edge of cap, 3.87 ft above land surface.

REMARKS.--This is a flowing well. The water level is measured in a clear plastic tube above land surface.

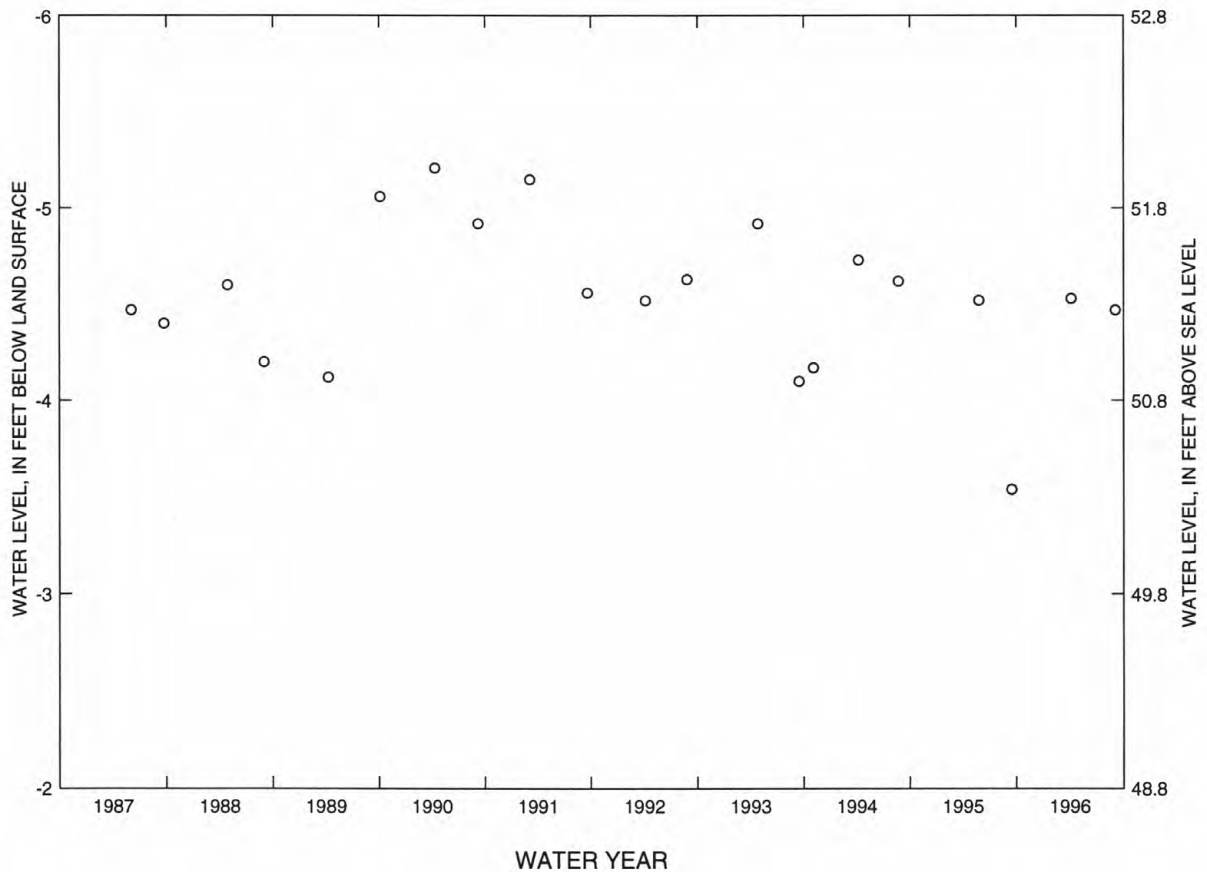
PERIOD OF RECORD.--Oct. 1963 to Sept. 1966, June 1968 to current year. Records for 1963 to 1966 and 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.49 ft above land surface, Dec. 15, 1965; lowest, 3.32 ft above land surface, Oct. 9, 1970.

WATER LEVEL, IN FEET ABOVE (-) LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	-4.53	SEP 4	-4.47

NJ-WRD WELL NO. 05-0407



GROUND-WATER LEVELS

BURLINGTON COUNTY

394422074430902. Local I.D., Atsion 2 Obs. NJ-WRD Well Number, 05-0408.

LOCATION.--Lat 39°44'22", long 74°43'09", Hydrologic Unit 02040301, about 2,200 ft east of Rt. 206, in Atsion, Shamong Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Driven water-table observation well, diameter 1.25 in., depth 65 ft, screened 63 to 65 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 47.52 ft above sea level.

Measuring point: Top of casing, 1.00 ft above land surface.

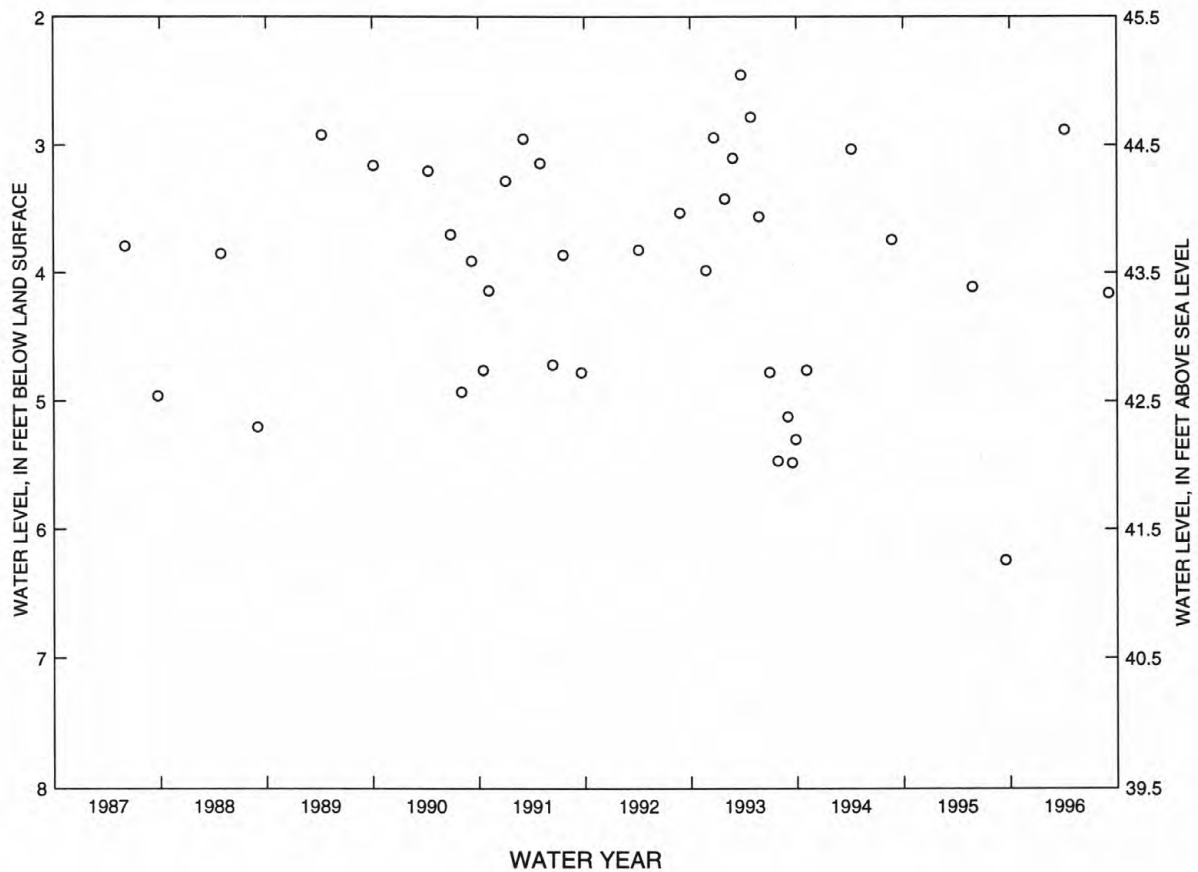
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft below land surface, Apr. 28, 1983; lowest, 6.51 ft below land surface, Sept. 9, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	2.88	SEP 4	4.16

NJ-WRD WELL NO. 05-0408



GROUND-WATER LEVELS

37

BURLINGTON COUNTY

394422074430903. Local I.D., Atsion 3 Obs. NJ-WRD Well Number, 05-0409.

LOCATION.--Lat 39°44'22", long 74°43'09", Hydrologic Unit 02040301, about 2,200 ft east of Rt. 206, in Atsion, Shamong Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Driven water-table observation well, diameter 1.25 in., depth 17 ft, screened 14 to 17 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 47.13 ft above sea level.

Measuring point: Top of casing, 2.00 ft above land surface.

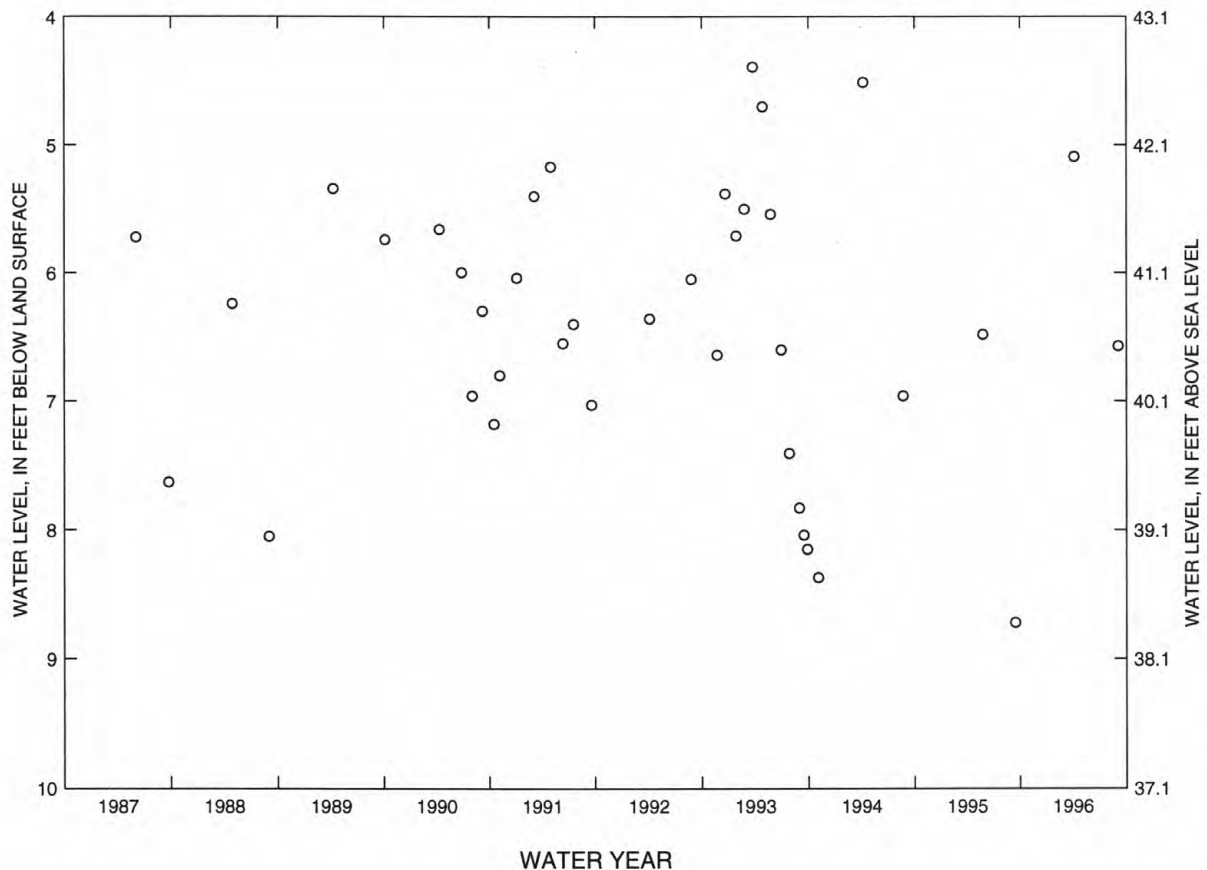
PERIOD OF RECORD.--October 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.04 ft below land surface, Apr. 28, 1983; lowest, 8.85 ft below land surface, Dec. 15, 1965.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	5.09	SEP 4	6.57

NJ-WRD WELL NO. 05-0409



GROUND-WATER LEVELS

BURLINGTON COUNTY

394452074281901. Local I.D., Penn SF Shallow Obs. NJ-WRD Well Number, 05-0628.

LOCATION.--Lat 39°44'52", long 74°28'19", Hydrologic Unit 02040301, about 500 ft south of the intersection of Sooy Rd. and Cabin Rd., Penn State Forest, Washington Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 12 ft, open-end steel casing.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Digital water-level recorder, June 1990 to Oct. 1991. Periodic measurements, Oct. 1984 to June 1990. Digital water-level recorder Oct. 1977 to Oct. 1984. Periodic measurements, Jan. 1975 to Oct. 1977. Water-level recorder, Dec. 1936 to Jan. 1975.

DATUM.--Land surface is 78.78 ft above sea level.

Measuring point: Top of casing, 2.70 ft above land surface. Measuring point prior to July 1963, top of coupling, 0.11 ft above land surface.

REMARKS.--Well deepened from 10 ft to 12 ft in July 1963.

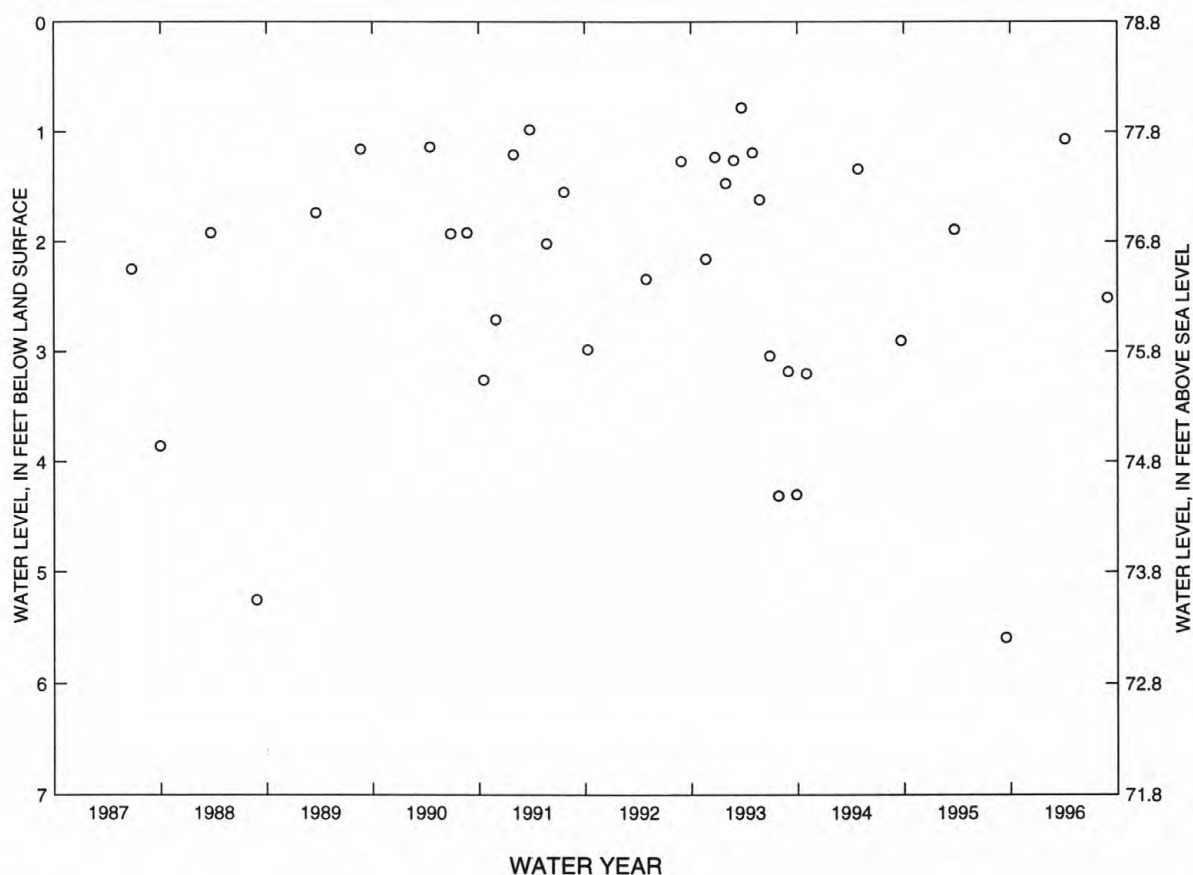
PERIOD OF RECORD.--Dec. 1936 to current year. Records for 1975 to 1981 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, greater than 0.11 ft above land surface (flowing), several times, 1959-62; lowest, 6.12 ft below land surface, Sept. 26, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	1.07	AUG 29	2.51

NJ-WRD WELL NO. 05-0628



GROUND-WATER LEVELS

39

BURLINGTON COUNTY

394513074280601. Local I.D., Penn SF Deep Obs. NJ-WRD Well Number, 05-0630.

LOCATION.--Lat 39°45'13", long 74°28'06", Hydrologic Unit 02040301, about 800 ft south of the intersection of Sooy Rd. and Chatsworth Rd., Penn State Forest, Washington Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 41 ft, open end steel casing.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Digital water-level recorder, Aug. 1990 to Oct. 1991. Periodic measurements, Feb. 1982 to Aug. 1990. Digital water-level recorder, Nov. 1977 to Feb. 1982. Periodic measurements, July 1970 to Nov. 1977. Water-level recorder, Aug. 1963 to July 1970. Periodic measurements, Jan. 1951 to Aug. 1963.

DATUM.--Land surface is 104.30 ft above sea level.
Measuring point: Top of shelter shelf, 2.36 ft above land surface.

REMARKS.--Well depth was 30 ft before deepening in July 1963.

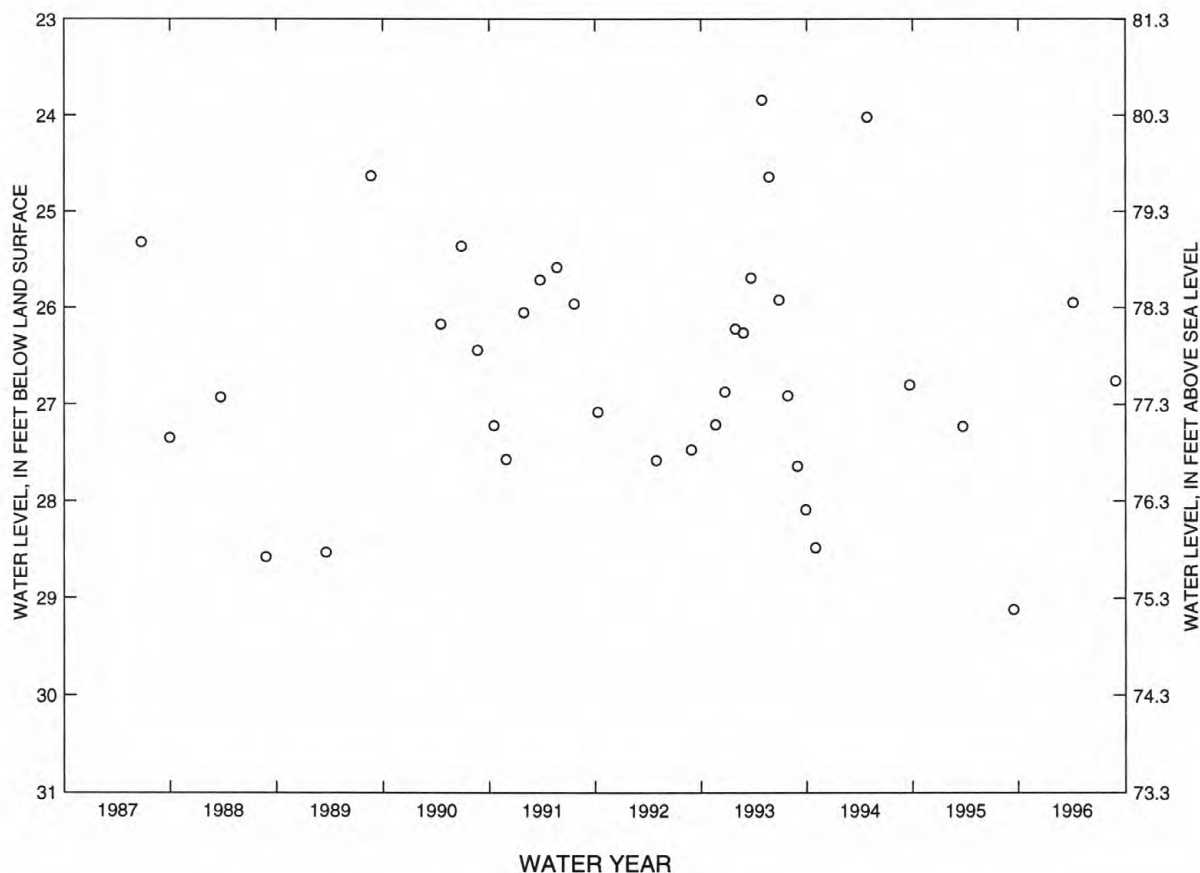
PERIOD OF RECORD.--Jan 1951 to current year. Records for 1951 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.73 ft below land surface, May 11, 1970; lowest, 29.60 ft below land surface, Jan. 24-Feb. 15, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	25.95	AUG 29	26.76

NJ-WRD WELL NO. 05-0630



GROUND-WATER LEVELS

BURLINGTON COUNTY

394914074254401. Local I.D., Coyle Airport Obs. NJ-WRD Well Number, 05-0676.

LOCATION.--Lat 39°49'14", long 74°25'46", Hydrologic Unit 02040301, about 200 ft north of Rt. 72, and 3.5 mi west of the intersection of routes 549 and 72, Woodland Township.
Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 540 ft, screened 530 to 540 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Feb. 1962 to July 1970.

DATUM.--Land surface is 199.19 ft above sea level.

Measuring point: Top of shelter shelf, 2.40 ft above land surface.

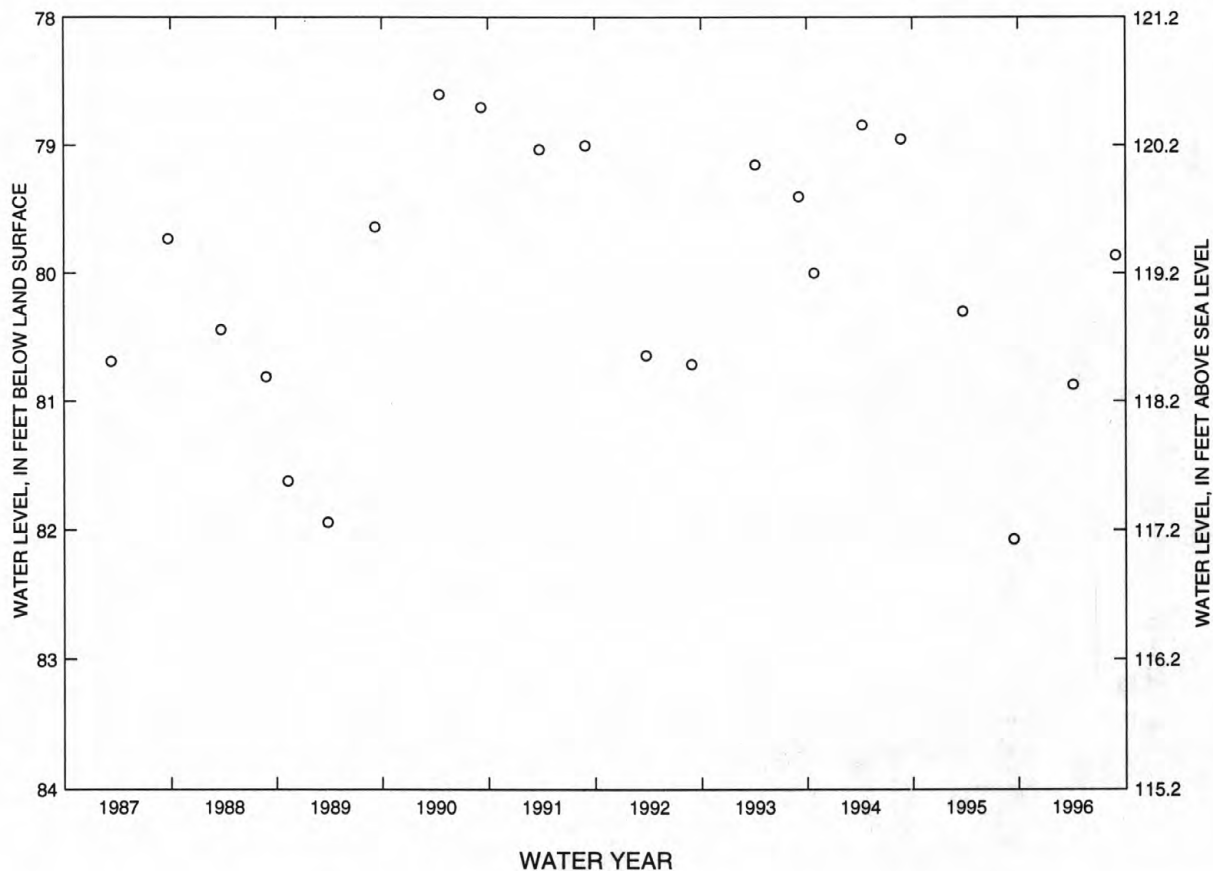
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 75.41 ft below land surface, June 14, 1973; lowest, 83.24 ft below land surface, Sept. 12, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	80.87	AUG 29	79.86

NJ-WRD WELL NO. 05-0676



BURLINGTON COUNTY

395122074301701. Local I.D., Butler Place 1 Obs. NJ-WRD Well Number, 05-0683.

LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 2,117 ft, screened 2,102 to 2,117 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, June 1975 to Sept. 1976. Water-level recorder, Oct. 1964 to June 1975.

DATUM.--Land surface is 140.66 ft above sea level.

Measuring point: Top of coupling, 2.80 ft above land surface.

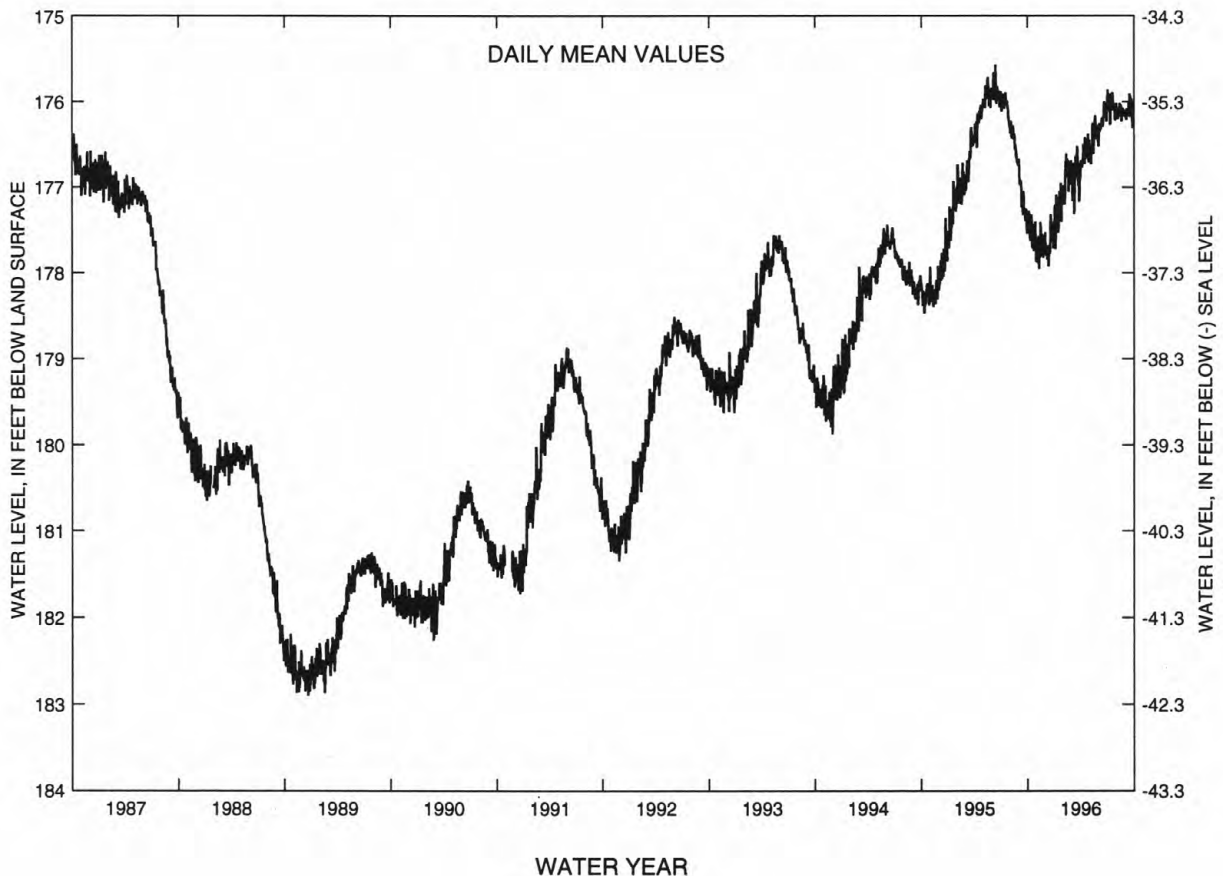
PERIOD OF RECORD.--Oct. 1964 to current year. Records for 1964 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 143.20 ft below land surface, Feb. 25, 1965; lowest, 182.96 ft below land surface, Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	177.35	177.88	177.80	177.63	177.19	176.97	176.74	176.57	176.31	176.08	176.19	176.21
10	177.60	177.95	177.69	177.28	176.80	177.31	176.50	176.51	176.31	176.10	176.08	176.13
15	177.32	177.41	177.71	177.39	176.78	176.64	176.73	176.61	176.22	176.01	176.09	176.13
20	177.64	177.72	177.32	177.37	177.04	176.52	176.59	176.20	176.04	175.92	176.23	176.08
25	177.65	177.80	177.47	177.23	176.80	176.92	176.54	176.43	176.03	176.08	176.11	176.12
EOM	177.86	177.73	177.55	176.98	176.92	176.85	176.45	176.45	176.11	176.09	176.18	176.27
MEAN	177.55	177.71	177.63	177.29	176.89	176.88	176.61	176.43	176.22	176.05	176.12	176.11
WTR YR 1996	MEAN 176.79 HIGH 175.71 JUL 13 LOW 177.99 NOV 10											

NJ-WRD WELL NO. 05-0683



GROUND-WATER LEVELS

BURLINGTON COUNTY

395122074301702. Local I.D., Butler Place 2 Obs. NJ-WRD Well Number, 05-0684.

LOCATION.--Lat 39°51'22", long 74°30'17", Hydrologic Unit 02040301, in Lebanon State Forest, Woodland Township.

Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 170 ft, screened 160 to 170 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Apr. 1975 to Mar. 1977. Water-level recorder, May 1965 to Apr. 1975.

DATUM.--Land surface is 140.82 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.67 ft above land surface.

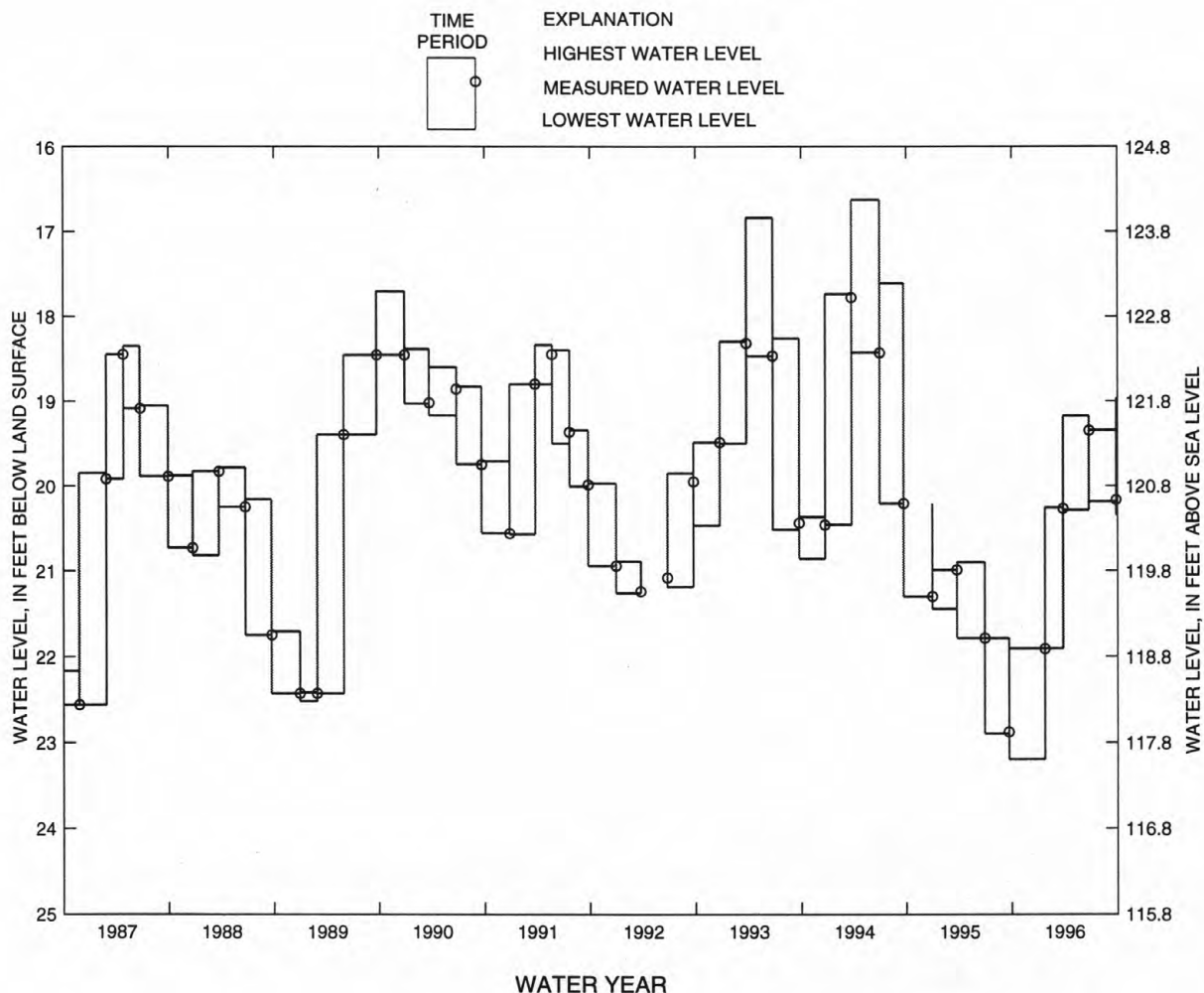
PERIOD OF RECORD.--May 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.14 ft below land surface, Feb. 15, 1973; lowest, 23.53 ft below land surface, between Sept. 26, and Dec. 11, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 21, 1995 TO JAN. 23, 1996	21.91	23.20	JAN. 23, 1996	21.91
JAN. 23, 1996 TO MAR. 27, 1996	20.26	21.91	MAR. 27, 1996	20.27
MAR. 27, 1996 TO JUNE 25, 1996	19.18	20.29	JUNE 25, 1996	19.35
JUNE 25, 1996 TO SEPT. 27, 1996	19.35	20.19	SEPT. 27, 1996	20.17

NJ-WRD WELL NO. 05-0684



BURLINGTON COUNTY

395150074284201. Local I.D., Lebanon State Forest 23-D Obs. NJ-WRD Well Number, 05-0689.

LOCATION.--Lat 39°51'52", long 74°28'48", Hydrologic Unit 02040202, in Lebanon State Forest, Woodland Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 8 in., depth 33 ft, open-end cement casing.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1975 to Jan. 1979. Water-level recorder, Sept. 1955 to Apr. 1975.

DATUM.--Land surface is 152.02 ft above sea level.

Measuring point: Top of casing, 0.70 ft above land surface.

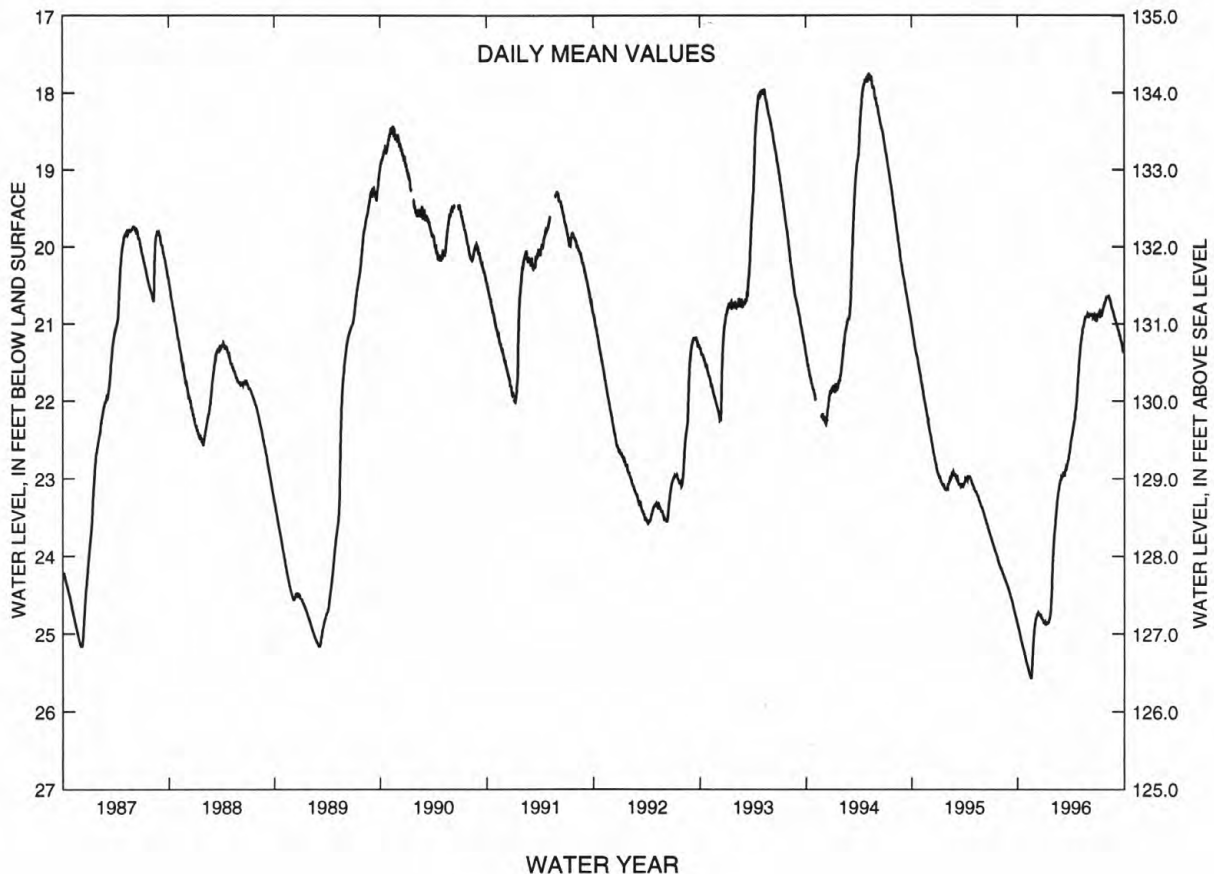
PERIOD OF RECORD.--Sept. 1955 to current year. Records for 1955 to 1979 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.37 ft below land surface, Sept. 11, 1958; lowest, 25.97 ft below land surface, Dec. 8-10, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.94	25.43	24.78	24.88	23.68	22.94	22.45	21.26	20.88	20.90	20.65	21.01
10	25.02	25.50	24.74	24.86	23.46	22.97	22.33	21.12	20.89	20.88	20.64	21.06
15	25.10	25.56	24.74	24.85	23.26	22.86	22.22	21.03	20.88	20.88	20.71	21.14
20	25.18	25.37	24.76	24.79	23.13	22.80	22.02	20.92	20.89	20.82	20.80	21.21
25	25.26	25.05	24.81	24.53	23.02	22.71	21.75	20.91	20.91	20.76	20.85	21.28
EOM	25.36	24.86	24.86	23.94	22.99	22.56	21.47	20.90	20.93	20.67	20.94	21.37
MEAN	25.12	25.33	24.78	24.69	23.33	22.83	22.11	21.05	20.90	20.83	20.75	21.14
WTR YR 1996	MEAN 22.74	HIGH 20.64	AUG 8-10	LOW 25.57	NOV 16-17							

NJ-WRD WELL NO. 05-0689



GROUND-WATER LEVELS

BURLINGTON COUNTY

395315074494601. Local I.D., Medford Twp MW-1 Obs. NJ-WRD Well Number, 05-1155.

LOCATION.--Lat 39°53'15", long 74°49'46", Hydrologic Unit 02040202, on the east side of Mill St. (County Rt. 623), 0.6 mi south of County Rt. 541, Medford Township.

Owner: Medford Township.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 180 ft, screened 120 to 180 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 46.15 ft above sea level (levels by Medford Township).

Measuring point: Top of recorder shelf, 2.90 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

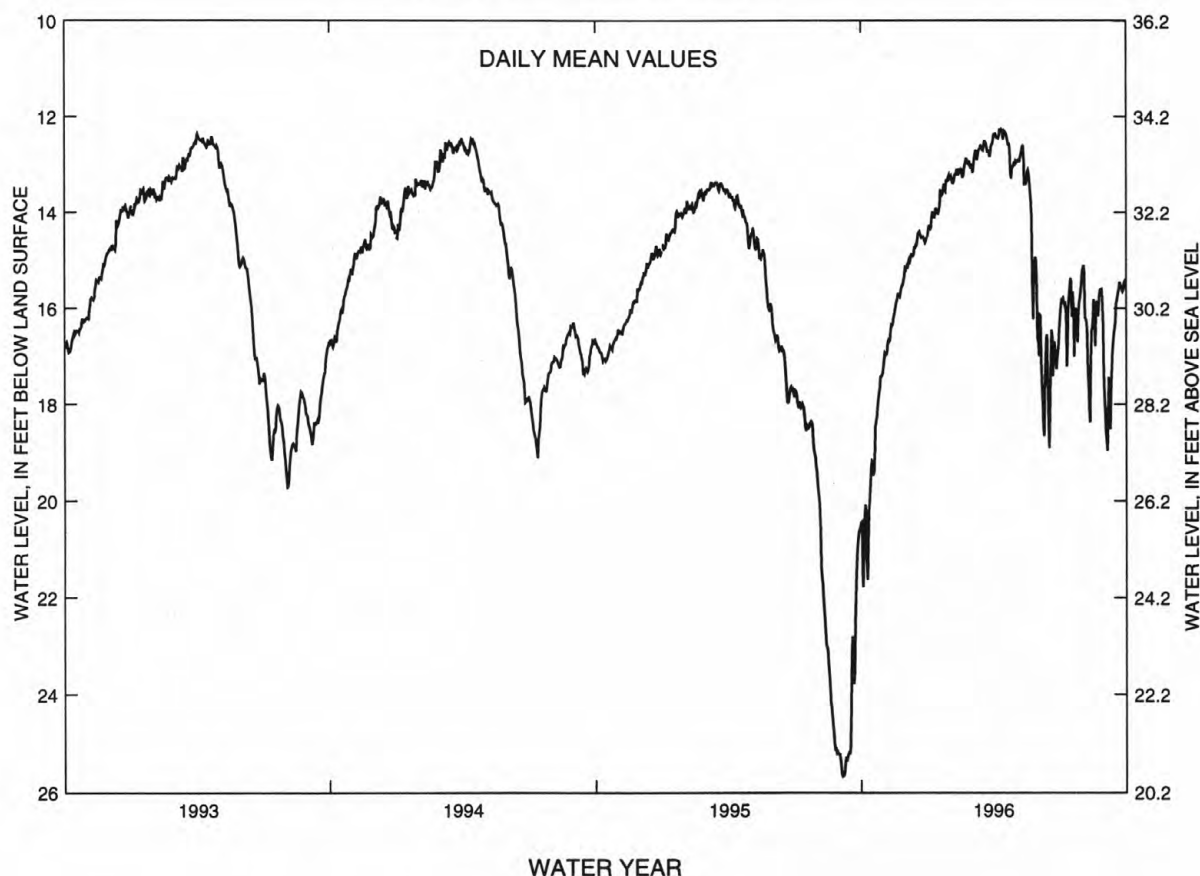
PERIOD OF RECORD.--Sept. 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.17 ft below land surface, Apr. 16, 1996; lowest, 25.75 ft below land surface, Sept. 5, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	20.79	16.97	15.13	14.35	13.38	13.02	12.40	12.91	16.15	15.84	16.20	18.96
10	21.63	16.68	14.88	14.07	13.20	12.90	12.27	12.75	18.65	16.10	17.61	17.66
15	19.31	16.18	14.74	14.02	13.16	12.59	12.47	13.24	17.66	15.58	16.41	16.44
20	18.96	15.83	14.43	13.66	13.23	12.52	12.43	13.19	16.46	15.93	16.16	15.67
25	17.92	15.66	14.52	13.52	12.92	12.71	13.18	15.48	16.94	16.31	15.69	15.61
EOM	17.35	15.34	14.52	13.22	13.01	12.57	12.95	15.49	16.68	15.50	17.26	15.49
MEAN	19.38	16.21	14.75	13.84	13.15	12.75	12.54	13.63	17.22	16.03	16.27	16.70
WTR YR 1996	MEAN 15.21	HIGH 12.17	APR 16	LOW 22.17	OCT 4							

NJ-WRD WELL NO. 05-1155



GROUND-WATER LEVELS

45

BURLINGTON COUNTY

395524074502501. Local I.D., Medford 1 Obs. NJ-WRD Well Number, 05-0258.

LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 410 ft, screened 400 to 410 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, Aug. 1975 to Feb. 1977. Water-level recorder, Oct. 1963 to Aug. 1975.

DATUM.--Land surface is 70.77 ft above sea level.

Measuring point: Top of coupling, 2.70 ft above land surface.

REMARKS.-- Water level is affected by nearby pumping.

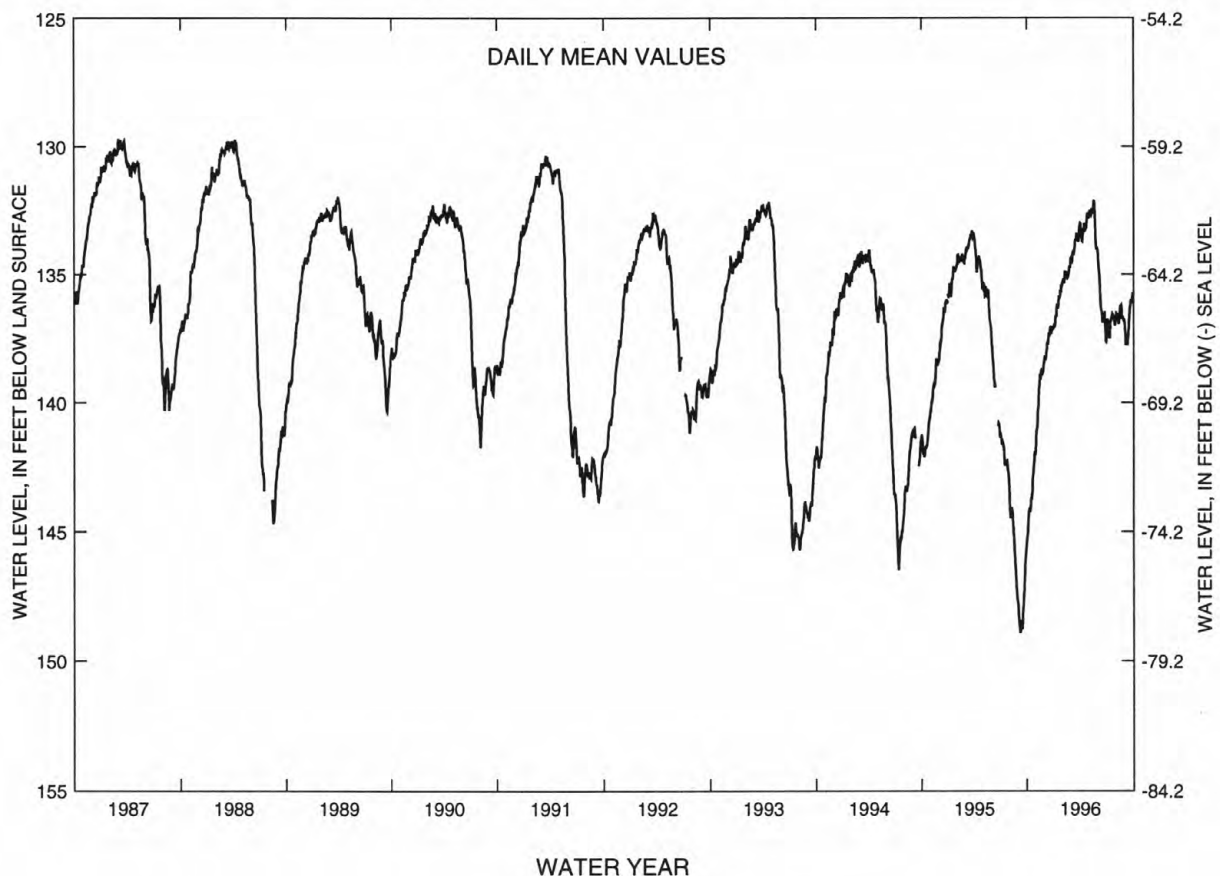
PERIOD OF RECORD.--Oct. 1963 to current year. Records for 1963 to 1975 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 85.22 ft below land surface, Feb. 16-19, 1964; lowest, 148.95 ft below land surface, Sept. 8-9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	144.86	140.98	138.29	137.04	135.31	134.49	133.45	132.52	134.84	136.78	136.54	137.70
10	144.12	140.07	137.68	136.60	134.96	134.24	133.53	132.63	136.01	137.29	136.77	137.72
15	143.75	138.90	137.36	136.23	135.16	133.68	133.29	132.63	136.51	136.87	136.69	137.17
20	143.37	138.85	137.09	135.97	135.09	133.40	133.14	132.22	---	136.61	136.24	136.26
25	142.41	138.83	137.25	135.68	134.72	133.67	132.79	133.77	136.46	136.68	136.68	135.97
EOM	141.93	138.36	137.08	135.29	134.37	133.10	132.71	134.00	137.65	136.93	136.83	135.72
MEAN	143.59	139.52	137.54	136.22	134.99	133.84	133.17	132.89	136.01	136.90	136.62	136.82
WTR YR 1996 MEAN 136.53 HIGH 132.08 MAY 18 LOW 145.47 OCT 1												

NJ-WRD WELL NO. 05-0258



GROUND-WATER LEVELS

BURLINGTON COUNTY

395524074502502. Local I.D., Medford 2 Obs. NJ-WRD Well Number, 05-0259.

LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at the Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 263 ft, screened 253 to 263 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Digital water-level recorder, Dec. 1984 to Sept. 1987. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Water-level recorder, Oct. 1963 to Aug. 1975.

DATUM.--Land surface is 72.92 ft above sea level.

Measuring point: Top of well shelter shelf, 3.22 ft above land surface.

REMARKS.--Water level is occasionally affected by nearby pumping.

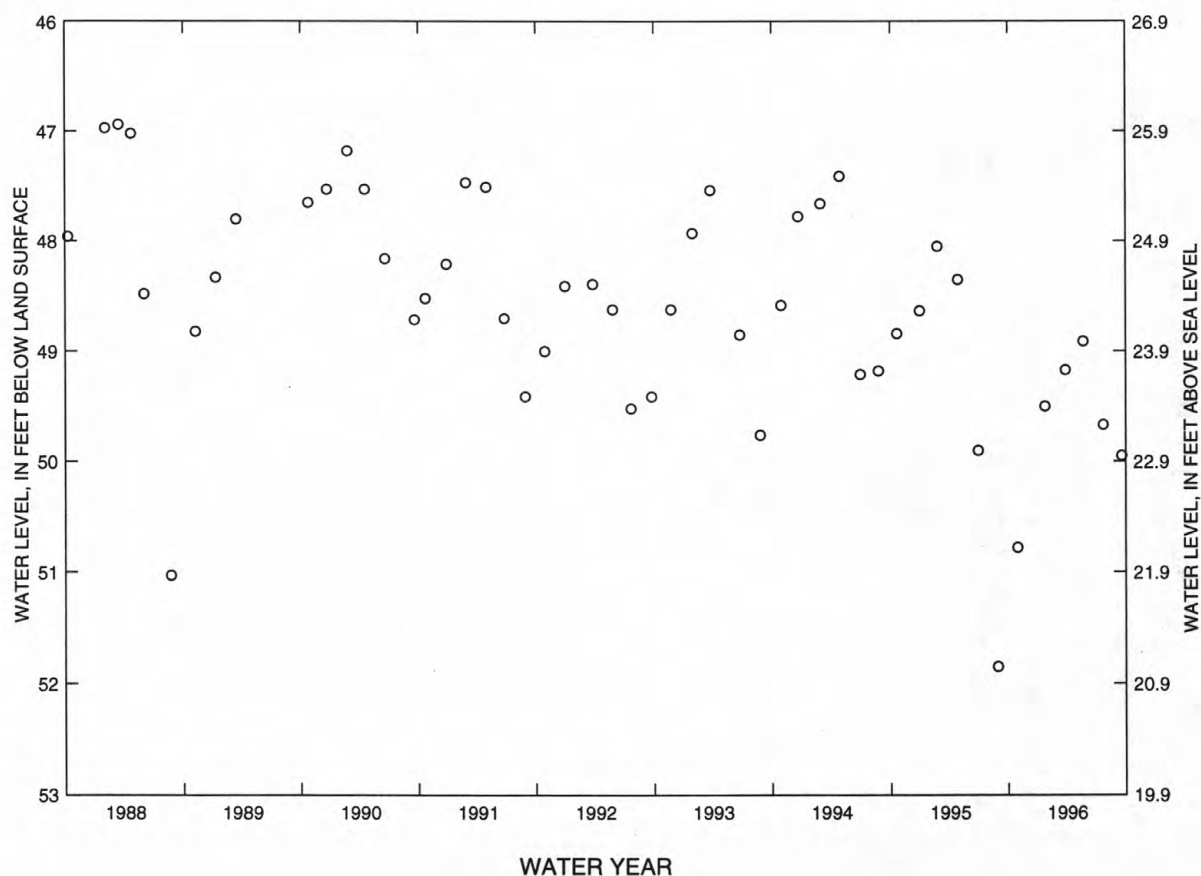
PERIOD OF RECORD.--Oct. 1963 to Aug. 1975, Feb. 1977 to current year. Records for 1963 to 1975 and 1987 to 1989 are unpublished and are available in files of the New Jersey District office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.42 ft below land surface, Apr. 27, 1973; lowest, 111.96 ft below land surface, July 9, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 30	50.78	MAR 27	49.17	JUL 24	49.67
JAN 23	49.50	MAY 22	48.91	SEP 20	49.95

NJ-WRD WELL NO. 05-0259



GROUND-WATER LEVELS

47

BURLINGTON COUNTY

395525074502505. Local I.D., Medford 5 Obs. NJ-WRD Well Number, 05-0261.

LOCATION.--Lat 39°55'25", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 750 ft, screened 740 to 750 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Mar. 1975 to Feb. 1977. Water-level recorder, Jan. 1968 to Mar. 1975.

DATUM.--Land surface is 72.60 ft above sea level.

Measuring point: Top of recorder shelf, 3.60 ft above land surface.

REMARKS.-- Water level is affected by nearby pumping.

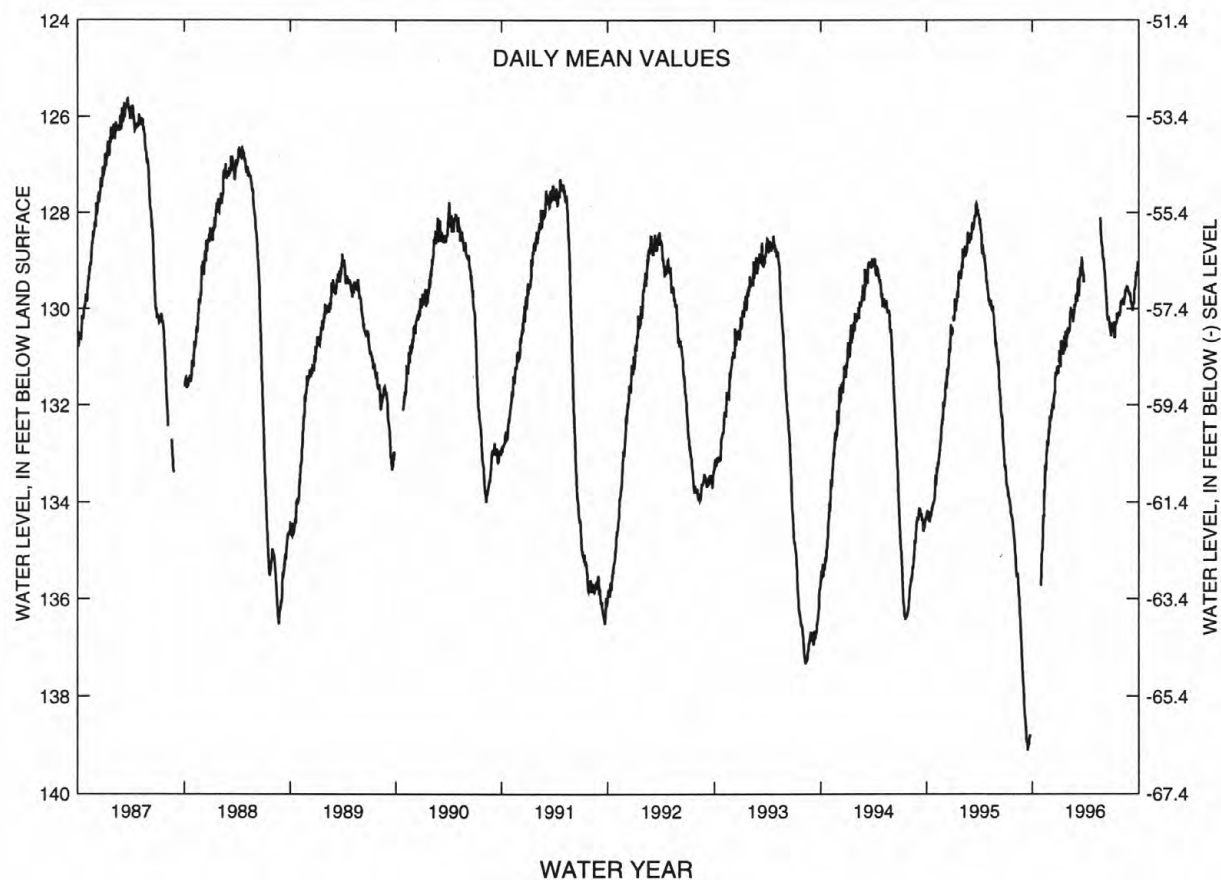
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.46 ft below land surface, Mar. 1, 1968; lowest, 139.15 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	134.97	132.27	131.16	130.47	129.65	---	---	129.09	130.47	129.86	129.86
10	---	134.27	131.97	130.79	130.12	129.74	---	---	129.54	130.44	129.81	130.01
15	---	133.24	131.83	130.86	130.11	129.14	---	---	130.00	130.32	129.78	129.89
20	---	132.93	131.33	130.84	130.22	128.93	---	---	130.16	130.11	129.63	129.54
25	---	132.77	131.27	130.69	129.95	129.25	---	128.42	130.32	130.13	129.57	129.25
EOM	135.73	132.46	131.18	130.40	129.85	---	---	128.85	130.49	129.98	129.71	129.08
MEAN	---	133.62	131.74	130.79	130.14	129.38	---	---	129.85	130.27	129.72	129.62
WTR YR 1996	HIGH 128.03 MAY 23 LOW 135.79 OCT 31											

NJ-WRD WELL NO. 05-0261



GROUND-WATER LEVELS

BURLINGTON COUNTY

395525074502601. Local I.D., Medford 4 Obs. NJ-WRD Well Number, 05-0262.

LOCATION.--Lat 39°55'24", long 74°50'25", Hydrologic Unit 02040202, at Medford Wildlife Management Area, Medford Township.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,145 ft, screened 1,125 to 1,145 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, July 1975 to Feb. 1977. Water-level recorder, Jan. 1968 to July 1975.

DATUM.--Land surface is 72.32 ft above sea level.

Measuring point: Top of recorder shelf, 2.40 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

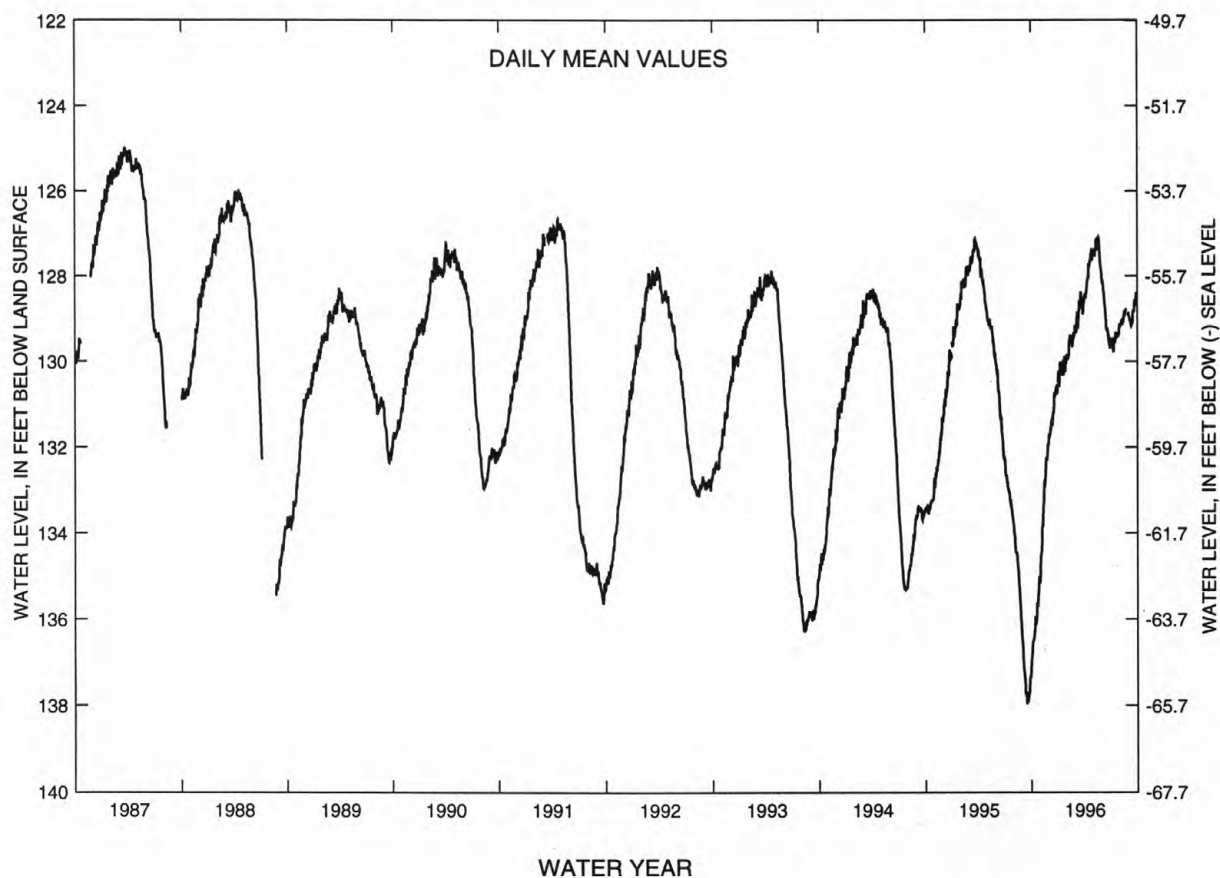
PERIOD OF RECORD.--Jan. 1968 to current year. Records for 1968 to 1975 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.24 ft below land surface, Mar. 13, 1968; lowest, 138.00 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	136.67	134.46	131.71	130.53	129.92	129.11	128.50	127.41	128.25	129.64	129.15	129.02
10	136.45	133.79	131.38	130.15	129.55	129.23	128.17	127.34	128.62	129.62	129.04	129.14
15	135.94	132.77	131.23	130.23	129.50	128.58	128.05	127.38	129.05	129.54	129.03	129.10
20	135.93	132.46	130.73	130.27	129.62	128.37	127.64	127.10	129.22	129.36	128.92	128.83
25	135.47	132.22	130.68	130.13	129.37	128.69	127.49	127.61	129.45	129.39	---	128.59
EOM	135.13	131.92	130.57	129.84	129.31	128.60	127.39	128.05	129.59	129.24	128.91	128.44
MEAN	136.04	133.11	131.15	130.18	129.56	128.82	127.95	127.43	128.95	129.48	129.00	128.86
WTR YR 1996	MEAN 130.06 HIGH 127.07 MAY 11-12 LOW 137.16 OCT 1											

NJ-WRD WELL NO. 05-0262



GROUND-WATER LEVELS

49

BURLINGTON COUNTY

395838074590501. Local I.D., Campbell 1 Obs. NJ-WRD Well Number, 05-0274.

LOCATION.--Lat 39°58'41", long 74°59'05", Hydrologic Unit 02040202, at Denton Vacuum Inc., Church Rd., Moorestown Township.
Owner: Denton Vacuum Inc.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 10 in., depth 268 ft, screened 241 to 262 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Jan. 1973 to May 1975. Periodic measurements, Apr. 1972 to Jan. 1973.

DATUM.--Land surface is 40 ft above sea level, from topographic map.
Measuring point: Top of coupling, 1.50 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

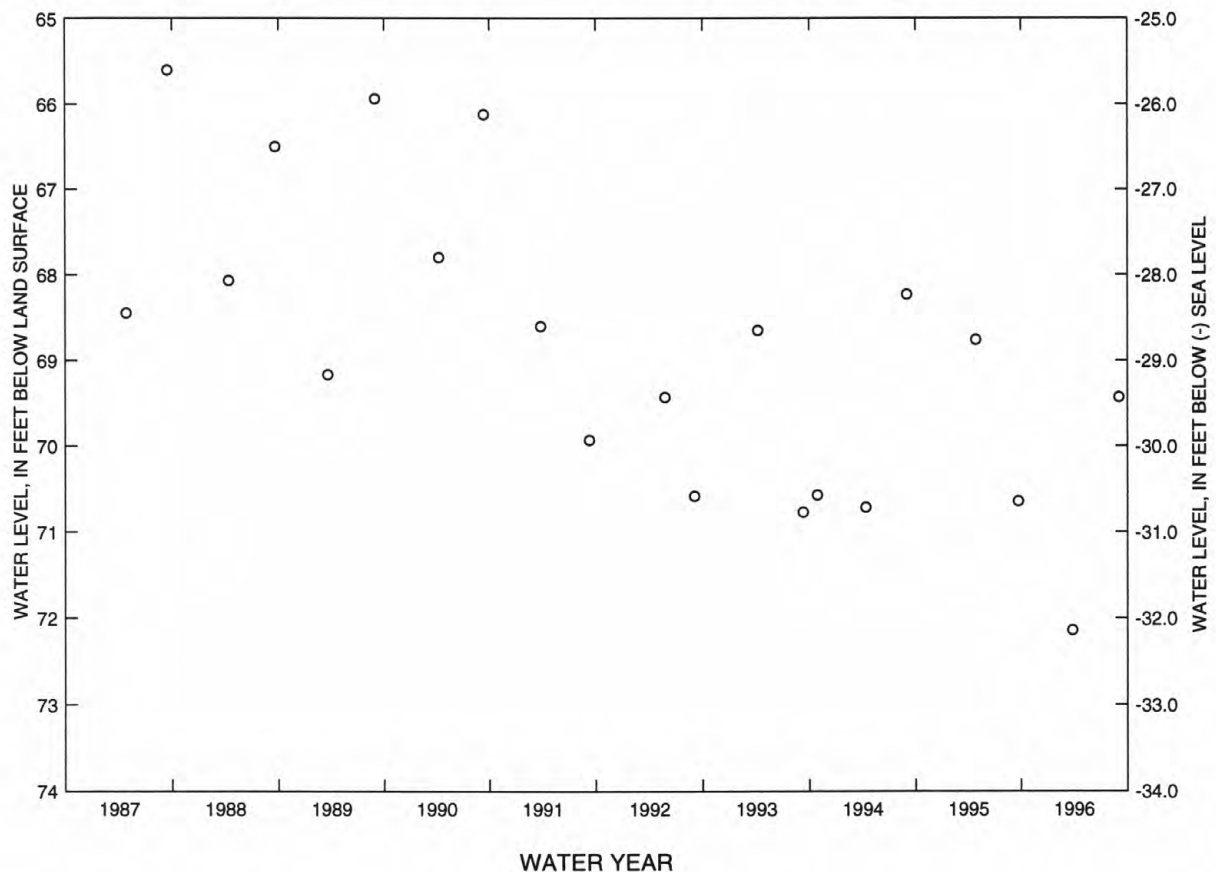
PERIOD OF RECORD.--Apr. 1972 to Apr. 1984, May 1986 to current year. Records for 1972 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 50.35 ft below land surface, June 30, 1973; lowest, 72.14 ft below land surface, Mar. 27, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 27	72.14	SEP 3	69.43

NJ-WRD WELL NO. 05-0274



GROUND-WATER LEVELS

BURLINGTON COUNTY

400010074521601. Local I.D., Willingboro 2 Obs. NJ-WRD Well Number, 05-0645.

LOCATION.--Lat 40°00'10", long 74°52'16", Hydrologic Unit 02040202, near intersection of Bridge Street and Tiffany Lane, Willingboro Township.
Owner: Willingboro Municipal Utilities Authority.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 441 ft, screened 431 to 441 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level recorder, Jan. 1968 to Sept. 1975. Periodic measurements, Mar. 1966 to Jan. 1968.

DATUM.--Land surface is 40.30 ft above sea level.

Measuring point: Top of recorder shelf, 2.00 ft below land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

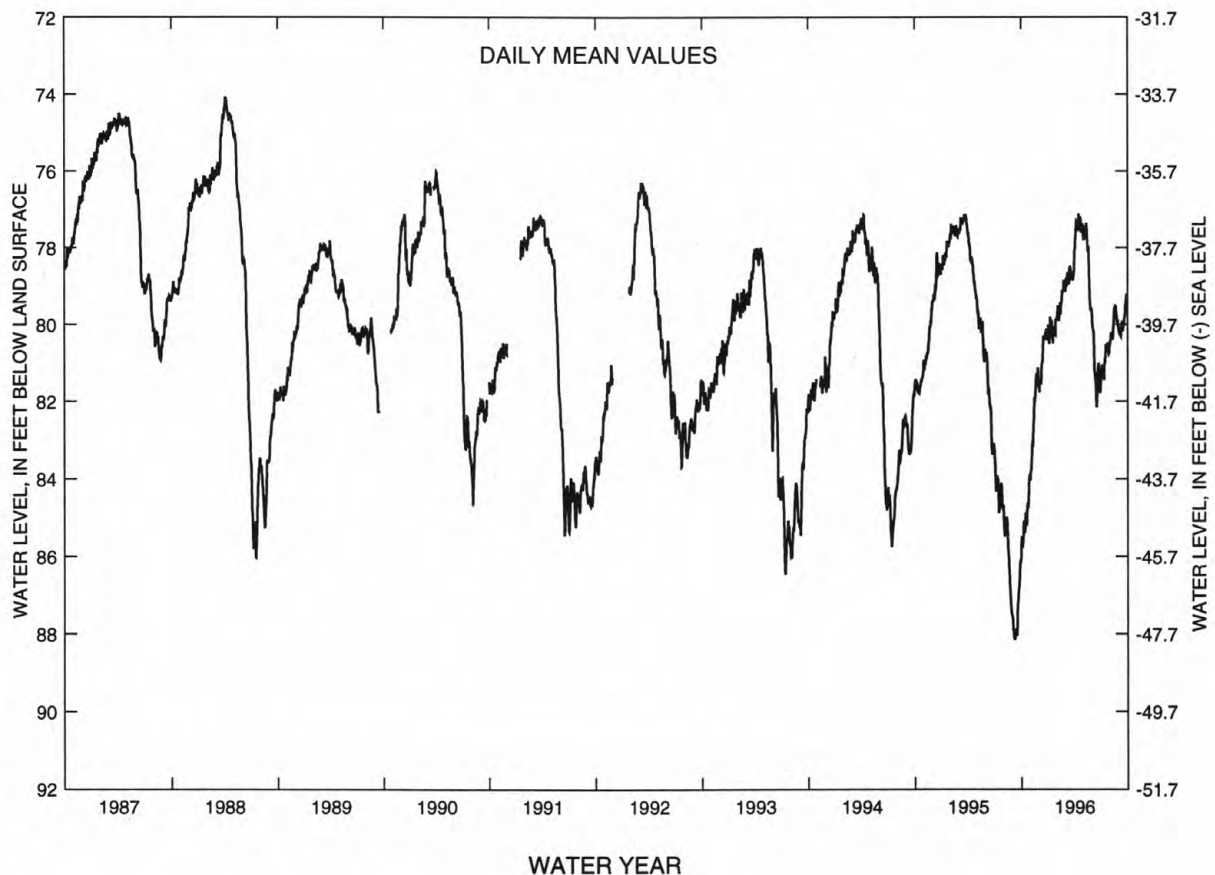
PERIOD OF RECORD.--Mar. 1966 to Sept. 1975, Mar. 1977 to current year. Records for 1966 to 1975 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 49.79 ft below land surface, June 21, 1967; lowest, 88.36 ft below land surface, Sept. 8-9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.75	83.56	81.50	80.47	79.62	78.89	77.66	77.54	80.14	81.27	80.36	80.17
10	85.07	83.08	81.05	79.91	79.72	78.94	77.42	77.69	81.20	81.32	80.25	80.16
15	84.92	81.90	80.53	80.03	79.46	78.53	77.29	77.80	81.69	80.94	80.00	80.07
20	85.13	81.55	80.31	80.28	79.10	78.62	77.27	77.98	81.55	80.62	79.51	80.00
25	84.75	81.41	80.17	80.27	78.89	78.64	77.55	79.36	81.07	80.55	79.78	79.44
EOM	83.95	81.65	80.10	79.80	79.13	78.54	77.46	79.63	81.76	80.62	80.08	79.33
MEAN	84.99	82.31	80.75	80.10	79.38	78.75	77.48	78.27	81.11	80.94	80.01	79.91
WTR YR 1996	MEAN 80.34 HIGH 76.90 APR 16 LOW 85.94 OCT 4											

NJ-WRD WELL NO. 05-0645



GROUND-WATER LEVELS

51

BURLINGTON COUNTY

400213074510801. Local I.D., Willingboro 1 Obs. NJ-WRD Well Number, 05-0063.

LOCATION.--Lat 40°02'13", long 74°51'08", Hydrologic Unit 02040202, on the west side of Rancocas Rd. about 2 mi north of Rancocas, Burlington Township.

Owner: Willingboro Municipal Utilities Authority.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 294 ft, screened 284 to 294 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Dec. 1984 to Sept. 1987. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, Sept. 1975 to Feb. 1977. Water-level recorder, Mar. 1966 to Sept. 1975.

DATUM.--Land surface is 45.45 ft above sea level.

Measuring point: Top of well shelter shelf, 0.60 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

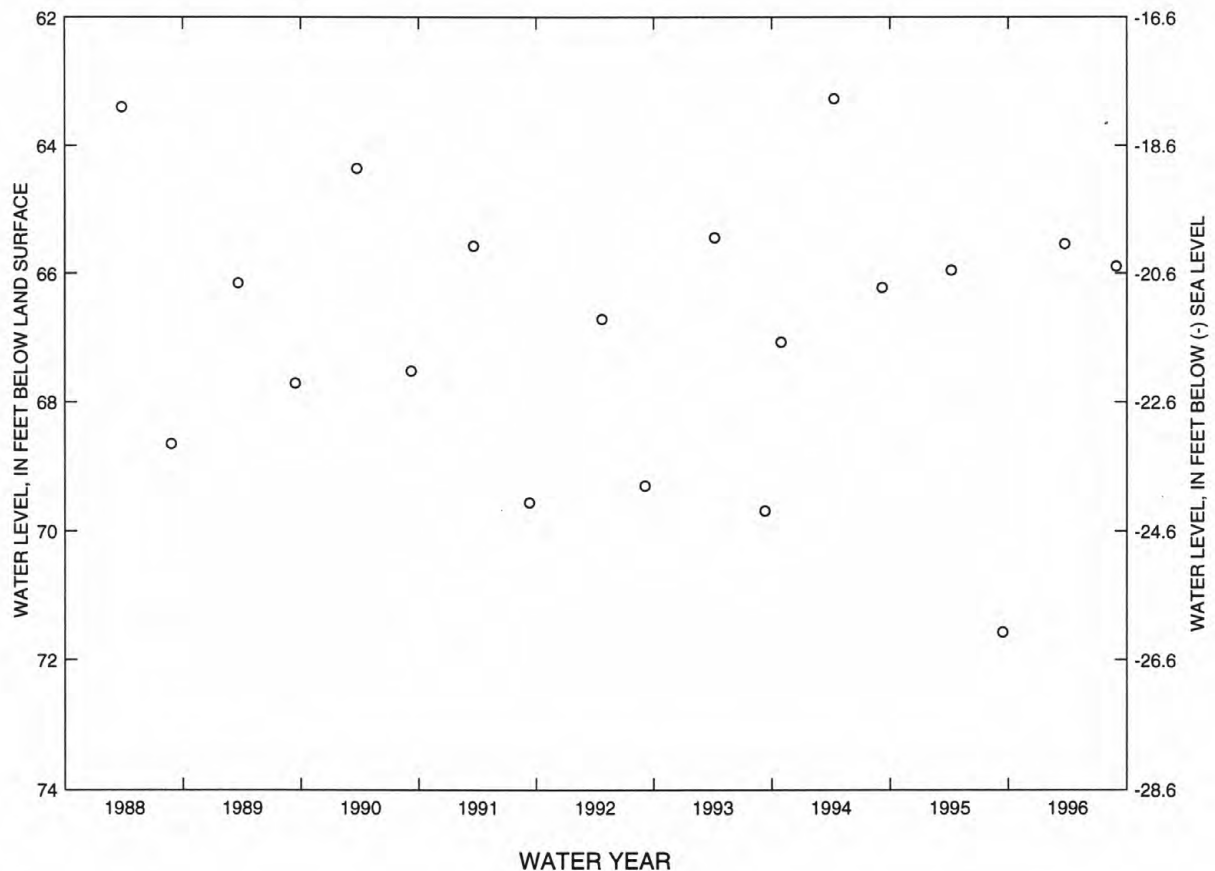
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.25 ft below land surface, Mar. 19, 1966; lowest, 71.57 ft below land surface, Sept. 13, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	65.54	AUG 30	65.89

NJ-WRD WELL NO. 05-0063



GROUND-WATER LEVELS

BURLINGTON COUNTY

400242074422301. Local I.D., Rhodia 1 Obs. NJ-WRD Well Number, 05-0440.

LOCATION.--Lat 40°02'42", long 74°42'23", Hydrologic Unit 02040201, at 1 Devi Dr. in Saddle Ridge Estates, near Jobstown, Springfield Township.
Owner: Fred Goodwin.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 615 ft, screened 603 to 613 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to Apr. 1977. Water-level recorder, Dec. 1968 to Aug. 1975.

DATUM.--Land surface is 71.65 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.22 ft above land surface.

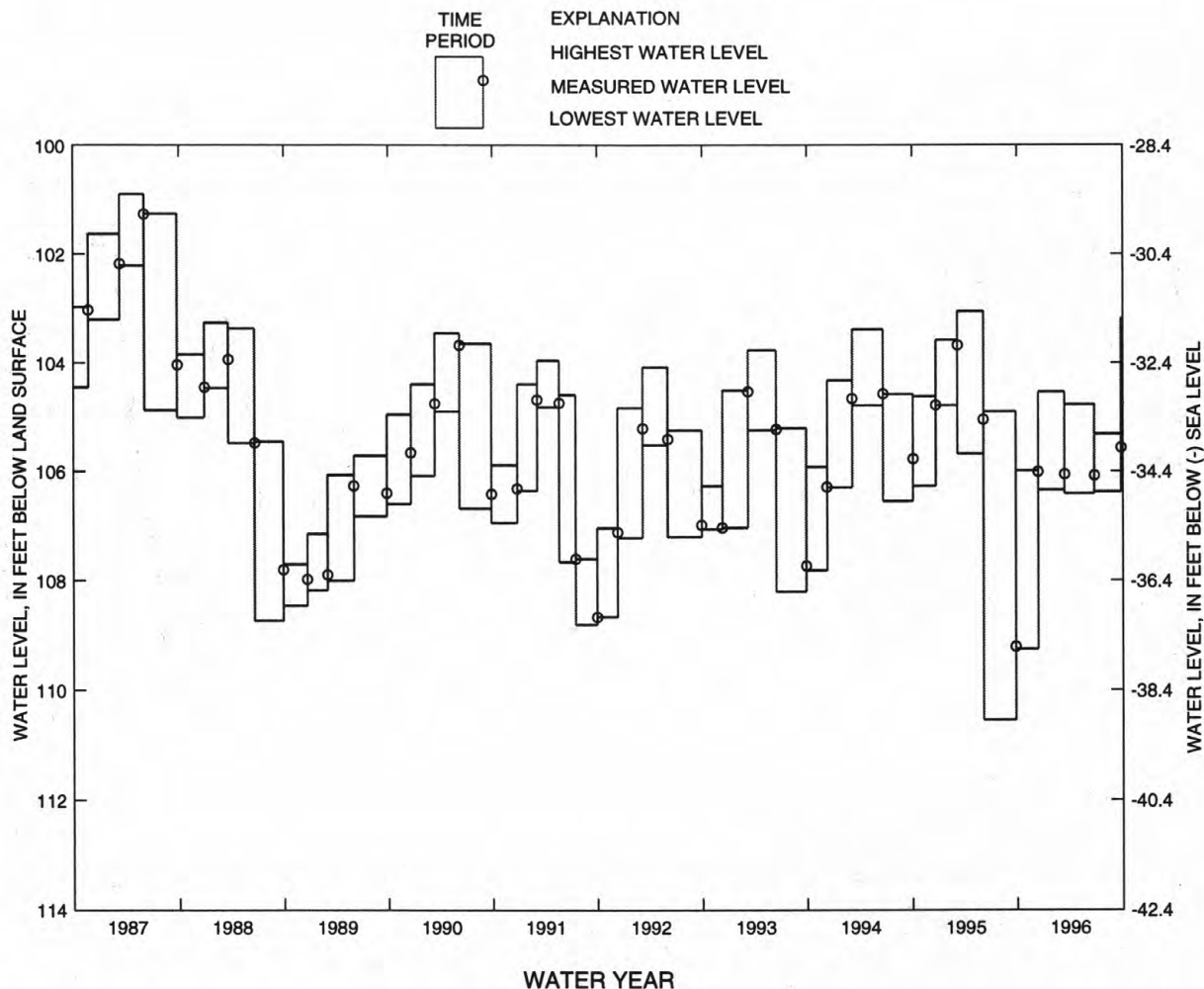
PERIOD OF RECORD.--Dec. 1968 to current year. Records for 1968 to 1978 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 86.55 ft below land surface, Dec. 31, 1969; lowest, 110.55 ft below land surface, between June 5 and Sept. 26, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 13, 1995	105.99	109.25	DEC. 13, 1995	106.01
DEC. 13, 1995 TO MAR. 13, 1996	104.53	106.35	MAR. 13, 1996	106.06
MAR. 13, 1996 TO JUNE 25, 1996	104.77	106.41	JUNE 25, 1996	106.08
JUNE 25, 1996 TO SEPT. 26, 1996	105.32	106.38	SEPT. 26, 1996	105.57

NJ-WRD WELL NO. 05-0440



GROUND-WATER LEVELS

53

CAMDEN COUNTY

394215074561701. Local I.D., New Brooklyn Park 1 Obs. NJ-WRD Well Number, 07-0476.

LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.
Owner: U.S. Geological Survey.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 1,505 ft, screened 1,485 to 1,495 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Mar. 1977 to Dec. 1984. Periodic measurements, Aug. 1975 to Mar. 1977. Water-level recorder, Jan. 1963 to Aug. 1975. Periodic measurements, Aug. 1960 to Jan. 1963.

DATUM.--Land surface is 111.13 ft above sea level.

Measuring point: Top of coupling, 1.75 ft above land surface.

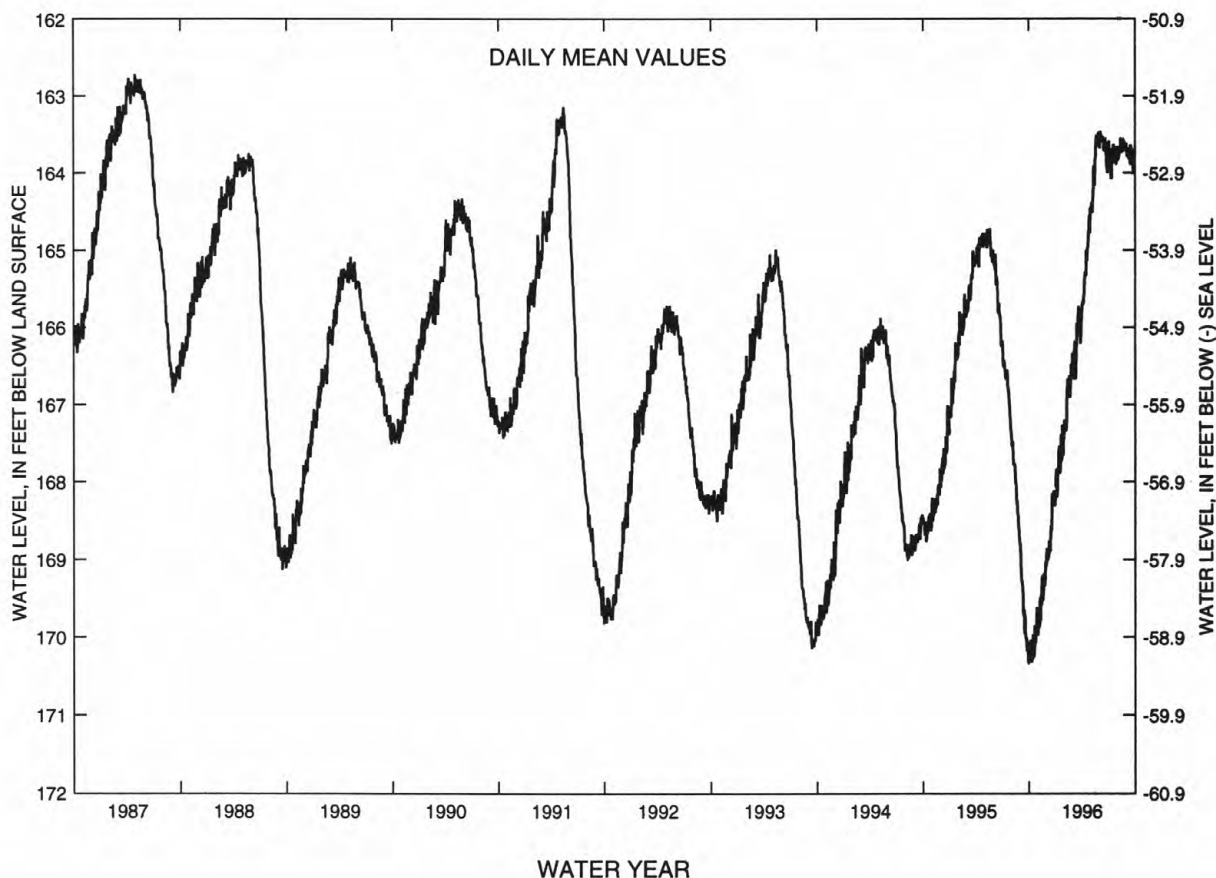
PERIOD OF RECORD.--Aug. 1960 to current year. Records for 1960 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 117.24 ft below land surface, Nov. 16, 1960; lowest, 170.36 ft below land surface, Sept. 30, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	170.12	169.87	169.01	168.13	167.33	166.45	165.69	164.41	163.51	163.84	163.81	163.79
10	170.31	169.79	168.76	167.83	166.87	166.67	165.36	164.22	163.59	163.92	163.66	163.79
15	169.97	169.21	168.63	167.77	166.75	165.95	165.33	164.15	163.60	163.79	163.62	163.83
20	170.11	169.37	168.15	167.68	166.85	165.73	164.97	163.57	163.60	163.66	163.73	163.82
25	169.94	169.28	168.18	167.52	166.54	166.01	164.73	163.64	163.74	163.76	163.60	163.84
EOM	169.98	169.08	168.14	167.20	166.54	165.85	164.45	163.61	163.85	163.72	163.71	163.91
MEAN	170.09	169.44	168.56	167.70	166.84	166.16	165.17	163.95	163.66	163.79	163.67	163.78
WTR YR 1996 MEAN 166.07 HIGH 163.41 JUN 3 LOW 170.34 OCT 11												

NJ-WRD WELL NO. 07-0476



GROUND-WATER LEVELS

CAMDEN COUNTY

394215074561702. Local I.D., New Brooklyn Park 2 Obs. NJ-WRD Well Number, 07-0477.

LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.

Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 849 ft, screened 829 to 839 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to Mar. 1977. Water-level recorder, Dec. 1962 to Aug. 1975. Periodic measurements, May 1961 to Dec. 1962.

DATUM.--Land surface is 111.13 ft above sea level.

Measuring point: Top of recorder shelf, 3.30 ft above land surface.

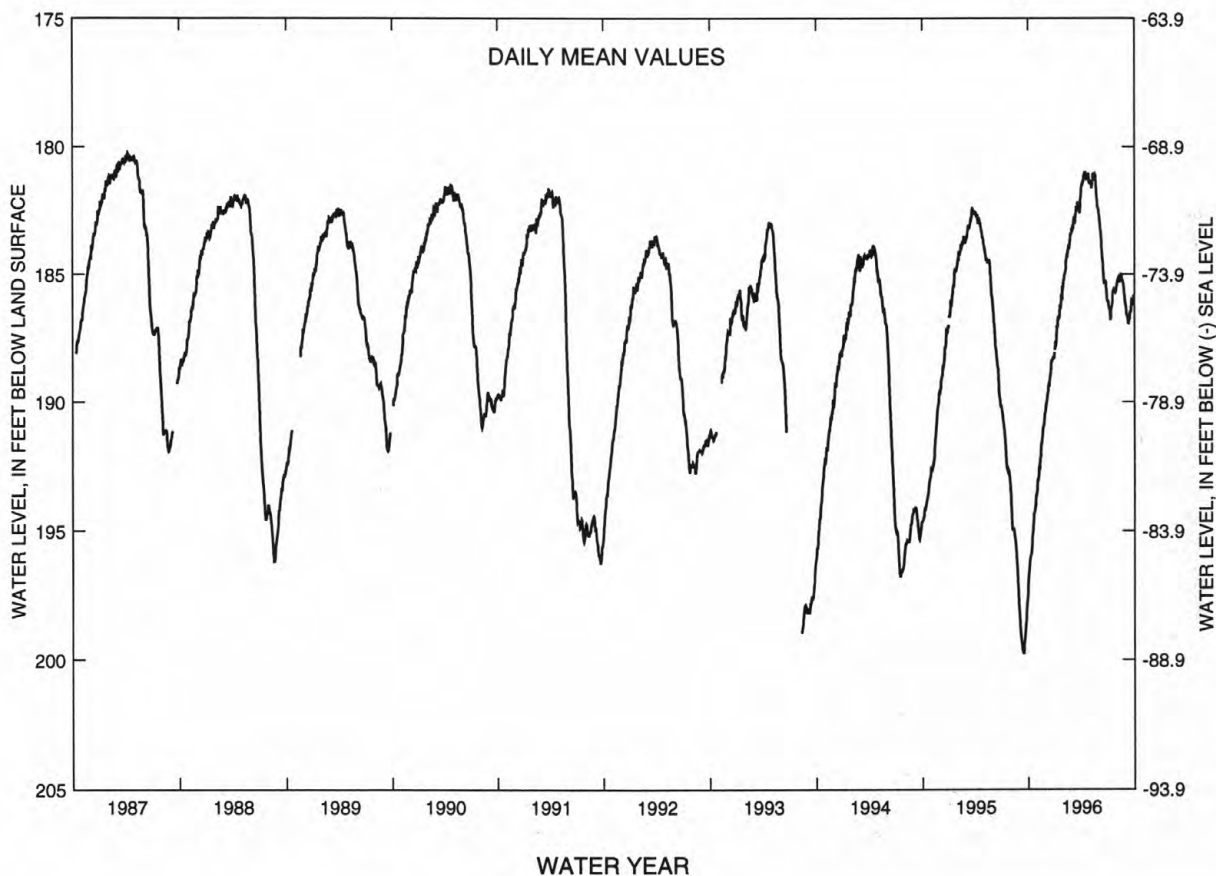
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 127.48 ft below land surface, May 5, 1961; lowest, 199.76 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	196.44	193.00	189.90	187.78	184.96	183.02	181.49	181.45	183.13	186.26	185.24	186.57
10	195.96	192.59	189.35	187.00	184.42	183.03	181.13	181.34	183.88	186.65	185.14	186.81
15	195.25	191.59	189.05	186.72	184.13	182.35	181.18	181.32	184.61	186.27	185.10	186.76
20	194.54	191.22	188.40	186.37	183.94	182.16	181.22	181.12	185.31	185.65	185.21	186.42
25	194.12	190.79	188.32	185.91	183.42	182.46	181.16	182.04	185.28	185.67	185.42	186.04
EOM	193.52	190.33	188.07	185.20	183.34	181.84	181.36	182.56	186.03	185.58	186.11	185.84
MEAN	195.16	191.75	189.00	186.61	184.16	182.59	181.27	181.58	184.49	186.03	185.33	186.41
WTR YR 1996	MEAN 186.21 HIGH 180.92 APR 16 LOW 197.26 OCT 1											

NJ-WRD WELL NO. 07-0477



GROUND-WATER LEVELS

55

CAMDEN COUNTY

394215074561703. Local I.D., New Brooklyn Park 3 Obs. NJ-WRD Well Number, 07-0478.

LOCATION.--Lat 39°42'15", long 74°56'17", Hydrologic Unit 02040302, on eastern shore of New Brooklyn Lake about 900 ft upstream of Rt. 536, Winslow Township.

Owner: U.S. Geological Survey.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 530 ft, screened 520 to 530 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to Mar. 1977. Water-level recorder, Dec. 1962 to Aug. 1975. Periodic measurements, May 1961 to Dec. 1962.

DATUM.--Land surface is 111.45 ft above sea level.

Measuring point: Top of coupling, 2.10 ft above land surface.

REMARKS.--Water level is affected by regional cone of depression.

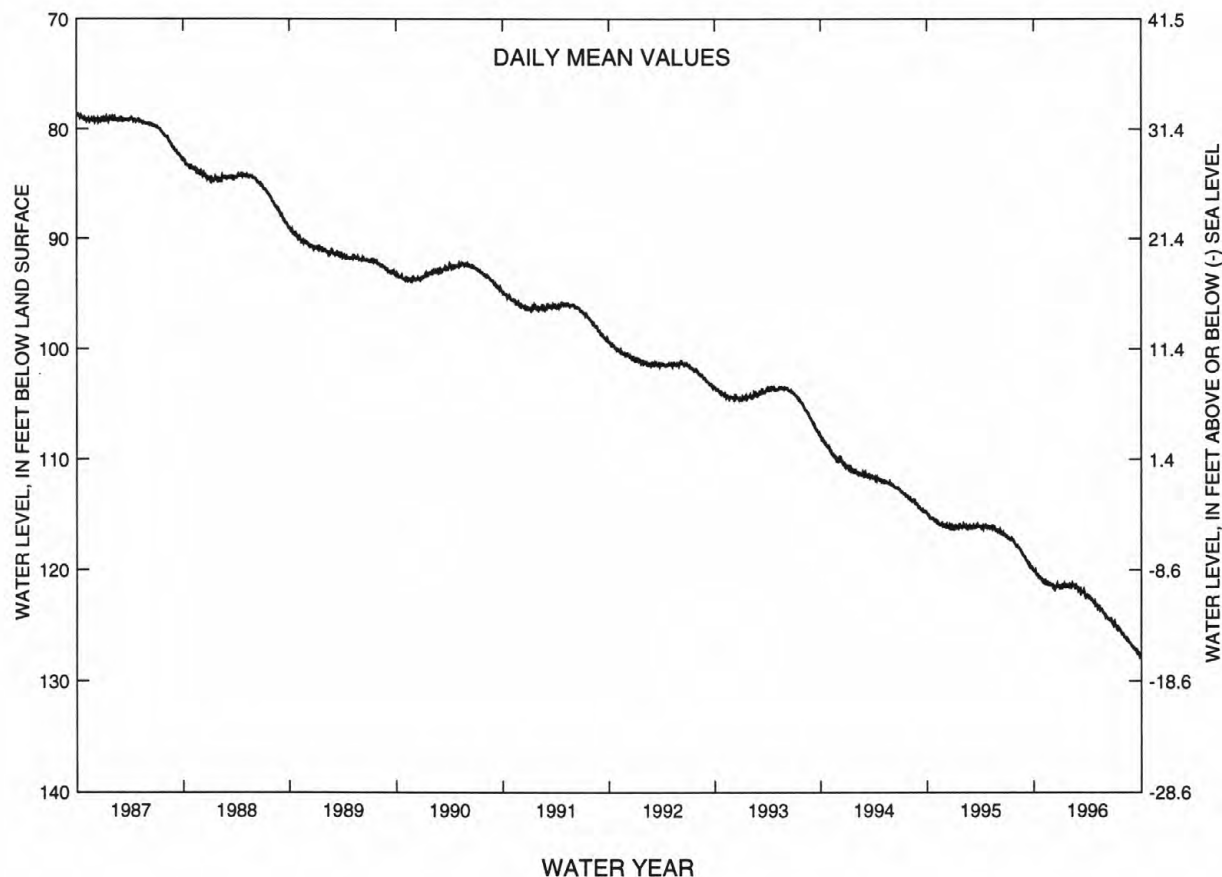
PERIOD OF RECORD.--May 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 56.12 ft below land surface, Aug. 14, 1962; lowest, 127.89 ft below land surface, Sept. 30, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	120.08	121.22	121.51	121.63	121.61	121.88	122.41	123.25	124.21	124.96	126.04	127.07
10	120.41	121.35	121.46	121.40	121.38	122.17	122.41	123.38	124.41	125.20	126.13	127.18
15	120.35	120.97	121.54	121.49	121.43	121.85	122.76	123.63	124.48	125.16	126.19	127.33
20	120.73	121.33	121.27	121.41	121.67	121.85	122.80	123.53	124.48	125.30	126.51	127.40
25	120.79	121.42	121.46	121.47	121.58	122.30	122.94	123.90	124.69	125.62	126.63	127.61
EOM	121.09	121.38	121.58	121.37	121.75	122.34	123.03	124.11	124.91	125.79	126.88	127.84
MEAN	120.51	121.23	121.49	121.45	121.51	122.04	122.67	123.55	124.50	125.29	126.33	127.31
WTR YR 1996 MEAN 123.16 HIGH 119.96 OCT 6 LOW 127.89 SEP 30												

NJ-WRD WELL NO. 07-0478



GROUND-WATER LEVELS

CAMDEN COUNTY

394440074593101. Local I.D., Winslow 5 Obs. NJ-WRD Well Number, 07-0503.

LOCATION.--Lat 39°44'40", long 74°59'31", Hydrologic Unit 02040302, about 1,000 ft east of intersection of Cross Keys-Berlin Rd. and Erial-Williamstown Rd., Winslow Township.
Owner: Winslow Water Company.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 76 ft, screened 71 to 76 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Nov. 1977 to Dec. 1984. Water-level recorder, Dec. 1972 to Nov. 1977.

DATUM.--Land surface is 173.26 ft above sea level.

Measuring point: Top of recorder shelf, 1.00 ft above land surface.

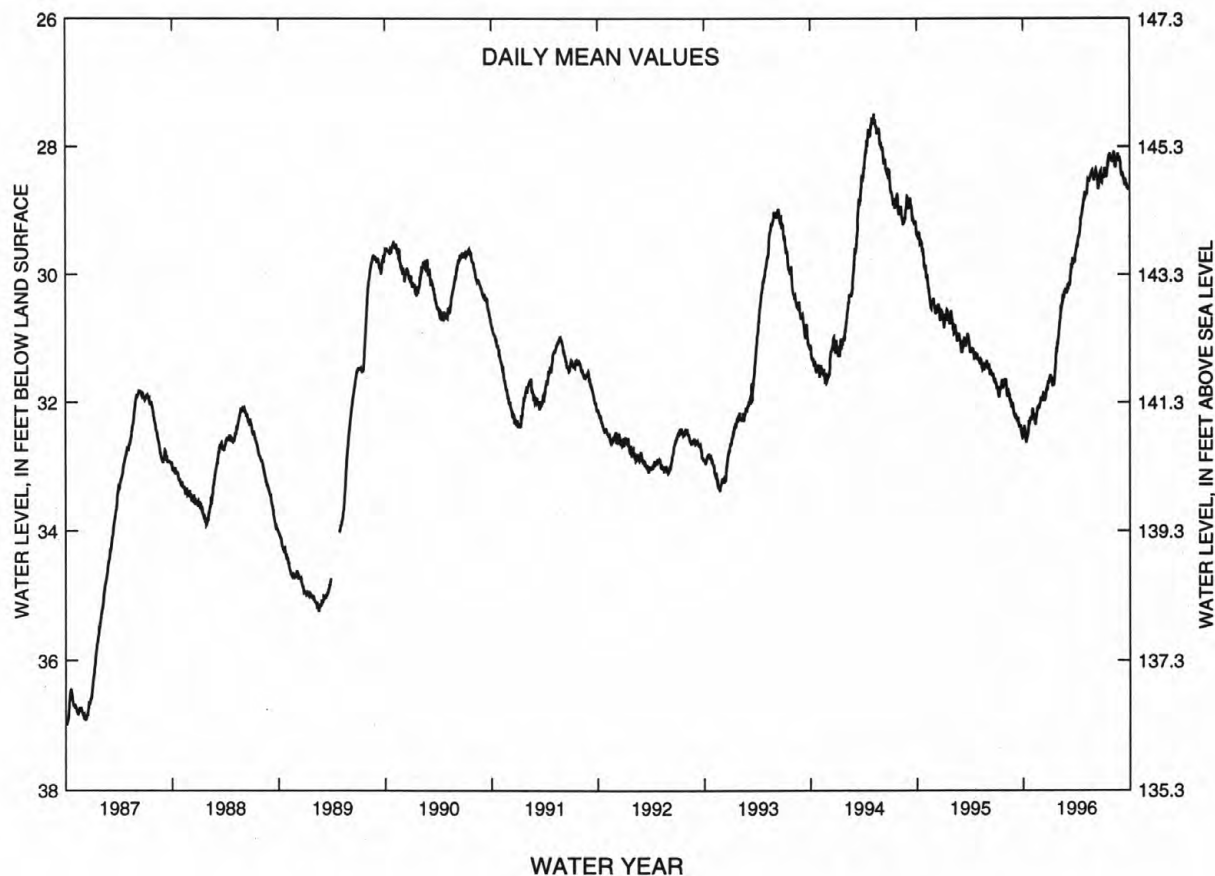
PERIOD OF RECORD.--Dec. 1972 to current year. Records for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.78 ft below land surface, May 20-21, 1973; lowest, 38.35 ft below land surface, between June 3 and Oct. 6, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.37	32.21	31.94	31.66	30.70	30.17	29.54	28.72	28.46	28.49	28.18	28.46
10	32.58	32.31	31.90	31.73	30.51	30.15	29.40	28.56	28.43	28.38	28.15	28.46
15	32.49	32.19	31.97	31.73	30.38	29.84	29.22	28.55	28.61	28.45	28.31	28.59
20	32.35	32.10	31.80	31.50	30.27	29.78	29.04	28.46	28.52	28.26	28.17	28.60
25	32.26	32.05	31.72	31.22	30.24	29.76	28.88	28.38	28.38	28.13	28.19	28.65
EOM	32.23	31.97	31.62	30.96	30.29	29.64	28.71	28.51	28.51	28.18	28.24	28.67
MEAN	32.41	32.15	31.85	31.46	30.44	29.93	29.19	28.54	28.49	28.31	28.20	28.53
WTR YR 1996	MEAN 29.96	HIGH 28.07	AUG 9	LOW 32.62	OCT 11-12							

NJ-WRD WELL NO. 07-0503



GROUND-WATER LEVELS

57

CAMDEN COUNTY

394922074563301. Local I.D., Elm Tree 2 Obs. NJ-WRD Well Number, 07-0412.

LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Rd. and about 2 mi northwest of Berlin, Voorhees Township.

Owner: New Jersey - American Water Company.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,092 ft, screened 1,082 to 1,092 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Mar. 1977 to Dec. 1984. Periodic measurements, June 1975 to Mar. 1977. Water-level recorder, July 1965 to June 1975. Periodic measurements, Feb. 1964 to July 1965.

DATUM.--Land surface is 148.68 ft above sea level.

Measuring point: Top of recorder shelf, 2.80 ft above land surface.

REMARKS.--Well was originally screened 1,217 to 1,227 ft; rehabilitated Aug. 1969.

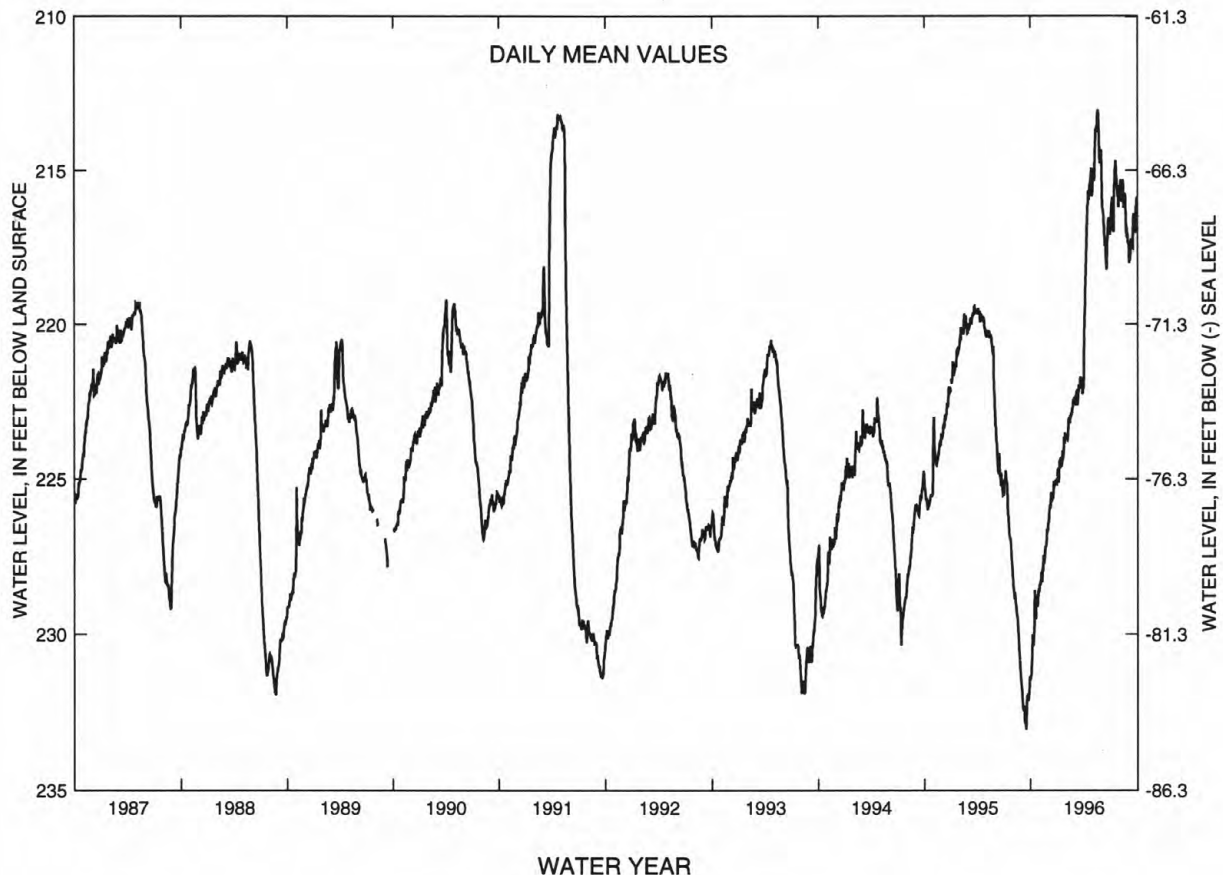
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1978 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 142.28 ft below land surface, Mar. 3, 1964; lowest, 233.08 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	231.08	228.39	225.97	225.02	223.71	222.43	219.40	215.15	216.28	216.10	215.32	217.85
10	230.38	228.32	225.50	224.50	223.18	222.63	217.31	214.03	217.05	216.44	215.96	217.25
15	229.08	227.47	225.60	224.49	223.05	221.97	216.11	213.76	217.55	215.57	216.23	217.52
20	229.51	227.36	225.09	224.38	222.84	221.71	215.58	213.14	217.44	214.89	215.77	216.80
25	229.09	227.01	225.19	223.78	222.55	222.03	215.20	214.71	216.55	215.72	217.08	216.88
DOM	228.61	226.64	224.98	223.63	222.57	222.04	215.72	214.45	217.10	215.75	217.38	215.88
MEAN	229.73	227.63	225.54	224.32	223.04	222.17	216.89	214.23	216.93	215.86	216.12	217.09
WTR YR 1996	MEAN 220.80 HIGH 213.01 MAY 18-19 LOW 231.51 OCT 1											

NJ-WRD WELL NO. 07-0412



GROUND-WATER LEVELS

CAMDEN COUNTY

394922074563302. Local I.D., Elm Tree 3 Obs. NJ-WRD Well Number, 07-0413.

LOCATION.--Lat 39°49'22", long 74°56'30", Hydrologic Unit 02040202, about 200 ft northeast of Thomas Rd. and about 2 mi northwest of Berlin, Voorhees Township.

Owner: New Jersey - American Water Company.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 717 ft, screened 706 to 717 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1975 to Mar. 1977. Water-level recorder, Dec. 1963 to Apr. 1975.

DATUM.--Land surface is 148.73 ft above sea level.

Measuring point: Top of recorder shelf, 0.60 ft above land surface.

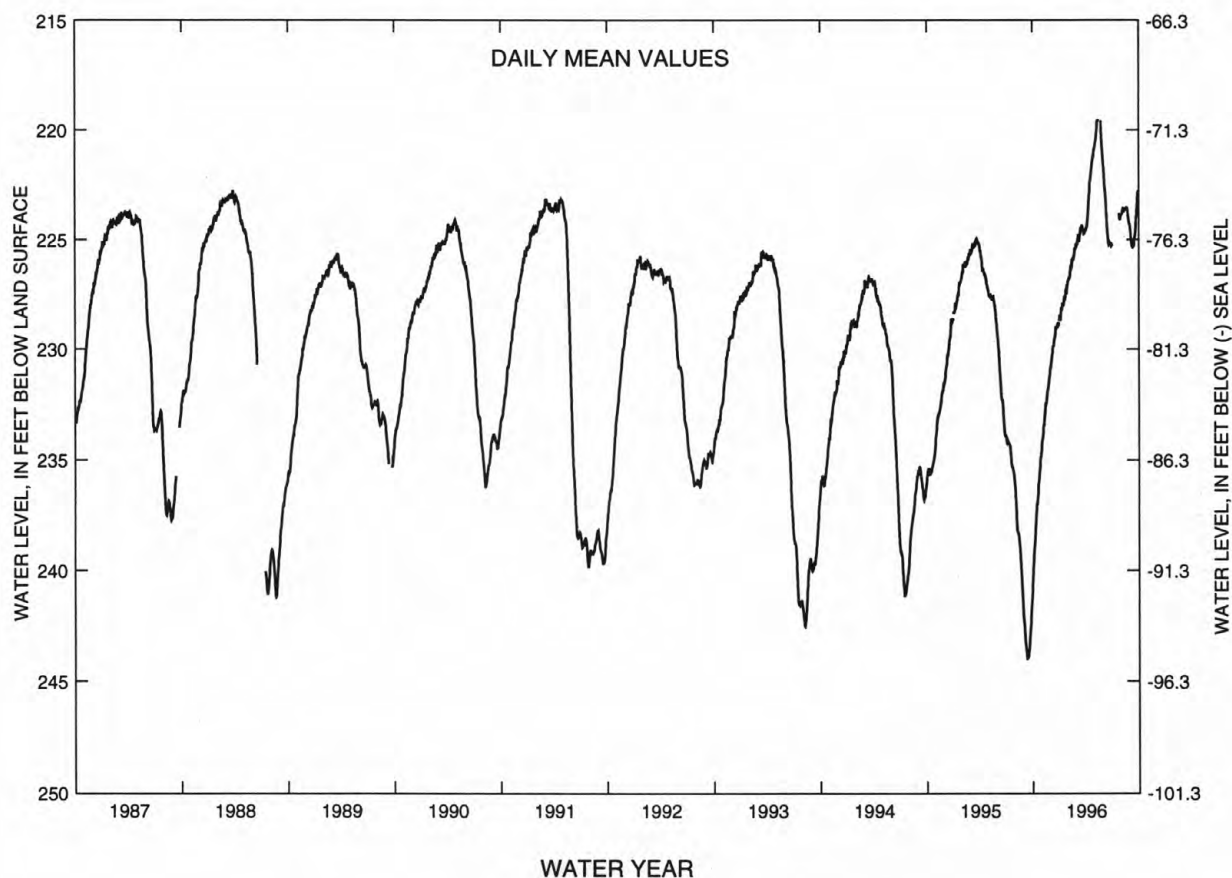
PERIOD OF RECORD.--Dec. 1963 to current year. Records for 1963 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 174.21 ft below land surface, Feb. 6, 1964; lowest, 243.99 ft below land surface, Sept. 11-12, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	239.33	234.02	230.58	228.65	226.77	225.08	224.45	220.57	222.26	225.23	223.83	224.86
10	238.30	233.41	229.93	228.12	226.33	225.11	223.76	219.95	223.26	---	223.60	225.34
15	237.00	232.41	229.56	227.96	226.03	224.56	222.82	219.52	224.44	---	223.64	225.30
20	236.47	232.10	229.01	227.74	225.87	224.33	221.95	---	225.20	---	223.61	224.73
25	235.53	231.65	228.94	227.40	225.44	224.59	221.41	219.89	225.13	---	223.73	223.70
EOM	234.71	231.08	228.78	226.86	225.30	224.63	220.88	221.38	225.21	223.99	224.31	222.77
MEAN	237.22	232.65	229.61	227.86	226.06	224.75	222.79	---	224.00	---	223.76	224.53
WTR YR 1996	MEAN 226.78 HIGH 219.45 MAY 24 LOW 240.76 OCT 1											

NJ-WRD WELL NO. 07-0413



GROUND-WATER LEVELS

59

CAMDEN COUNTY

395229074571201. Local I.D., Hutton Hill 1 Obs. NJ-WRD Well Number, 07-0117.

LOCATION.--Lat 39°52'29", long 74°57'12", Hydrologic Unit 02040202, about 800 ft northeast of intersection of Kresson Rd. and Cropwell Rd., Cherry Hill Township.

Owner: New Jersey - American Water Company.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 562 ft, screened 552 to 562 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, Apr. 1975 to Feb. 1977. Water-level recorder, Aug. 1967 to Apr. 1975.

DATUM.--Land surface is 157.61 ft above sea level.

Measuring point: Top of recorder shelf, 1.60 ft above land surface.

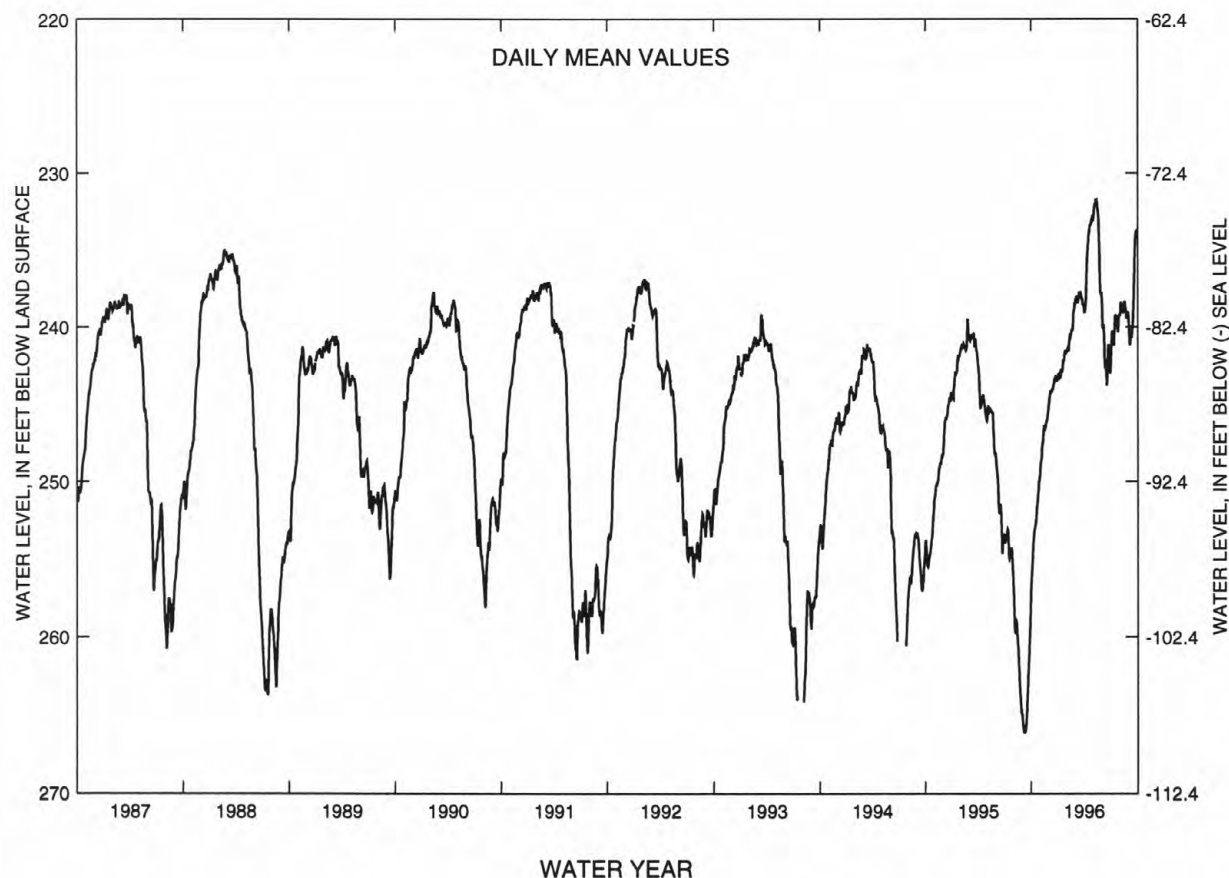
PERIOD OF RECORD.--Aug. 1967 to current year. Records for 1967 to 1978 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 200.77 ft below land surface, Mar. 23, 1968; lowest, 266.26 ft below land surface, Sept. 9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	255.42	248.62	244.43	243.34	241.50	238.09	238.84	232.28	240.06	240.71	238.39	241.18
10	253.68	247.56	244.11	243.31	240.90	238.45	236.03	232.01	241.81	240.90	238.86	240.45
15	252.87	246.38	244.01	242.86	240.50	237.72	234.46	231.94	242.45	239.86	238.92	239.84
20	252.03	246.42	243.35	242.27	240.22	237.76	233.44	232.95	242.79	239.30	238.71	236.53
25	250.88	245.95	243.24	241.66	238.95	238.13	233.16	236.74	241.22	240.05	239.45	233.82
EOM	249.67	245.24	243.31	241.57	238.52	238.67	232.72	237.87	243.00	239.23	239.28	233.65
MEAN	252.81	246.96	243.85	242.53	240.36	238.15	235.22	233.77	241.55	240.23	238.92	238.00
WTR YR 1996	MEAN 241.04 HIGH 231.68 MAY 11 LOW 257.15 OCT 1											

NJ-WRD WELL NO. 07-0117



GROUND-WATER LEVELS

CAMDEN COUNTY

395229074571202. Local I.D., Hutton Hill 2 Obs. NJ-WRD Well Number, 07-0118.

LOCATION.--Lat 39°52'29", long 74°57'12", Hydrologic Unit 02040202, about 800 ft northeast of the intersection of Kresson Rd. and Cropwell Rd., Cherry Hill Township.

Owner: New Jersey - American Water Company.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 147 ft, screened 137 to 147 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Aug. 1967 to Apr. 1975.

DATUM.--Land surface is 157.53 ft above sea level.

Measuring point: Top of coupling, 1.66 ft above land surface.

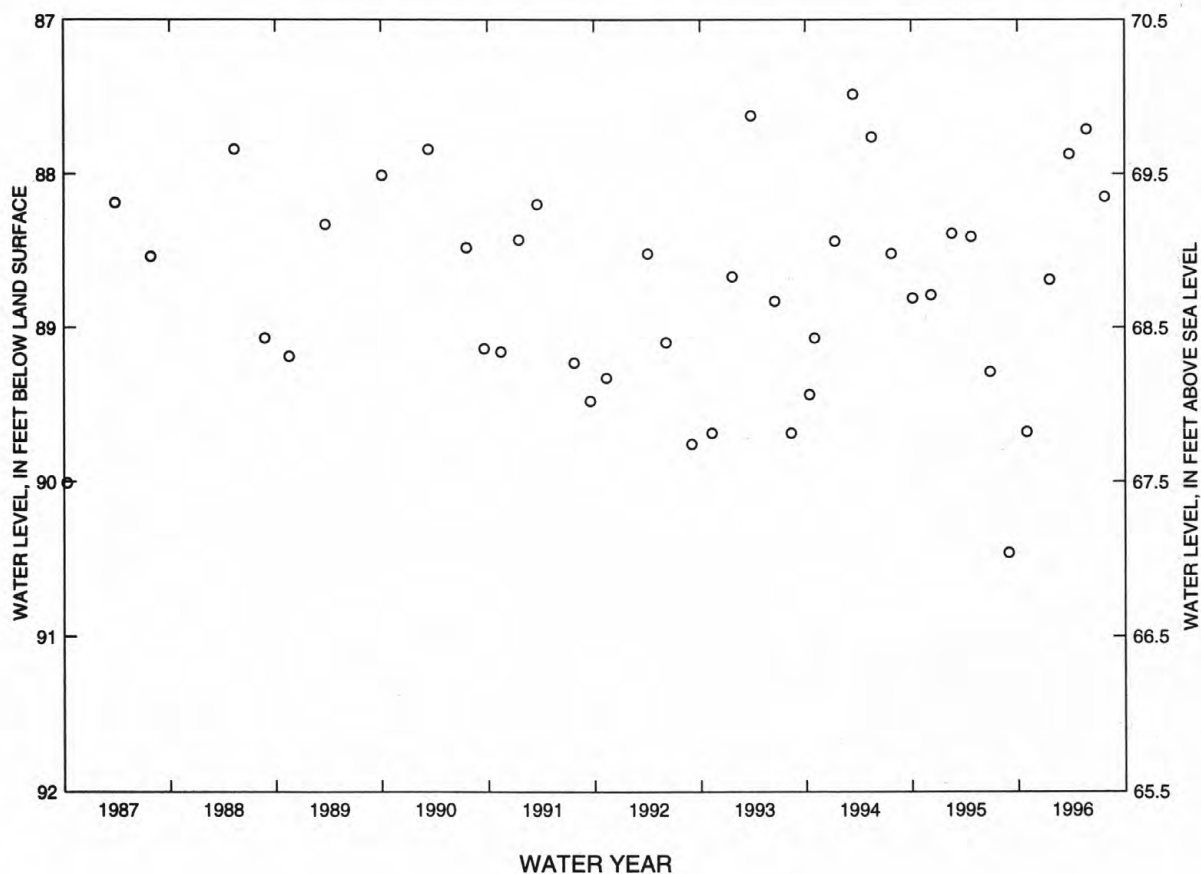
PERIOD OF RECORD.--Sept. 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 84.87 ft below land surface, Apr. 27, 1973; lowest, 90.46 ft below land surface, Aug 30, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 31	89.68	MAR 25	87.87	JUL 25	88.15
JAN 18	88.69	MAY 23	87.71		

NJ-WRD WELL NO. 07-0118



GROUND-WATER LEVELS

61

CAMDEN COUNTY

395246075043301. Local I.D., Egbert Obs. NJ-WRD Well Number, 07-0283.

LOCATION.--Lat 39°52'46", long 75°04'34", Hydrologic Unit 02040202, in Camden County Park, about 400 ft south of the corner of Dallas and Sylvan Avenues, Haddon Heights Borough.

Owner: New Jersey - American Water Company.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 455 ft, screened 445 to 455 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Dec. 1984 to Apr. 1988. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, Apr. 1975 to Feb. 1977. Water-level recorder, June 1963 to Apr. 1975.

DATUM.--Land surface is 23.66 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 2.78 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

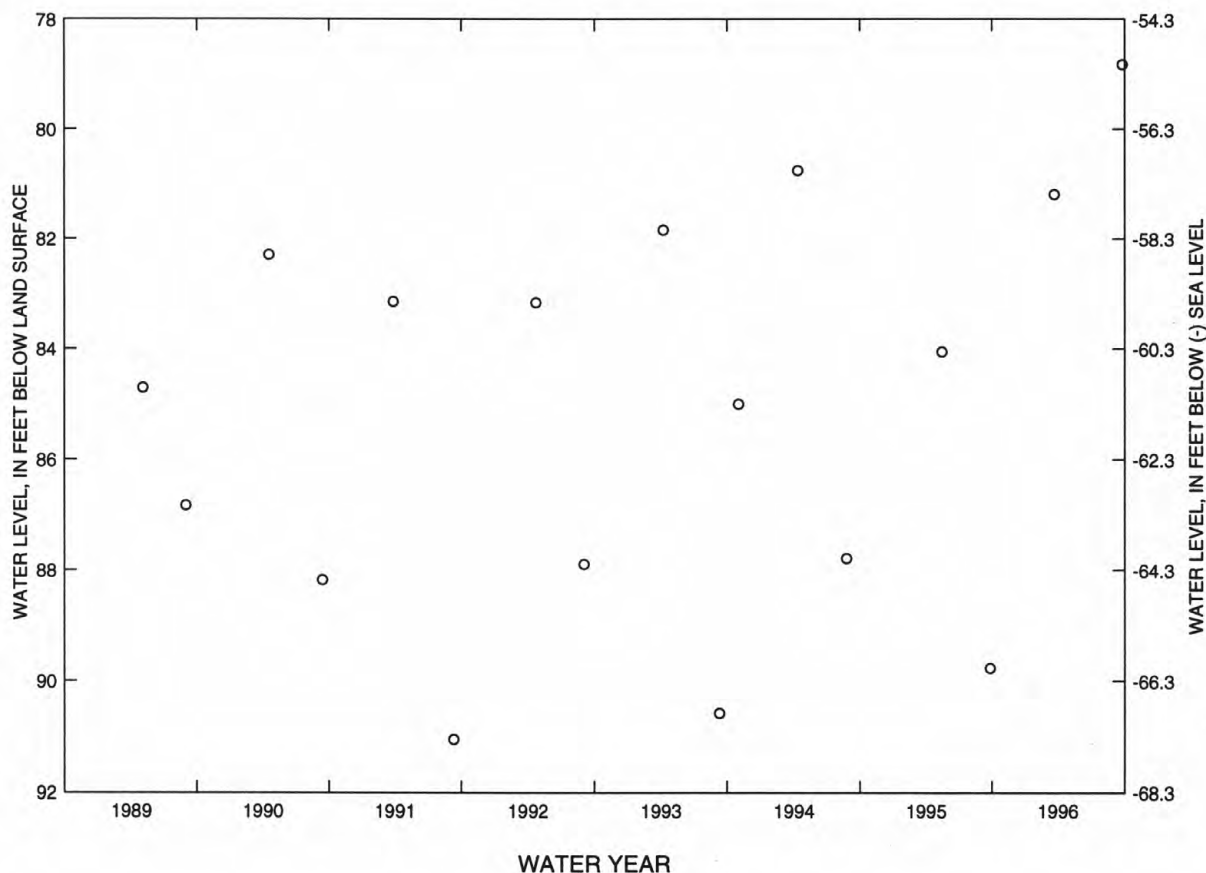
PERIOD OF RECORD.--June 1963 to current year. Records for 1963 to 1982 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.93 ft below land surface, Apr. 8, 1964; lowest, 130.41 ft below land surface, between July 12 and Sept. 29, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	81.19	SEP 25	78.82

NJ-WRD WELL NO. 07-0283



GROUND-WATER LEVELS

CAPE MAY COUNTY

385607074555201. Local I.D., West Cape May 1 Obs. NJ-WRD Well Number, 09-0150.

LOCATION.--Lat 38°56'07", long 74°55'56", Hydrologic Unit 02040302, on the north side of Sunset Blvd., West Cape May Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 293 ft, screened 283 to 293 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, June 1957 to Aug. 1975.

DATUM.--Land surface is 6.60 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.88 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

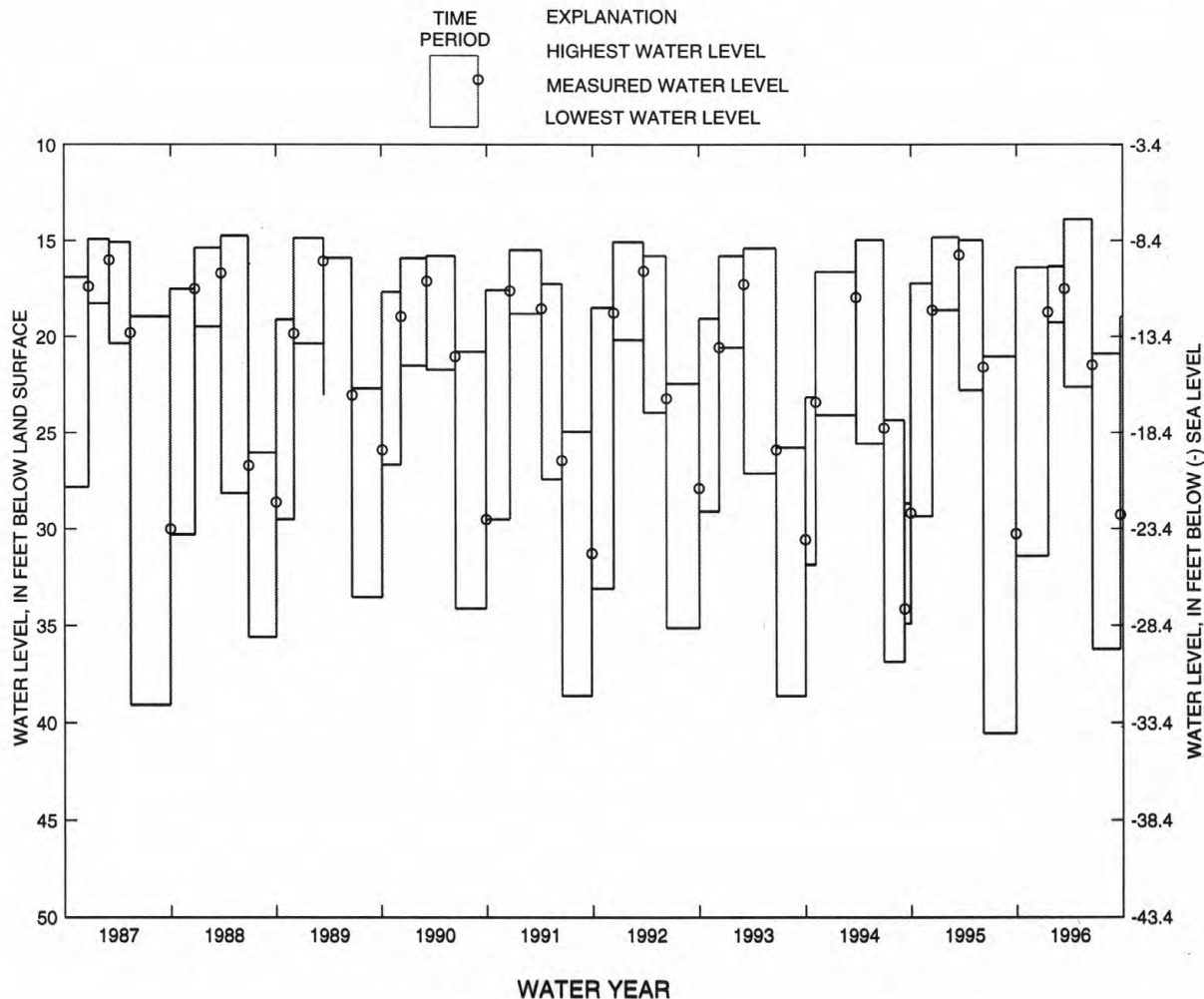
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.89 ft below land surface, between Mar. 14 and June 18, 1996; lowest, 41.30 ft below land surface, Sept. 3, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1995 TO JAN. 17, 1996	16.40	31.42	JAN. 17, 1996	18.73
JAN. 17, 1996 TO MAR. 14, 1996	16.36	19.28	MAR. 14, 1996	17.51
MAR. 14, 1996 TO JUNE 18, 1996	13.89	22.63	JUNE 18, 1996	21.47
JUNE 18, 1996 TO SEPT. 24, 1996	20.88	36.24	SEPT. 24, 1996	29.28

NJ-WRD WELL NO. 09-0150



GROUND-WATER LEVELS

63

CAPE MAY COUNTY

385616074580001. Local I.D., Traffic Circle Obs. NJ-WRD Well Number, 09-0020.

LOCATION.--Lat 38°56'16", long 74°58'00", Hydrologic Unit 02040206, at the traffic circle at the intersection of Central, Cape, and Ocean Avenues, Cape May Point, Cape May Point Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Holly Beach water-bearing zone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 1.25 in., depth 20 ft, screened 15 to 20 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, May 1977 to Oct. 1984. Water-level recorder, Jan. 1963 to May 1977.

DATUM.--Land surface is 9.12 ft above sea level.

Measuring point: Top of shelter shelf, 3.00 ft above land surface.

REMARKS.--Water level is affected by the stage of Lake Lilly.

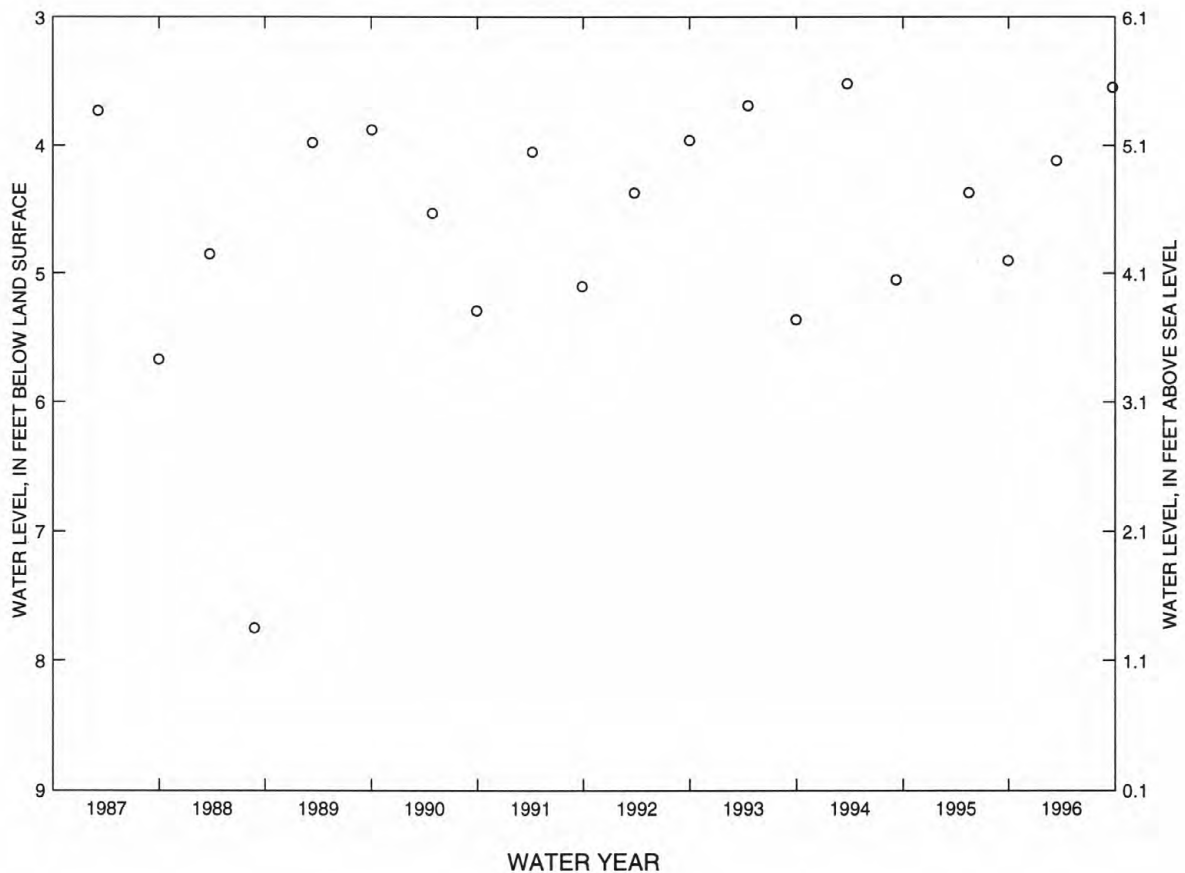
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.45 ft below land surface, between Nov. 11, 1977 and Feb. 21, 1978; lowest, 7.75 ft below land surface, Aug. 25, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 14	4.12	SEP 24	3.55

NJ-WRD WELL NO. 09-0020



GROUND-WATER LEVELS

CAPE MAY COUNTY

385709074512801. Local I.D., Coast Guard 800 Obs. NJ-WRD Well Number, 09-0302.

LOCATION.--Lat 38°57'09", long 74°51'28", Hydrologic Unit 02040302, at U.S. Coast Guard Electronics and Engineering Center, Lower Township.
Owner: U. S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 903 ft, screened 883 to 893 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 5 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 3.05 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

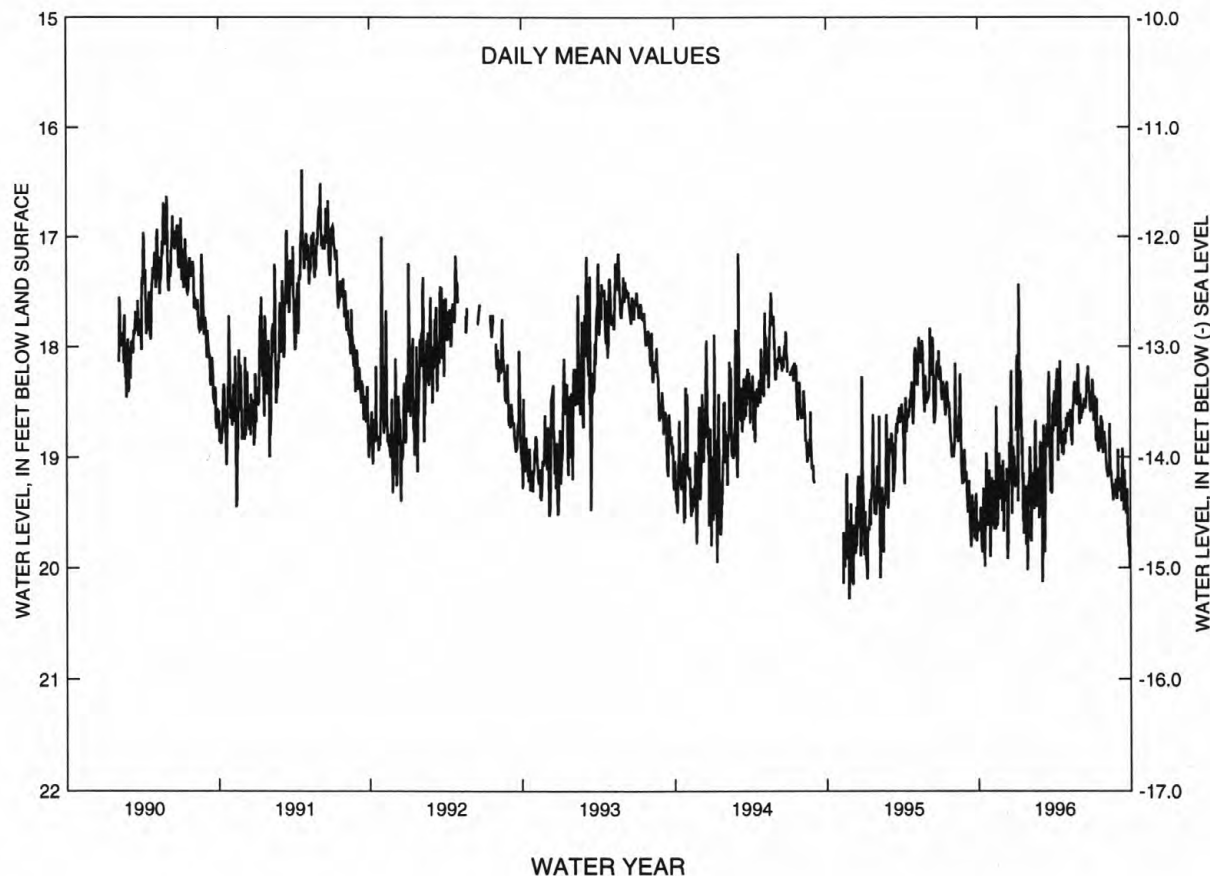
PERIOD OF RECORD.--Feb. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.04 ft below land surface, Apr. 21, 1991; lowest, 20.84 ft below land surface, Dec. 3, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.58	19.62	19.23	18.97	19.34	19.91	18.62	18.63	18.61	18.59	19.06	19.30
10	19.82	19.61	19.35	18.53	19.45	19.86	18.30	18.60	18.56	18.60	19.17	19.39
15	19.30	18.88	19.18	18.98	19.00	18.70	18.56	18.89	18.53	18.89	19.11	19.32
20	19.31	19.16	18.22	19.69	19.21	18.23	18.82	18.34	18.26	18.80	19.29	19.35
25	19.51	19.16	18.92	19.79	19.55	19.08	18.87	18.46	18.36	18.73	19.24	19.53
EOM	19.78	19.03	19.11	19.22	19.33	18.77	18.64	18.42	18.48	18.77	19.37	20.00
MEAN	19.56	19.31	19.18	19.01	19.24	19.04	18.64	18.56	18.48	18.71	19.15	19.37
WTR YR 1996	MEAN 19.02	HIGH 16.82	JAN 8	LOW 20.55	MAR 4							

NJ-WRD WELL NO. 09-0302



GROUND-WATER LEVELS

65

CAPE MAY COUNTY

385748074553301. Local I.D., Canal 5 Obs. NJ-WRD Well Number, 09-0048.

LOCATION.--Lat 38°57'48", long 74°55'33", Hydrologic Unit 02040206, between the Cape May Canal and Jonathon Hoffman Rd., Lower Township.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 252 ft, screened 242 to 252 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1963 to Aug. 1975. Periodic measurements, Oct. 1958 to Apr. 1963. Water-level recorder, July 1957 to Oct. 1958.

DATUM.--Land surface is 17.48 ft above sea level.

Measuring point: Top of shelter shelf, 3.10 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

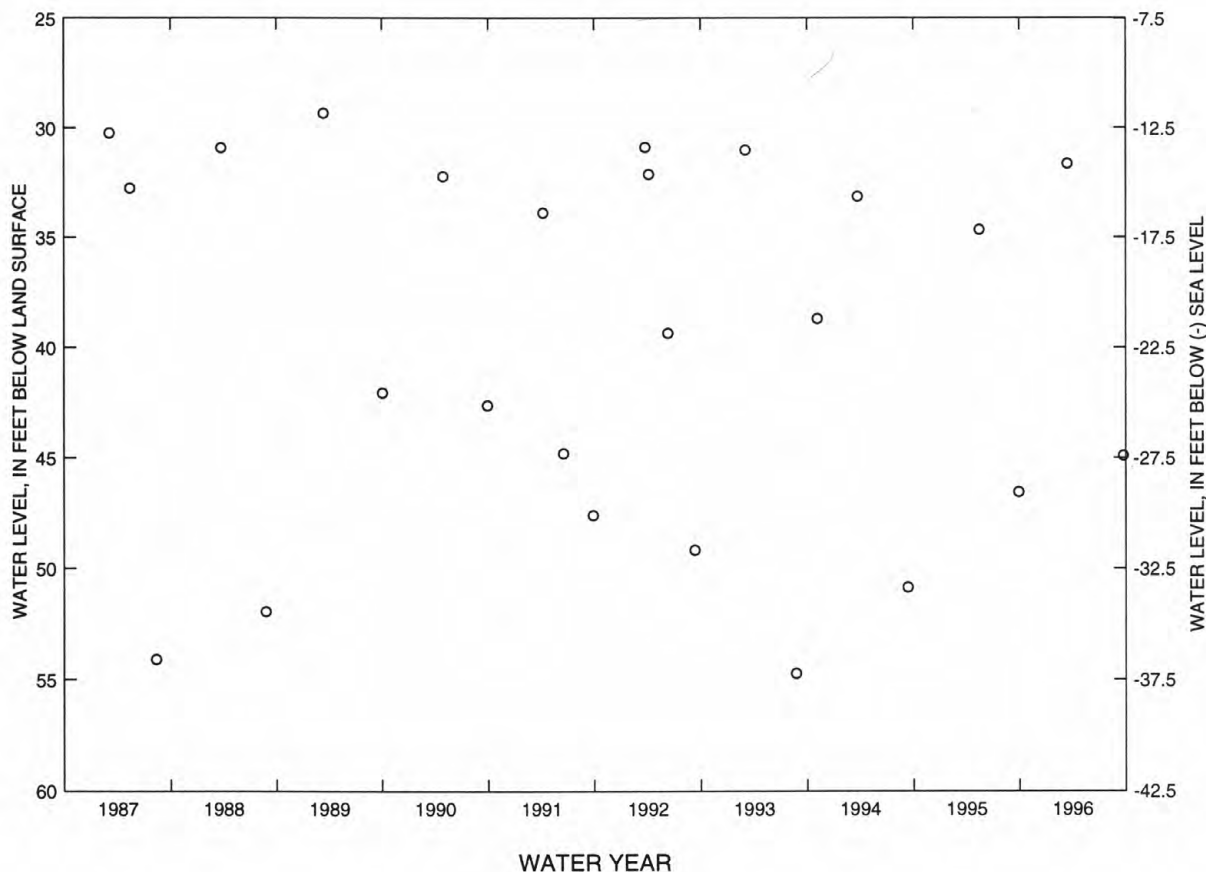
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.03 ft below land surface, Mar. 21, 1958; lowest, 56.67 ft below land surface, Aug. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 14	31.63	SEP 24	44.90

NJ-WRD WELL NO. 09-0048



GROUND-WATER LEVELS

CAPE MAY COUNTY

385804074574201. Local I.D., Higbee Beach 3 Obs. NJ-WRD Well Number, 09-0049.

LOCATION.--Lat 38°58'04", long 74°57'42", Hydrologic Unit 02040206, on the north bank at the west end of the Cape May Canal, Lower Township.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 250 ft, screened 241 to 250 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, May 1965 to Aug. 1975.

DATUM.--Land surface is 6.00 ft above sea level.

Measuring Point: Front edge of cutout in recorder housing, 2.93 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

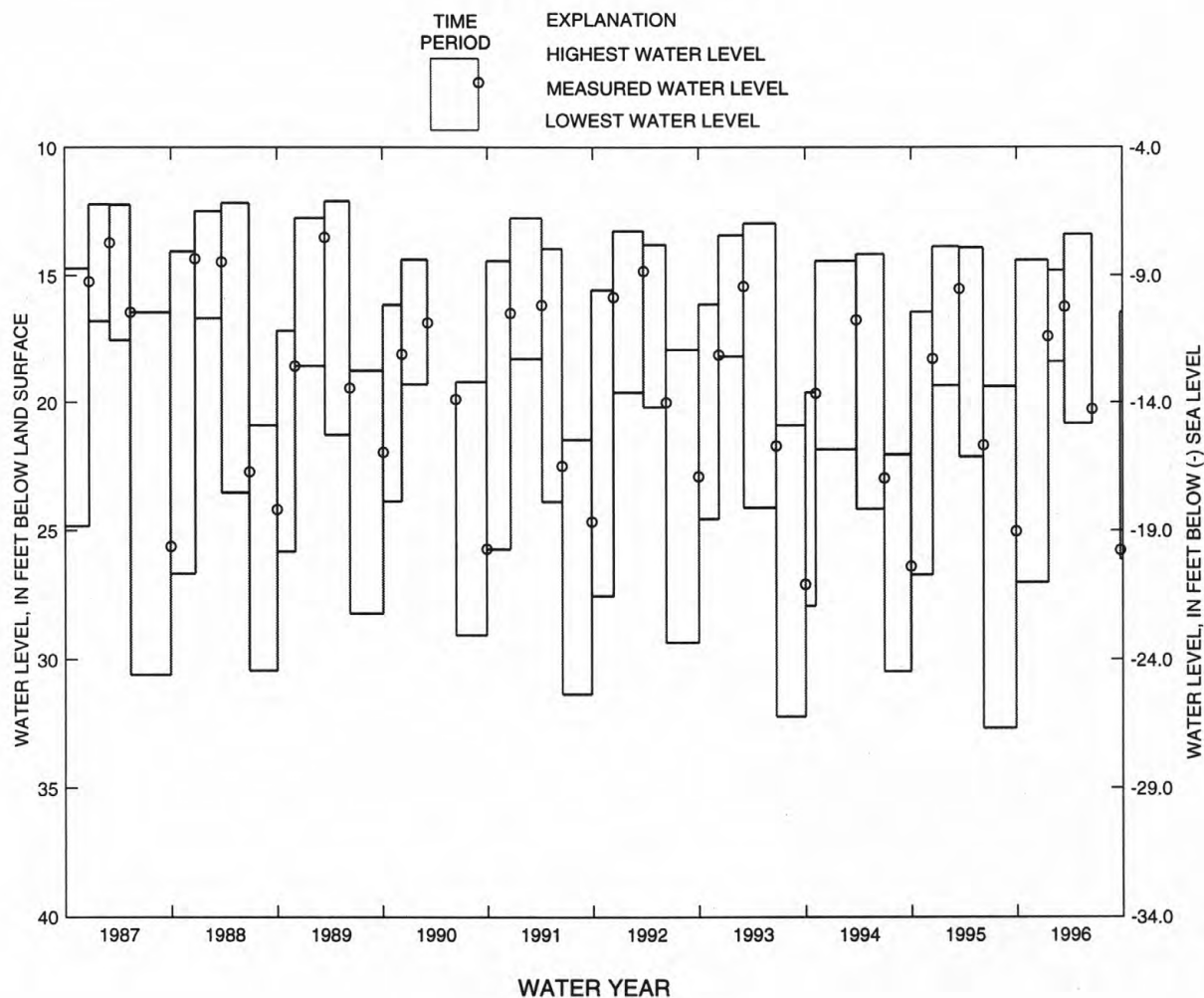
PERIOD OF RECORD.--May 1965 to current year. Records for 1975 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.10 ft below land surface, between Mar. 14 and June 9, 1989; lowest, 34.22 ft below land surface, July 31, 1974.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1995 TO JAN. 17, 1996	14.41	27.03	JAN. 17, 1996	17.40
JAN. 17, 1996 TO MAR. 14, 1996	14.81	18.39	MAR. 14, 1996	16.24
MAR. 14, 1996 TO JUNE 18, 1996	13.39	20.82	JUNE 18, 1996	20.26
JUNE 18, 1996 TO SEPT. 24, 1996	---	---	SEPT. 24, 1996	25.77

NJ-WRD WELL NO. 09-0049



GROUND-WATER LEVELS

67

CAPE MAY COUNTY

390012074472001. Local I.D., M-1 N Wildwood 800 Obs. NJ-WRD Well Number, 09-0337.

LOCATION.--Lat 39°00'12", long 74°47'20", Hydrologic Unit 02040302, on the north side of 2nd Ave., between Surf Ave. and Ocean Ave., North Wildwood City.

Owner: U.S. Geological Survey - North Wildwood City.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 965 ft, screened 910 to 960 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 10 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 4.40 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

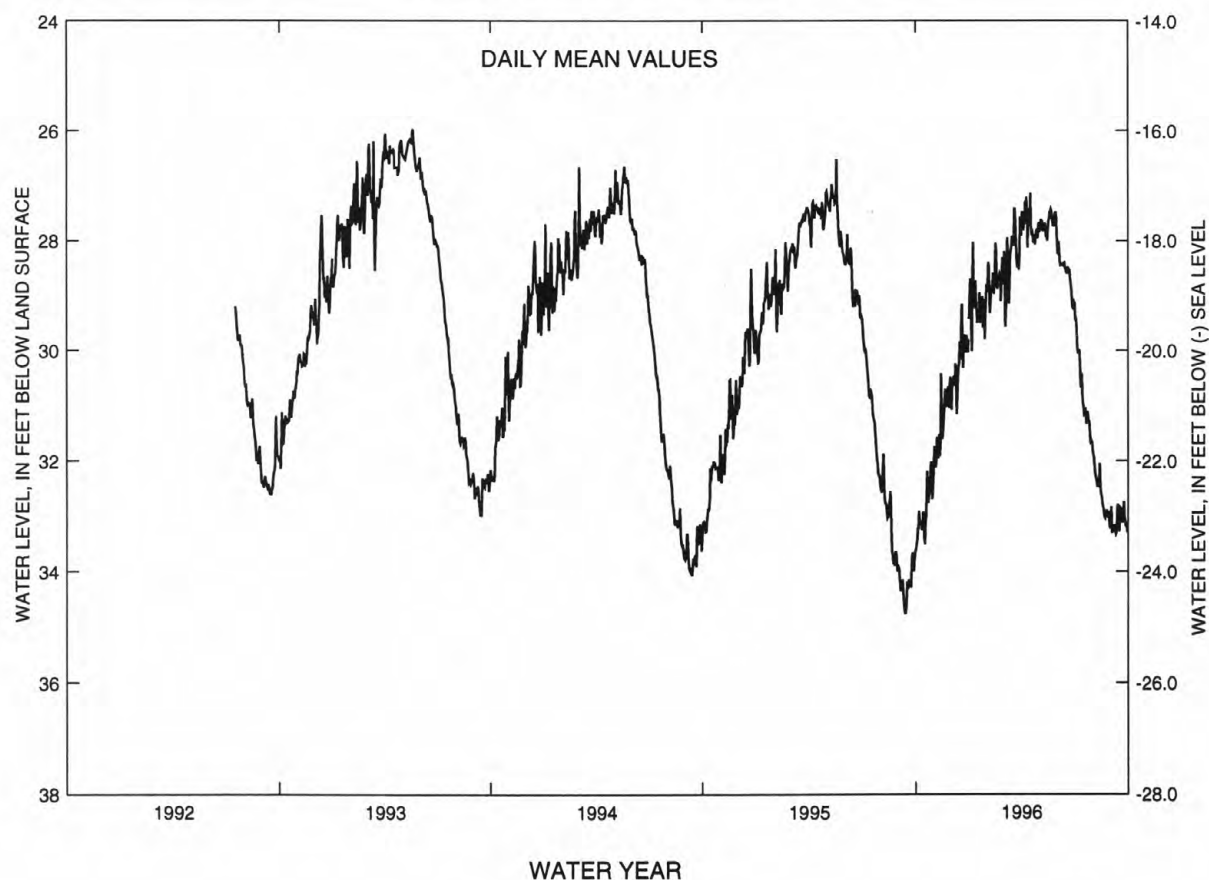
PERIOD OF RECORD.--July 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.93 ft below land surface, May 20, 1993; lowest, 35.51 ft below land surface, Sept. 12, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	33.23	32.11	30.51	29.65	28.93	29.25	27.65	27.68	28.37	29.88	32.21	33.29
10	33.13	31.85	30.59	29.11	28.94	29.15	27.47	27.70	28.43	30.29	32.46	33.32
15	32.95	31.09	30.23	29.50	28.45	27.92	27.56	28.00	28.52	30.97	32.59	33.11
20	32.57	30.93	29.16	29.50	28.63	27.42	27.91	27.47	28.51	31.16	32.90	33.00
25	32.54	30.72	29.76	29.58	29.10	28.25	27.93	27.65	28.90	31.32	32.89	33.00
EOM	32.47	30.48	29.80	28.80	28.80	27.91	27.67	27.91	29.11	31.66	33.22	33.29
MEAN	32.93	31.33	30.21	29.19	28.73	28.28	27.70	27.69	28.58	30.72	32.61	33.08
WTR YR 1996 MEAN 30.09 HIGH 25.70 MAR 19 LOW 34.40 OCT 1												

NJ-WRD WELL NO. 09-0337



GROUND-WATER LEVELS

CAPE MAY COUNTY

390058074542701. Local I.D., Airport 7 Obs. NJ-WRD Well Number, 09-0060.

LOCATION.--Lat 39°00'56", long 74°54'26", Hydrologic Unit 02040206, at the Cape May County Airport, Lower Township.

Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 257 ft, screened 242 to 257 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1963 to Aug. 1975. Periodic measurements, Jan. 1963 to Apr. 1963.

DATUM.--Land surface is 13.11 ft above sea level.

Measuring point: Top of shelter shelf, 3.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

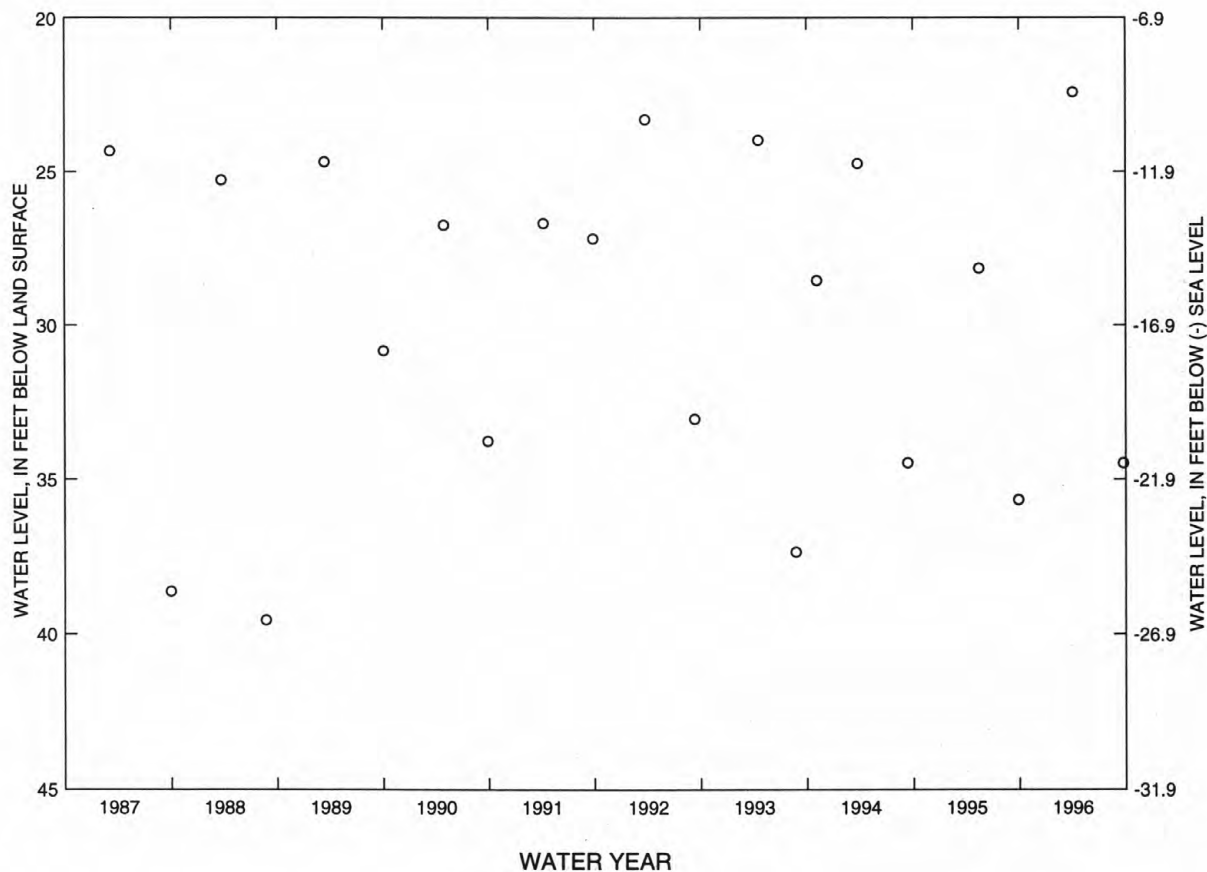
PERIOD OF RECORD.--Jan. 1963 to current year. Records for 1963 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.00 ft below land surface, Apr. 9, 1964; lowest, 42.43 ft below land surface, Aug. 11, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 3	22.42	SEP 24	34.49

NJ-WRD WELL NO. 09-0060



GROUND-WATER LEVELS

69

CAPE MAY COUNTY

390156074533401. Local I.D., Pump Pond N. Obs. NJ-WRD Well Number, 09-0333.

LOCATION.--Lat 39°01'56", long 74°53'34", Hydrologic Unit 02040206, on the east side of Rt. 47, about 1,000 ft north of Pumping Station Pond, Middle Township.

Owner: U. S. Geological Survey - Wildwood Water Department.

AQUIFER.--Holly Beach water-bearing zone.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 43 ft, screened 28 to 38 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--60 minute recording interval.

DATUM.--Land surface is 20 ft above sea level, from topographic map.

Measuring point: Top of base of aluminum locking cap, 3.61 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

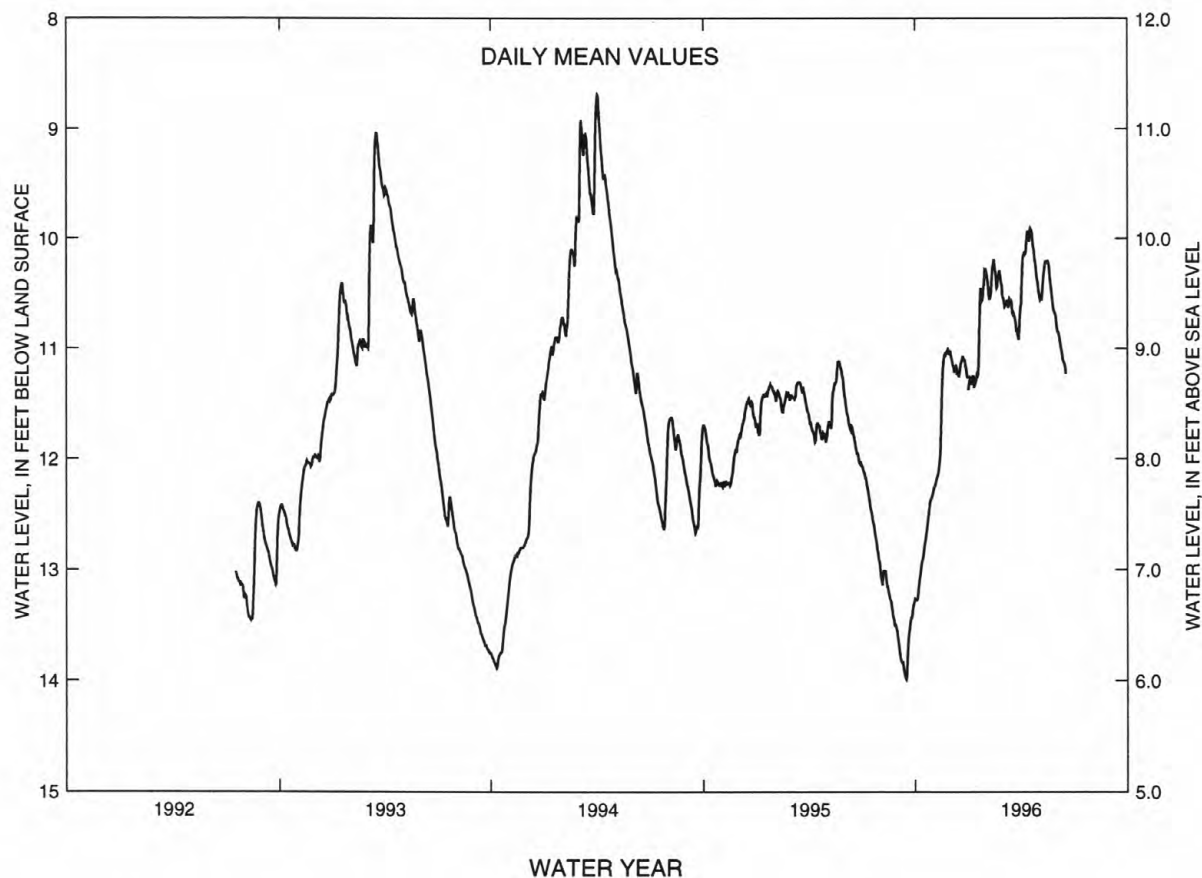
PERIOD OF RECORD.--July 1992 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.68 ft below land surface, Apr. 2, 1994; lowest, 14.01 ft below land surface, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.27	12.24	11.15	11.28	10.51	10.61	10.15	10.55	10.87	---	---	---
10	13.05	12.14	11.17	11.25	10.39	10.63	10.04	10.33	11.03	---	---	---
15	12.89	11.74	11.24	11.27	10.26	10.56	10.03	10.22	11.15	---	---	---
20	12.69	11.09	11.12	10.82	10.44	10.70	9.96	10.30	---	---	---	---
25	12.48	11.03	11.11	10.56	10.33	10.84	10.21	10.56	---	---	---	---
EOM	12.33	11.05	11.27	10.29	10.51	10.63	10.41	10.73	---	---	---	---
MEAN	12.83	11.62	11.16	10.97	10.38	10.67	10.13	10.44	---	---	---	---
WTR YR 1996	HIGH 9.90 APR 17 LOW 13.30 OCT 4											

NJ-WRD WELL NO. 09-0333



GROUND-WATER LEVELS

CAPE MAY COUNTY

390211074505501. Local I.D., Cape May 42 Obs. NJ-WRD Well Number, 09-0080.

LOCATION.--Lat 39°02'13", long 74°50'56", Hydrologic Unit 02040302, in the center of the median of the Garden State Parkway, near mile marker 6, Middle Township.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 252 ft, screened 242 to 252 ft.

INSTRUMENTATION.--None; periodic measurements with chalked steel tape. Water-level recorder, May 1963 to July 1970. Periodic measurements, Oct. 1958 to May 1963. Water-level recorder, July 1957 to Oct. 1958.

DATUM.--Land surface is 13.67 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 2.41 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

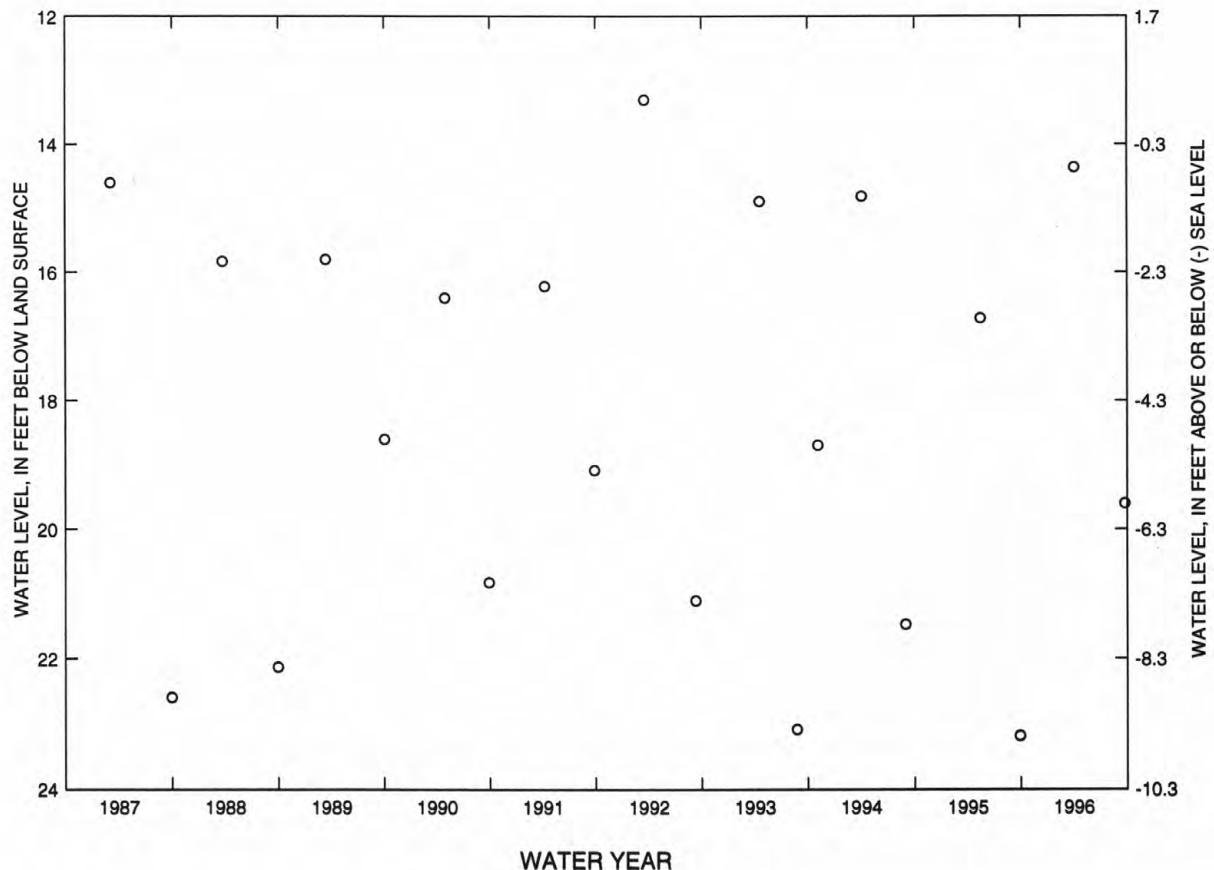
PERIOD OF RECORD.--July 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.82 ft below land surface, Apr. 3, 6, 1958; lowest, 23.18 ft below land surface, Sept. 28, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 3	14.36	SEP 24	19.60

NJ-WRD WELL NO. 09-0080



GROUND-WATER LEVELS

71

CAPE MAY COUNTY

390211074505502. Local I.D., Cape May 23 Obs. NJ-WRD Well Number, 09-0081.

LOCATION.--Lat 39°02'11", long 74°50'55", Hydrologic Unit 02040302, in the center of the median of the Garden State Parkway, near mile marker 6, Middle Township.

Owner: U.S. Geological Survey.

AQUIFER.--Holly Beach water-bearing zone.

WELL CHARACTERISTICS.--Driven water-table observation well, diameter 1.25 in., depth 26 ft, screened 23 to 26 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 14.90 ft above sea level.

Measuring point: Top of casing, 1.30 ft above land surface.

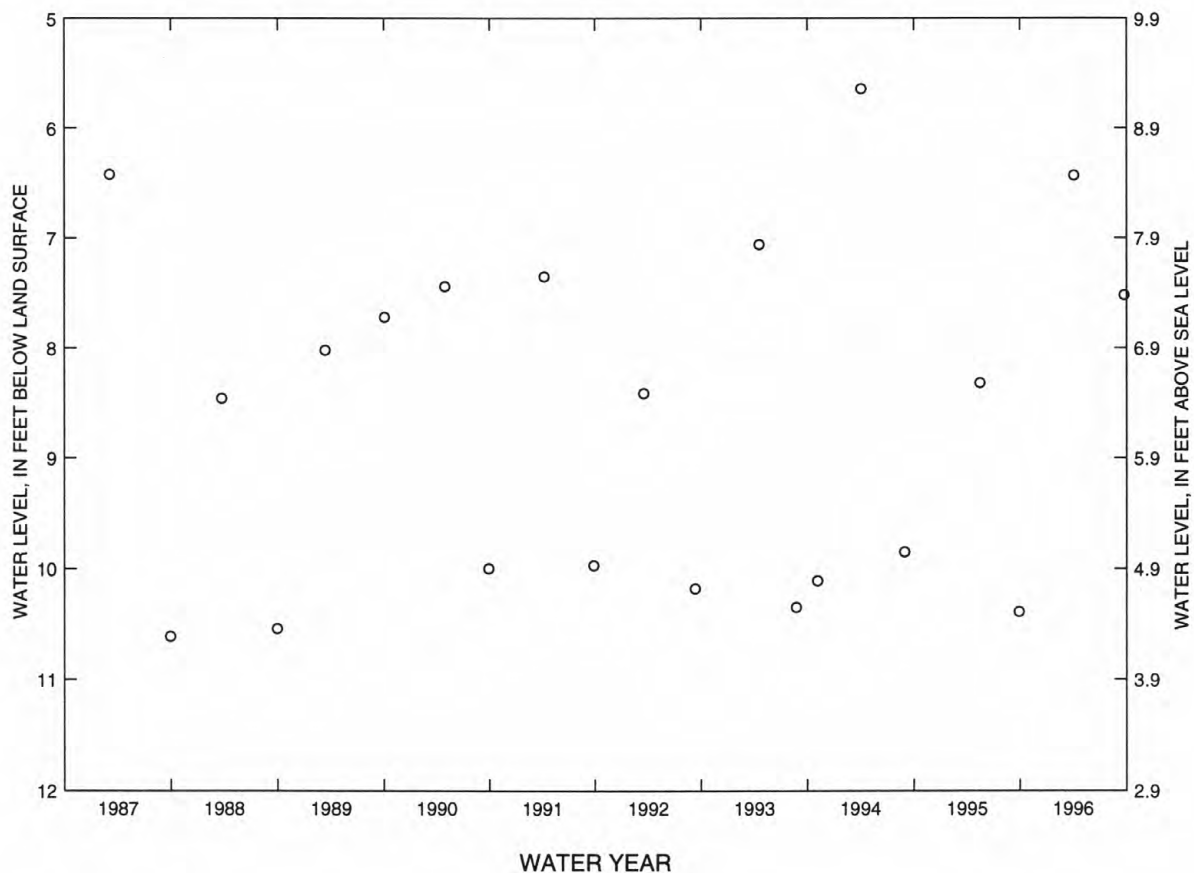
PERIOD OF RECORD.--June 1957 to current year. Records for 1957 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.64 ft below land surface, Apr. 5, 1994; lowest, 10.82 ft below land surface, Sept. 30, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 3	6.43	SEP 24	7.52

NJ-WRD WELL NO. 09-0081



GROUND-WATER LEVELS

CAPE MAY COUNTY

390422074544701. Local I.D., Oyster 800 Obs. NJ-WRD Well Number, 09-0306.

LOCATION.--Lat 39°04'22", long 74°54'47", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.
Owner: U. S. Geological Survey.

AQUIFER.--Atlantic City 800-foot sand of the Kirkwood Formation of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 709 ft, screened 656 to 666 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--60 minute recording interval. Water-level recorder, Mar. 1990 to Dec. 1992.

DATUM.--Land surface is 6 ft above sea level, from topographic map.

Measuring point: Top of PVC casing, 3.05 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

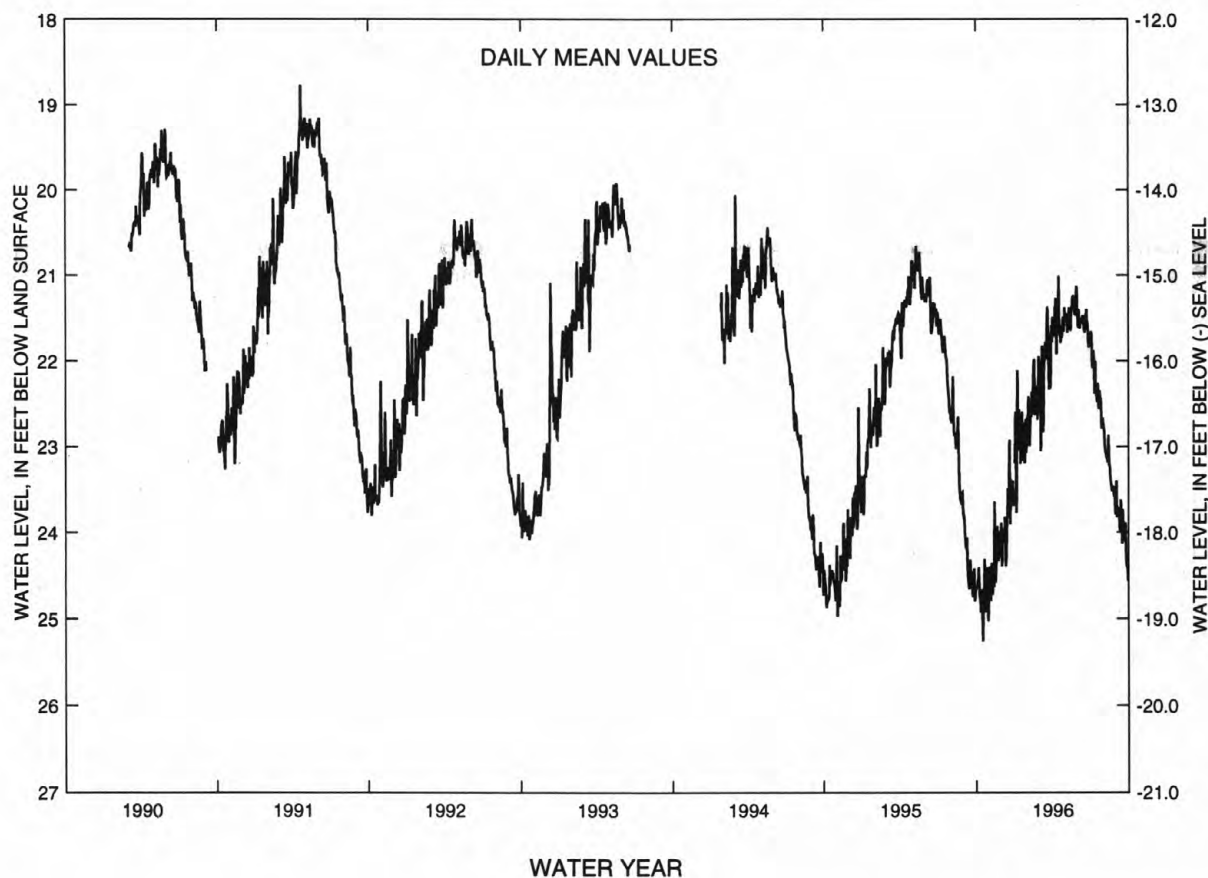
PERIOD OF RECORD.--Mar. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.74 ft below land surface, May 15, 1991; lowest, 25.93 ft below land surface, Oct. 17, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.55	24.79	24.04	23.42	22.73	22.78	21.63	21.51	21.59	21.99	23.02	23.79
10	24.76	24.68	23.99	22.80	22.65	22.83	21.36	21.47	21.53	22.07	23.13	23.97
15	24.71	23.91	23.80	23.20	22.21	21.78	21.51	21.65	21.58	22.38	23.21	23.97
20	24.65	24.11	22.92	23.16	22.46	21.37	21.67	21.26	21.46	22.39	23.45	23.98
25	24.80	24.13	23.41	23.18	22.68	22.05	21.59	21.42	21.58	22.48	23.46	24.14
EOM	24.91	23.89	23.56	22.66	22.50	21.78	21.38	21.43	21.77	22.70	23.79	24.56
MEAN	24.74	24.32	23.77	22.94	22.48	22.09	21.54	21.43	21.58	22.28	23.26	23.94
WTR YR 1996	MEAN 22.87 HIGH 19.60 MAR 19 LOW 25.93 OCT 17											

NJ-WRD WELL NO. 09-0306



CAPE MAY COUNTY

390425074544601. Local I.D., Oyster Lab 4 Obs. NJ-WRD Well Number, 09-0089.

LOCATION.--Lat 39°04'25", long 74°54'46", Hydrologic Unit 02040206, at the Rutgers Oyster Laboratory near Green Creek, Middle Township.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 210 ft, screened 195 to 210 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, Aug. 1957 to Aug. 1975.

DATUM.--Land surface is 7.37 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 3.90 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

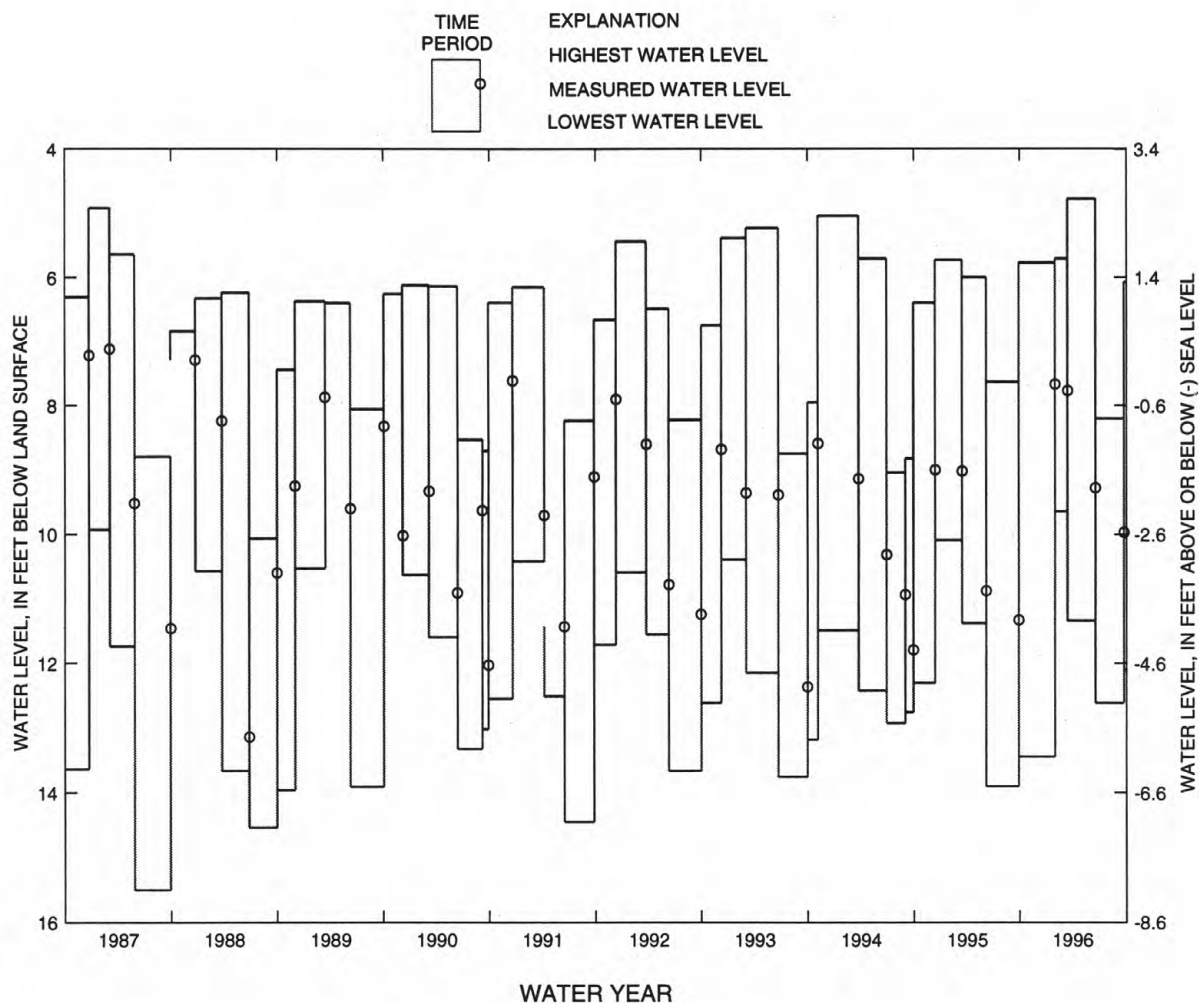
PERIOD OF RECORD.--Aug. 1957 to current year. Records for 1957 to 1982 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.07 ft below land surface, Apr. 3, 1958; lowest, 15.71 ft below land surface, between June 4 and Sept. 30, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 28, 1995 TO JAN. 31, 1996	5.78	13.44	JAN. 31, 1996	7.67
JAN. 31, 1996 TO MAR. 14, 1996	5.71	9.65	MAR. 14, 1996	7.77
MAR. 14, 1996 TO JUNE 18, 1996	4.78	11.34	JUNE 18, 1996	9.28
JUNE 18, 1996 TO SEPT. 24, 1996	8.20	12.62	SEPT. 24, 1996	9.97

NJ-WRD WELL NO. 09-0089



GROUND-WATER LEVELS

CAPE MAY COUNTY

390608074483801. Local I.D., Cape May County Park 8 Obs. NJ-WRD Well Number, 09-0099.

LOCATION.--Lat 39°06'11", long 74°48'38", Hydrologic Unit 02040302, at Cape May County Park, Rt. 9, Middle Township.
Owner: U.S. Geological Survey.

AQUIFER.--Cohansey Sand of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 230 ft, screened 214 to 230 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Nov. 1968 to Nov. 1986. Water-level recorder, Apr. 1961 to Nov. 1968. Periodic measurements, Nov. 1958 to Apr. 1961. Water-level recorder, Oct. 1957 to Oct. 1958.

DATUM.--Land surface is 10.73 ft above sea level.
Measuring point: Top of recorder shelf, 2.20 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

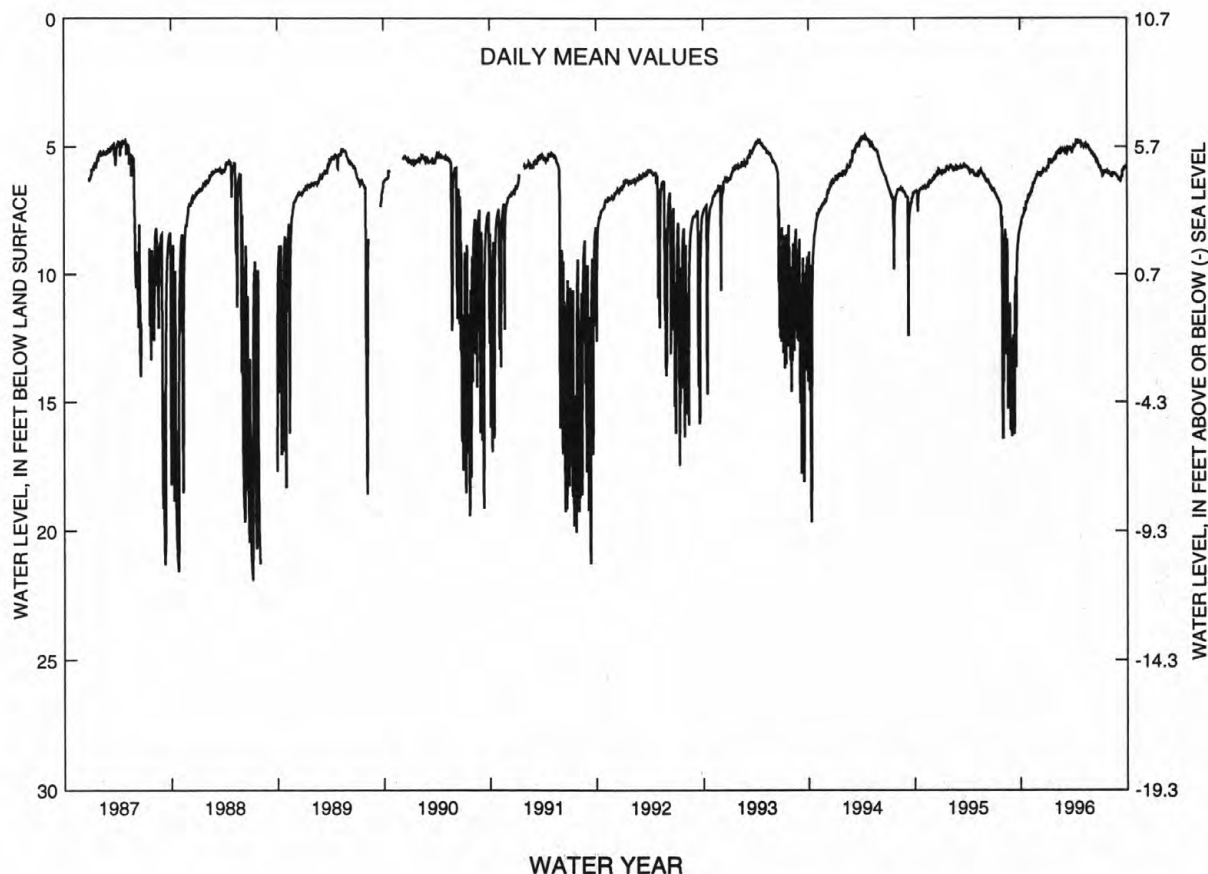
PERIOD OF RECORD.--Oct. 1957 to current year. Records from 1957 to 1987 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.73 ft below land surface, Apr. 5, 1958; lowest, 22.01 ft below land surface, July 9, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.90	6.88	6.10	5.83	5.27	5.21	4.98	4.95	5.23	5.91	6.08	6.30
10	7.73	6.76	6.02	5.55	5.21	5.24	4.81	4.93	5.38	6.10	6.14	6.36
15	7.48	6.41	6.05	5.61	5.22	5.09	4.86	5.02	5.42	6.00	6.03	6.18
20	7.44	6.36	5.87	5.59	5.20	5.03	4.79	4.94	5.47	5.95	6.07	5.93
25	7.16	6.21	5.91	5.51	5.14	5.15	4.86	5.09	5.62	6.01	6.09	5.82
EOM	7.01	6.12	5.92	5.38	5.19	5.10	4.91	5.18	5.81	6.02	6.19	5.80
MEAN	7.52	6.51	6.00	5.59	5.20	5.14	4.88	5.00	5.46	5.98	6.09	6.07
WTR YR 1996	MEAN 5.79	HIGH 4.69	APR 16	LOW 8.19	OCT 1							

NJ-WRD WELL NO. 09-0099



GROUND-WATER LEVELS

75

CUMBERLAND COUNTY

391350075002001. Local I.D., Heislerville 1 Obs. NJ-WRD Well Number, 11-0118.

LOCATION.--Lat 39°13'50", long 75°00'18", Hydrologic Unit 02040206, in Heislerville Wildlife Management Area, Matts Landing Rd., Heislerville, Maurice River Township.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 41 ft, screened 36 to 41 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 6.22 ft above sea level.

Measuring point: Top of coupling, 1.00 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

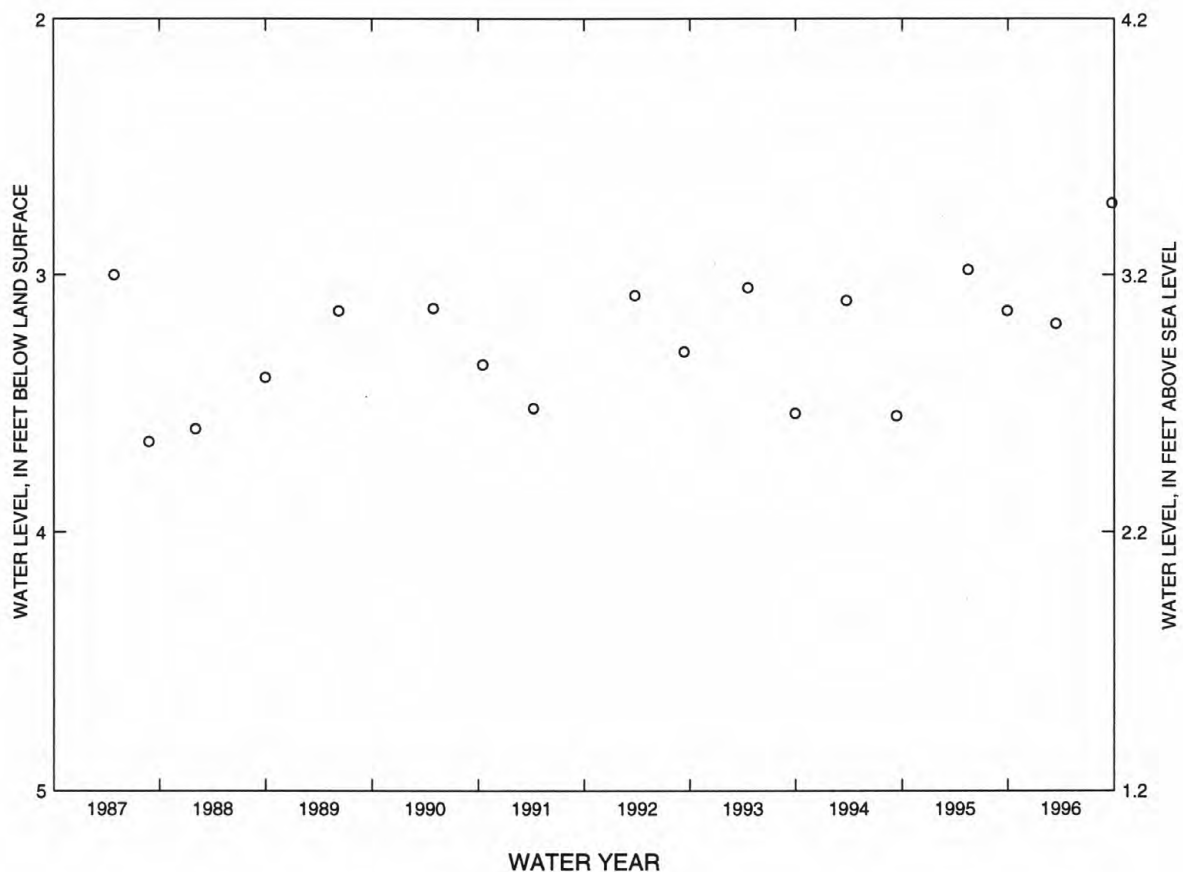
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.72 ft below land surface, Sept. 24, 1996; lowest, 3.79 ft below land surface, Aug. 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 14	3.19	SEP 24	2.72

NJ-WRD WELL NO. 11-0118



GROUND-WATER LEVELS

CUMBERLAND COUNTY

391351075001801. Local I.D., Heislerville 2 Obs. NJ-WRD Well Number, 11-0119.

LOCATION.--Lat 39°13'50", long 75°00'18", Hydrologic Unit 02040206, in Heislerville Wildlife Management Area, Matts Landing Rd., Heislerville, Maurice River Township.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 135 ft, screened 125 to 135 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 5.98 ft above sea level.

Measuring point: Top of coupling, 1.00 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

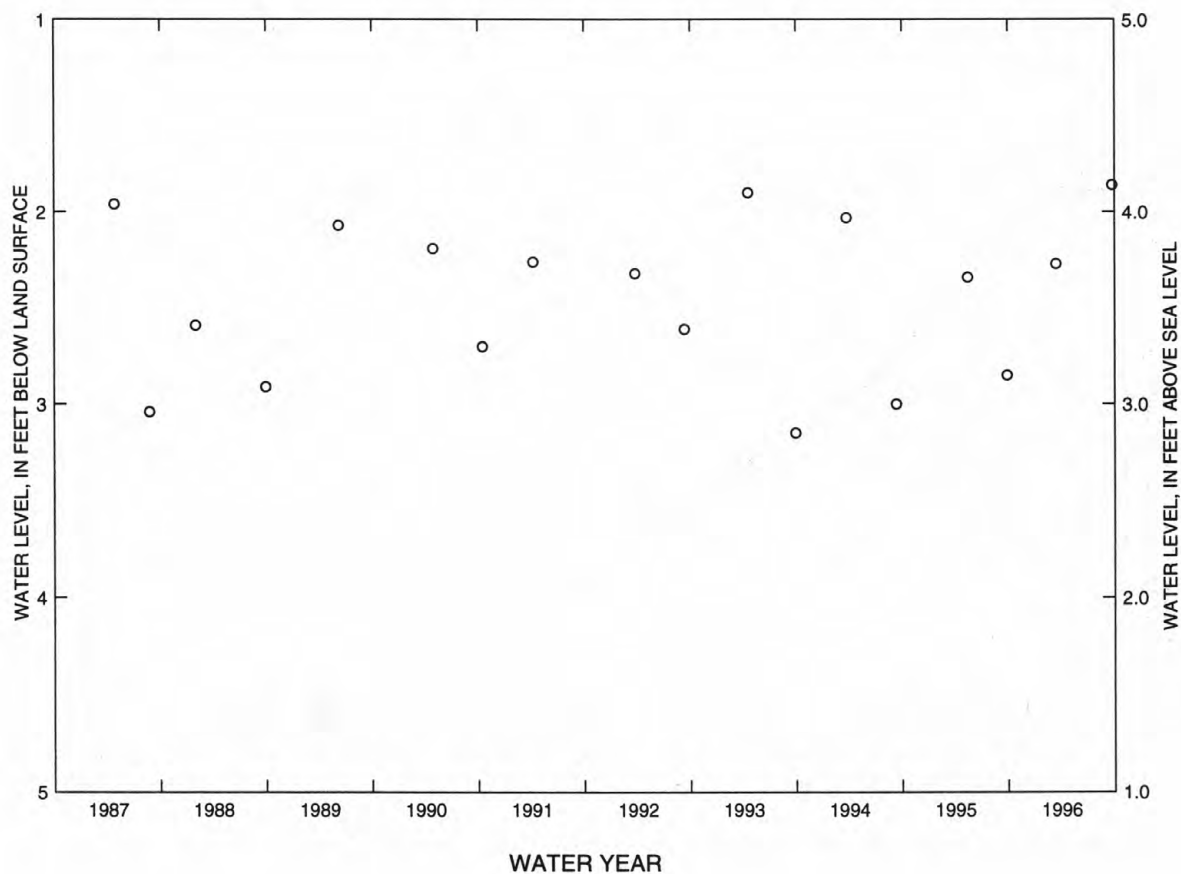
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.64 ft below land surface, Apr. 28, 1983; lowest, 3.25 ft below land surface, Aug. 12, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 14	2.27	SEP 24	1.86

NJ-WRD WELL NO. 11-0119



GROUND-WATER LEVELS

77

CUMBERLAND COUNTY

391828075120902. Local I.D., Jones Island 2 Obs. NJ-WRD Well Number, 11-0096.

LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, in Nantuxent Wildlife Management Area, about 1.7 mi south of Cedarville, Lawrence Township.

Owner: Cumberland County.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 375 ft, screened 365 to 375 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Mar. 1972 to Mar. 1977.

DATUM.--Land surface is 10.10 ft above sea level.

Measuring point: Top of recorder shelf, 1.90 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

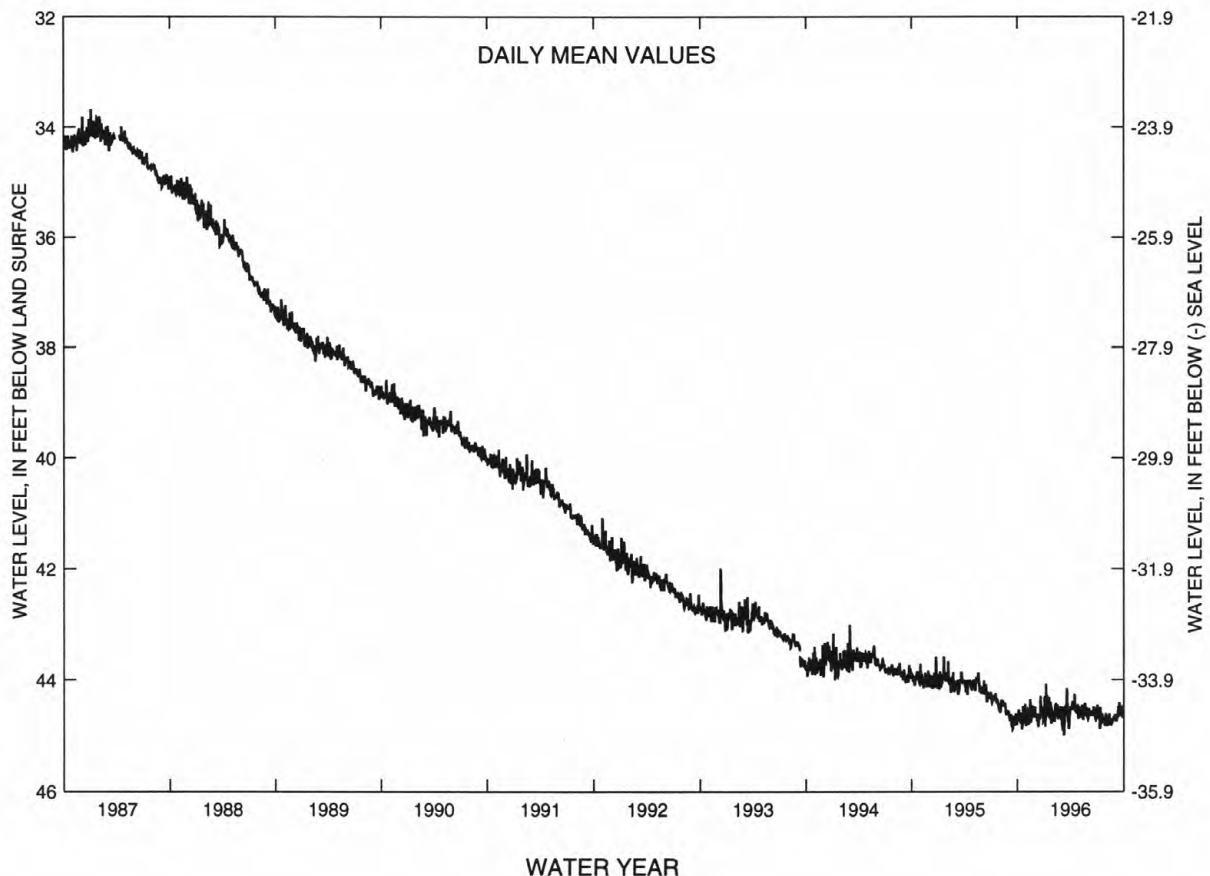
PERIOD OF RECORD.--Mar. 1972 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.27 ft below land surface, Apr. 11, 1972; lowest, 45.04 ft below land surface, Mar. 10, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	44.59	44.81	44.68	44.71	44.73	44.76	44.53	44.54	44.59	44.66	44.80	44.75
10	44.74	44.80	44.67	44.41	44.55	45.00	44.41	44.58	44.64	44.74	44.77	44.69
15	44.60	44.36	44.67	44.58	44.50	44.47	44.55	44.72	44.60	44.71	44.73	44.63
20	44.72	44.62	44.30	44.70	44.64	44.16	44.51	44.44	44.49	44.69	44.81	44.59
25	44.70	44.63	44.53	44.70	44.65	44.68	44.57	44.64	44.57	44.73	44.72	44.54
EOM	44.82	44.61	44.65	44.56	44.71	44.60	44.48	44.64	44.60	44.64	44.71	44.69
MEAN	44.69	44.63	44.63	44.55	44.59	44.64	44.51	44.57	44.61	44.69	44.74	44.61
WTR YR 1996 MEAN 44.62 HIGH 43.89 JAN 8 LOW 45.04 MAR 10												

NJ-WRD WELL NO. 11-0096



GROUND-WATER LEVELS

CUMBERLAND COUNTY

391830075120801. Local I.D., Jones Island 1 Obs. NJ-WRD Well Number, 11-0097.

LOCATION.--Lat 39°18'29", long 75°12'08", Hydrologic Unit 02040206, in Nantuxent Wildlife Management Area, about 1.7 mi south of Cedarville, Lawrence Township.

Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 171 ft, screened 166 to 171 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 10.10 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 3.30 ft above land surface.

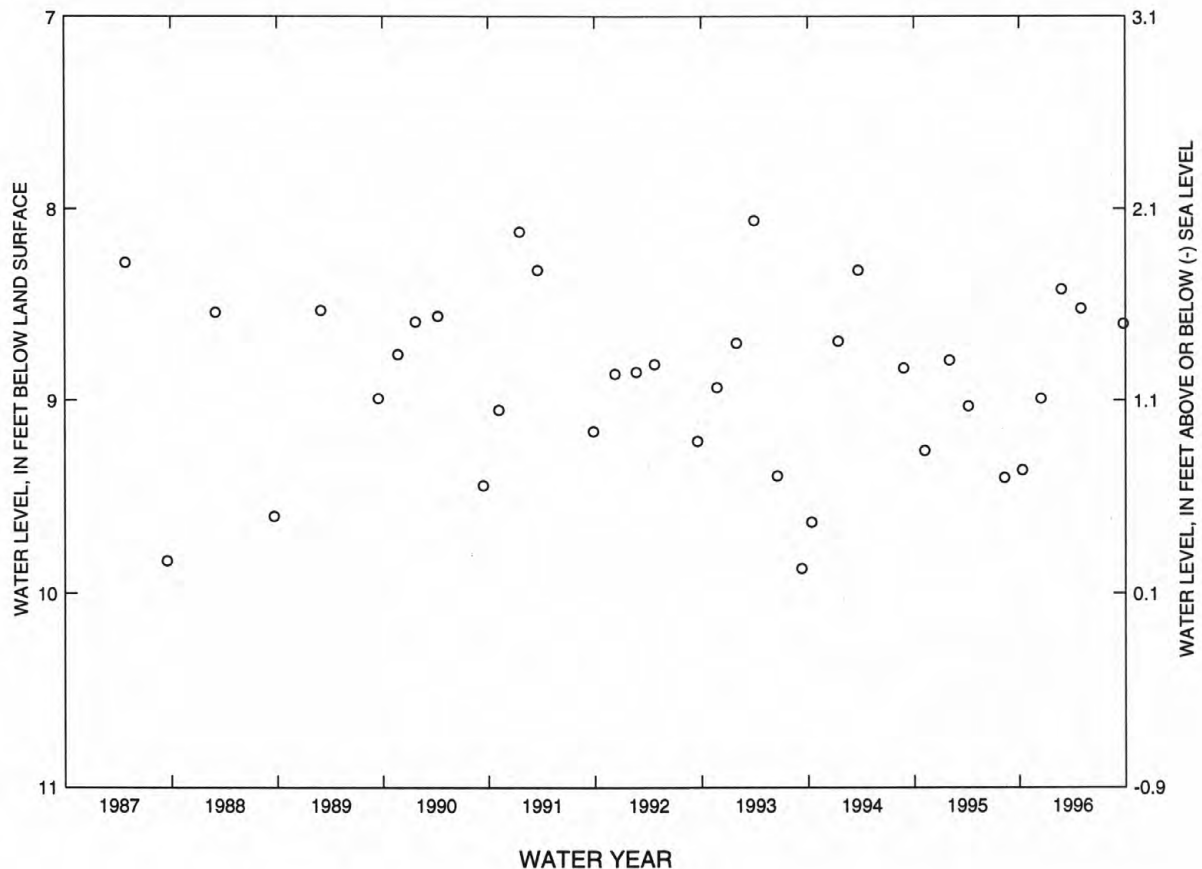
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.86 ft below land surface, Feb. 8, 1973; lowest, 10.13 ft below land surface, Sept. 22, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	9.36	FEB 23	8.42	SEP 25	8.60
DEC 15	8.99	MAY 1	8.52		

NJ-WRD WELL NO. 11-0097



GROUND-WATER LEVELS

79

CUMBERLAND COUNTY

392508075184601. Local I.D., Sheppards 2 Obs. NJ-WRD Well Number, 11-0073.

LOCATION.--Lat 39°25'08", long 75°18'46", Hydrologic Unit 02040206, at the Holly Shores Girl Scout Camp at Sheppards Mill, Greenwich Rd., Greenwich Township.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 40 ft, screened 35 to 40 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 37.35 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 2.61 ft above land surface.

REMARKS.--Water level is affected by the stage of Sheppards Mill Pond.

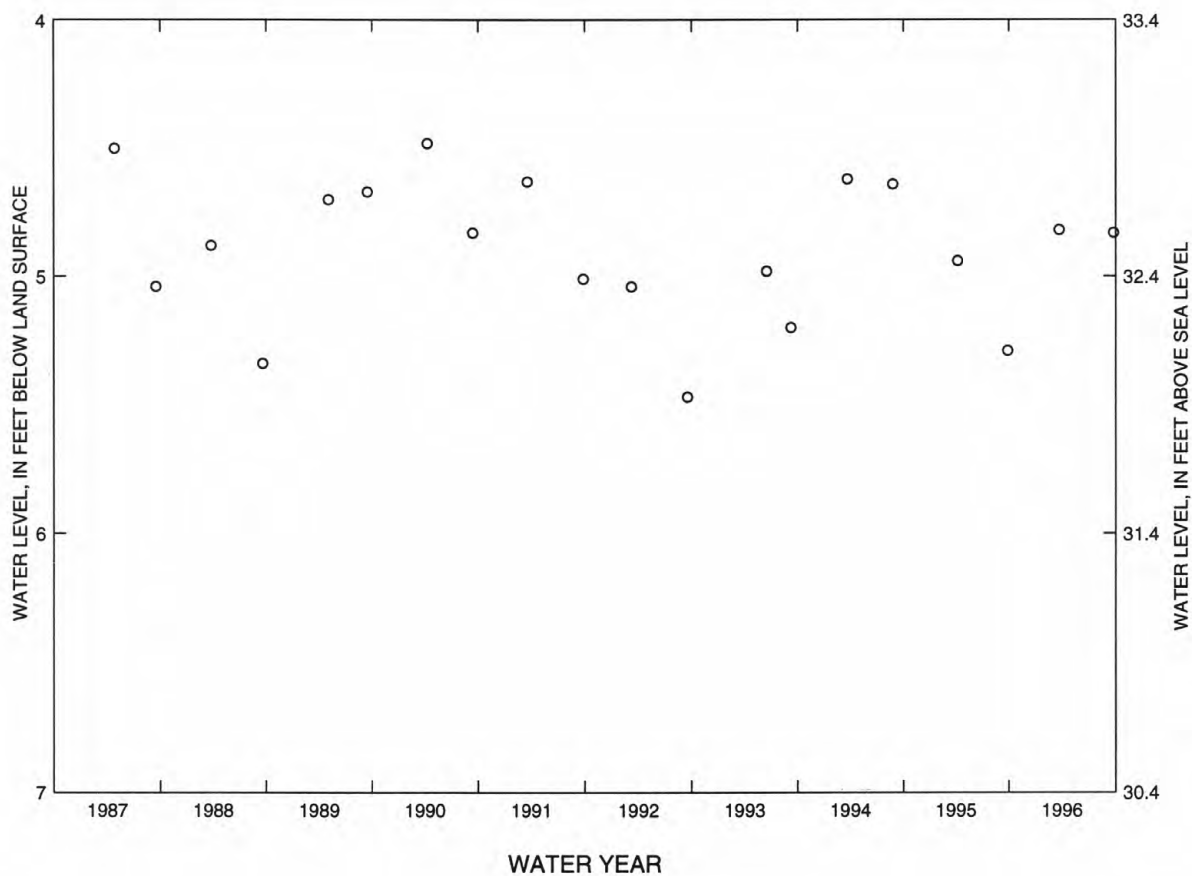
PERIOD OF RECORD.--Mar. 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.00 ft below land surface, May 4, 1973; lowest, 5.47 ft below land surface, Sept. 17, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	4.82	SEP 25	4.83

NJ-WRD WELL NO. 11-0073



GROUND-WATER LEVELS

CUMBERLAND COUNTY

392512074521206. Local I.D., Ragovin 2100 Obs. NJ-WRD Well Number 11-0137.

LOCATION.--Lat 39°25'14", long 74°52'17", Hydrologic Unit 02040302, in wooded area off Harriet Ave., 1.5 mi southeast of Milmay, Maurice River

Township.

Owner: Sam DeRosa.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in., depth 2,093 ft, perforated casing 2,083 to 2,093 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Oct. 1974 to Mar. 1977.

DATUM.--Land surface is 85 ft above sea level, by altimeter.

Measuring point: Top of recorder shelf, 2.40 ft above land surface.

REMARKS.--This well is perforated in a saline zone of the aquifer system (Luzier, 1980,p. 8-12). An equivalent freshwater head is obtained by multiplying the column of water in the well by the ratio of density of water in the well to the density of freshwater. In 1995, the density of water was 1.011 grams per milliliter at 20 deg. C and a plus 17 foot correction was needed to obtain the equivalent freshwater head. The well was pumped on Feb. 3, 1988. After pumping, the water-level did not return to its previous level. Therefore, the perforated area may have been partially clogged prior to the pumping on Feb. 3, 1988.

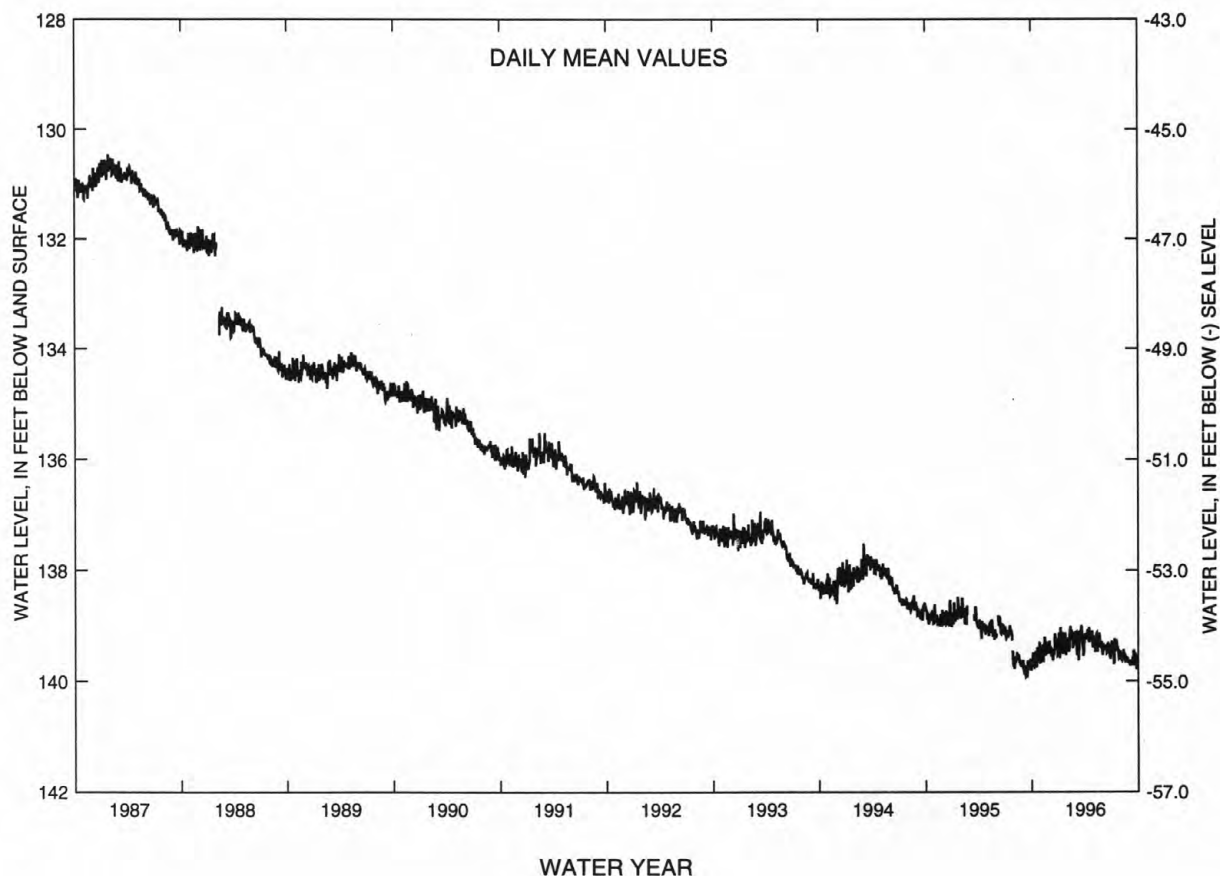
PERIOD OF RECORD.--Oct. 1974 to current year. Records for 1974 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 115.82 ft below land surface, Apr. 3, 1975; lowest, 139.96 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.56	139.65	139.52	139.51	139.45	139.35	139.20	139.32	139.39	139.49	139.61	139.73
10	139.74	139.66	139.44	139.22	139.17	139.63	139.08	139.33	139.44	139.55	139.56	139.70
15	139.47	139.21	139.47	139.38	139.17	139.10	139.30	139.47	139.41	139.36	139.53	139.69
20	139.65	139.45	139.15	139.44	139.38	139.00	139.22	139.17	139.33	139.30	139.67	139.60
25	139.53	139.49	139.32	139.38	139.22	139.36	139.23	139.38	139.39	139.46	139.59	139.63
EOM	139.66	139.45	139.41	139.23	139.31	139.28	139.19	139.45	139.49	139.50	139.68	139.75
MEAN	139.60	139.45	139.42	139.33	139.25	139.30	139.20	139.31	139.43	139.44	139.58	139.64
WTR YR 1996 MEAN 139.41 HIGH 138.91 MAR 19 LOW 139.82 SEP 26-27												

NJ-WRD WELL NO. 11-0137



GROUND-WATER LEVELS

81

CUMBERLAND COUNTY

392528075064101. Local I.D., Fair Grounds 3 Obs. NJ-WRD Well Number, 11-0163.

LOCATION.--Lat 39°25'26", long 75°06'43", Hydrologic Unit 02040206, at the Cumberland County Fairgrounds, between Carmel and Morais Avenues, Millville City.
Owner: Cumberland County.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 473 ft, screened 463 to 473 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 80 ft above sea level, from topographic map.

Measuring point: Top of base of aluminum locking cap, 3.34 ft above land surface.

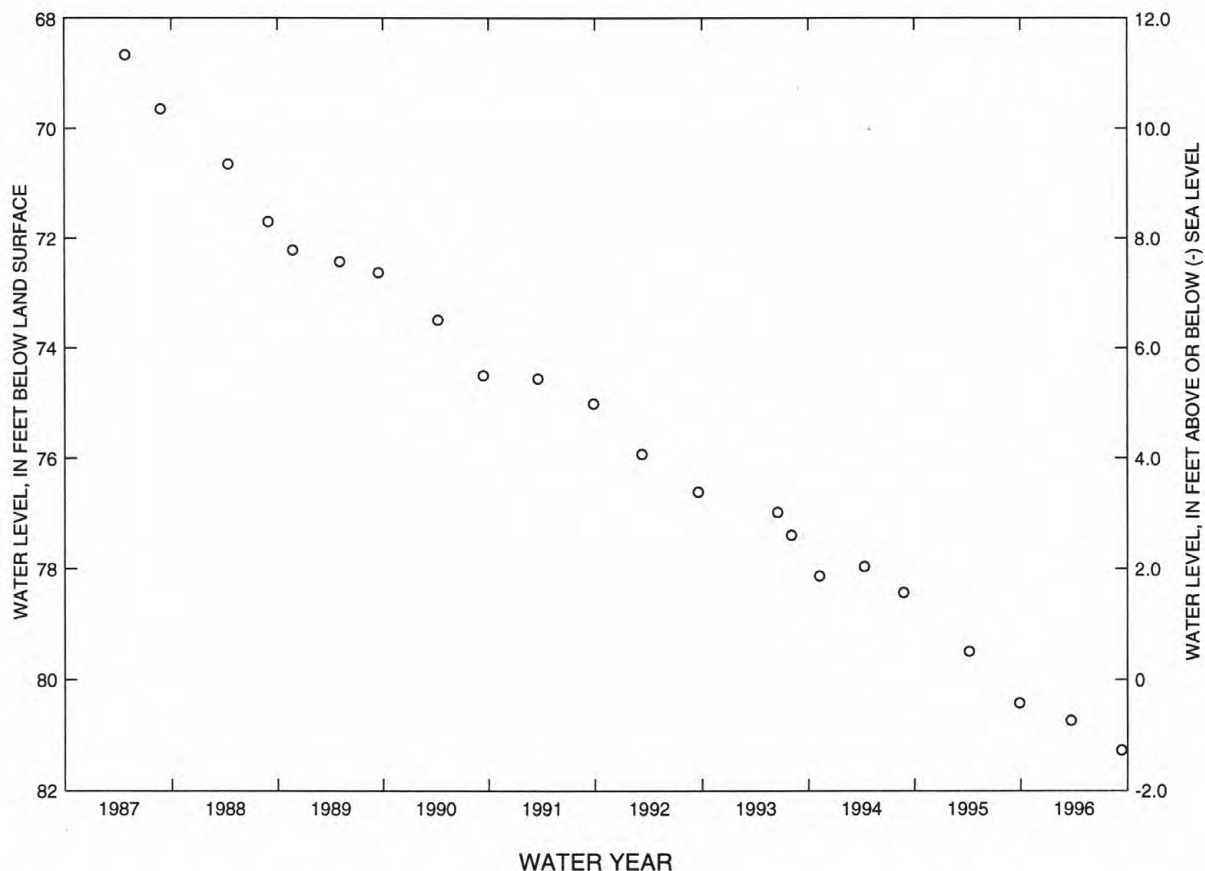
PERIOD OF RECORD.--May 1973 to current year. Records for 1973 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.62 ft below land surface, May 4, 1973; lowest, 81.28 ft below land surface, Sept. 12, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	80.74	SEP 12	81.28

NJ-WRD WELL NO. 11-0163



GROUND-WATER LEVELS

CUMBERLAND COUNTY

392731075092401. Local I.D., Vocational School 2 Obs. NJ-WRD Well Number, 11-0042.

LOCATION.--Lat 39°27'32", long 75°09'29", Hydrologic Unit 02040206, next to the Cumberland County Technical Education Center, Bridgeton Ave., Deerfield Township.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 47 ft, screened 42 to 47 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Mar. 1972 to July 1987.

DATUM.--Land surface is 81.77 ft above sea level.

Measuring point: Top of recorder shelf, 2.92 ft above land surface.

REMARKS.--Water level is occasionally affected by pumping from nearby irrigation well.

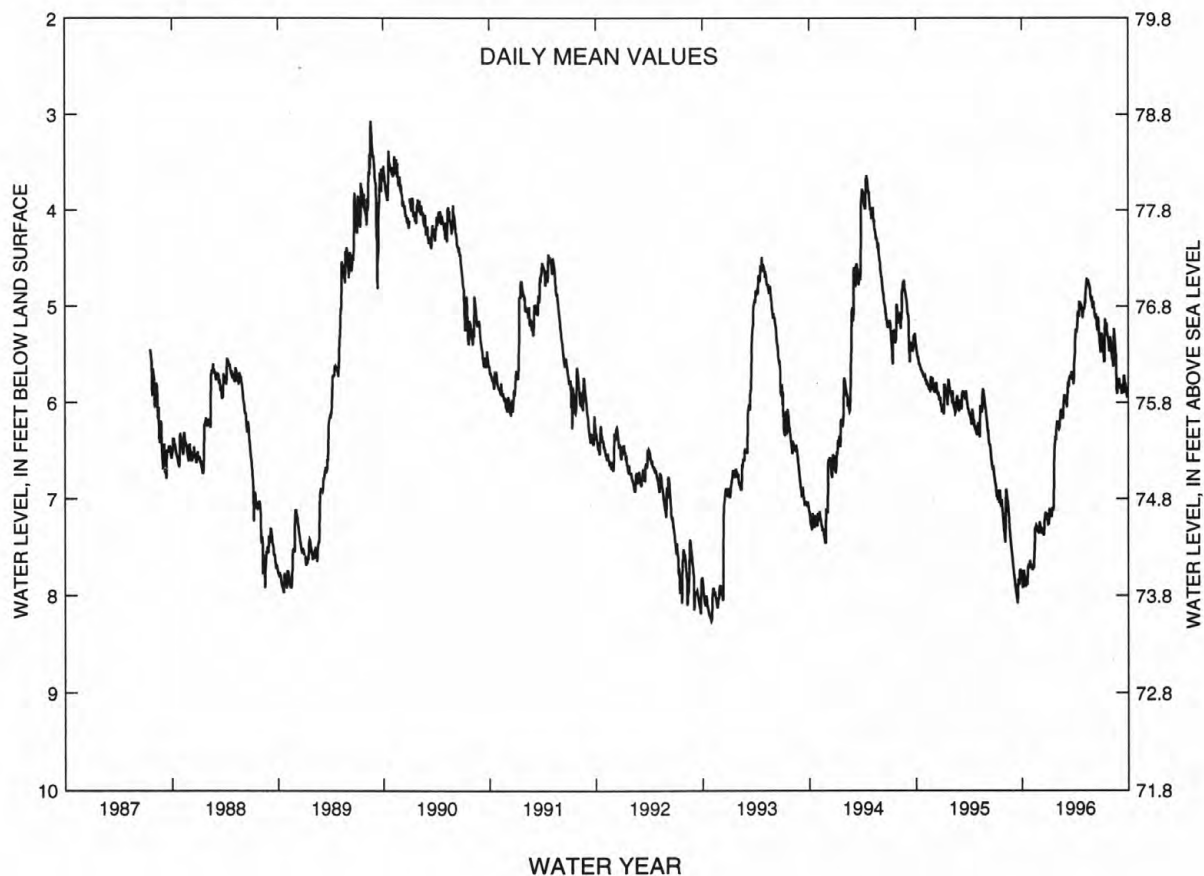
PERIOD OF RECORD.--Mar. 1972 to current year. Records from 1972 to 1987 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.40 ft below land surface, Apr. 21, 1972; lowest, 8.39 ft below land surface, Sept. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.84	7.72	7.31	7.12	6.26	5.96	5.27	5.00	4.98	5.40	5.46	5.84
10	7.80	7.72	7.31	7.16	6.14	5.84	5.09	4.79	5.11	5.54	5.57	5.91
15	7.83	7.31	7.38	7.11	6.11	5.72	5.11	4.79	5.15	5.15	5.26	5.89
20	7.89	7.29	7.15	6.54	6.11	5.68	4.97	4.78	5.11	5.19	5.49	5.80
25	7.69	7.34	7.17	6.38	5.94	5.74	5.03	4.90	5.32	5.36	5.91	5.87
EOM	7.68	7.26	7.27	6.20	6.01	5.53	5.03	4.97	5.38	5.37	5.76	5.89
MEAN	7.79	7.48	7.26	6.82	6.10	5.78	5.11	4.86	5.17	5.35	5.56	5.84
WTR YR 1996	MEAN 6.09	HIGH 4.69	MAY 11-12	LOW 7.93	OCT 4-5							

NJ-WRD WELL NO. 11-0042



GROUND-WATER LEVELS

83

CUMBERLAND COUNTY

392732075092401. Local I.D., Vocational School 1 Obs. NJ-WRD Well Number, 11-0043.

LOCATION.--Lat 39°27'32", long 75°09'29", Hydrologic Unit 02040206, next to the Cumberland County Technical Education Center, Bridgeton Ave., Deerfield Township.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 138 ft, screened 133 to 138 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 82.14 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 0.51 ft above land surface.

REMARKS.--Water level is occasionally affected by pumping from nearby wells.

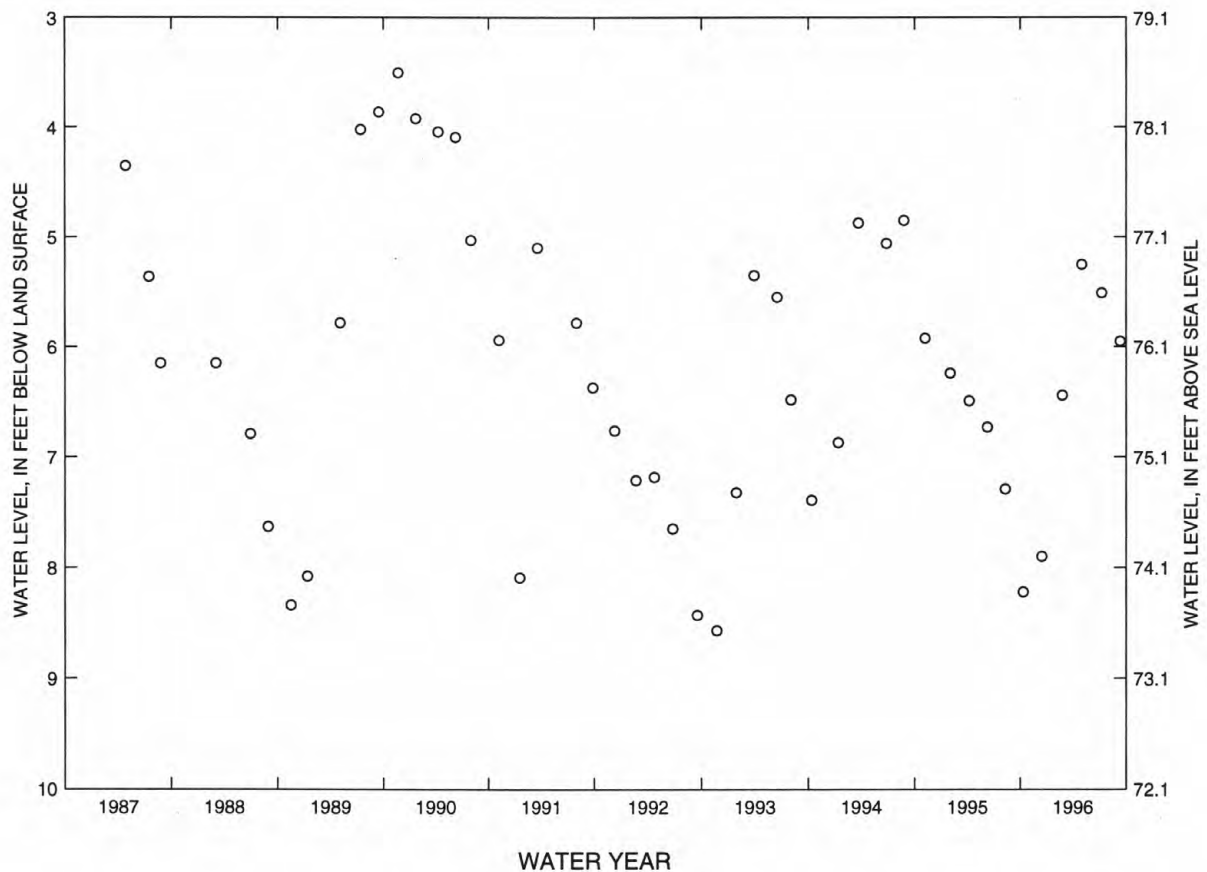
PERIOD OF RECORD.--Mar. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.31 ft below land surface, Feb. 8, 1973; lowest, 8.57 ft below land surface, Nov. 23, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	8.22	FEB 23	6.44	JUL 9	5.51
DEC 15	7.90	MAY 1	5.25	SEP 12	5.95

NJ-WRD WELL NO. 11-0043



GROUND-WATER LEVELS

CUMBERLAND COUNTY

392733075092401. Local I.D., Vocational School 3 Obs. NJ-WRD Well Number, 11-0044.

LOCATION.--Lat 39°27'32", long 75°09'29", Hydrologic Unit 02040206, next to the Cumberland County Technical Education Center, Bridgeton Ave., Deerfield Township.

Owner: Cumberland County.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 376 ft, screened 361 to 376 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 81.95 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 0.31 ft above land surface.

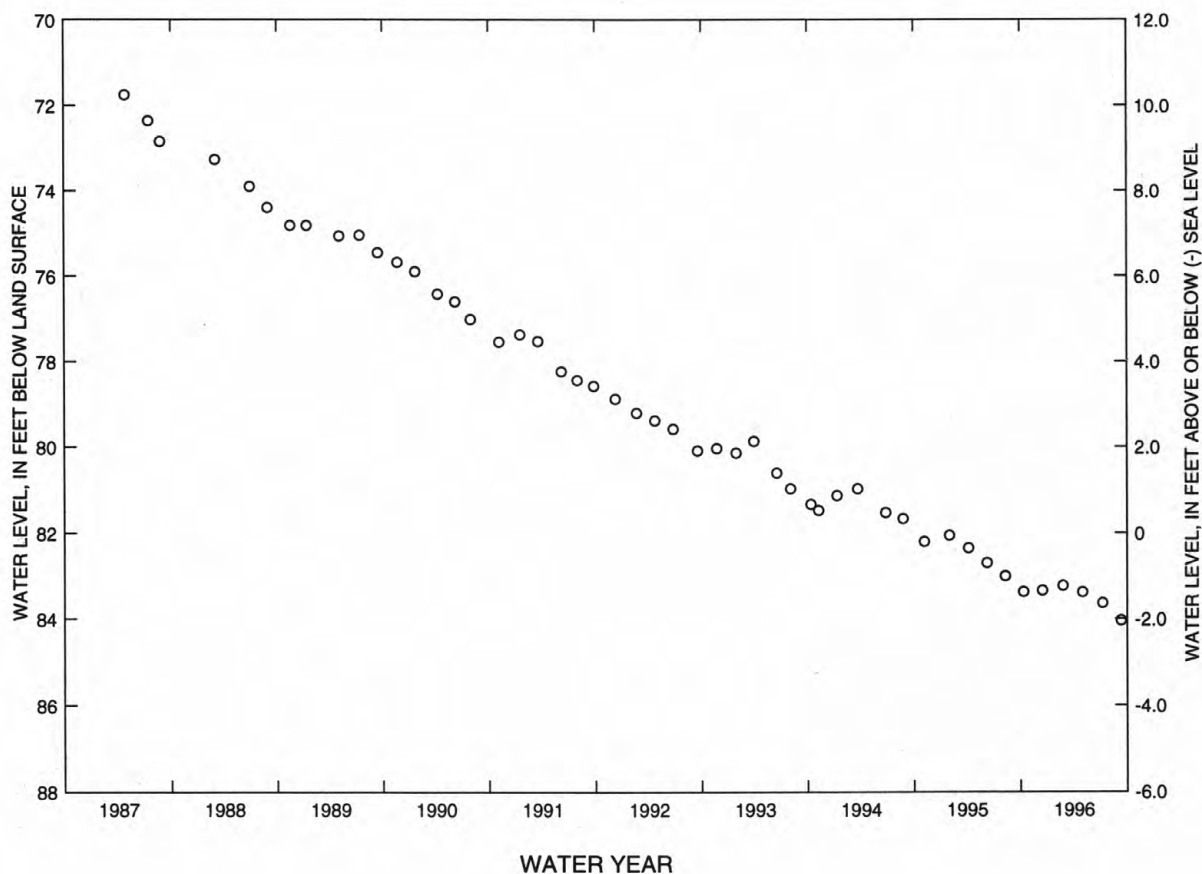
PERIOD OF RECORD.--July 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 58.79 ft below land surface, July 31, 1972; lowest, 84.04 ft below land surface, Sept. 12, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	83.37	FEB 23	83.23	JUL 9	83.63
DEC 15	83.34	MAY 1	83.38	SEP 12	84.04

NJ-WRD WELL NO. 11-0044



GROUND-WATER LEVELS

85

CUMBERLAND COUNTY

392920074570001. Local I.D., Natural Area 1 Obs. NJ-WRD Well Number, 11-0237.

LOCATION.--Lat 39°29'20", long 74°57'00", Hydrologic Unit 02040206, in the Willow Oak Natural Area, about 600 ft east of the intersection of Maple Ave. and Lincoln Ave., Vineland City.
Owner: Cumberland County.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 81 ft, screened 76 to 81 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 88 ft above sea level, by altimeter.

Measuring point: Top of base of aluminum locking cap, 0.98 ft above land surface.

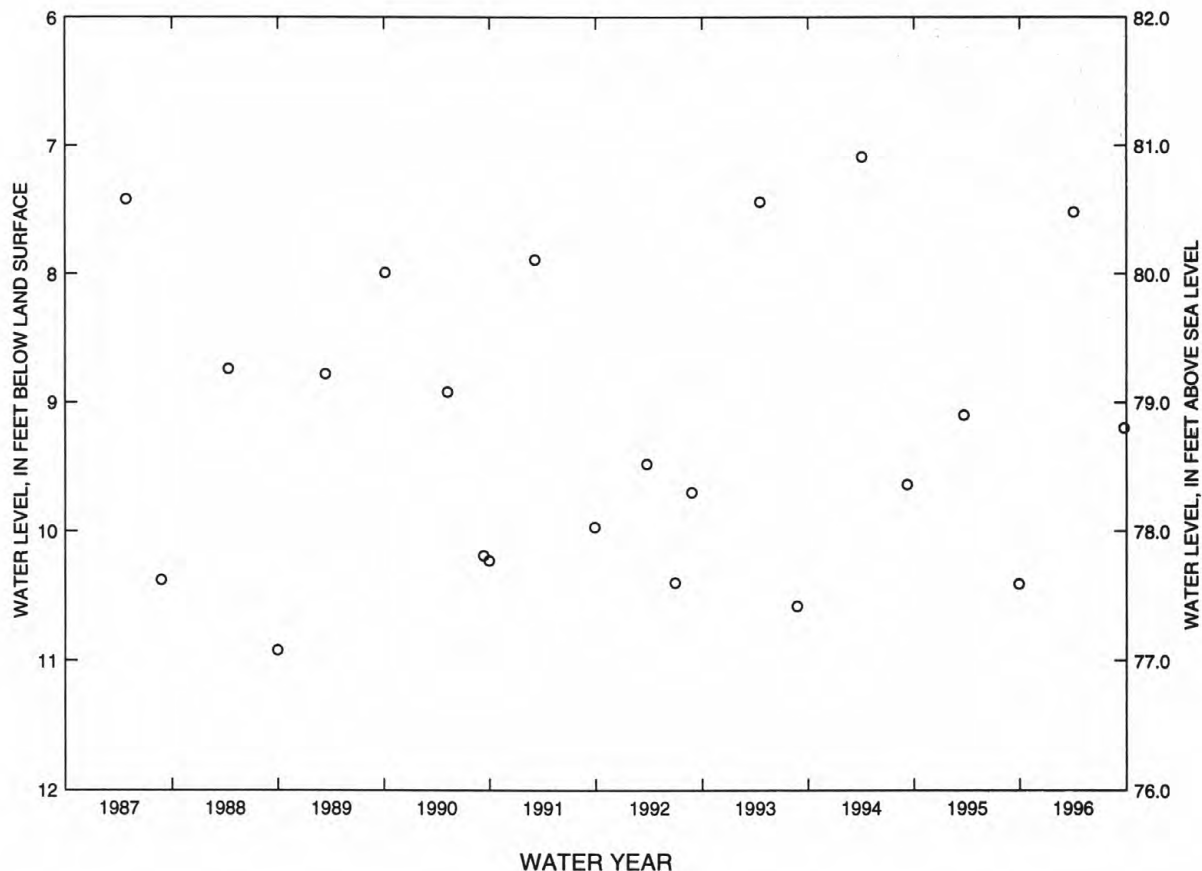
PERIOD OF RECORD.--Apr. 1972 to current year. Records for 1972 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.92 ft below land surface, Feb. 9, 1973; lowest, 11.05 ft below land surface, Sept. 20, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 3	7.52	SEP 24	9.20

NJ-WRD WELL NO. 11-0237



GROUND-WATER LEVELS

ESSEX COUNTY

404347074193301. Local I.D., Christ Church 2 Obs. NJ-WRD Well Number, 13-0095.

LOCATION.--Lat 40°43'47", long 74°19'33", Hydrologic Unit 02030104, at Christ Church, about 200 ft east of Highland Ave., Millburn Township.
Owner: State of New Jersey - Christ Church.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 200 ft, screened 180 to 200 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 276.9 ft above sea level.

Measuring point: Top of casing, 0.67 ft below land surface.

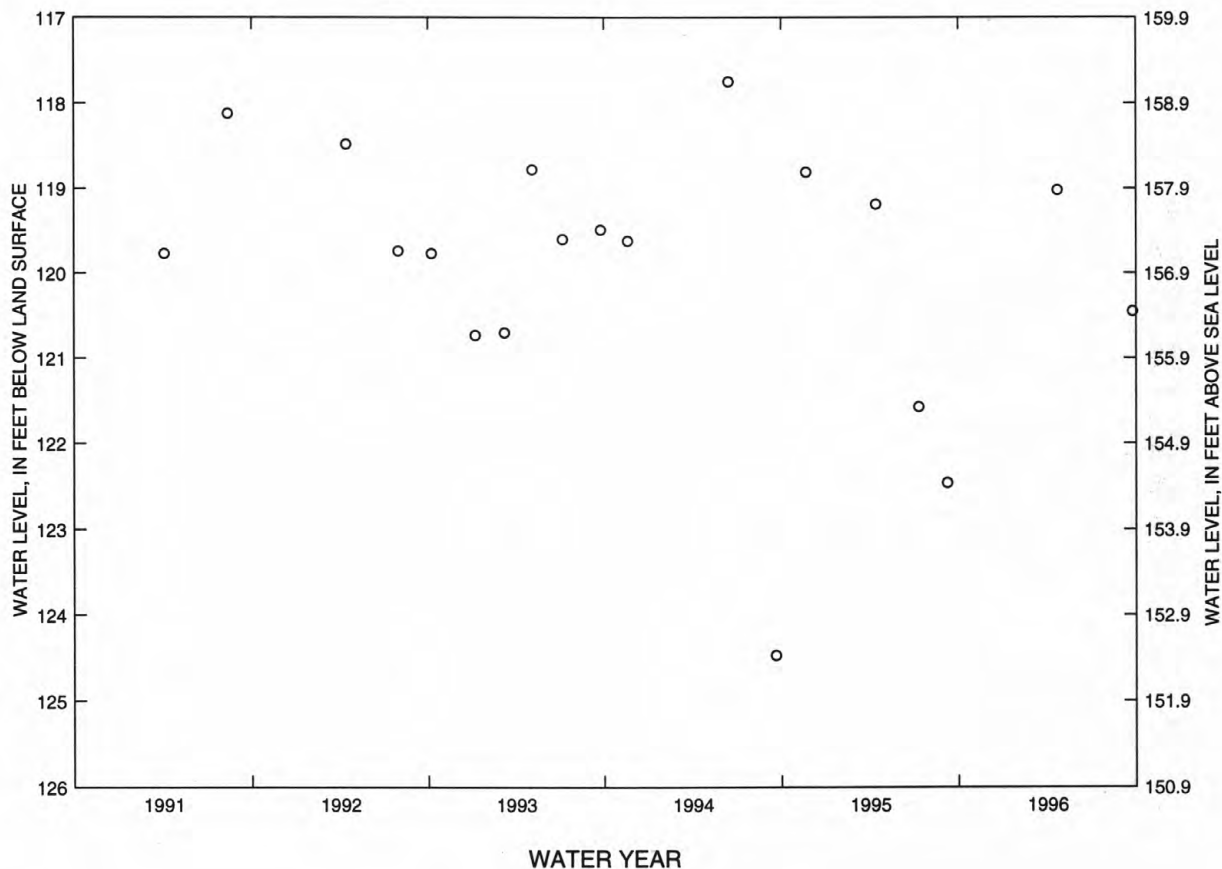
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 117.75 ft below land surface, June 15, 1994; lowest, 124.47 ft below land surface, Sept. 20, 1994.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 29	121.18	APR 22	119.02	SEP 24	120.45

NJ-WRD WELL NO. 13-0095



ESSEX COUNTY

404452074211601. Local I.D., Canoe Brook 30 Obs. NJ-WRD Well Number, 13-0013.

LOCATION.--Lat 40°44'52", long 74°21'16", Hydrologic Unit 02030103, about 0.3 mi north of the New Jersey - American Water Company's Canoe Brook pumping station, near Chatham, Millburn Township.
Owner: New Jersey - American Water Company.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, depth 130 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1977 to July 1984. Periodic measurements, Apr. 1975 to Apr. 1977. Water-level recorder, Sept. 1925 to Apr. 1975.

DATUM.--Land surface is 170.00 ft above sea level.
Measuring point: Top of well shelter shelf, 6.57 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

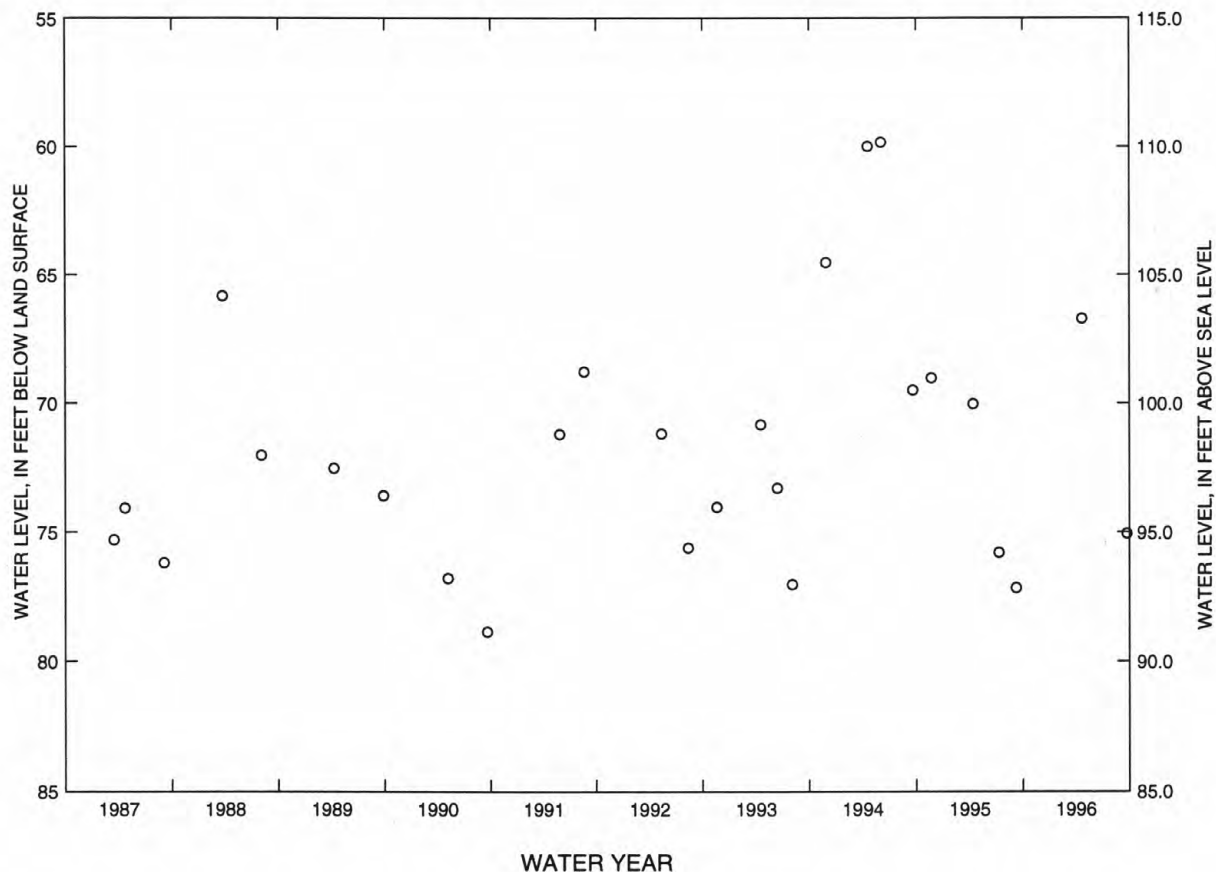
PERIOD OF RECORD.--Sept. 1925 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.25 ft below land surface, Aug. 25, 1931; lowest, 86.70 ft below land surface, Oct. 23, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22	66.70	SEP 24	75.05

NJ-WRD WELL NO. 13-0013



GROUND-WATER LEVELS

ESSEX COUNTY

404454074202101. Local I.D., Neutral Zone Obs. NJ-WRD Well Number, 13-0014.

LOCATION.--Lat 40°44'54", long 74°20'21", Hydrologic Unit 02030103, about 1,500 ft south of the East Orange Water Department pumping station, Parsonage Hill Rd., Millburn Township.
Owner: East Orange Water Department.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, depth 64 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Nov. 1926 to May 1975.

DATUM.--Land surface is 179.37 ft above sea level.

Measuring point: Top of casing, 3.50 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

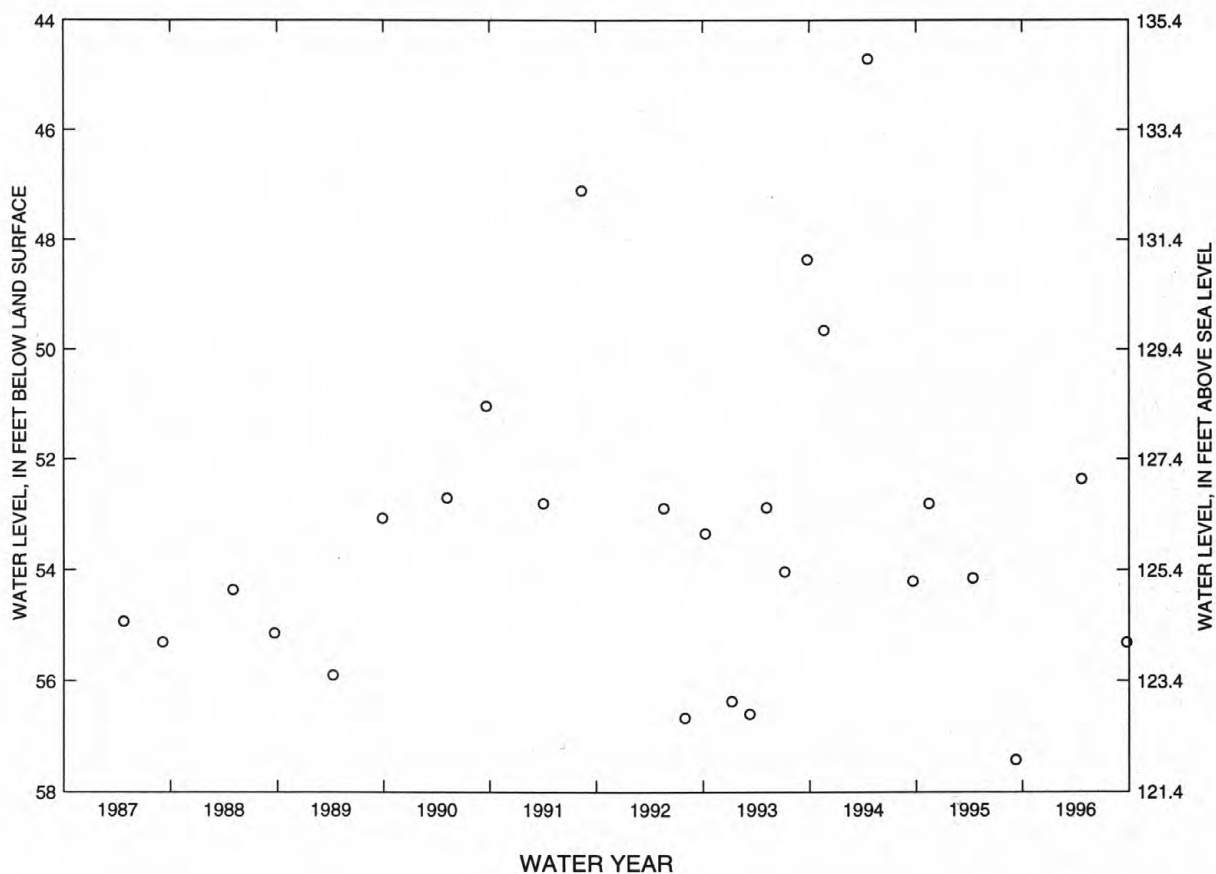
PERIOD OF RECORD.--Nov. 1926 to Oct. 1984, May 1986 to current year. Records for 1975 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.57 ft below land surface, Oct. 25, 1927; lowest, 63.12 ft below land surface, Apr. 10, 1967.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 22	52.36	SEP 24	55.31

NJ-WRD WELL NO. 13-0014



GROUND-WATER LEVELS

89

ESSEX COUNTY

404455074203201. Local I.D., East Orange 28 Obs. NJ-WRD Well Number, 13-0094.

LOCATION.--Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.

Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Towaco Formation of Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 298 ft, open hole 112 to 298 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to Apr. 1992.

DATUM.--Land surface is 184.7 ft above sea level.

Measuring point: Top of recorder shelf, 2.65 ft above land surface.

REMARKS.-- Water level is affected by nearby pumping.

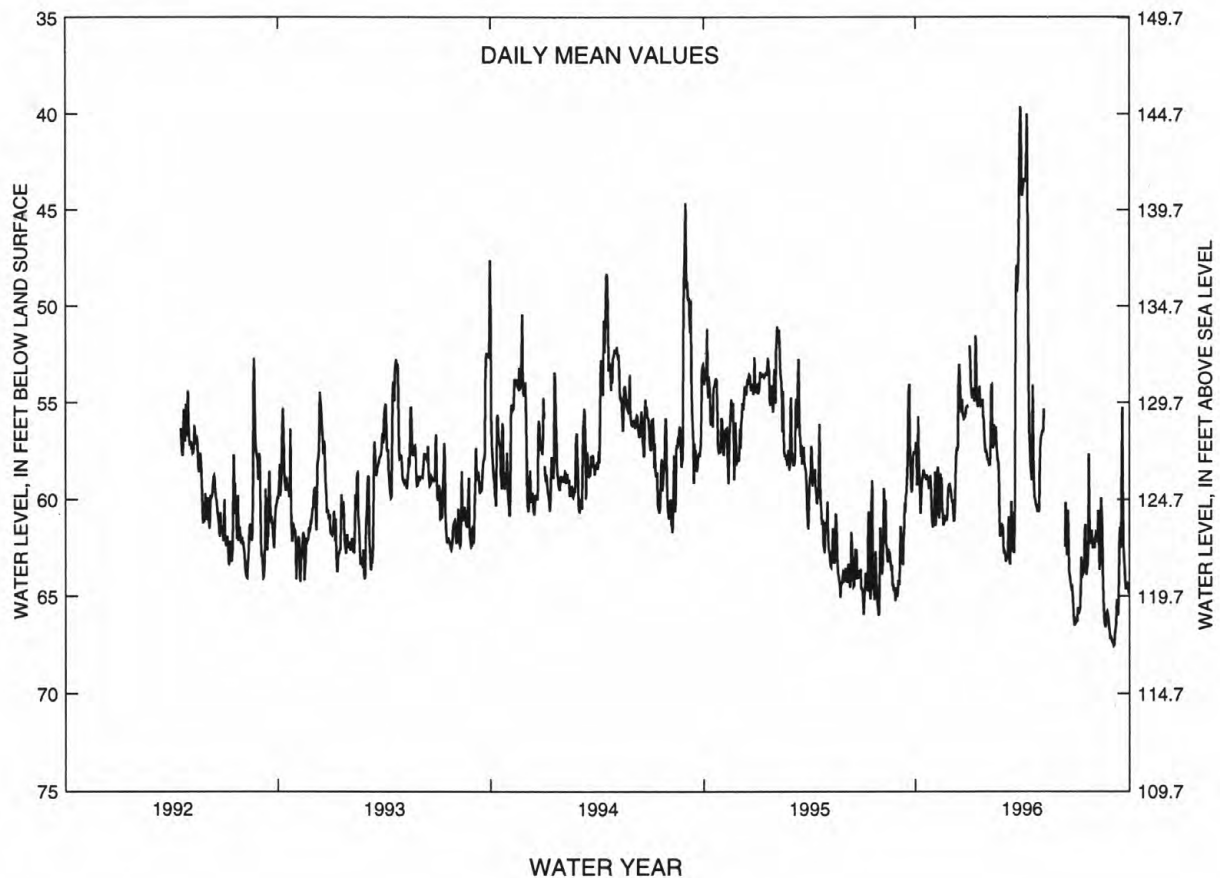
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.05 ft below land surface, Mar. 30, 1996; lowest, 67.74 ft below land surface, Sept. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.43	61.36	60.66	54.43	58.14	63.10	43.38	56.51	---	65.60	61.75	67.53
10	60.72	60.21	57.80	54.94	57.10	63.20	42.87	---	---	64.61	61.98	65.19
15	58.48	58.90	53.01	54.97	57.15	61.94	58.37	---	61.70	63.76	60.63	61.44
20	59.00	61.16	54.83	54.99	58.04	54.06	57.36	---	63.75	63.89	66.49	59.65
25	59.21	60.72	55.76	55.72	61.31	48.17	60.35	---	64.57	60.93	65.96	64.65
EOM	61.38	59.48	---	57.57	62.50	44.04	60.54	---	66.40	62.53	67.18	64.87
MEAN	58.97	60.14	56.92	54.90	58.40	56.00	53.21	---	---	63.58	63.96	64.18
WTR YR 1996 MEAN 59.25 HIGH 39.05 MAR 30 LOW 67.74 SEP 4												

NJ-WRD WELL NO. 13-0094



GROUND-WATER LEVELS

ESSEX COUNTY

404455074203202. Local I.D., East Orange Shallow Obs. NJ-WRD Well Number, 13-0096.

LOCATION.--Lat 40°44'55", long 74°20'32", Hydrologic Unit 02030103, at East Orange Water Company, JFK Blvd. and Parsonage Hill Rd., Millburn Township.

Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 84 ft, screened 79 to 84 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to Apr. 1992.

DATUM.--Land surface is 184.7 ft above sea level.

Measuring point: Top of recorder shelf, 2.40 ft above land surface.

REMARKS.-- Water level is affected by nearby pumping.

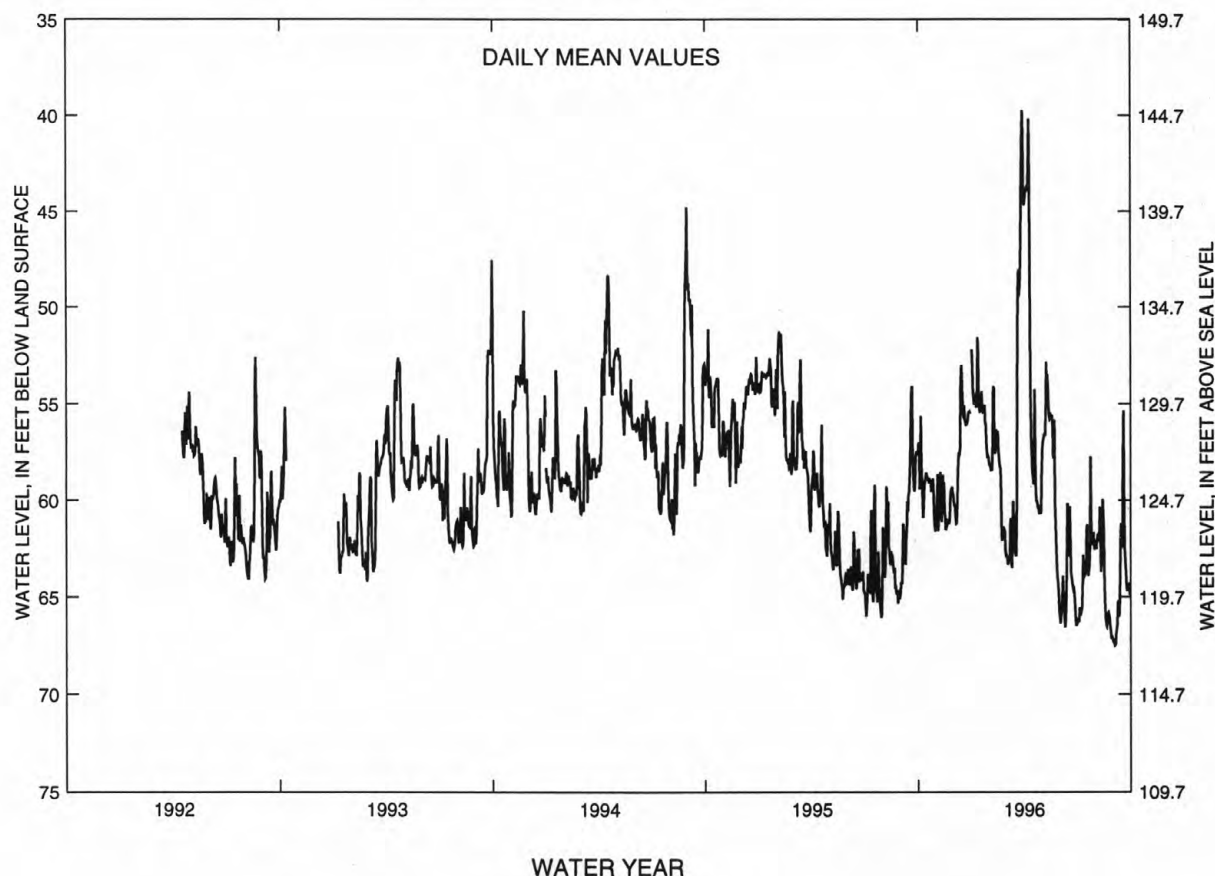
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.17 ft below land surface, Mar. 30, 1996; lowest, 67.69 ft below land surface, Sept. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.37	61.57	60.82	54.66	58.38	63.22	43.76	56.64	64.85	65.56	61.81	67.47
10	60.90	60.40	57.96	55.19	57.36	63.34	43.24	54.79	66.56	64.46	61.96	65.20
15	58.58	59.08	53.01	55.22	57.39	62.07	58.57	55.80	61.72	63.78	60.71	61.21
20	59.11	61.31	55.09	55.23	58.26	53.97	57.53	56.28	63.77	63.90	66.47	59.79
25	59.31	60.86	56.01	55.96	61.47	48.36	60.41	61.19	64.60	61.03	65.95	64.68
EOM	61.55	59.67	---	57.79	62.64	44.46	60.59	65.76	66.38	62.56	67.15	64.89
MEAN	59.07	60.28	57.10	55.11	58.58	56.11	53.42	57.81	64.46	63.57	63.95	64.17
WTR YR 1996 MEAN 59.48 HIGH 39.17 MAR 30 LOW 67.69 SEP 4												

NJ-WRD WELL NO. 13-0096



GROUND-WATER LEVELS

91

GLOUCESTER COUNTY

394119075062701. Local I.D., Glassboro ML-1 Obs. NJ-WRD Well Number, 15-1126.

LOCATION.--Lat 39°41'19", long 75°06'27", Hydrologic Unit 02040206, at the end of Pershing St., Glassboro Borough.

Owner: Glassboro Borough.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 338 ft, screened 328 to 338 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements Jan. to June 1995.

DATUM.--Land surface is 145.95 ft above sea level.

Measuring point: Top of recorder shelf, 2.20 ft above land surface.

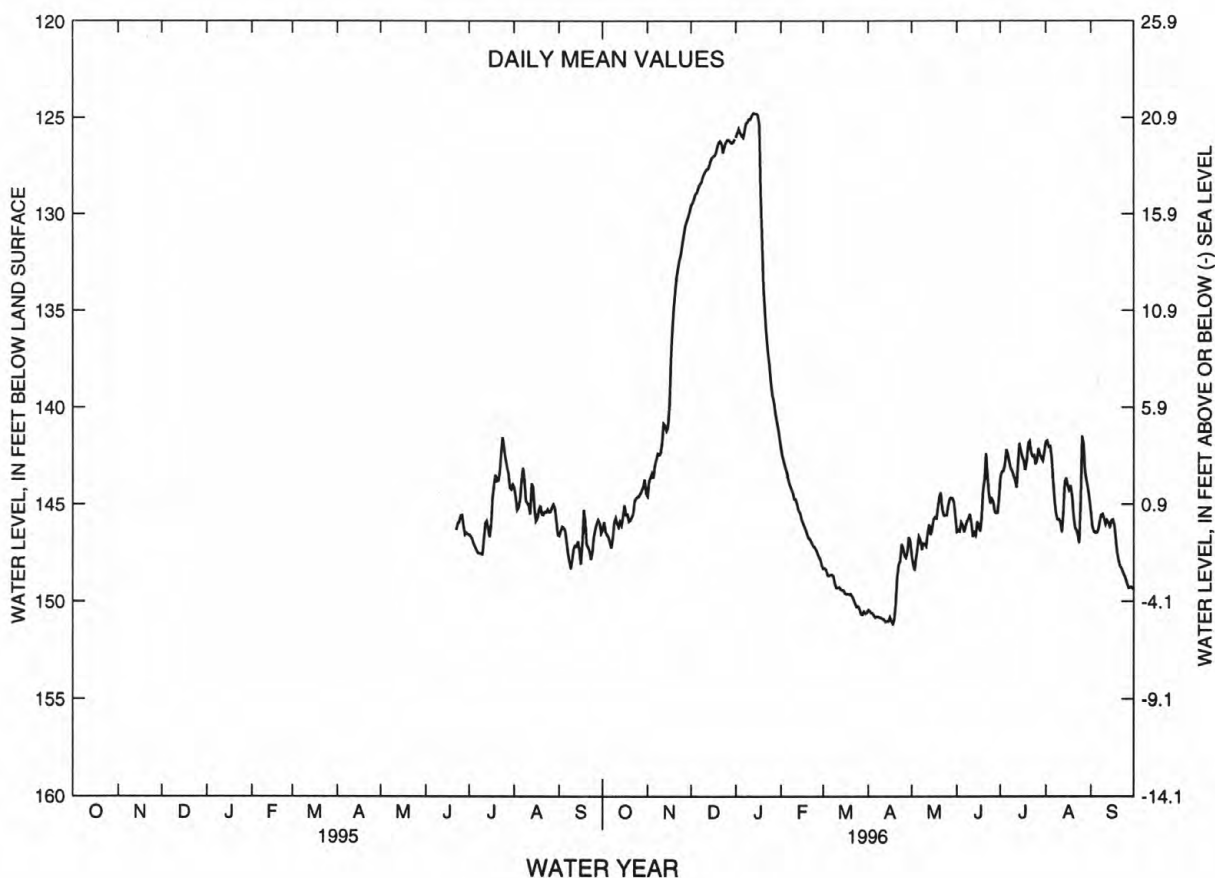
PERIOD OF RECORD.--Jan. 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.76 ft below land surface, Jan. 12-13, 1996; lowest, 151.18 ft below land surface, Apr. 18, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	146.68	143.64	128.90	125.96	143.37	148.69	150.74	147.23	146.08	142.18	142.60	146.48
10	145.73	142.36	127.92	125.09	144.74	149.32	150.85	147.05	145.51	143.55	145.79	145.75
15	145.69	141.02	127.13	124.81	145.77	149.44	151.04	146.31	145.91	142.26	143.64	145.87
20	145.85	134.03	126.31	133.84	146.75	149.63	150.10	144.61	143.72	141.86	145.56	147.92
25	144.63	131.55	126.32	138.75	147.36	150.27	147.27	145.58	144.73	142.94	144.71	148.85
EOM	144.46	129.89	126.13	141.61	148.18	150.59	146.88	145.69	144.60	142.32	144.76	149.38
MEAN	145.60	137.81	127.37	130.76	145.52	149.54	149.73	146.13	145.49	142.76	144.33	147.10
WTR YR 1996	MEAN 142.64 HIGH 124.76 JAN 12-13 LOW 151.18 APR 18											

NJ-WRD WELL NO. 15-1126



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394221075072201. Local I.D., USGS GSC Obs-1 Shallow. NJ-WRD Well Number, 15-1054.

LOCATION.--Lat 39°42'21", long 75°07'22", Hydrologic Unit 02040202, at Rowan College, about 500 ft. north of the intersection of Whitney and Oakwood Streets, Glassboro Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 2 in., depth 36 ft, screened 31 to 36 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--60-minute recording interval. Periodic measurements Mar. 1991 to Nov. 1995.

DATUM.--Land surface is 153.9 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 0.32 ft above land surface.

PERIOD OF RECORD.--Mar. 1991 to current year.

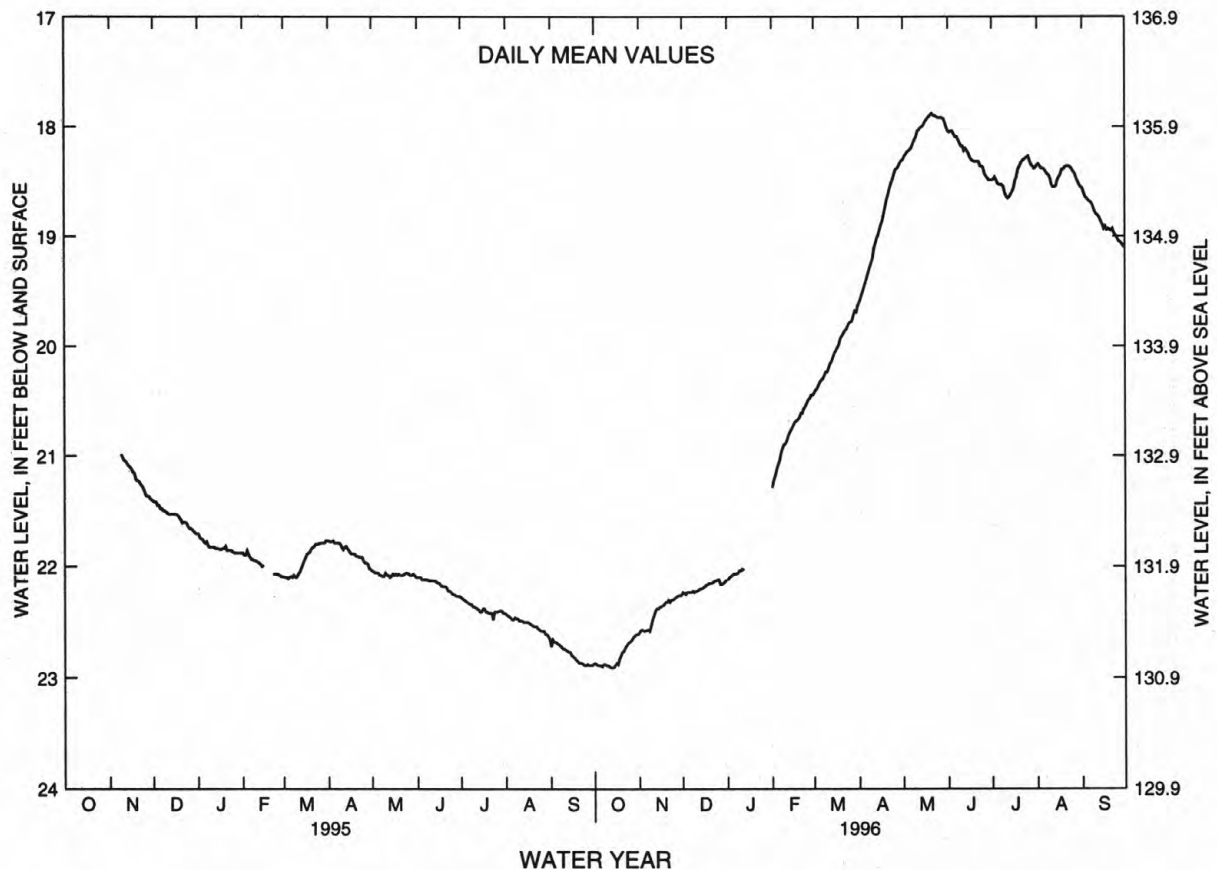
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.88 ft below land surface, May 20-22, 1996; lowest, 22.98 ft below land surface, Sept. 14, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.89	22.58	22.23	22.07	21.08	20.33	19.43	18.22	18.07	18.52	18.38	18.67
10	22.89	22.48	22.22	22.04	20.89	20.24	19.21	18.09	18.18	18.61	18.47	18.78
15	22.89	22.36	22.19	---	20.74	20.06	18.94	17.99	18.24	18.59	18.49	18.89
20	22.77	22.32	22.15	---	20.65	19.91	18.66	17.89	18.32	18.36	18.37	18.94
25	22.68	22.29	22.12	---	20.52	19.79	18.43	17.92	18.37	18.28	18.39	19.01
EOM	22.61	22.26	22.12	---	20.45	19.63	18.31	18.01	18.49	18.37	18.55	19.10
MEAN	22.80	22.40	22.18	---	20.79	20.04	18.87	18.03	18.25	18.46	18.43	18.86

WTR YR 1996 MEAN 20.00 HIGH 17.88 MAY 20-22 LOW 22.91 OCT 4, 11-15

NJ-WRD WELL NO. 15-1054



GROUND-WATER LEVELS

93

GLOUCESTER COUNTY

393246075012701. Local I.D., Newfield 2-A Obs. NJ-WRD Well Number, 15-0372.

LOCATION.--Lat 39°32'38", long 75°00'44", Hydrologic Unit 02040206, about 1,000 ft south of the intersection of Gorgo Lane and Catawba Ave., Newfield Borough.

Owner: Newfield Water Department.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, depth 154 ft, screened 129 to 149 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 120 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 2.80 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

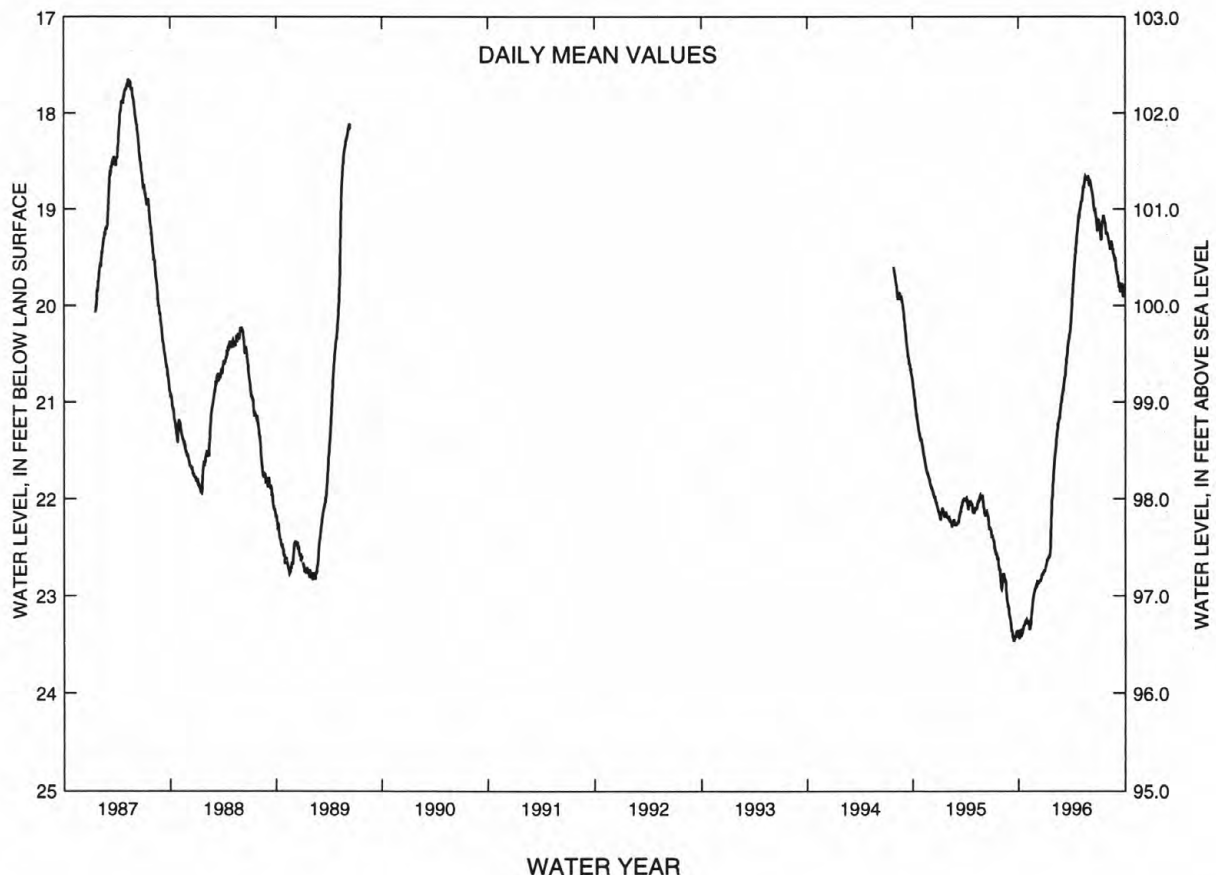
PERIOD OF RECORD.--Jan. 1987 to June 1989, Aug. 1994 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 17.61 ft below land surface, May 10-12, 1987; lowest, 23.53 ft below land surface, Sept. 14-15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.42	23.28	22.87	22.67	21.51	20.83	19.87	18.92	18.73	19.16	19.30	19.67
10	23.36	23.32	22.85	22.61	21.34	20.74	19.63	18.82	18.80	19.28	19.38	19.76
15	23.37	23.16	22.84	22.60	21.22	20.54	19.46	18.75	18.91	19.13	19.36	19.85
20	23.30	23.04	22.79	22.38	21.14	20.40	19.25	18.67	19.00	19.07	19.42	19.81
25	23.27	22.94	22.76	21.98	21.01	20.30	19.10	18.70	19.08	19.15	19.48	19.91
EOB	23.25	22.90	22.73	21.66	20.93	20.13	18.99	18.72	19.19	19.25	19.58	19.91
MEAN	23.33	23.13	22.82	22.37	21.25	20.54	19.46	18.77	18.93	19.17	19.40	19.78
WTR YR 1996	MEAN 20.75 HIGH 18.63 MAY 20 LOW 23.49 OCT 2-5											

NJ-WRD WELL NO. 15-0372



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394354075025901. Local I.D., WTMUA Monitoring 1 Obs. NJ-WRD Well Number, 15-1033.

LOCATION.--Lat 39°43'54", long 75°02'59", Hydrologic Unit 02040202, next to the Washington Township MUA water tank at the intersection of White Birches Rd. and Rt. 655 (Fries Mill Rd.), Washington Township.
Owner: Washington Township Municipal Utilities Authority.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 54 ft, screened 44 to 54 ft.

INSTRUMENTATION.--Submersible logger pressure transducer--60 minute recording interval. Daily mean recorded from Aug. 1989 to Apr. 21, 1992; water level recorded hourly Apr. 22, 1992 to present.

DATUM.--Land surface is 150 ft above sea level, from topographic map.
Measuring point: Top of outer protective casing, 2.50 ft above land surface.

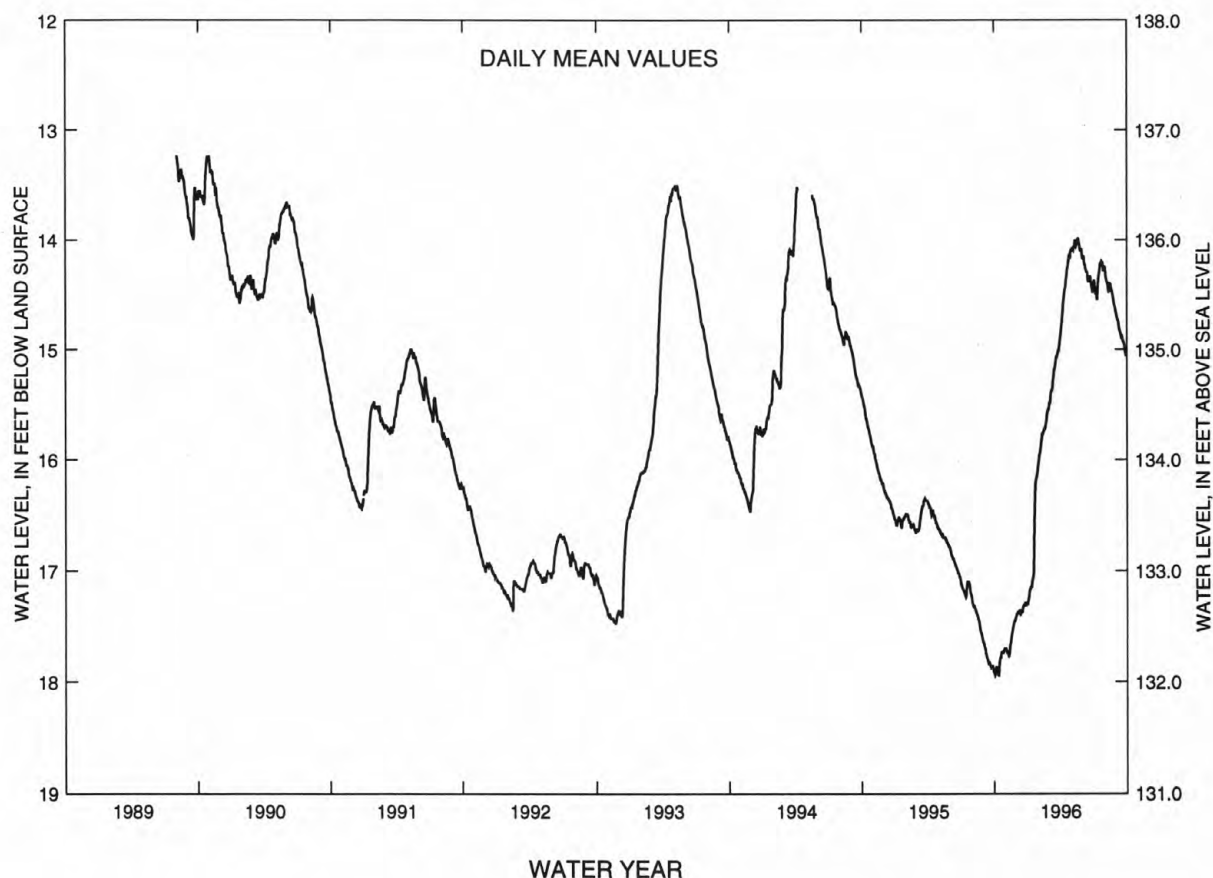
PERIOD OF RECORD.--Aug. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.14 ft below land surface, Aug. 2, 1989; lowest, 17.95 ft below land surface, Oct. 13-15, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.93	17.72	17.39	17.24	15.94	15.44	14.74	14.08	14.19	14.45	14.36	14.72
10	17.90	17.76	17.37	17.15	15.82	15.36	14.55	14.04	14.27	14.52	14.43	14.80
15	17.89	17.67	17.38	17.08	15.74	15.18	14.43	14.05	14.34	14.35	14.40	14.88
20	17.78	17.56	17.33	16.64	15.70	15.08	14.26	13.99	14.38	14.22	14.47	14.92
25	17.73	17.47	17.30	16.18	15.57	15.02	14.15	14.09	14.39	14.21	14.54	14.98
EOM	17.70	17.42	17.31	16.05	15.54	14.91	14.09	14.15	14.46	14.26	14.65	15.06
MEAN	17.83	17.62	17.35	16.80	15.76	15.20	14.43	14.06	14.32	14.34	14.45	14.86
WTR YR 1996	MEAN 15.59	HIGH 13.97	MAY 11	LOW 17.95	OCT 13-15							

NJ-WRD WELL NO. 15-1033



GROUND-WATER LEVELS

95

GLOUCESTER COUNTY

394652075100401. Local I.D., Mantua Shallow Obs. NJ-WRD Well Number, 15-0741.

LOCATION.--Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Department off Main Street (County Rt. 553), Mantua Township.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 313 ft, screened 293 to 313 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 82 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 4.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping. Water-quality data for 1996 are available elsewhere in this report.

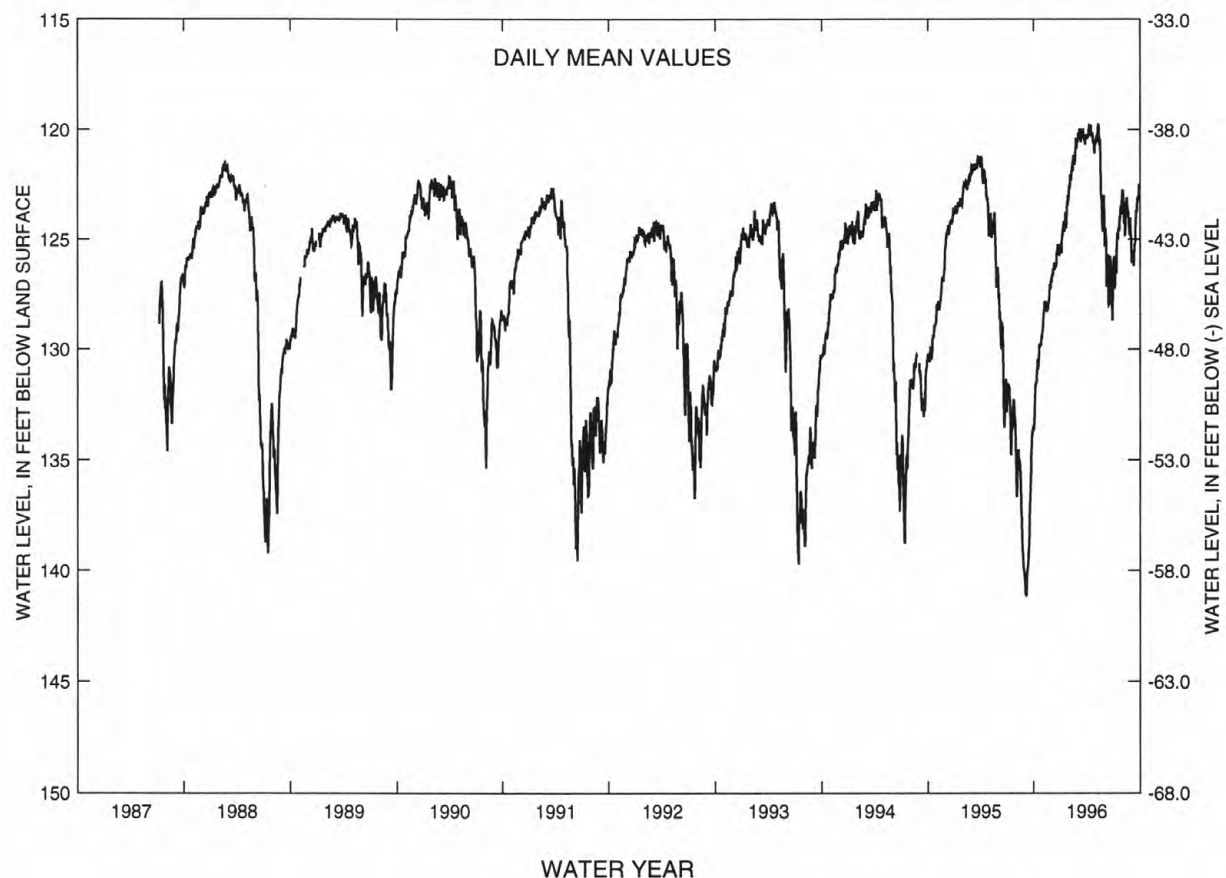
PERIOD OF RECORD.--July 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 119.40 ft below land surface, May 11, 1996; lowest, 141.36 ft below land surface, Sept. 6-7, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	132.56	128.40	126.66	125.63	122.18	120.26	120.21	120.25	124.55	125.79	122.95	125.97
10	131.50	128.22	126.40	124.42	121.88	119.99	119.82	120.03	127.08	126.13	124.19	126.17
15	130.60	128.09	126.21	124.60	121.17	120.02	119.91	120.71	126.53	124.91	123.29	125.20
20	130.14	128.16	125.52	124.14	121.45	120.08	120.31	122.91	126.03	124.44	123.82	123.78
25	129.78	127.32	125.45	123.25	120.66	120.48	120.51	124.46	126.58	124.09	124.36	123.17
EOM	129.28	126.86	125.38	122.54	120.45	120.31	120.48	123.38	128.30	123.28	124.76	122.49
MEAN	130.94	127.96	126.03	124.26	121.49	120.27	120.28	121.64	126.37	125.09	123.82	124.57
WTR YR 1996	MEAN 124.40	HIGH 119.40	MAY 11	LOW 134.07	OCT 1-2							

NJ-WRD WELL NO. 15-0741



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394652075100402. Local I.D., Mantua Deep Obs. NJ-WRD Well Number, 15-0742.

LOCATION.--Lat 39°46'52", long 75°10'04", Hydrologic Unit 02040202, at the Township of Mantua Road Department off Main Street (County Rt. 553), Mantua Township.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 777 ft, screened 757 to 777 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 84 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 4.20 ft above land surface.

REMARKS.--Water level is affected by nearby pumping. Water-quality data for 1996 are available elsewhere in this report.

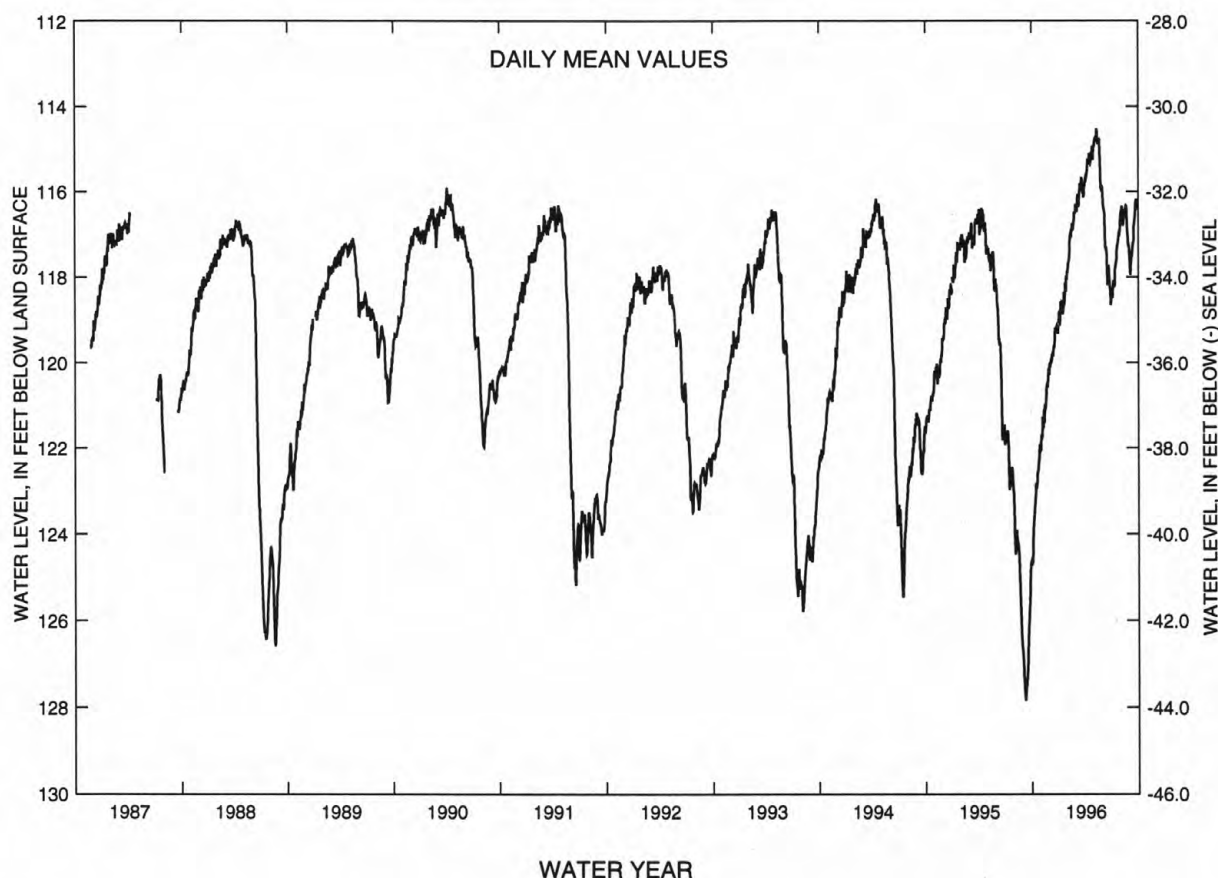
PERIOD OF RECORD.--Nov. 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 114.47 ft below land surface, May 11-12, 1996; lowest, 127.89 ft below land surface, Sept. 8-9, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	124.16	121.76	120.04	119.06	117.62	116.29	115.67	114.78	116.42	118.48	116.37	117.95
10	123.49	121.49	119.80	118.66	117.10	116.36	115.28	114.68	117.33	---	116.80	117.53
15	122.88	120.98	119.66	118.75	116.93	115.82	115.31	114.89	117.47	117.75	116.49	117.22
20	122.79	120.74	119.20	118.66	116.85	115.67	115.30	114.76	117.99	117.31	116.34	116.60
25	122.33	120.46	119.17	118.31	116.51	115.94	115.06	115.87	118.17	117.05	116.93	116.18
EOM	122.06	120.22	119.15	117.85	116.45	115.83	114.94	115.94	118.60	116.69	117.33	116.26
MEAN	123.09	121.02	119.59	118.56	117.00	116.04	115.33	115.09	117.48	117.64	116.66	117.01
WTR YR 1996	MEAN 117.88 HIGH 114.47 MAY 11-12 LOW 124.75 OCT 3											

NJ-WRD WELL NO. 15-0742



GROUND-WATER LEVELS

97

GLOUCESTER COUNTY

394808075172401. Local I.D., Stefka 1 Obs. NJ-WRD Well Number, 15-0712.

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 295 ft, screened 275 to 290 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 6.50 ft above sea level.

Measuring point: Top of recorder shelf, 2.20 ft above land surface.

REMARKS.--Water-quality data for 1996 are available elsewhere in this report.

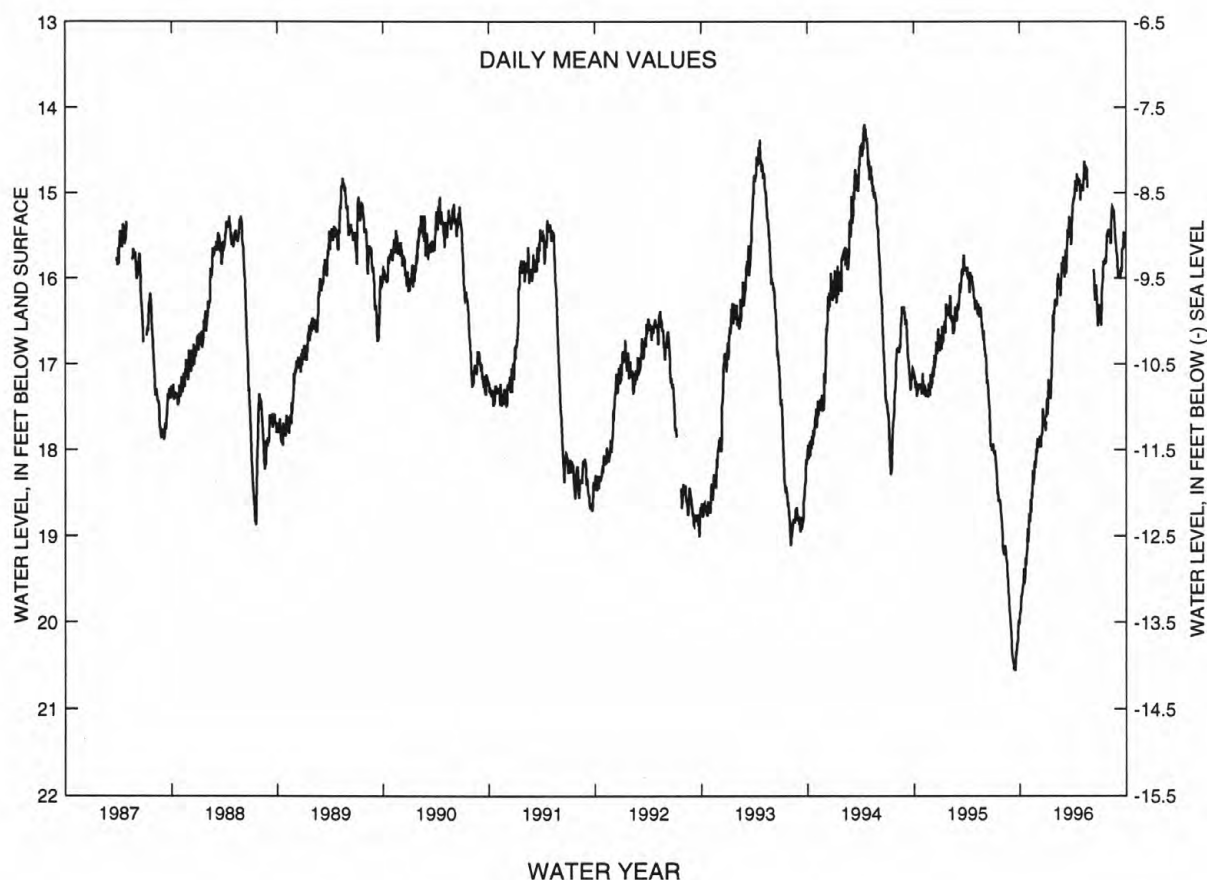
PERIOD OF RECORD.--Mar. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.15 ft below land surface, Apr. 16, 1994; lowest, 20.58 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.79	18.84	17.97	17.56	16.31	15.89	15.09	14.93	---	16.47	15.46	15.97
10	19.64	18.72	17.85	17.29	16.06	15.95	14.87	14.78	---	16.37	15.59	15.96
15	19.38	18.24	17.84	17.34	16.07	15.43	14.99	14.85	16.04	15.95	15.18	15.88
20	19.43	18.25	17.52	---	16.17	15.28	14.83	14.72	16.10	15.82	15.20	15.65
25	19.21	18.17	17.64	16.57	15.86	15.47	14.92	---	16.35	15.80	15.46	15.51
EOM	19.04	18.02	17.67	16.25	15.88	15.28	14.93	---	16.42	15.46	15.71	15.59
MEAN	19.47	18.41	17.79	17.05	16.07	15.60	14.96	---	---	16.00	15.41	15.79
WTR YR 1996	MEAN 16.52	HIGH 14.58	MAY 11-12	LOW 19.96	OCT 1							

NJ-WRD WELL NO. 15-0712



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394808075172402. Local I.D., Stefka 2 Obs. NJ-WRD Well Number, 15-0713.

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 155 ft, screened 125 to 155 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 5.64 ft above sea level.

Measuring point: Top of recorder shelf, 3.00 ft above land surface.

REMARKS.--Water-quality data for 1996 are available elsewhere in this report.

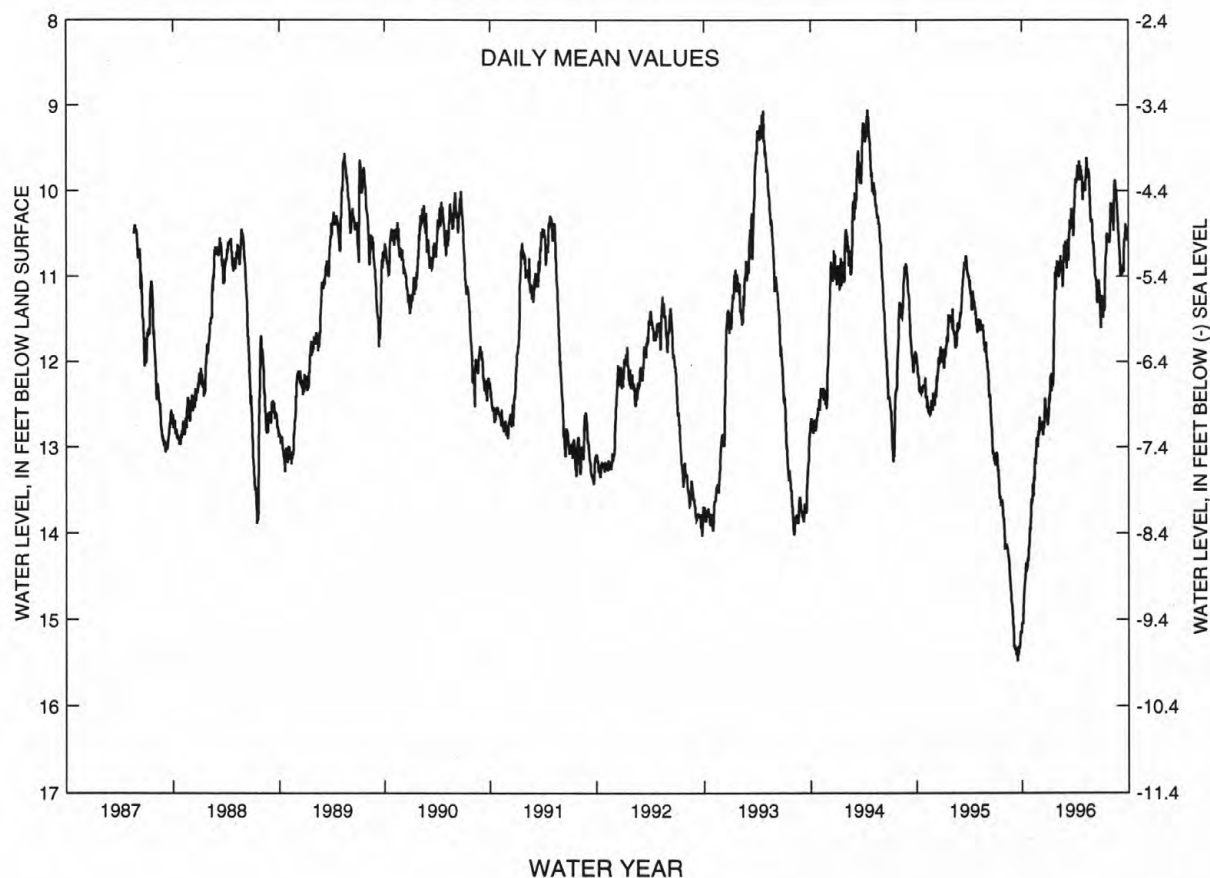
PERIOD OF RECORD.--May 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.00 ft below land surface, Apr. 16, 1994; lowest, 15.50 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.97	13.65	12.77	12.44	---	10.76	9.90	9.95	10.69	11.39	10.16	10.99
10	14.59	13.55	12.73	12.27	10.88	10.82	9.70	9.74	11.00	11.34	10.35	10.96
15	14.34	13.13	12.79	12.28	10.94	10.34	9.88	9.85	11.16	10.79	9.91	10.93
20	14.37	12.98	12.43	11.68	11.07	10.21	9.71	9.82	11.10	10.50	10.00	10.56
25	14.16	12.93	12.56	11.15	10.69	10.35	9.88	10.33	11.18	10.60	10.24	10.48
EOM	13.88	12.81	12.64	10.83	10.77	10.14	9.97	10.47	11.52	10.40	10.65	10.48
MEAN	14.46	13.22	12.68	11.83	10.86	10.49	9.84	9.99	11.06	10.91	10.20	10.72
WTR YR 1996	MEAN 11.36	HIGH 9.56	MAY 11-12	LOW 15.09	OCT 1							

NJ-WRD WELL NO. 15-0713



GROUND-WATER LEVELS

99

GLOUCESTER COUNTY

394808075172403. Local I.D., Stefka 3 Obs. NJ-WRD Well Number, 15-0727.

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station Roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 210 ft, screened 195 to 205 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Jun. 1987 to Nov. 1988.

DATUM.--Land surface is 5.06 ft above sea level.

Measuring point: Top of shelter shelf, 2.90 ft above land surface.

REMARKS.--Water-quality data for 1996 are available elsewhere in this report.

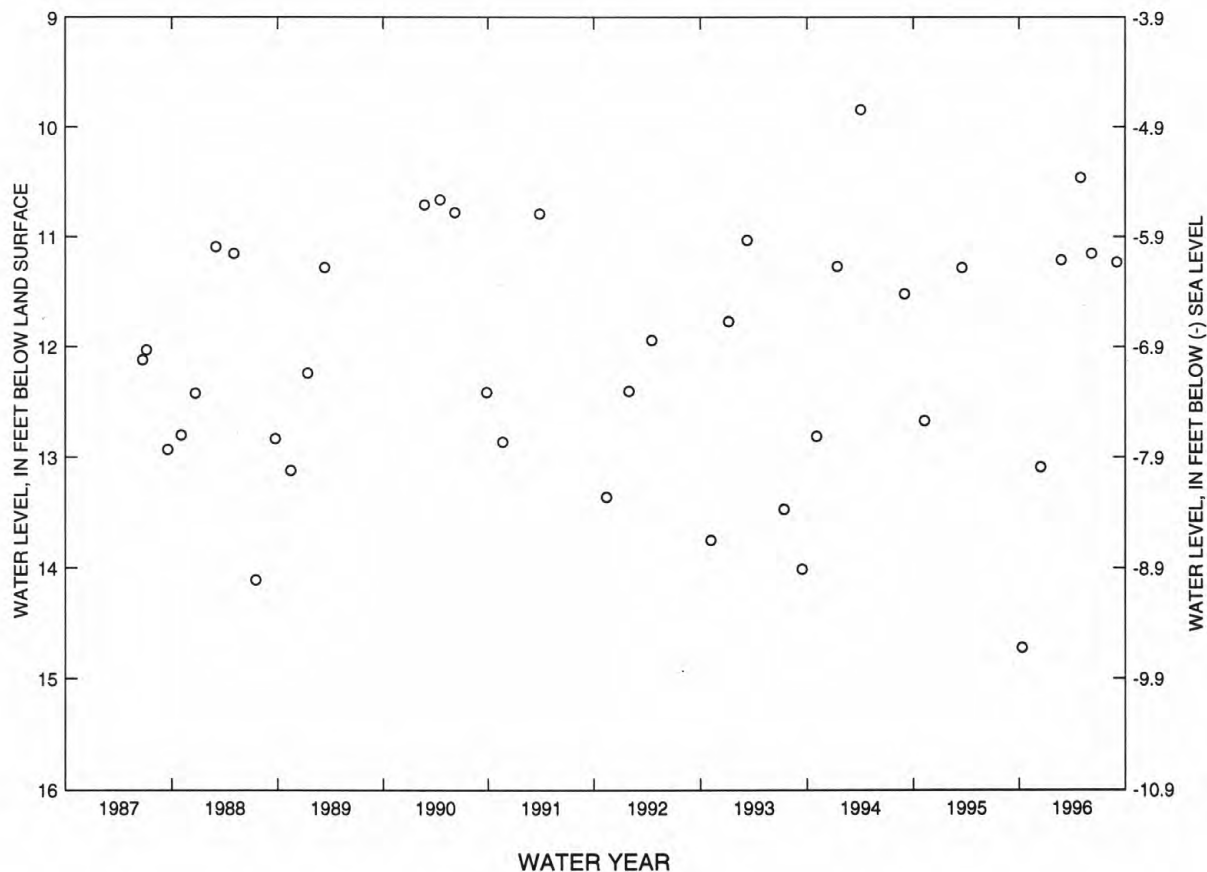
PERIOD OF RECORD.--June 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.84 ft below land surface, Apr. 4, 1994; lowest, 14.72 ft below land surface, Oct. 11, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	14.72	FEB 23	11.21	JUN 7	11.15
DEC 15	13.09	MAY 1	10.46	SEP 3	11.23

NJ-WRD WELL NO. 15-0727



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394808075172404. Local I.D., Stefka 4 Obs. NJ-WRD Well Number, 15-0728.

LOCATION.--Lat 39°48'08", long 75°17'24", Hydrologic Unit 02040202, near the intersection of Swedesboro and Tomlin Station roads, next to Pargey Creek, on land owned by Mr. William Stefka, Greenwich Township.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 56 ft, screened 46 to 56 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 4.46 ft above sea level.

Measuring point: Top of recorder shelf, 3.20 ft above land surface.

REMARKS.--Water-quality data for 1996 are available elsewhere in this report.

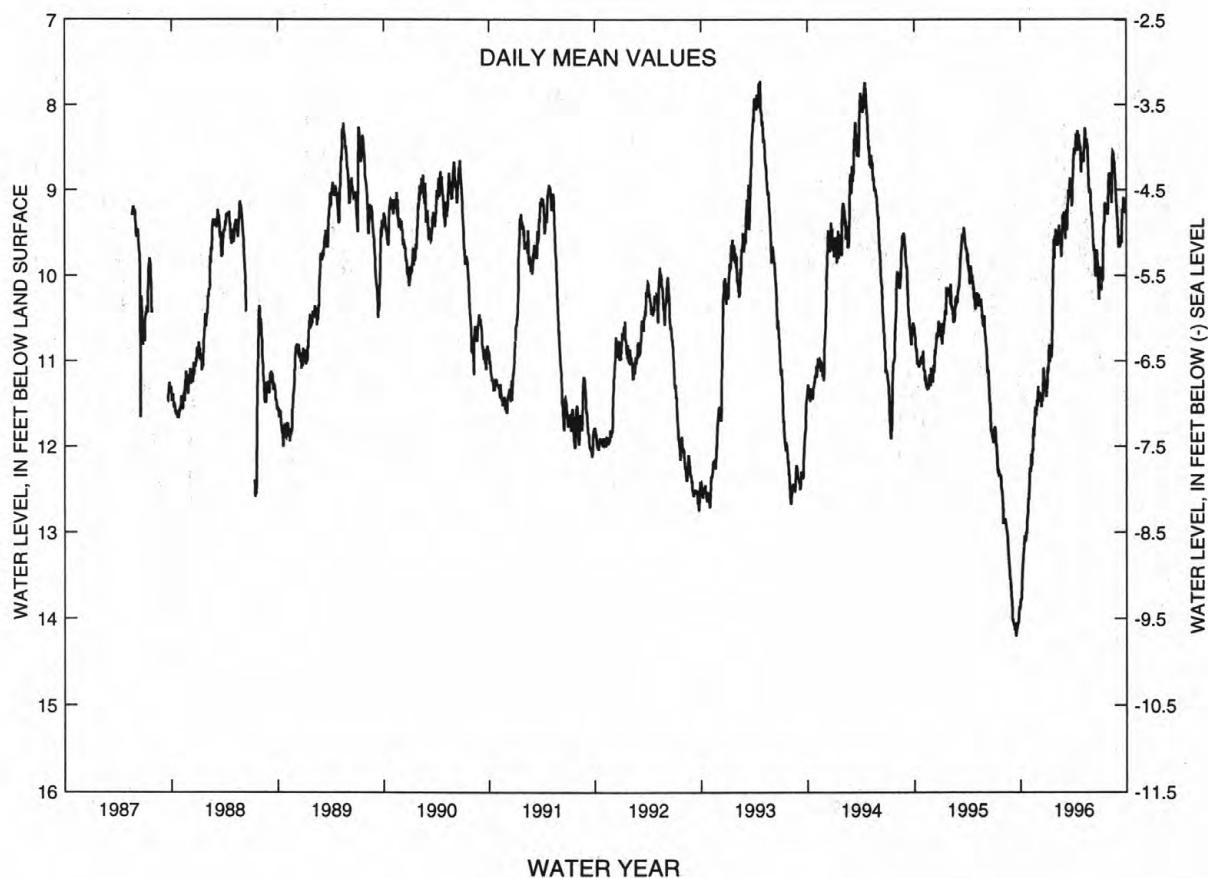
PERIOD OF RECORD.--May 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.70 ft below land surface, Apr. 22, 1993, Apr. 16, 1994; lowest, 14.20 ft below land surface, Sept. 15-16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.73	12.30	11.43	11.11	9.63	9.42	8.54	8.62	9.35	10.05	8.83	9.67
10	13.30	12.21	11.40	10.93	9.54	9.47	8.35	8.40	9.68	9.99	9.03	9.64
15	13.04	11.78	11.46	10.93	9.59	9.00	8.54	8.51	9.83	9.44	8.58	9.61
20	13.07	11.64	11.08	10.32	9.74	8.86	8.35	8.48	9.78	9.15	8.68	9.23
25	12.82	11.59	11.24	9.77	9.34	9.03	8.54	8.99	9.85	9.27	8.93	9.16
EOM	12.54	11.47	11.35	9.46	9.42	8.80	8.64	9.13	10.22	9.08	9.32	9.16
MEAN	13.16	11.88	11.35	10.49	9.52	9.15	8.50	8.65	9.75	9.58	8.88	9.40
WTR YR 1996 MEAN 10.03 HIGH 8.23 MAY 11-12 LOW 13.82 OCT 1												

NJ-WRD WELL NO. 15-0728



GROUND-WATER LEVELS

101

GLOUCESTER COUNTY

394942075131701. Local I.D., Shell 5 Obs/sealed. NJ-WRD Well Number, 15-0296.

LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the intersection of Mantua Grove Rd. and I-295, West Deptford Township.
Owner: Huntsman Polypropylene Corp.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 327 ft, screened 321 to 326 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 20.76 ft above sea level.

Measuring point: Top of recorder shelf, 2.90 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

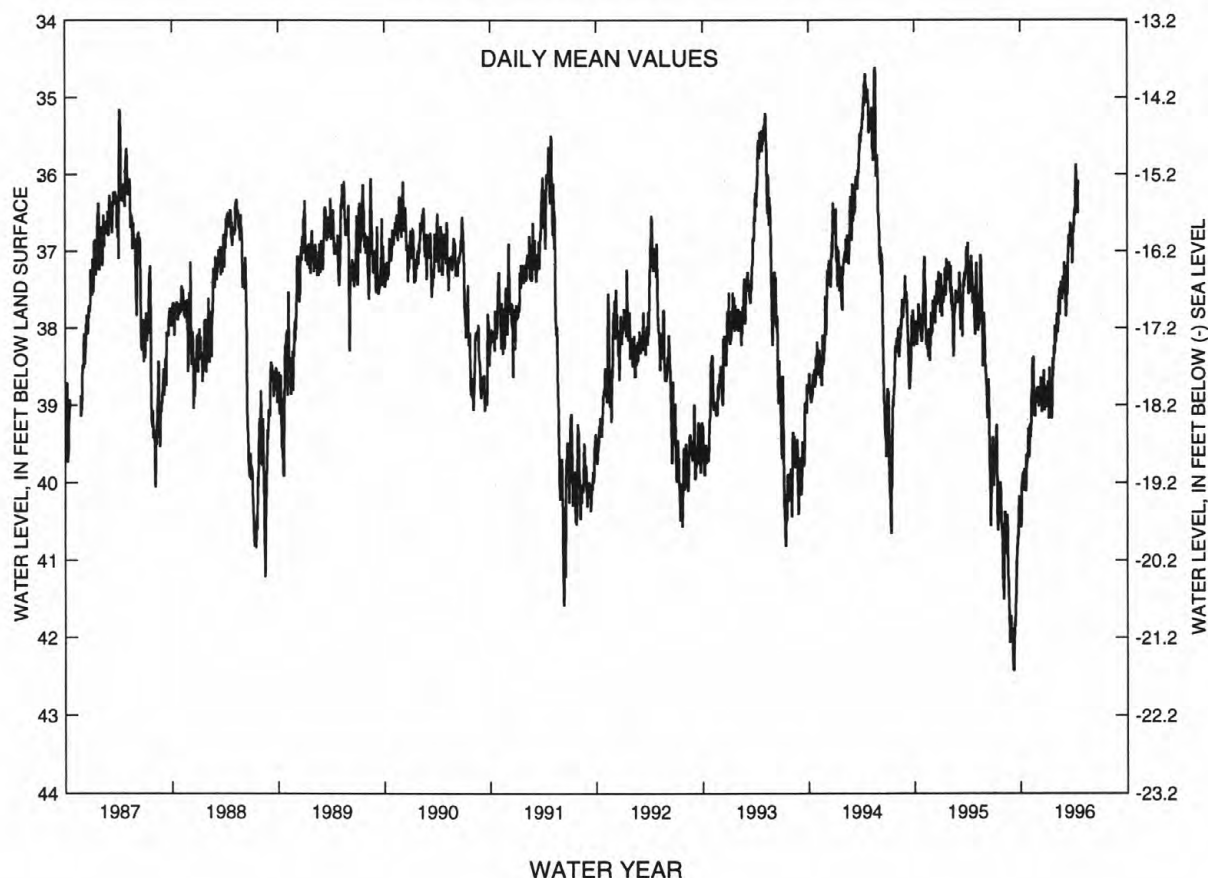
PERIOD OF RECORD.--June 1962 to April 1996 (discontinued). Records for 1962 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 27.75 ft below land surface, Dec. 6, 1962; lowest, 42.76 ft below land surface, Sept. 8, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.07	39.36	38.82	38.82	38.06	37.83	36.54	---	---	---	---	---
10	39.86	38.71	38.81	38.81	37.66	37.57	36.18	---	---	---	---	---
15	39.82	38.68	39.05	39.06	37.54	36.79	36.51	---	---	---	---	---
20	39.99	39.15	38.55	38.63	37.56	36.63	---	---	---	---	---	---
25	39.67	38.92	38.77	38.34	37.49	36.74	---	---	---	---	---	---
EOM	39.60	38.93	38.97	38.12	37.49	36.75	---	---	---	---	---	---
MEAN	39.91	38.95	38.88	38.64	37.62	37.08	---	---	---	---	---	---
WTR YR 1996	HIGH 35.51 APR 9 LOW 40.83 OCT 3											

NJ-WRD WELL NO. 15-0296



GROUND-WATER LEVELS

GLOUCESTER COUNTY

394942075131702. Local I.D., Shell 6 Obs./sealed. NJ-WRD Well Number, 15-0297.

LOCATION.--Lat 39°49'42", long 75°13'17", Hydrologic Unit 02040202, near the intersection of Mantua Grove Rd. and I-295, West Deptford Township.
Owner: Huntsman Polypropylene Corp.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 120 ft, screened 113 to 118 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, June 1962 to July 1970.

DATUM.--Land surface is 20.50 ft above sea level.

Measuring point: Top of shelf, 3.30 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

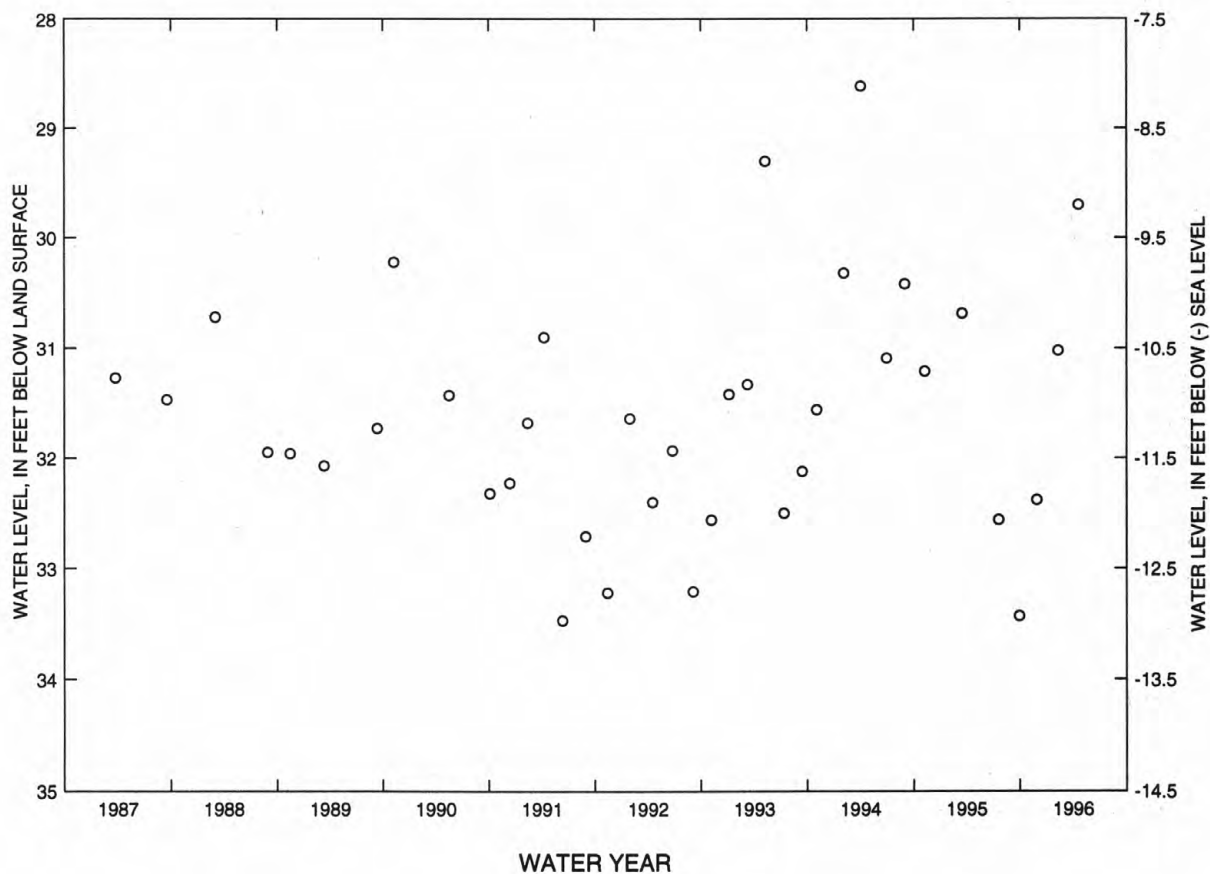
PERIOD OF RECORD.--June 1962 to April 1996 (discontinued). Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.84 ft below land surface, June 6, 1962; lowest, 33.65 ft below land surface, Aug. 28, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 28	32.38	FEB 9	31.02	APR 18	29.70

NJ-WRD WELL NO. 15-0297



GLOUCESTER COUNTY

394957075053001. Local I.D., Deptford Deep Obs. NJ-WRD Well Number, 15-0671.

LOCATION.--Lat 39°49'57", long 75°05'30", Hydrologic Unit 02040202, at N.J. Department of Transportation facility, N.J. Rt. 41, Deptford Township.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 670 ft, screened 650 to 670 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 35 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 3.55 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping. Water-quality data for 1996 are available elsewhere in this report.

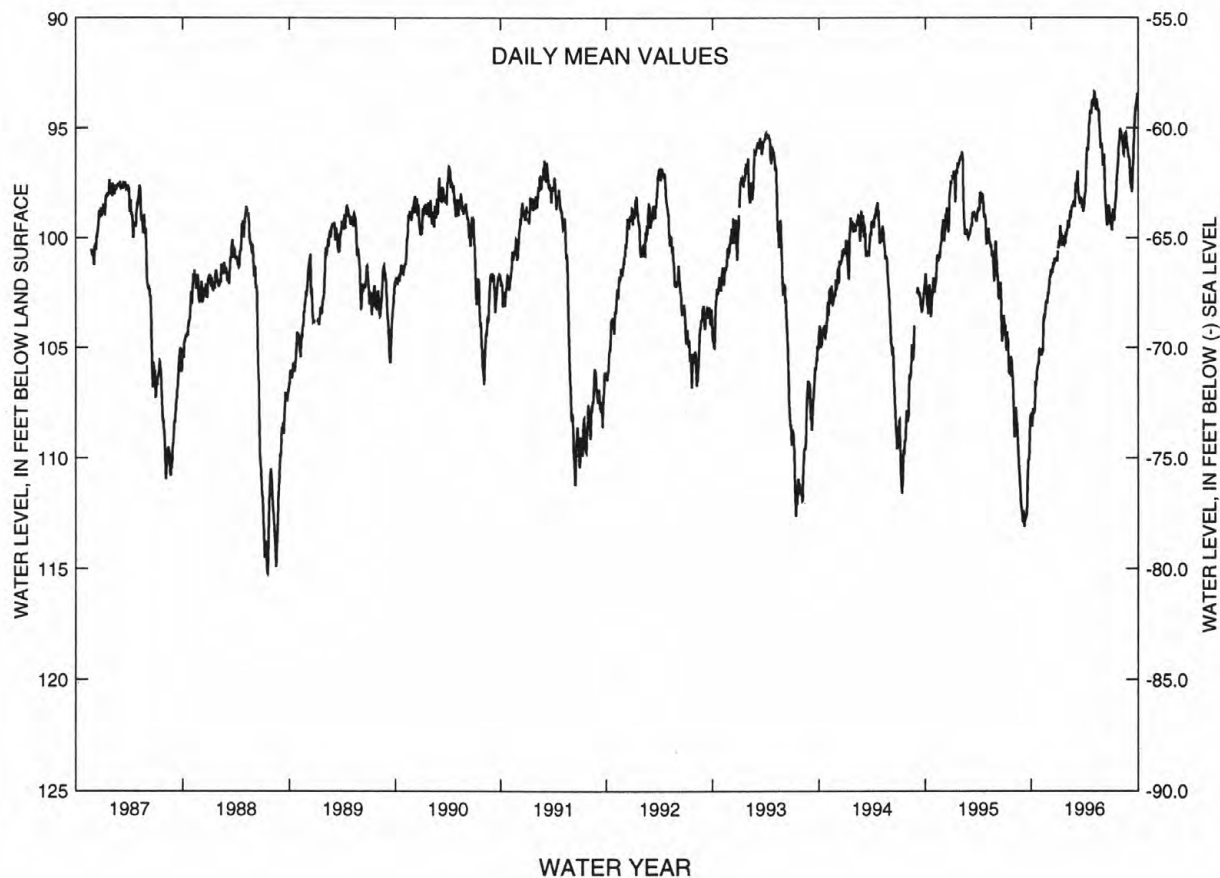
PERIOD OF RECORD.--June 1986 to current year. Records for 1986 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 93.11 ft below land surface, May 4, 1996; lowest 115.36 ft below land surface, July 19, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	108.42	105.36	101.77	100.33	99.27	97.58	97.50	93.36	---	99.36	95.23	97.37
10	107.91	105.11	101.47	99.76	99.08	97.89	95.88	94.16	97.81	99.03	95.80	97.81
15	106.52	103.47	101.16	100.11	98.84	98.25	95.36	94.13	98.96	98.44	95.72	96.62
20	106.35	102.98	100.93	100.33	98.56	98.16	94.19	94.29	99.00	97.32	95.29	94.74
25	105.78	102.84	100.97	100.13	98.44	98.50	94.08	95.56	98.64	96.54	95.77	93.91
EOM	105.17	102.44	100.60	99.62	97.93	98.33	93.90	95.87	99.36	95.16	96.31	93.43
MEAN	106.86	103.80	101.30	100.05	98.84	98.09	95.45	94.45	98.20	97.87	95.62	95.81
WTR YR 1996	MEAN 98.87	HIGH 93.11	MAY 4	LOW 108.71	OCT 4							

NJ-WRD WELL NO. 15-0671



GROUND-WATER LEVELS

GLOUCESTER COUNTY

395232075094201. Local I.D., Eagle Point 3 Obs. NJ-WRD Well Number, 15-0323.

LOCATION.--Lat 39°52'35", long 75°09'50", Hydrologic Unit 02040202, at the Coastal Eagle Point Oil Company, West Deptford Township.
Owner: Coastal Eagle Point Oil Company.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 276 ft, screened 255 to 275 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Apr. 1981 to Dec. 1984. Periodic measurements, July 1975 to Apr. 1981. Water-level recorder, Nov. 1949 to July 1975.

DATUM.--Land surface is 20.96 ft above sea level.

Measuring point: Top of casing, 3.00 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

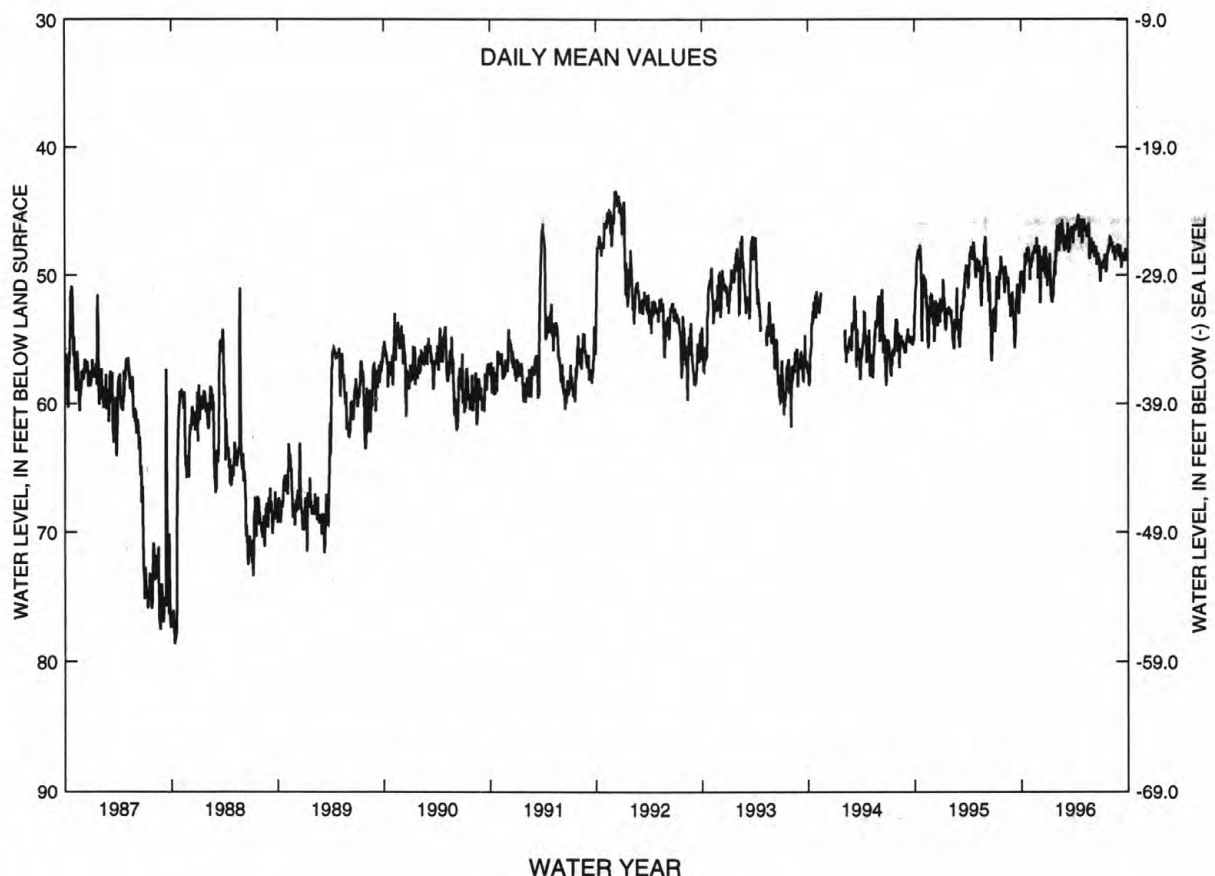
PERIOD OF RECORD.--Nov. 1949 to current year. Records for 1975 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.70 ft below land surface, Nov. 25, 1950; lowest, 87.30 ft below land surface, June 28, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.49	48.96	52.16	49.83	47.72	47.31	46.47	46.09	47.42	49.41	47.33	47.84
10	51.06	48.52	49.74	51.20	46.32	47.99	45.81	46.28	48.40	49.15	47.59	49.41
15	48.73	47.85	48.87	52.11	46.19	47.91	46.38	46.22	48.25	48.50	48.09	48.36
20	48.54	48.15	49.65	50.52	46.69	46.30	45.84	46.40	48.38	49.61	47.94	48.81
25	47.96	48.15	50.20	49.97	48.10	46.50	47.04	48.39	48.75	48.29	47.81	48.09
EOM	50.34	48.74	50.20	46.85	47.97	46.19	45.94	47.71	49.99	47.14	48.55	48.54
MEAN	49.33	48.48	49.31	49.94	46.94	46.99	46.24	46.88	48.62	48.73	47.86	48.48
WTR YR 1996 MEAN 48.15 HIGH 44.39 FEB 18 LOW 53.60 DEC 5												

NJ-WRD WELL NO. 15-0323



HUNTERDON COUNTY

402151074525301. Local I.D., Corsalo Rd TB 1 Obs. NJ-WRD Well Number, 19-0251.

LOCATION.--Lat 40°21'51", long 74°52'53", Hydrologic Unit 02040105, 1,100 ft east of the intersection of County Rt. 518 and Corsalo Rd., West Amwell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 3 in., depth 299 ft, open hole 21.5 to 299 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 405 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.50 ft above land surface.

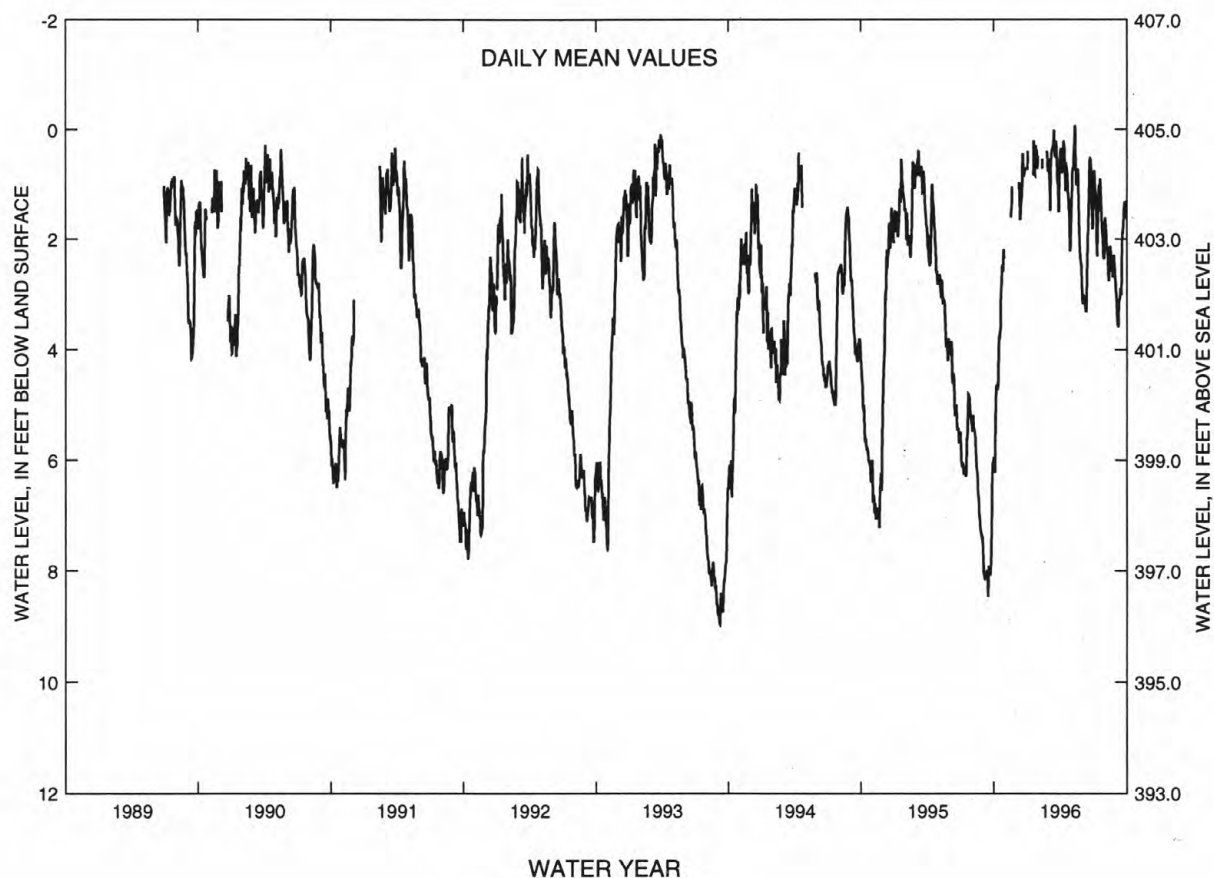
PERIOD OF RECORD.--June 1989 to current year. Records for 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land surface, Mar. 13, 1993; lowest, 9.00 ft below land surface, Sep. 8, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.22	---	---	---	---	1.18	.62	.72	3.08	.94	1.92	3.51
10	4.65	---	.97	---	---	---	.21	.20	3.29	1.80	2.35	3.10
15	4.04	---	1.41	---	---	.01	1.12	.98	2.12	1.24	2.19	2.93
20	3.60	1.35	.44	.74	---	.21	.75	.81	.77	.93	2.57	1.84
25	2.47	---	.77	---	.52	.93	1.48	2.21	.69	1.87	2.33	1.32
EOM	---	---	---	.49	---	.53	1.87	2.89	1.73	2.28	2.89	1.30
MEAN	4.06	---	---	---	---	.68	.90	1.22	2.10	1.49	2.32	2.48
WTR YR 1996	HIGH -.17 MAY 12 LOW 6.38 OCT 5											

NJ-WRD WELL NO. 19-0251



GROUND-WATER LEVELS

HUNTERDON COUNTY

402644074563601. Local I.D., Bird Obs. NJ-WRD Well Number, 19-0002.

LOCATION.--Lat 40°26'44", long 74°56'36", Hydrologic Unit 02040105, near U.S. Post Office, Sergeantsville, Delaware Township.
Owner: Phillip Fleming.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 36 in., depth 21 ft, lined with stone.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, July 1970 to May 1977. Water-level recorder, June 1965 to July 1970.

DATUM.--Land surface is 342.08 ft above sea level.

Measuring point: Top of recorder shelf, 1.50 ft above land surface.

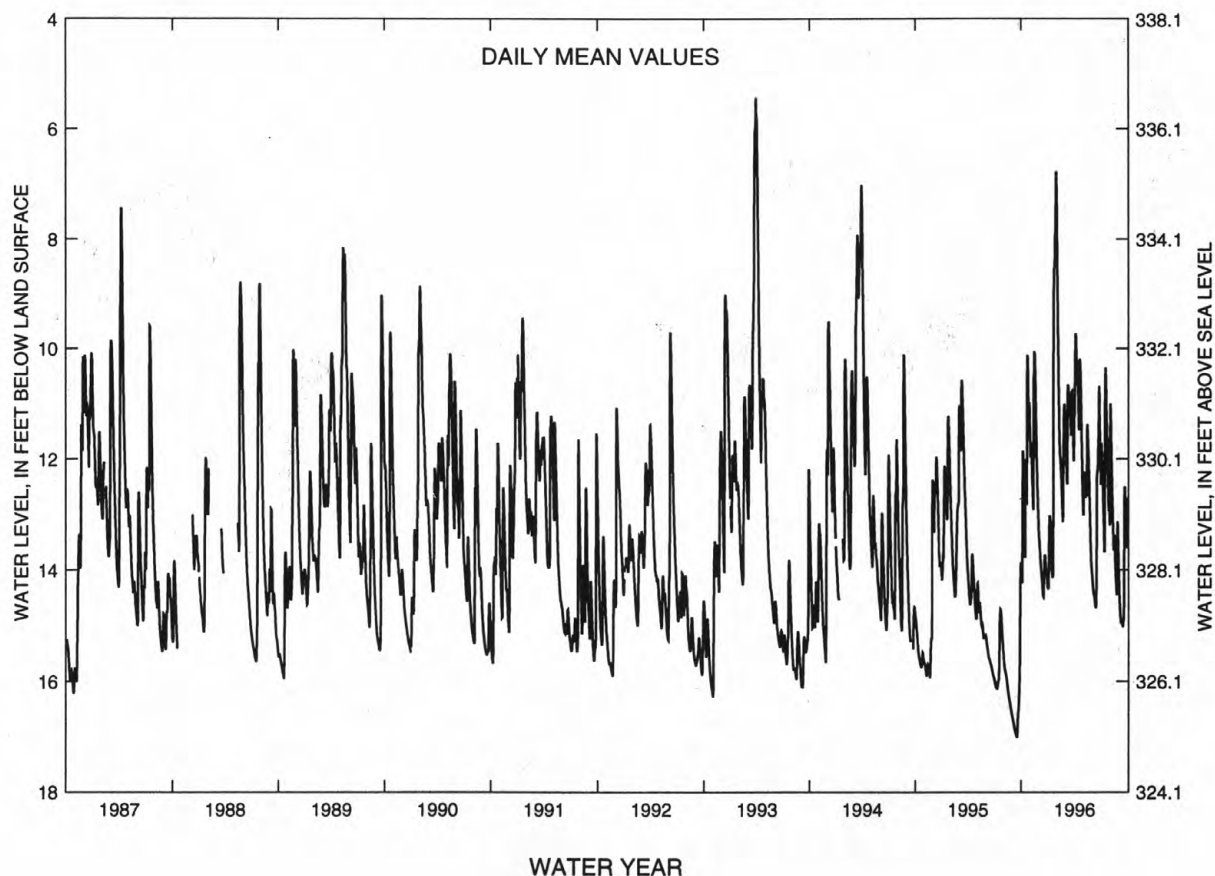
PERIOD OF RECORD.--June 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.27 ft below land surface, Mar. 29, 1993; lowest, 17.04 ft below land surface, Jan. 26-28, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.23	11.89	13.80	13.17	10.20	12.41	9.78	12.45	14.46	12.08	11.86	14.84
10	12.51	12.76	14.14	13.39	11.91	10.73	10.58	12.67	14.63	13.21	13.14	14.90
15	13.01	10.06	14.48	14.08	12.38	10.93	11.48	11.53	13.26	10.57	13.37	14.90
20	12.83	11.12	13.75	9.15	13.14	11.10	10.40	12.40	11.90	11.36	14.13	12.51
25	10.75	12.52	14.01	7.91	11.03	11.28	11.81	13.56	10.88	12.73	13.53	12.71
EOM	11.41	13.37	14.33	7.75	11.43	11.14	13.02	14.15	12.47	13.08	14.20	13.56
MEAN	12.27	11.83	14.02	11.44	11.43	11.35	10.98	12.72	13.06	12.20	13.21	14.05
WTR YR 1996	MEAN 12.38 HIGH 6.75 JAN 28 LOW 15.04 SEP 13-14											

NJ-WRD WELL NO. 19-0002



GROUND-WATER LEVELS

107

HUNTERDON COUNTY

403455074514801. Local I.D., Environmental Ctr 1 Obs. NJ-WRD Well Number, 19-0276.

LOCATION.--Lat 40°34'38", long 74°51'39", Hydrologic Unit 02030105, at the Hunterdon County Arboretum, Rt. 31, Clinton Township.
Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 175 ft, open hole 55 to 175 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Mar. 1991 to May 1992.

DATUM.--Land surface is 170.4 ft above sea level.

Measuring point: Top of recorder shelf, 1.45 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

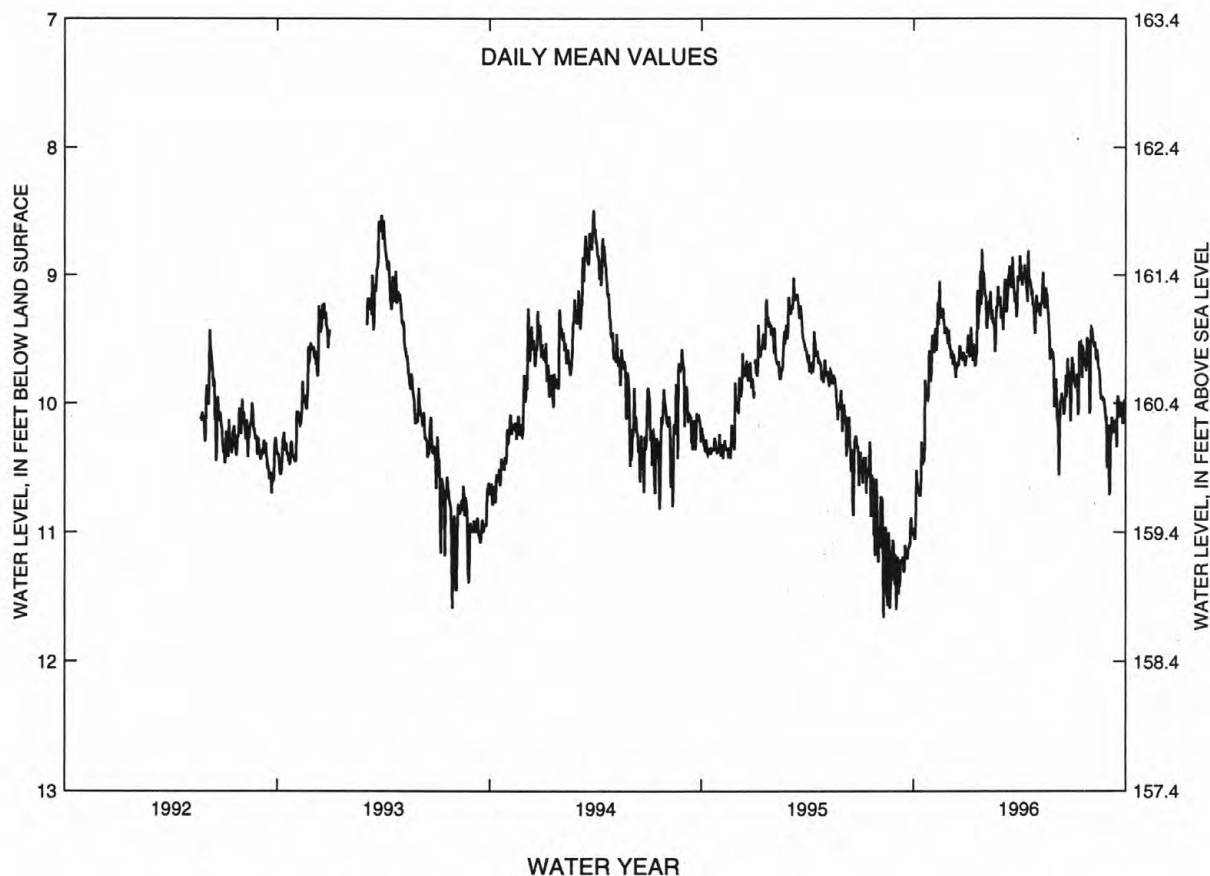
PERIOD OF RECORD.--Mar. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.44 ft below land surface, Mar. 29, 1994; lowest, 12.75 ft below land surface, Aug. 11, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.88	9.60	9.65	9.63	9.42	9.30	9.04	9.29	10.11	9.84	9.46	10.30
10	10.68	9.59	9.64	9.58	9.23	9.29	8.92	9.19	9.99	9.91	9.56	10.21
15	10.30	9.05	9.72	9.71	9.37	8.93	9.21	9.26	10.00	9.54	9.72	10.22
20	10.43	9.31	9.56	9.42	9.50	8.86	9.05	9.27	9.78	9.59	9.97	10.11
25	9.96	9.44	9.61	9.08	9.16	9.16	9.24	9.63	9.75	9.75	9.98	10.07
EOB	9.81	9.53	9.63	9.04	9.32	9.04	9.16	10.03	9.72	10.08	10.45	10.06
MEAN	10.38	9.42	9.64	9.39	9.28	9.14	9.09	9.34	9.97	9.71	9.81	10.16
WTR YR 1996 MEAN 9.61 HIGH 8.54 JAN 27 LOW 11.56 SEP 3												

NJ-WRD WELL NO. 19-0276



GROUND-WATER LEVELS

HUNTERDON COUNTY

403517074452501. Local I.D., Readington School 11 Obs. NJ-WRD Well Number, 19-0270.

LOCATION.--Lat 40°35'17", long 74°45'25", Hydrologic Unit 02030105, behind Readington School, on Readington Rd. (County Rd. 620), Readington Township.

Owner: State of New Jersey.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 101 ft, open hole 50 to 101 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 224.99 ft above sea level.

Measuring point: Top of recorder shelf, 2.20 ft above land surface.

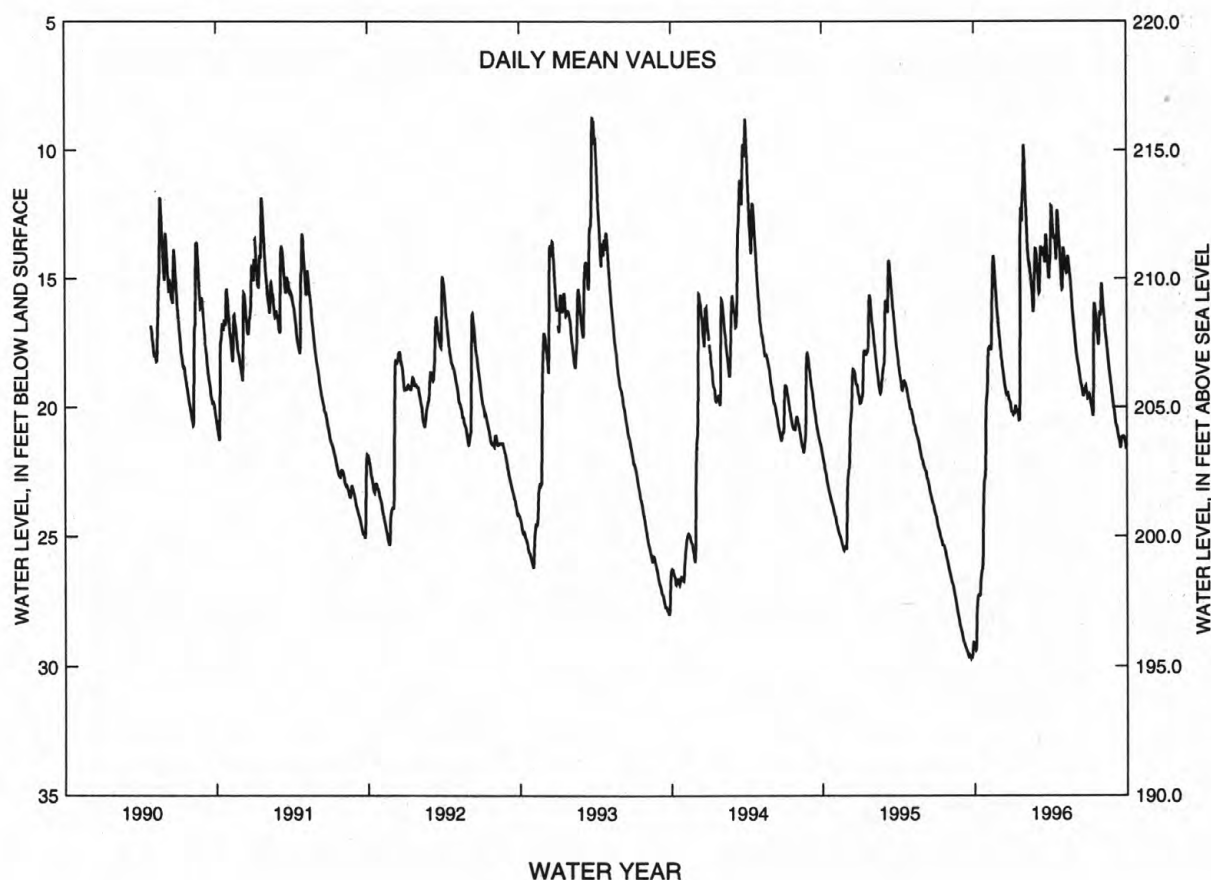
PERIOD OF RECORD.--Apr. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.64 ft below land surface, Mar. 26, 1993; lowest, 29.70 ft below land surface, Sept. 22-23, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.36	17.71	18.08	20.23	13.25	15.56	12.46	14.19	18.22	19.68	15.75	20.64
10	27.29	17.79	18.68	20.05	14.48	13.96	13.37	14.77	18.78	20.17	16.79	21.02
15	27.06	14.45	19.30	20.36	15.13	13.80	14.27	14.38	19.23	15.99	17.67	21.44
20	26.28	14.93	19.40	13.41	16.30	13.76	12.75	15.25	19.45	16.63	18.51	21.16
25	22.86	16.26	19.77	11.73	13.85	14.10	14.28	16.47	19.19	17.59	19.19	21.16
EOM	19.62	17.24	20.20	10.84	14.43	14.32	15.37	17.55	19.65	16.31	20.01	21.64
MEAN	25.85	16.53	19.09	16.85	14.33	14.33	13.54	15.22	18.98	17.99	17.72	21.08
WTR YR 1996	MEAN 17.64	HIGH 9.74	JAN 28	LOW 29.44	OCT 5							

NJ-WRD WELL NO. 19-0270



GROUND-WATER LEVELS

109

MERCER COUNTY

401552074501801. Local I.D., Civil Defense Obs. NJ-WRD Well Number, 21-0028.

LOCATION.--Lat 40°15'53", long 74°50'12", Hydrologic Unit 02040105, at the State Police Headquarters, Ewing Township.

Owner: State of New Jersey.

AQUIFER.--Lockatong Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 300 ft, open hole 33 to 300 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Periodic measurements, July 1970 to Sept. 1976. Water-level recorder, June 1964 to July 1970.

DATUM.--Land surface is 122.99 ft above sea level.

Measuring point: Top of shelter shelf, 2.80 ft above land surface.

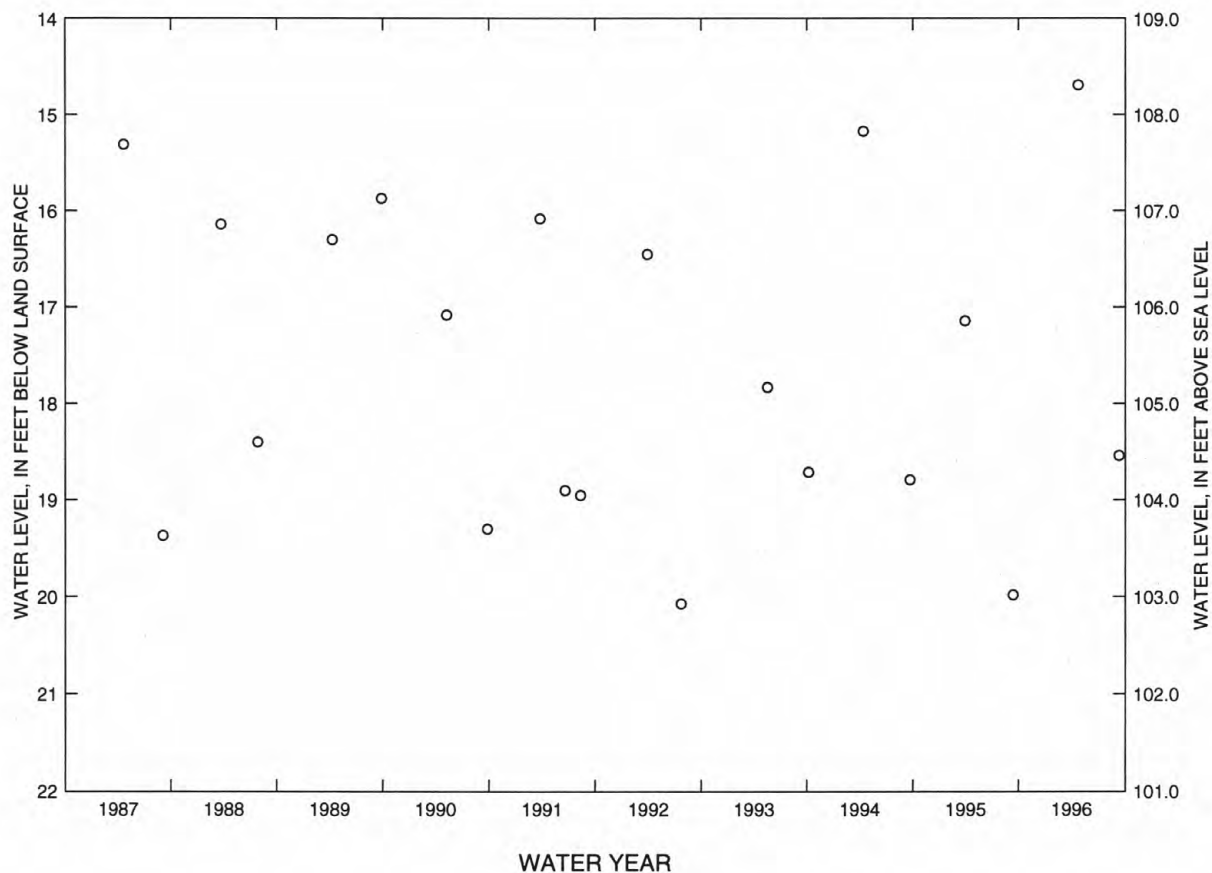
PERIOD OF RECORD.--June 1964 to Sept. 1976, Apr. 1978 to current year. Records for 1964 to 1976 and 1978 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.14 ft below land surface, Apr. 6, 1970; lowest, 49.69 ft below land surface, June 17, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 23	14.69	SEP 11	18.54

NJ-WRD WELL NO. 21-0028



GROUND-WATER LEVELS

MERCER COUNTY

401753074483501. Local I.D., Bristol-Myers 100 Obs. NJ-WRD Well Number, 21-0289.

LOCATION.--Lat 40°17'53", long 74°48'35", Hydrologic Unit 02040105, about 600 ft east of Scotch Rd. and about 1.1 mi north of I-95, interchange 3, Hopewell Township.

Owner: Bristol-Myers Squibb Company.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in., depth 300 ft, open hole 12 to 300 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 215 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 1.65 ft above land surface.

REMARKS.--Water level is occasionally affected by pumping of nearby irrigation well.

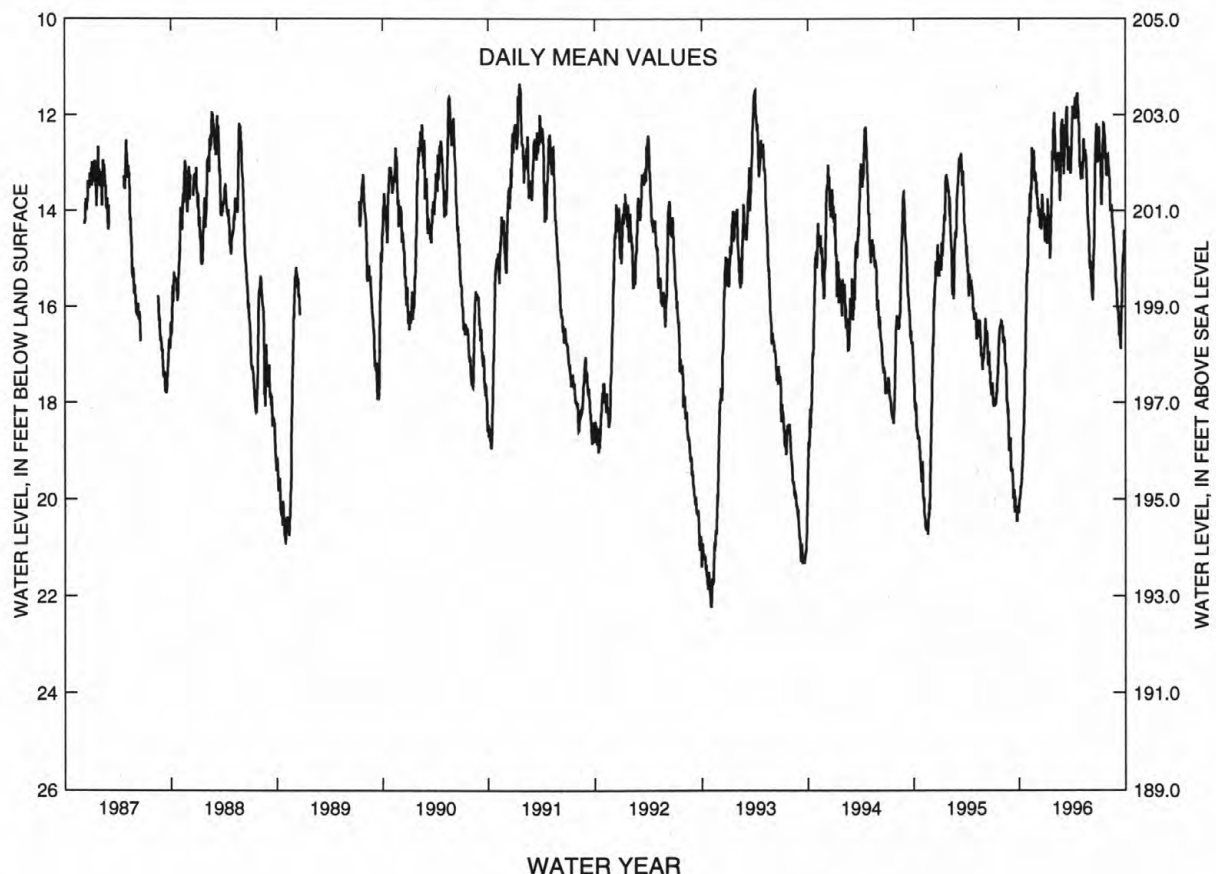
PERIOD OF RECORD.--Dec. 1986 to current year. Records for 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.22 ft below land surface, Jan. 17, 1991; lowest, 22.29 ft below land surface, Nov. 1-2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	19.96	14.27	13.96	14.53	13.01	13.06	11.88	13.17	15.21	12.66	13.03	16.05
10	19.56	14.03	13.96	14.09	13.14	12.66	11.87	12.89	15.79	13.33	13.51	16.38
15	18.73	12.68	14.20	14.70	13.01	11.83	12.08	12.97	14.85	13.09	13.91	16.75
20	17.80	12.97	13.66	14.12	13.80	12.77	11.56	12.89	13.12	12.19	14.35	15.91
25	16.24	13.37	14.14	12.92	12.17	12.84	12.20	14.00	12.19	12.75	14.75	14.89
EOM	15.17	13.66	14.51	11.96	12.49	12.58	12.99	14.80	12.90	13.20	15.52	14.43
MEAN	18.16	13.52	14.07	13.78	12.86	12.68	12.03	13.34	14.23	12.85	14.04	15.79
WTR YR 1996	MEAN 13.95	HIGH 11.50	APR 19	LOW 20.19	OCT 1							

NJ-WRD WELL NO. 21-0289



MERCER COUNTY

401804074432601. Local I.D., Cranston Farms 15 Obs. NJ-WRD Well Number, 21-0364.

LOCATION.--Lat 40°18'04", long 74°43'26", Hydrologic Unit 02040105, 1,200 ft north of intersection of Cold Soil Rd. and Rt. 206, Lawrenceville, Lawrence Township.

Owner: State of New Jersey.

AQUIFER.--Stockton Formation of Triassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 50 to 200 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 123.2 ft above sea level.

Measuring point: Top of recorder shelf, 2.30 ft above land surface.

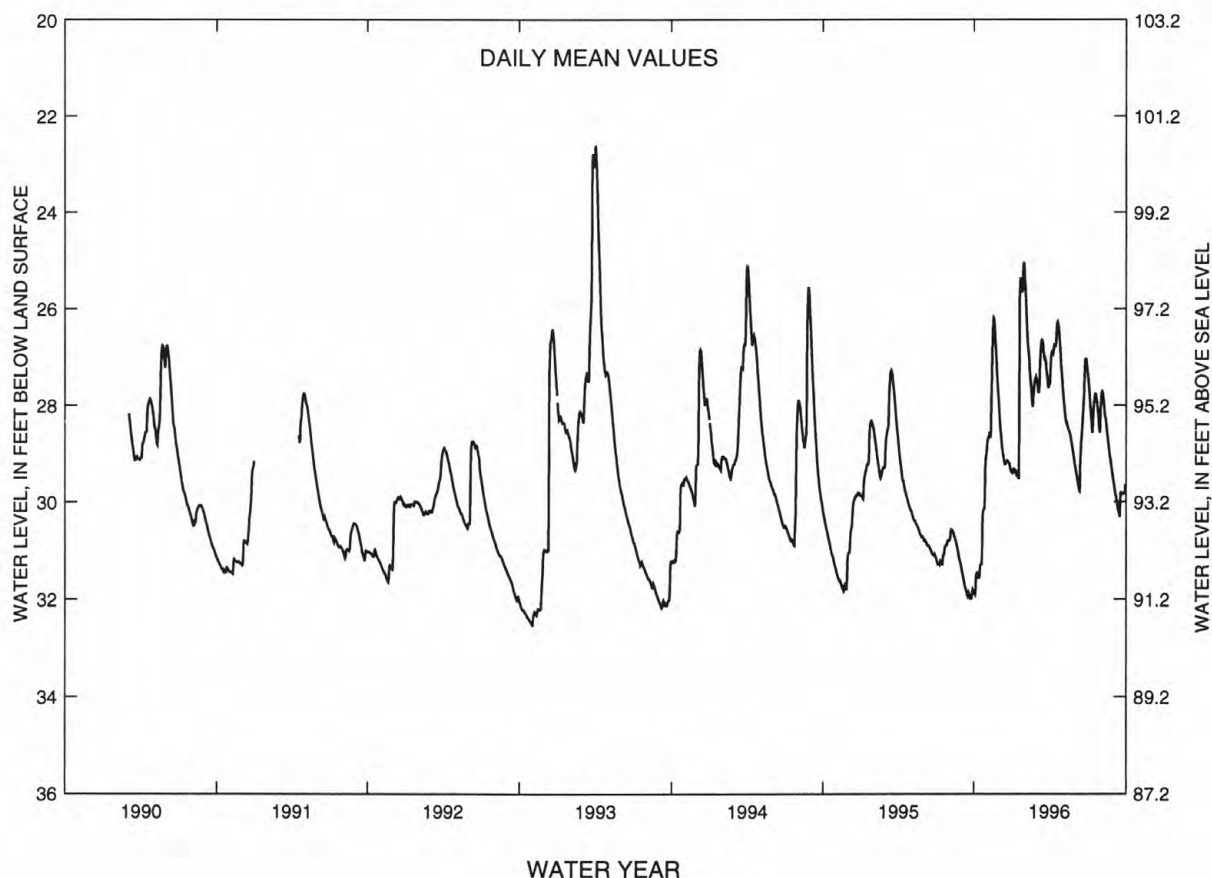
PERIOD OF RECORD.--Mar. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.58 ft below land surface, Apr. 2-3, 1993; lowest, 32.55 ft below land surface, Nov. 2, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.84	28.67	28.53	29.33	26.09	27.73	26.92	27.97	29.47	27.74	27.71	29.79
10	31.56	28.65	28.94	29.37	26.88	26.85	26.87	28.33	29.74	28.34	28.02	30.04
15	31.43	26.88	29.21	29.47	27.50	26.69	26.80	28.49	28.77	28.09	28.39	30.26
20	31.28	26.29	29.14	25.77	28.03	27.01	26.27	28.62	28.07	27.76	28.80	29.82
25	30.16	27.07	29.19	25.52	27.47	27.35	26.68	28.88	27.08	28.08	29.13	29.81
EOM	29.04	27.89	29.38	25.11	27.46	27.57	27.38	29.22	27.25	28.46	29.50	29.63
MEAN	30.99	27.63	28.99	27.80	27.06	27.22	26.81	28.48	28.55	28.03	28.52	29.89
WTR YR 1996	MEAN 28.34 HIGH 25.03 JAN 30-31 LOW 31.93 OCT 4											

NJ-WRD WELL NO. 21-0364



GROUND-WATER LEVELS

MERCER COUNTY

401834074515501. Local I.D., Washington Crossing Park 14 Obs. NJ-WRD Well Number, 21-0366.

LOCATION.--Lat 40°18'37", long 74°51'15", Hydrologic Unit 02040105, off Brick Yard Rd., in Washington Crossing State Park, Hopewell Township.
Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 225 ft, open hole 50 to 225 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to Apr. 1992.

DATUM.--Land surface is 183.3 ft above sea level.

Measuring point: Top of recorder shelf, 2.10 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

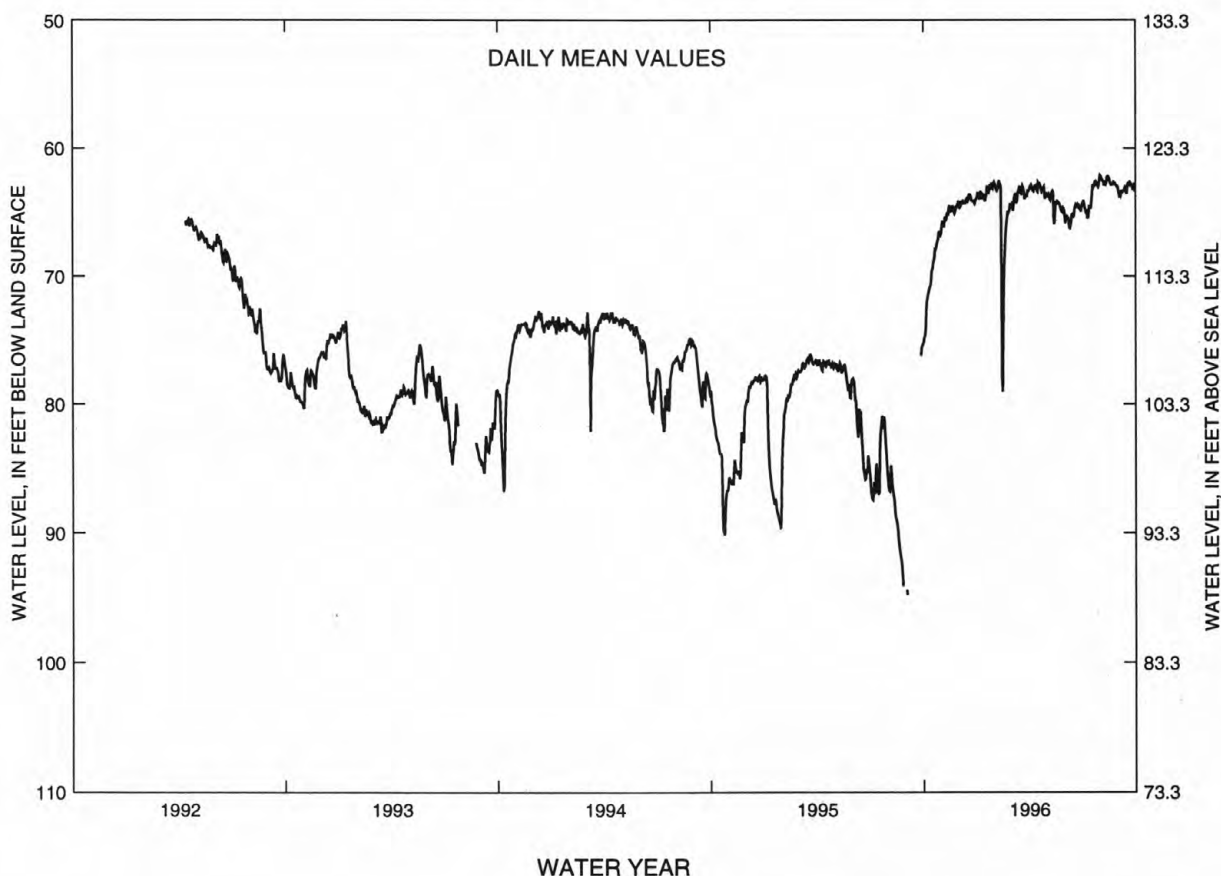
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 61.68 ft below land surface, Aug. 1, 1996; lowest, 95.09 ft below land surface, Sept. 3, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.00	66.16	64.48	63.83	63.31	64.39	63.01	63.82	65.37	64.48	62.51	63.77
10	71.22	65.55	64.22	63.71	62.85	64.29	62.99	63.39	66.26	65.42	62.69	63.35
15	69.62	64.46	63.95	64.01	79.02	62.94	63.37	65.23	65.15	64.56	62.19	63.50
20	68.43	64.83	63.61	63.30	66.97	62.95	62.94	64.26	64.37	62.88	62.85	62.83
25	67.27	64.96	64.15	63.08	65.06	63.67	63.13	64.75	64.37	62.77	62.68	62.87
DOM	66.64	64.50	63.96	62.67	64.60	63.32	63.47	64.90	64.56	62.41	63.01	63.38
MEAN	69.97	65.13	64.13	63.47	66.11	63.68	63.16	64.28	65.13	63.85	62.62	63.18
WTR YR 1996	MEAN 64.56 HIGH 61.68 AUG 1 LOW 81.45 FEB 15											

NJ-WRD WELL NO. 21-0366



MERCER COUNTY

402131074461201. Local I.D., SBMWA Honey Branch 10 Obs. NJ-WRD Well Number, 21-0088.

LOCATION.--Lat 40°21'31", long 74°46'11", Hydrologic Unit 02030105, at the Stony Brook-Millstone Watersheds Reserve, Wargo Rd., near Pennington, Hopewell Township.

Owner: U.S. Geological Survey - Stony Brook-Millstone Watersheds Association.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 150 ft, open hole 20 to 150 ft.

INSTRUMENTATION.--NONE: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1994 to Mar. 1995. Periodic measurements, Oct. 1988 to Apr. 1994. Water-level recorder, Jan. 1987 to Oct. 1988. Periodic measurements, July 1984 to Jan. 1987. Water-level recorder, Apr. 1977 to July 1984. Periodic measurements. Aug. 1975 to Apr. 1977. Water-level recorder, June 1967 to Aug. 1975.

DATUM.--Land surface is 179.53 ft above sea level.

Measuring point: Top of shelter shelf, 4.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

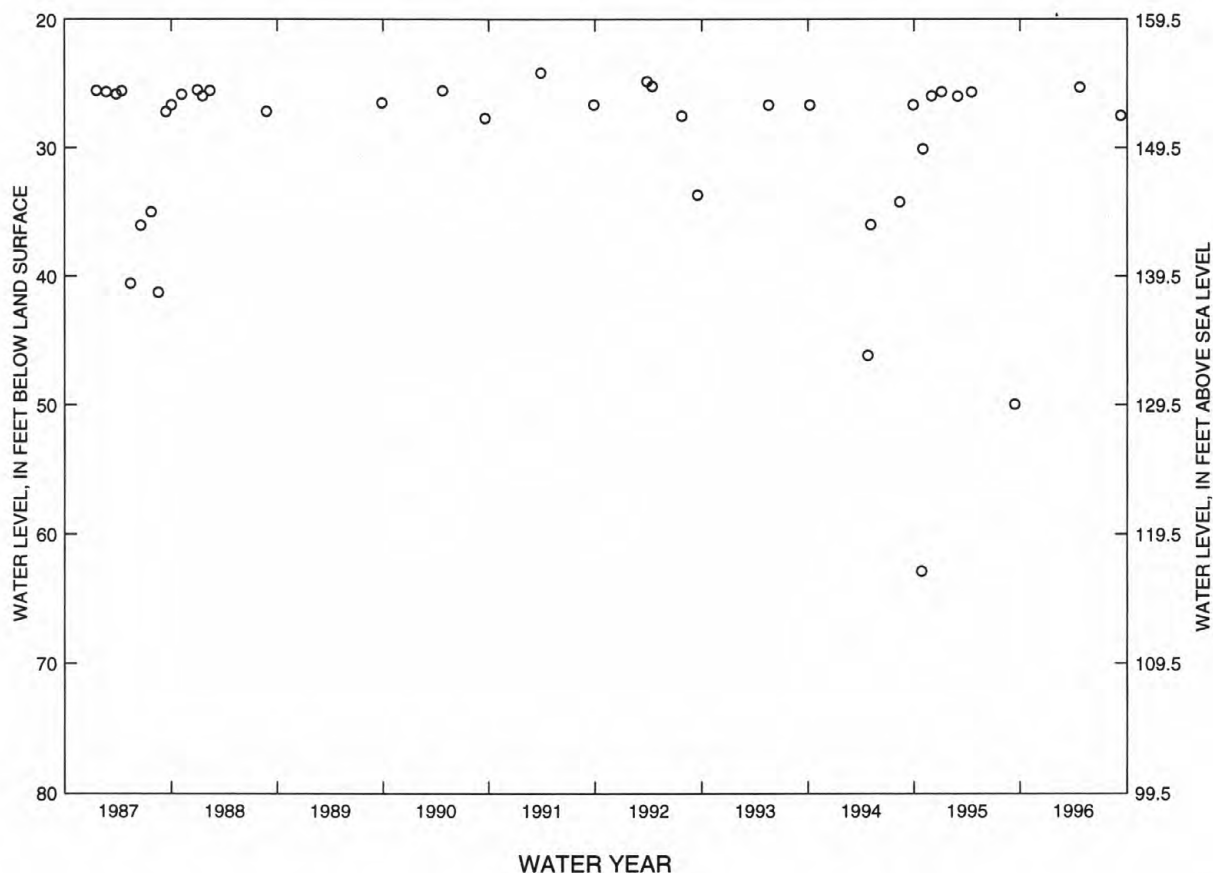
PERIOD OF RECORD.--June 1967 to current year. Records for 1967 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.63 ft below land surface, July 21, 1967; lowest, 62.89 ft below land surface, Oct. 28, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 23	25.28	SEP 11	27.47

NJ-WRD WELL NO. 21-0088



GROUND-WATER LEVELS

MERCER COUNTY

402138074435801. Local I.D., AT&T North Obs. NJ-WRD Well Number, 21-0365.

LOCATION.--Lat 40°21'38", long 74°43'58", Hydrologic Unit 02030105, AT&T, Carter Rd., Hopewell Township.
Owner: AT&T.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, depth 99 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 231 ft above sea level, by altimeter.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

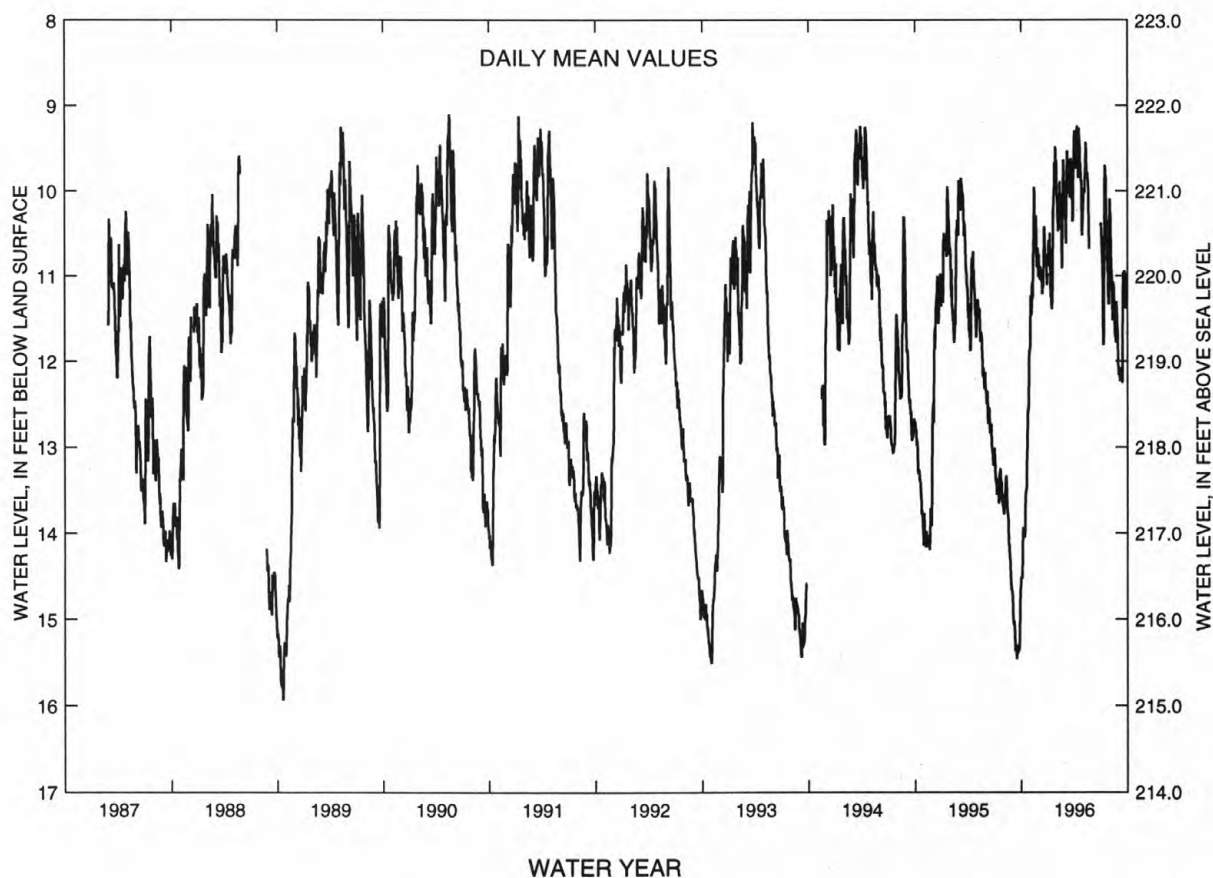
PERIOD OF RECORD.--Feb. 1987 to current year. Records for 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.90 ft below land surface, May 17, 1990; lowest, 16.07 ft below land surface, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.50	11.46	11.04	10.84	10.39	10.31	9.57	9.97	---	10.54	10.34	12.18
10	14.03	11.26	10.92	10.97	10.19	10.03	9.32	9.58	---	11.61	11.18	12.14
15	13.72	9.96	11.14	11.38	10.42	9.65	9.85	9.84	---	10.01	11.12	12.24
20	13.48	10.42	10.42	10.33	10.83	9.66	9.48	9.97	---	10.10	11.68	11.04
25	12.61	10.84	10.80	9.90	9.79	10.01	9.90	---	---	10.92	11.30	11.24
EOM	11.88	11.01	10.97	9.78	10.17	9.53	10.35	---	---	11.02	12.06	11.25
MEAN	13.45	10.85	10.90	10.52	10.21	9.95	9.66	---	---	10.71	11.19	11.65
WTR YR 1996 MEAN 10.85 HIGH 9.10 JAN 27 11 LOW 14.63 OCT 5												

NJ-WRD WELL NO. 21-0365



GROUND-WATER LEVELS

115

MIDDLESEX COUNTY

401932074352901. Local I.D., Plainsboro Pond Obs. NJ-WRD Well Number, 23-0273.

LOCATION.--Lat 40°19'32", long 74°35'29", Hydrologic Unit 02030105, near Plainsboro High School, Grovers Mill Rd. Plainsboro Township.
Owner: State of New Jersey - NJ Water Policy.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 75 ft, screened 70 to 75 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 76 ft above sea level, from topographic map.
Measuring point: Top of shelf, 1.40 ft above land surface.

REMARKS.--Water level is affected by the stage of Plainsboro Pond.

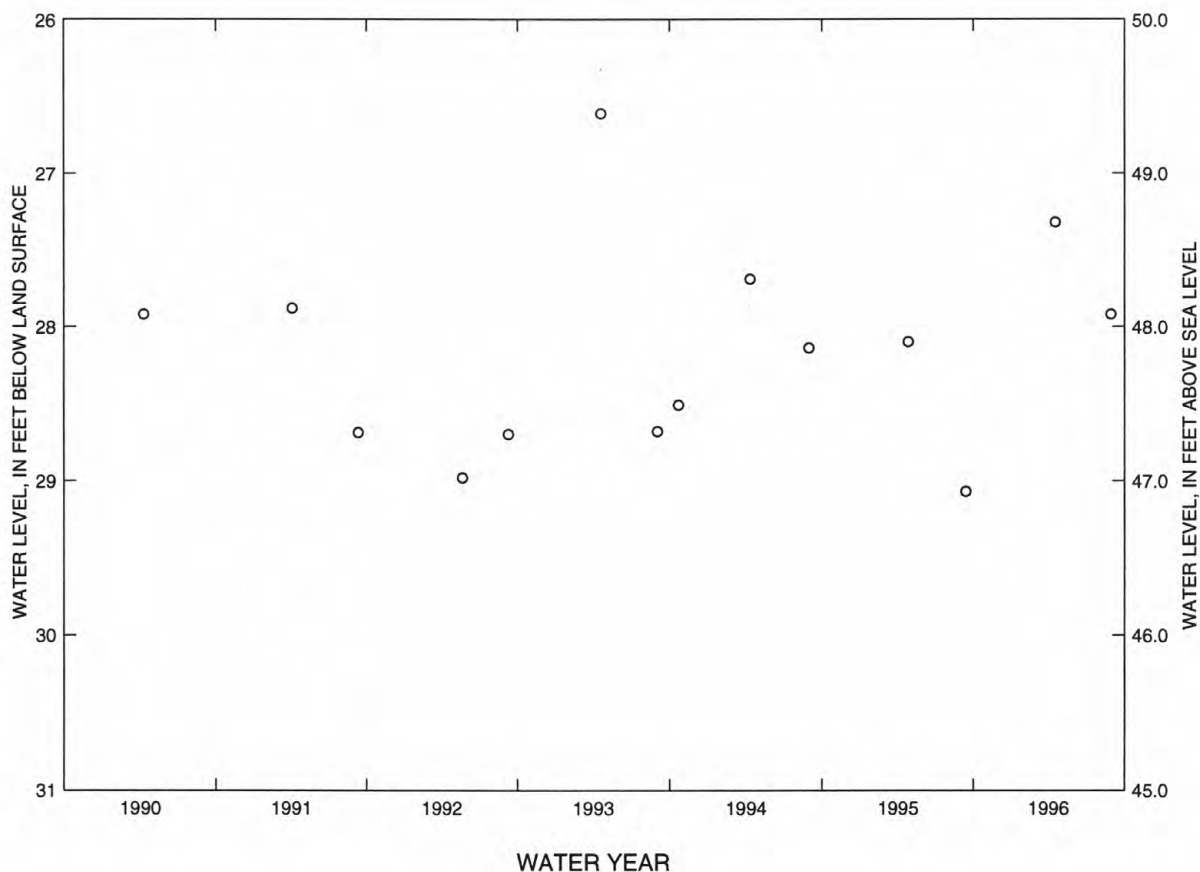
PERIOD OF RECORD.--Dec. 1970 to Nov. 1984, Apr. 1987 to Sept. 1987, Apr. 1990 to current year. Records for 1970 to 1984, and 1987 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 26.49 ft below land surface, May 20, 1983; lowest, 29.94 ft below land surface, July 27, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	27.32	AUG 30	27.92

NJ-WRD WELL NO. 23-0273



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402015074275701. Local I.D., Forsgate 3 Obs. NJ-WRD Well Number, 23-0228.

LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.

Owner: Monroe Township Municipal Utilities Authority.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 138 ft, screened 128 to 138 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Feb. 1975 to Jan. 1977. Water-level recorder, Oct. 1961 to Feb. 1975.

DATUM.--Land surface is 147.34 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 1.40 ft below land surface.

REMARKS.--Water level is affected by nearby pumping. Water level was affected by aquifer test between Sept. 11 and Sept. 26, 1996.

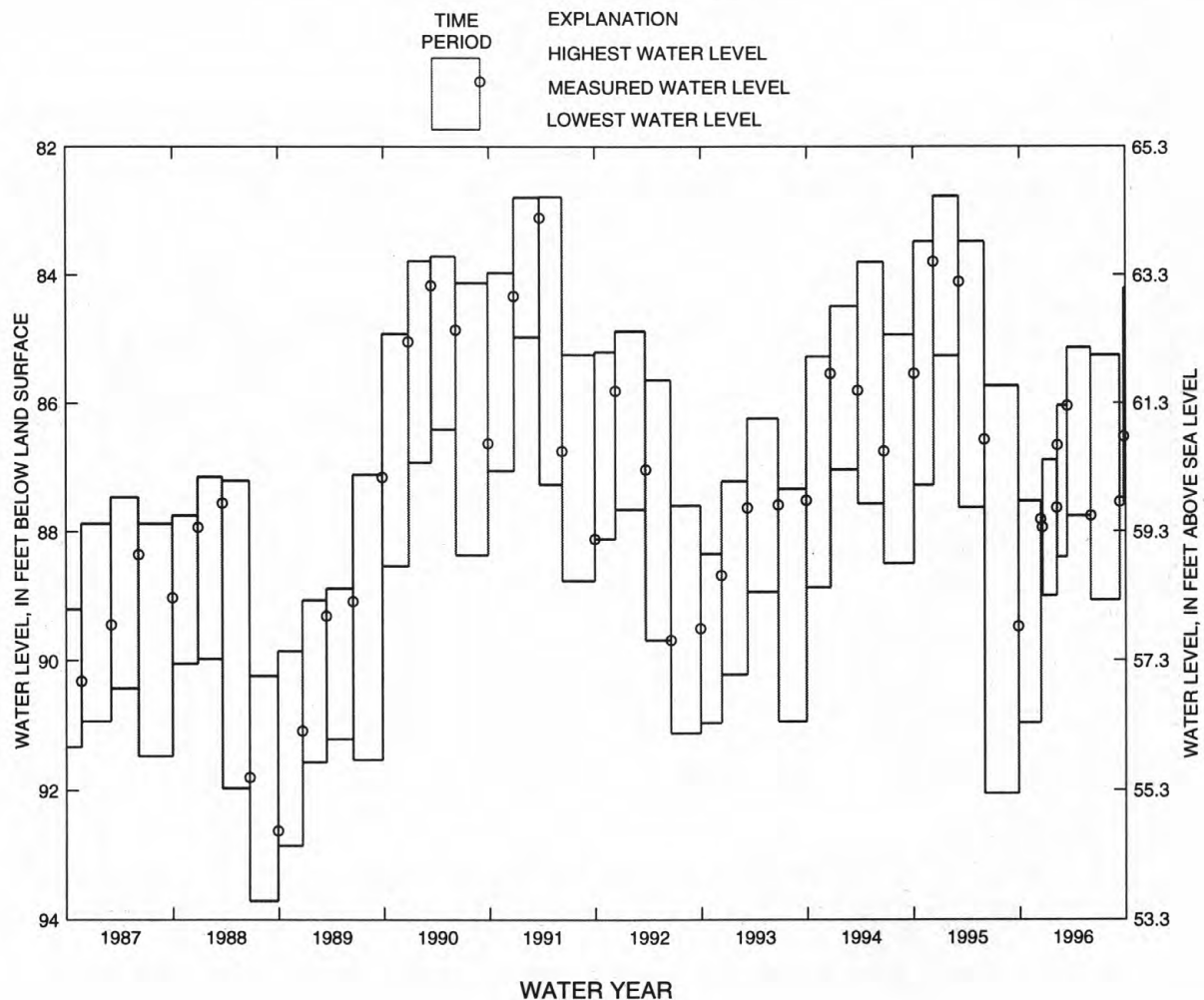
PERIOD OF RECORD.--Oct. 1961 to current year. Records for 1961 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.32 ft below land surface, May 6, 1962; lowest, 93.72 ft below land surface, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 13, 1995	87.53	90.96	DEC. 13, 1995	87.81
DEC. 13, 1995 TO DEC. 18, 1995	---	---	DEC. 18, 1995	87.94
DEC. 18, 1995 TO FEB. 6, 1996	86.89	89.00	FEB. 6, 1996	87.63
FEB. 6, 1996 TO FEB. 8, 1996	---	---	FEB. 8, 1996	86.66
FEB. 8, 1996 TO MAR. 13, 1996	86.04	88.40	MAR. 13, 1996	86.04
MAR. 13, 1996 TO JUNE 3, 1996	85.13	87.76	JUNE 3, 1996	87.76
JUNE 3, 1996 TO SEPT. 11, 1996	85.25	89.07	SEPT. 11, 1996	87.54
SEPT. 11, 1996 TO SEPT. 26, 1996	---	---	SEPT. 26, 1996	86.52

NJ-WRD WELL NO. 23-0228



MIDDLESEX COUNTY

402015074275702. Local I.D., Forsgate 4 Obs. NJ-WRD Well Number, 23-0229.

LOCATION.--Lat 40°20'15", long 74°27'57", Hydrologic Unit 02030105, Hanover Lane at Rossmoor, Monroe Township.
Owner: Monroe Township Municipal Utilities Authority.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 330 ft screened 319 to 330 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Oct. 1975 to Jan. 1977. Water-level recorder, Apr. 1965 to Oct. 1975.

DATUM.--Land surface is 147.34 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 1.50 ft below land surface.

REMARKS.--Water level is affected by nearby pumping. Water level was affected by aquifer test between Sept. 11 and Sept. 26, 1996.

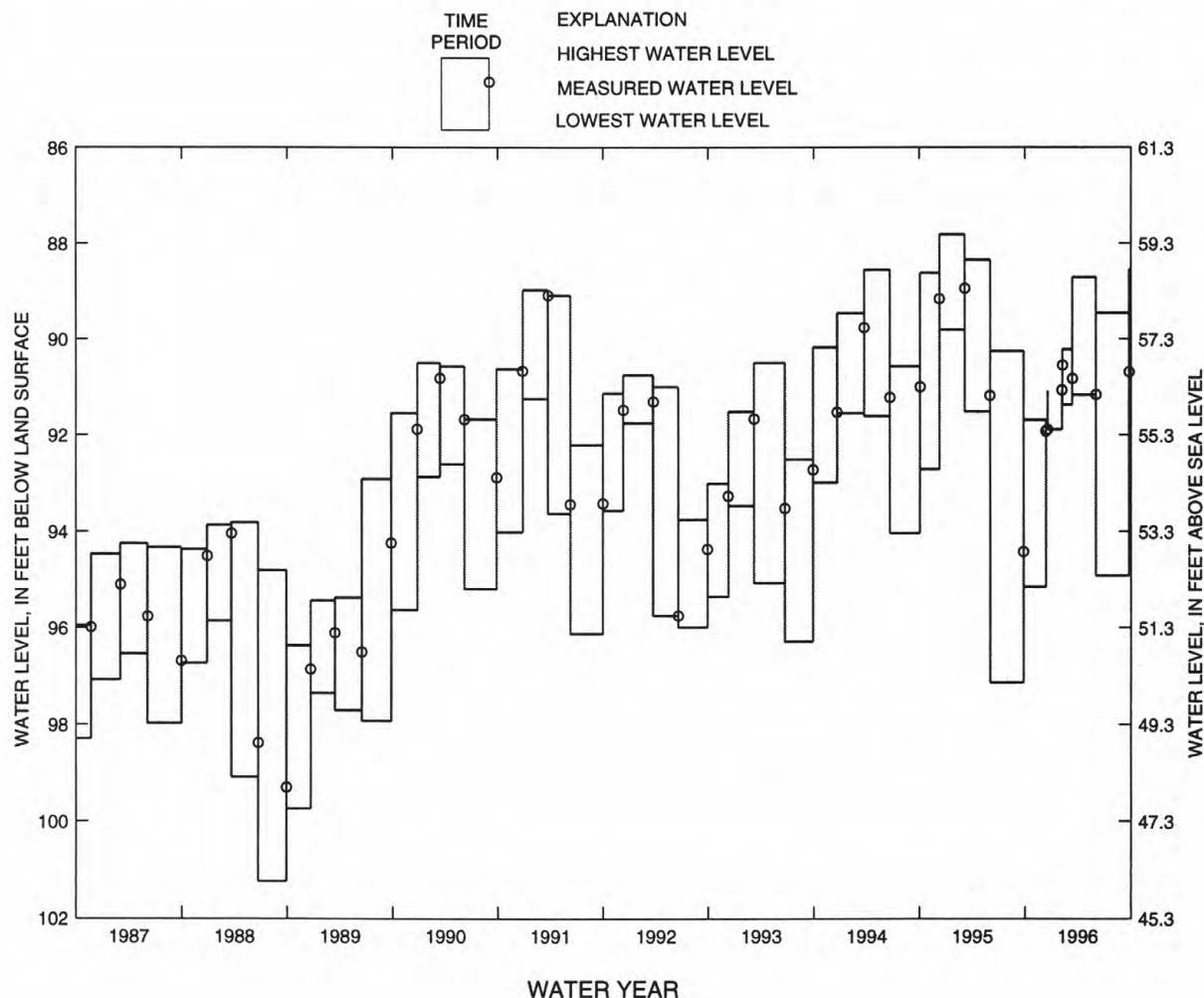
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 80.09 ft below land surface, July 16, 1973; lowest, 101.23 ft below land surface, between June 22 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 13, 1995	91.69	95.15	DEC. 13, 1995	91.92
DEC. 13, 1995 TO DEC. 18, 1995	---	---	DEC. 18, 1995	91.89
DEC. 18, 1995 TO FEB. 6, 1996	---	91.89	FEB. 6, 1996	91.07
FEB. 6, 1996 TO FEB. 8, 1996	---	---	FEB. 8, 1996	90.55
FEB. 8, 1996 TO MAR. 13, 1996	90.22	91.37	MAR. 13, 1996	90.83
MAR. 13, 1996 TO JUNE 3, 1996	88.71	91.17	JUNE 3, 1996	91.16
JUNE 3, 1996 TO SEPT. 26, 1996	89.45	94.92	SEPT. 26, 1996	90.69

NJ-WRD WELL NO. 23-0229



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402109074301301. Local I.D., Forsgate 1 Obs. NJ-WRD Well Number, 23-0291.

LOCATION.--Lat 40°21'09", long 74°30'13", Hydrologic Unit 02030105, on the south side of Friendship Rd., about 0.4 mi west of Rt. 130, South Brunswick Township.

Owner: Monroe Township Municipal Utilities Authority.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 203 ft, screened 192 to 203 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Jan. 1977 to Sept. 1984. Periodic measurements, Oct. 1975 to Jan. 1977. Water-level recorder, Apr. 1965 to Oct. 1975.

DATUM.--Land surface is 106.79 ft above sea level.

Measuring point: Top of shelf, 1.90 ft above land surface.

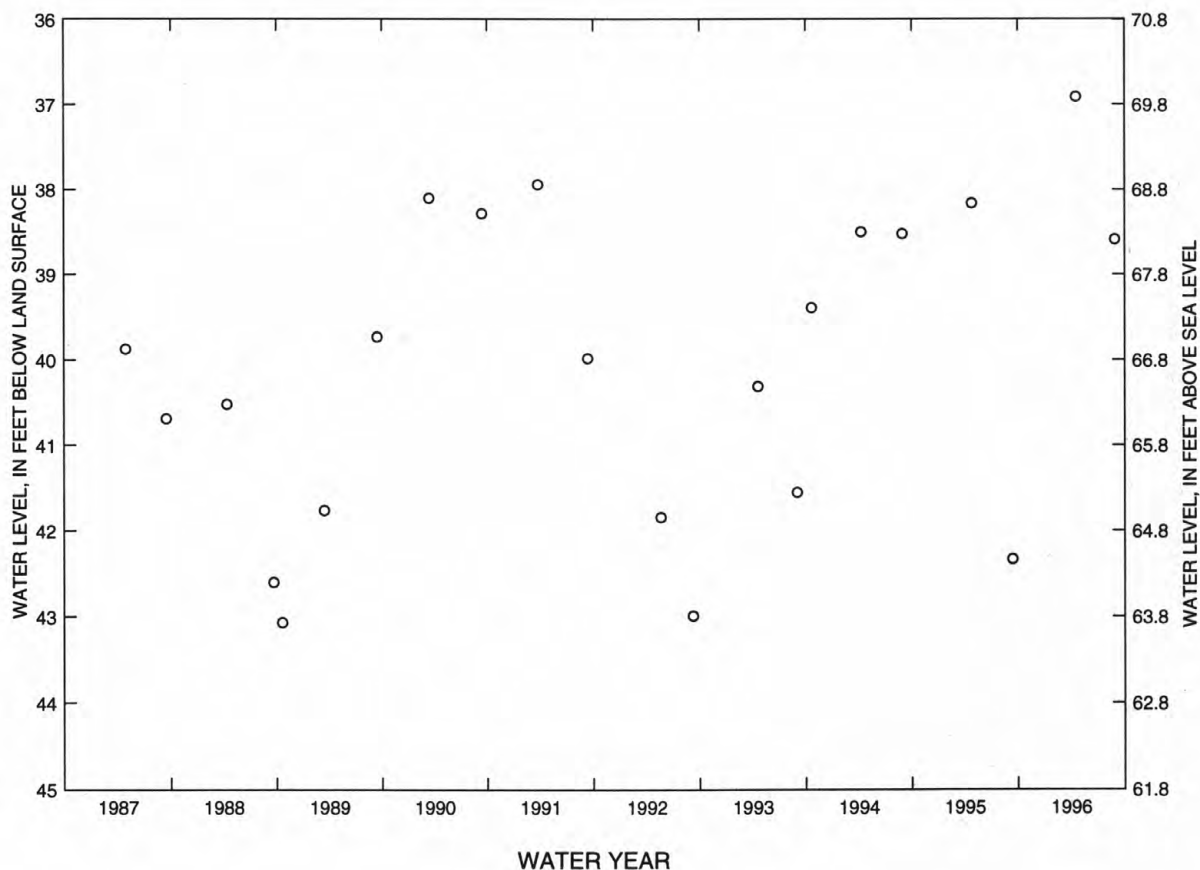
PERIOD OF RECORD.--Apr. 1965 to current year. Records for 1965 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.70 ft below land surface, July 5, 1973; lowest, 44.31 ft below land surface, between Jan. 12 and Apr. 21, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	36.91	AUG 30	38.59

NJ-WRD WELL NO. 23-0291



GROUND-WATER LEVELS

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MIDDLESEX COUNTY

402109074301302. Local I.D., Forsgate 2 Obs. NJ-WRD Well Number, 23-0292.

LOCATION.--Lat 40°21'09", long 74°30'12", Hydrologic Unit 02030105, on the south side of Friendship Rd., about 0.4 mi west of Rt. 130, South Brunswick Township.

Owner: Monroe Township Municipal Utilities Authority.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 104 ft, screened 93 to 104 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Aug. 1983 to Sept. 1985. Periodic measurements, Oct. 1975 to Aug. 1983. Water-level recorder, Oct. 1961 to Oct. 1975.

DATUM.--Land surface is 106.89 ft above sea level.

Measuring point: Top of shelf, 2.60 ft above land surface.

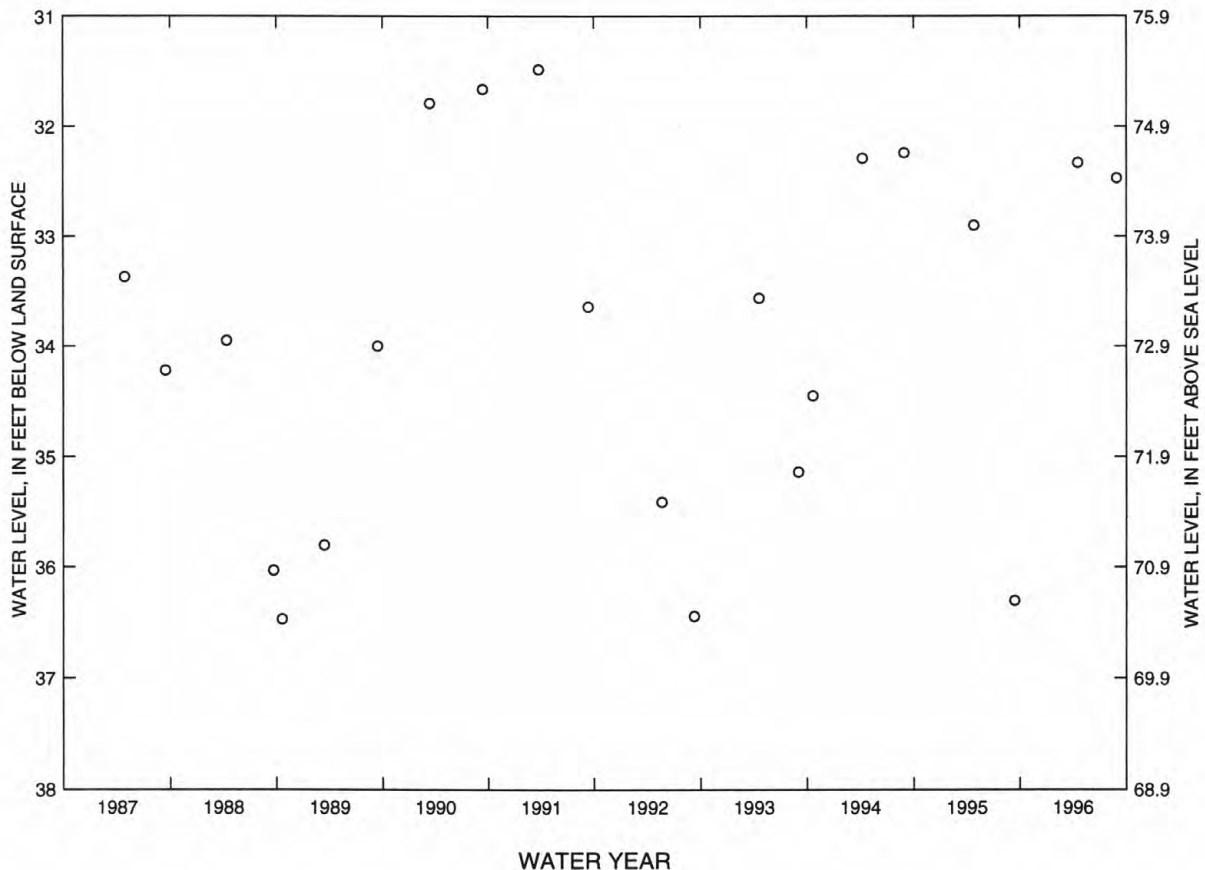
PERIOD OF RECORD.--October 1961 to current year. Records for 1961 to 1983 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 21.09 ft below land surface, May 2-3, 1962; lowest, 36.98 ft below land surface, Sept. 29, 1982.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	32.33	AUG 30	32.47

NJ-WRD WELL NO. 23-0292



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402143074185201. Local I.D., Morrell 1 Obs. NJ-WRD Well Number 23-0104.

LOCATION.--Lat 40°21'43", long 74°18'49", Hydrologic Unit 02030105, on the north side of Texas Rd., about 0.4 mi east of Rt. 9, Old Bridge Township.
Owner: Olympia and York Bridge Development Corp.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 17 in., depth 11 ft, cased with precast concrete rings.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to Dec. 1984. Water-level recorder, Oct. 1923 to Aug. 1975.

DATUM.--Land surface is 76.75 ft above sea level.

Measuring point: Top of concrete ring, 0.20 ft above land surface.

REMARKS.--Well depth was 6 ft before deepening in Sept. 1932.

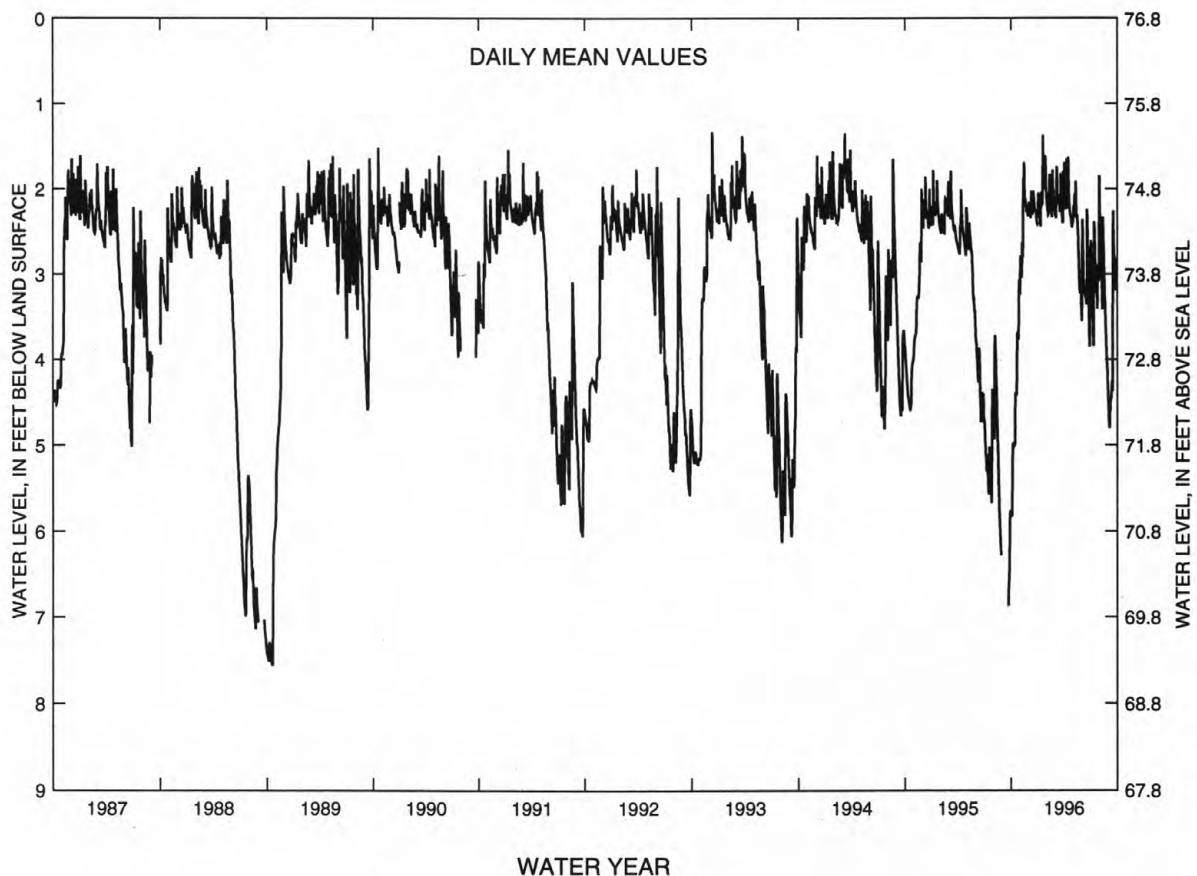
PERIOD OF RECORD.--Oct. 1923 to current year. Records for 1973 to 1985 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.84 ft below land surface, Jan. 19, 1996; lowest, 10.40 ft below land surface, Oct. 13, 1953.
Well was dry, Aug. to Sept. 1932, before deepening.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.71	2.99	2.31	2.24	2.27	2.21	2.18	2.30	2.52	2.83	2.53	4.79
10	4.98	2.80	2.03	2.40	1.96	2.16	1.65	2.20	3.19	3.55	3.14	4.45
15	4.64	1.69	2.23	2.17	2.20	2.15	2.23	2.34	3.14	2.47	2.54	4.29
20	4.41	2.18	2.16	1.67	2.08	1.82	2.21	2.55	2.24	2.96	3.25	2.67
25	3.72	2.23	2.27	1.74	2.09	2.29	2.35	3.11	3.17	3.40	3.77	2.92
EOM	3.20	2.25	2.40	2.09	2.26	2.05	2.41	3.33	3.45	2.48	4.36	2.91
MEAN	4.52	2.42	2.23	2.06	2.14	2.14	2.13	2.56	3.11	3.01	3.13	3.75
WTR YR 1996 MEAN 2.77 HIGH 0.84 JAN 19 LOW 5.84 OCT 3-4												

NJ-WRD WELL NO. 23-0104



GROUND-WATER LEVELS

121

MIDDLESEX COUNTY

402536074201801. Local I.D., Runyon 1 Obs. NJ-WRD Well Number, 23-0194.

LOCATION.--Lat 40°25'36", long 74°20'18", Hydrologic Unit 02030105, at the Runyon Watershed, Old Waterworks Rd., Old Bridge Township.
Owner: Perth Amboy Water Department.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 18 in., depth 281 ft, screened 201 to 231 ft and 251 to 281 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Aug. 1934 to Aug. 1975.

DATUM.--Land surface is 18.30 ft above sea level.

Measuring point: Top of casing, 0.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

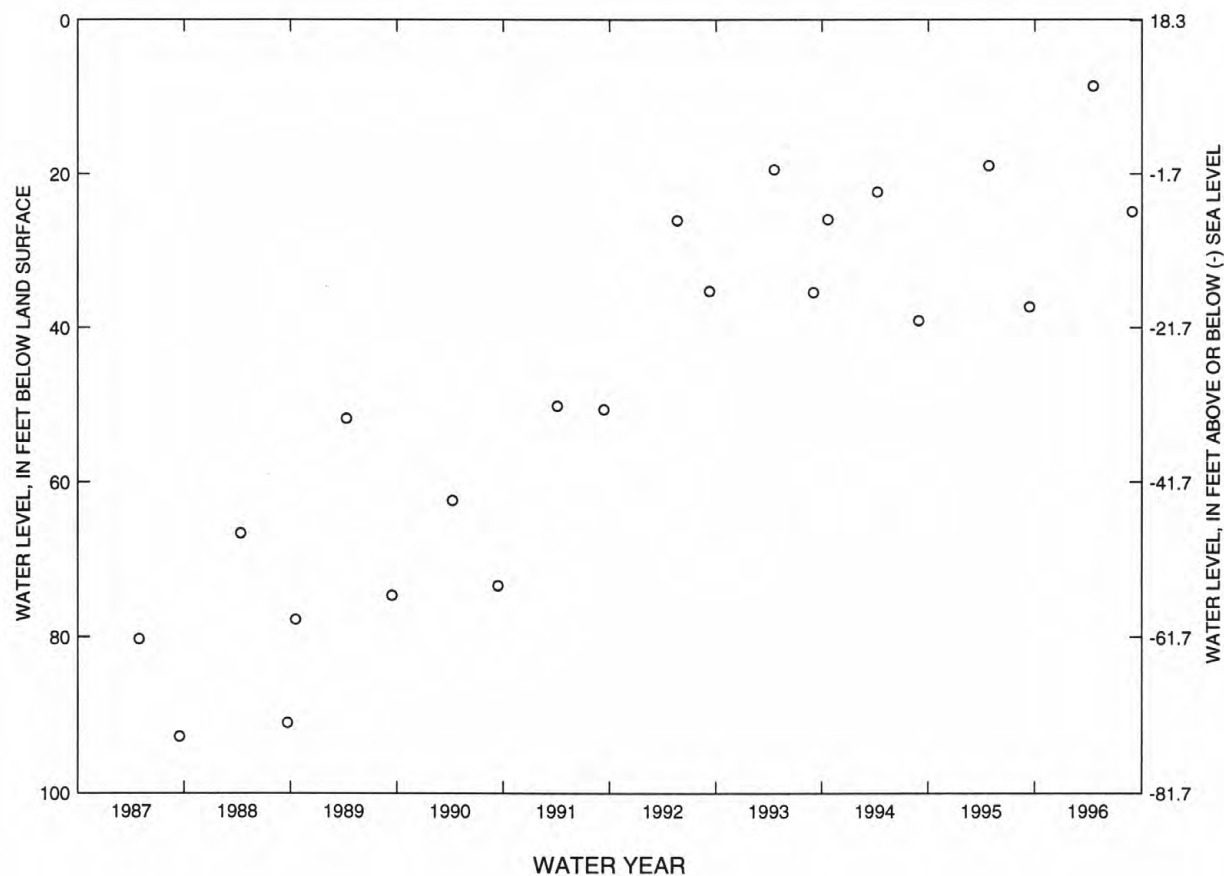
PERIOD OF RECORD.--Aug. 1934 to current year. Records for 1934 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.50 ft below land surface, Mar. 1, 1943, Mar. 26, 1944; lowest, 109.32 ft below land surface, Oct. 21, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	8.61	AUG 30	24.92

NJ-WRD WELL NO. 23-0194



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402553074271701. Local I.D., Fischer Obs. NJ-WRD Well Number, 23-0070.

LOCATION.--Lat 40°25'55", long 74°27'19", Hydrologic Unit 02030105, 32 Beaver Dam Dr. and Hardenburg Lane, East Brunswick Township.
Owner: Abe Weiss.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Dug water-table observation well, diameter 54 in., depth 21 ft, lined with concrete blocks.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Jan. 1977 to Apr. 1985.

DATUM.--Land surface is 73.00 ft above sea level.

Measuring point: Top of angle iron at bottom of shelter doors, 1.70 ft above land surface.

REMARKS.--Well deepened on Oct. 29, 1965 from 17 to 21 ft.

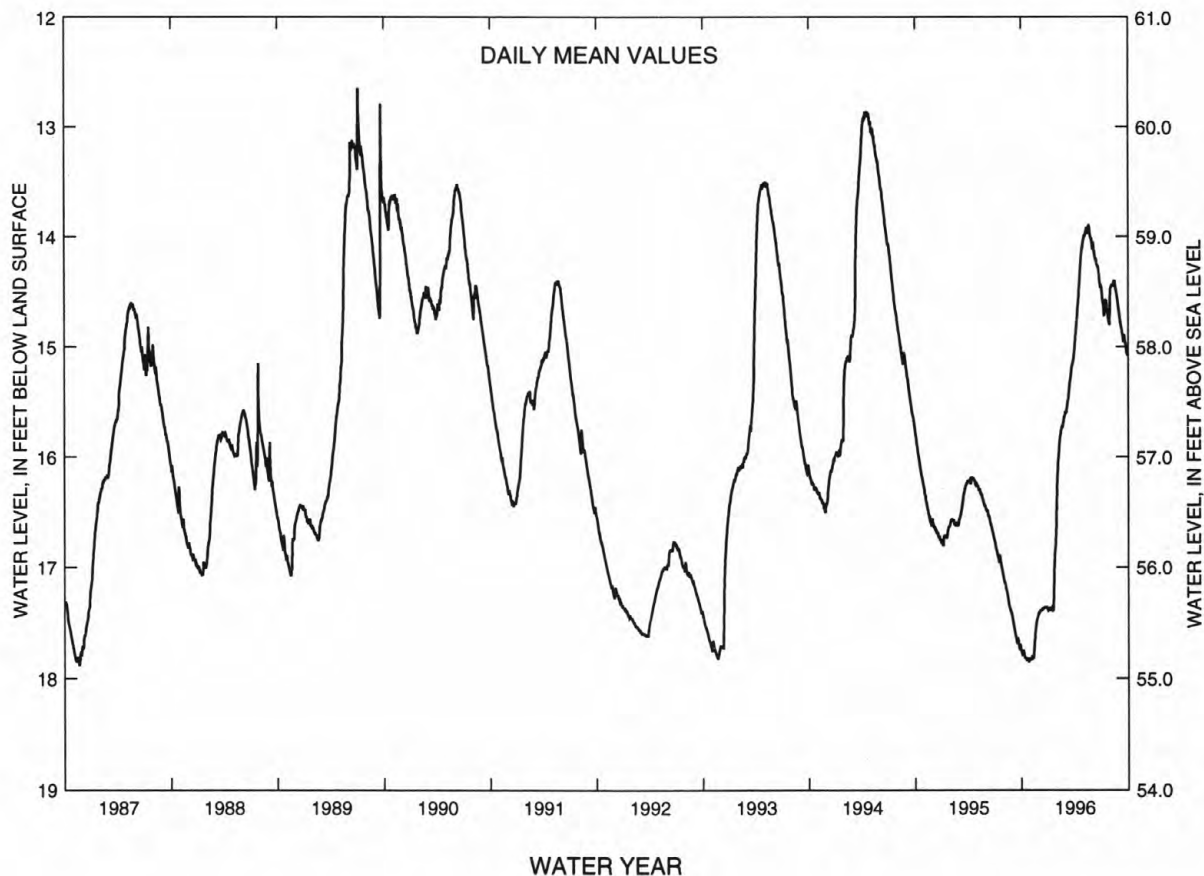
PERIOD OF RECORD.--June 1936 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.88 ft below land surface, Apr. 26-27, 1939; lowest, 19.11 ft below land surface, between July 24 and Oct. 6, 1981. Well was dry many times from 1963 to 1965, before deepening.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	17.80	17.83	17.40	17.39	16.01	15.56	14.88	13.99	14.09	14.54	14.45	14.78
10	17.78	17.82	17.39	17.37	15.84	15.48	14.70	13.95	14.19	14.66	14.43	14.85
15	17.82	17.67	17.37	17.39	15.75	15.33	14.54	13.97	14.22	14.61	14.41	14.94
20	17.84	17.53	17.36	17.27	15.72	15.23	14.30	13.90	14.26	14.61	14.48	14.94
25	17.84	17.46	17.36	16.84	15.64	15.15	14.14	14.00	14.36	14.73	14.55	15.01
EOM	17.83	17.42	17.37	16.28	15.61	15.03	14.04	14.08	14.46	14.73	14.67	15.08
MEAN	17.81	17.65	17.38	17.15	15.81	15.33	14.50	13.97	14.25	14.64	14.49	14.90
WTR YR 1996	MEAN 15.66 HIGH 13.90 MAY 19-21 LOW 17.86 OCT 27											

NJ-WRD WELL NO. 23-0070



GROUND-WATER LEVELS

123

MIDDLESEX COUNTY

402558074201301. Local I.D., SWD 2 Obs. NJ-WRD Well Number, 23-0344.

LOCATION.--Lat 40°25'58", long 74°20'13", Hydrologic Unit 02030105, 1,200 ft west of the Sayreville Water Treatment Plant, Old Bridge-South Amboy Rd., Sayreville Borough.
Owner: Sayreville Water Department.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 37 ft, screened 31 to 37 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Oct. 1968 to July 1975.

DATUM.--Land surface is 22.19 ft above sea level.

Measuring point: Top of well shelter shelf, 2.00 ft above land surface.

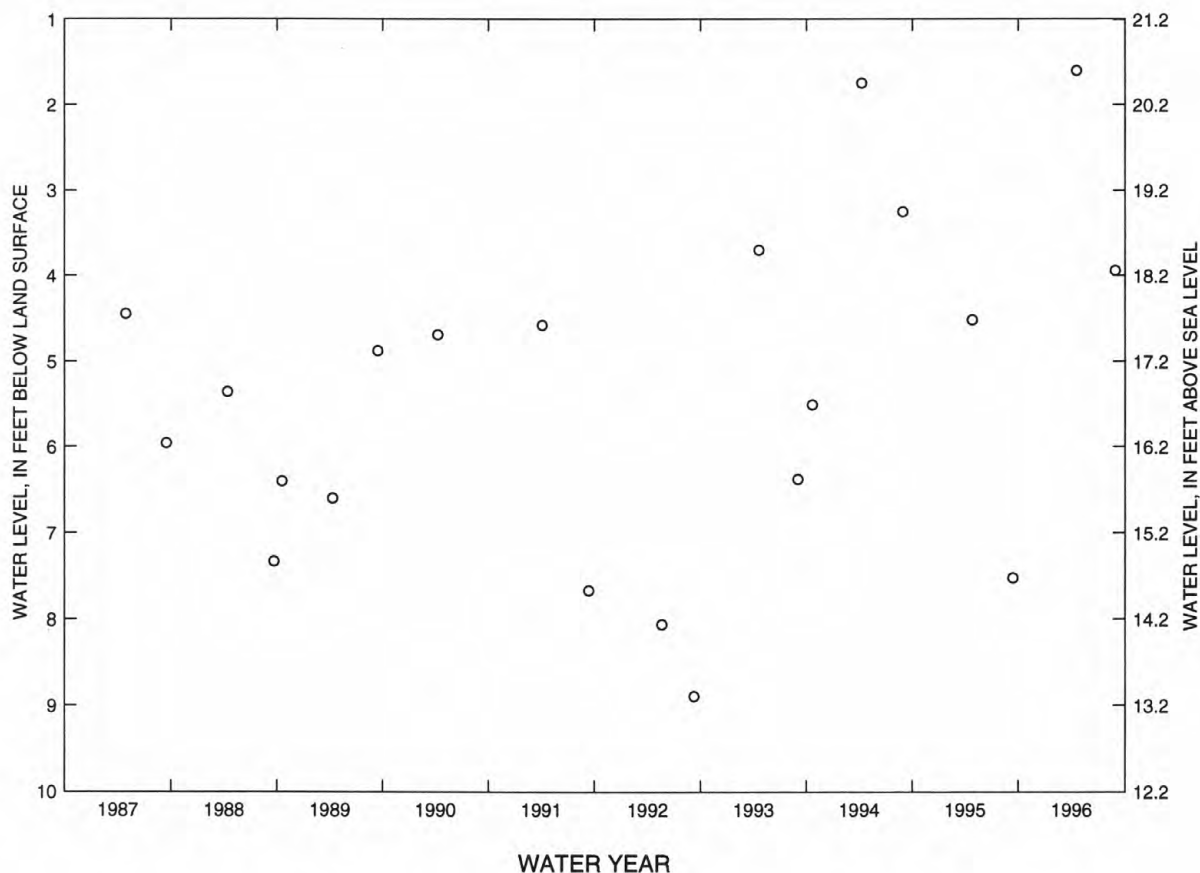
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.60 ft below land surface, Apr. 17, 1996; lowest, 14.04 ft below land surface, Nov. 30, 1969, Dec. 16, 1969, Nov. 17-22, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	1.60	AUG 30	3.94

NJ-WRD WELL NO. 23-0344



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402608074195701. Local I.D., SWD 1 Obs. NJ-WRD Well Number, 23-0351.

LOCATION.--Lat 40°26'05", long 74°19'59", Hydrologic Unit 02030105, near the Sayreville Water Treatment Plant, Old Bridge-South Amboy Rd, Sayreville Borough.
Owner: Sayreville Water Department.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 82 ft, screened 76 to 82 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 35.27 ft above sea level.

Measuring point: Top of casing, 1.70 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

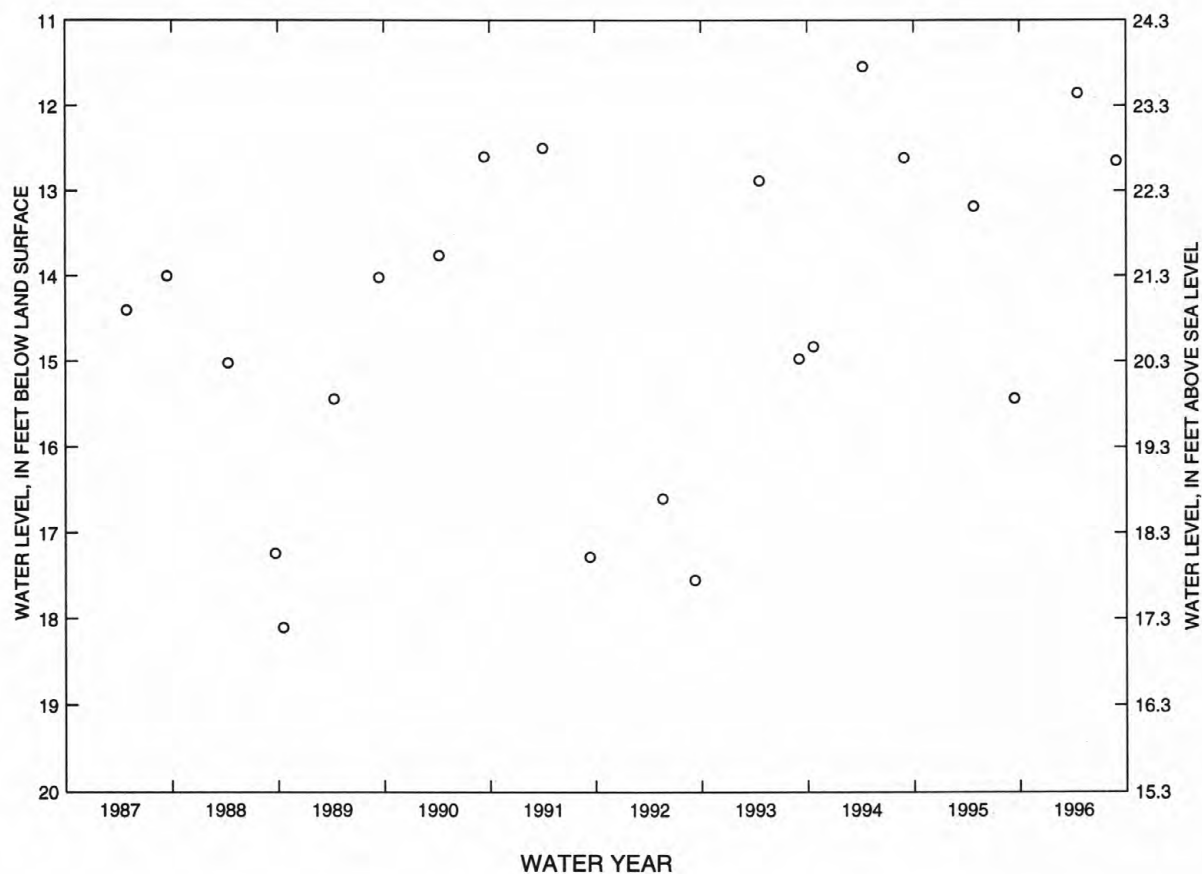
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.17 ft below land surface, Nov. 8, 1979; lowest, 27.20 ft below land surface, Dec. 16, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 27	11.85	AUG 30	12.65

NJ-WRD WELL NO. 23-0351



GROUND-WATER LEVELS

125

MIDDLESEX COUNTY

402623074212701. Local I.D., Duh Say 4 Obs. NJ-WRD Well Number, 23-0365.

LOCATION.--Lat 40°26'33", long 74°21'20", Hydrologic Unit 02030105, in the Maristat Inc. Auto Exchange, Jernee Mill Rd, Sayreville Borough.
Owner: Duhernal Water Company.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 160 ft, screened 148 to 160 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Jan. 1936 to Dec. 1973.

DATUM.--Land surface is 5.70 ft above sea level. Land surface was 11.00 ft above sea level prior to Dec. 1968.

Measuring point: Top of well shelter shelf, 3.00 ft above land surface. Measuring point was 1.47 ft above land surface prior to Dec. 1968.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

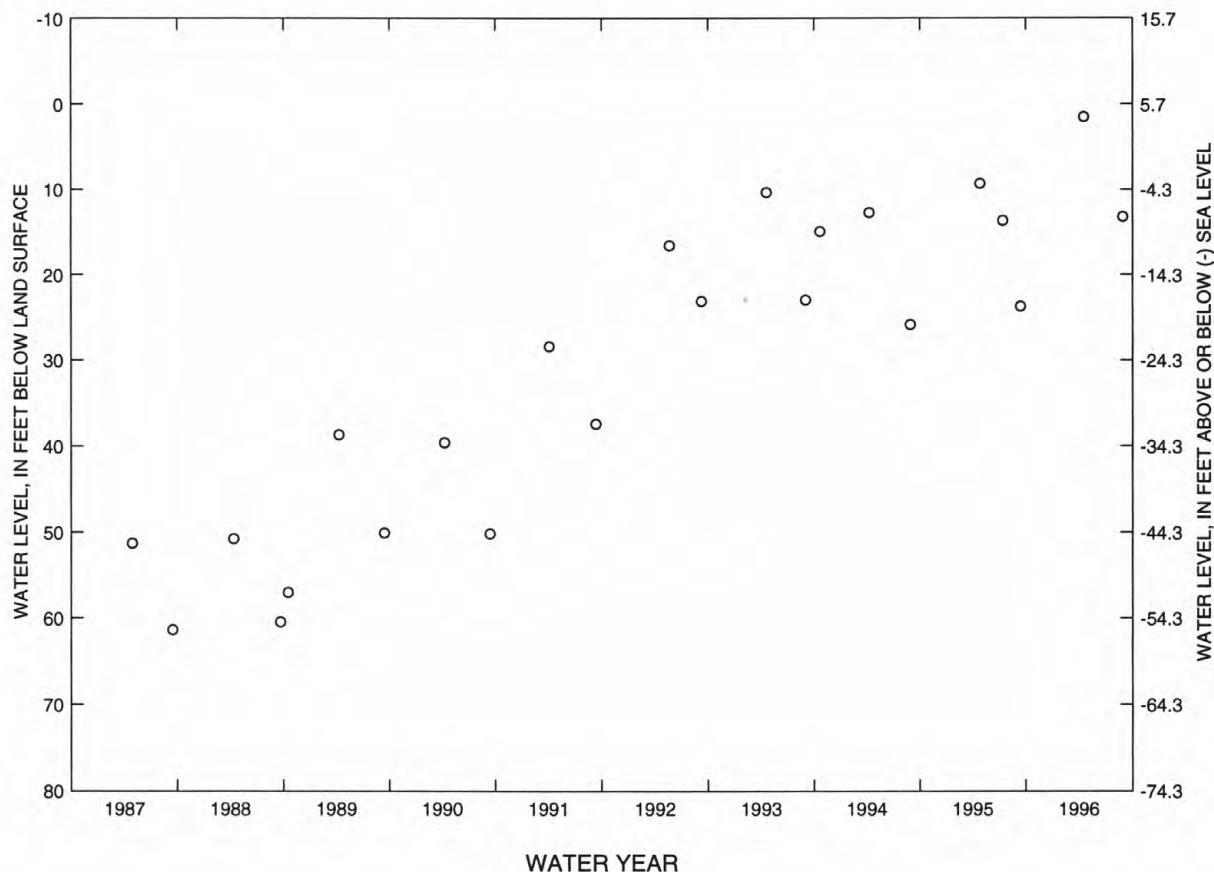
PERIOD OF RECORD.--Jan. 1936 to Nov. 1984, May 1986 to current year. Records for 1936 to 1984 and 1986 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.87 ft above land surface, Mar. 27, 1944; lowest, 72.00 ft below land surface, Oct. 21, 1981.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	1.50	AUG 30	13.23

NJ-WRD WELL NO. 23-0365



GROUND-WATER LEVELS

MIDDLESEX COUNTY

402633074220001. Local I.D., SRWD 2 Obs. NJ-WRD Well Number, 23-0439.

LOCATION.--Lat 40°26'33", long 74°22'00", Hydrologic Unit 02030105, at the corner of Whitehead Ave. and Anne St. South River Borough.
Owner: South River Water Department.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 5 in., depth 126 ft, screened 121 to 126 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Jan. 1977 to Sept. 1987. Periodic measurements, Apr. 1975 to Jan. 1977. Water-level recorder, Jan. 1968 to Apr. 1975.

DATUM.--Land surface is 20.69 ft above sea level.
Measuring point: Top of coupling, 2.12 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

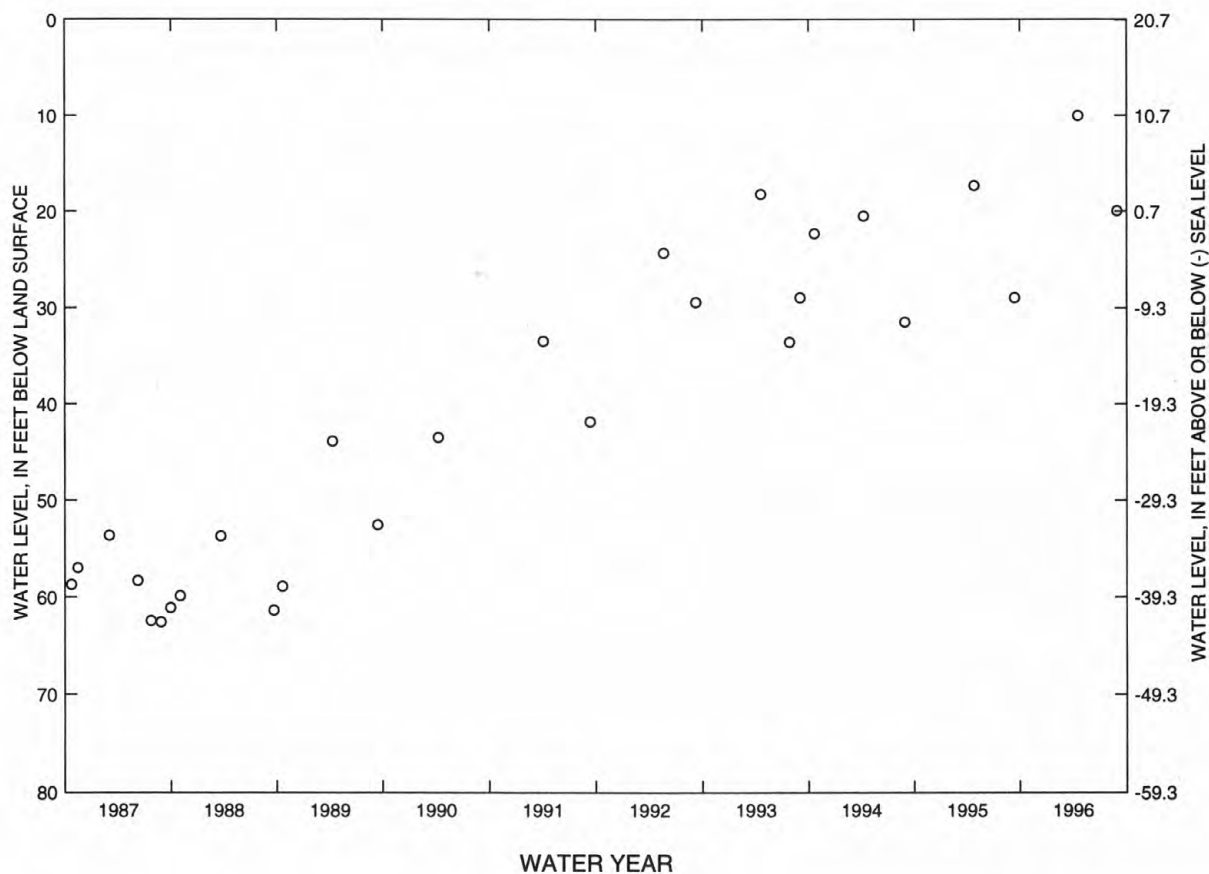
PERIOD OF RECORD.--January 1968 to current year. Records for 1968 to 1975 and 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.00 ft below land surface, Apr. 17, 1996; lowest, 73.64 ft below land surface, between Aug. 25 and Oct. 16, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	10.00	AUG 30	19.94

NJ-WRD WELL NO. 23-0439



GROUND-WATER LEVELS

127

MIDDLESEX COUNTY

403119074290301. Local I.D., Rutgers Golf 13 Obs. NJ-WRD Well Number, 23-1165.

LOCATION.--Lat 40°31'08", long 74°28'12", Hydrologic Unit 02030105, at the Rutgers University Golf Course, Piscataway Township.
Owner: State of New Jersey.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 50 to 200 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, June 1991 to May 1992.

DATUM.--Land surface is 58.8 ft above sea level.

Measuring point: Top of recorder shelf, 3.85 ft above land surface.

REMARKS.--Water level is affected by pumping of nearby irrigation well.

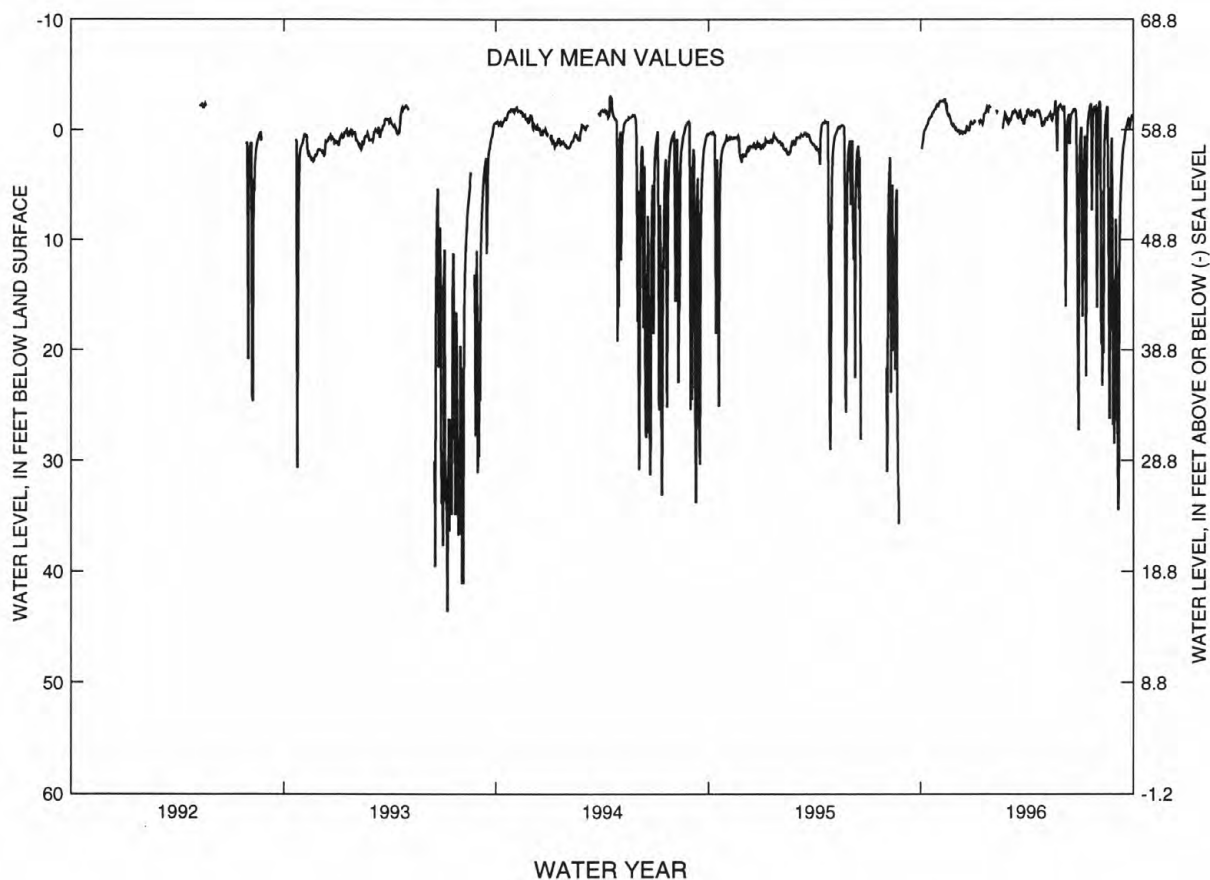
PERIOD OF RECORD.--June 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.14 ft above land surface, Apr. 16, 18, 1994; lowest, 49.87 ft below land surface, Aug. 6, 1993.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	.99	-2.55	.22	---	---	-.89	-1.70	-1.07	-2.11	8.63	-2.61	34.46
10	-.17	-2.54	.10	-.89	-1.60	-1.54	-1.66	-1.29	-.46	.56	10.53	4.84
15	-.97	-2.21	.17	-.67	---	-1.53	-1.09	-.88	-.63	-.32	-1.09	1.20
20	-1.24	-1.28	-.27	-1.48	-.12	-1.72	-1.81	-2.11	-1.78	-2.30	18.76	-.36
25	-1.84	-.40	-.20	-1.88	-1.45	-.92	-1.16	-1.51	-1.46	-1.78	.75	.04
EOM	-2.13	-.09	-.63	---	-.68	-1.14	-.65	-2.01	6.53	16.17	19.38	-1.37
MEAN	-.84	-1.67	-.05	-1.30	-1.11	-1.20	-1.39	-1.27	2.24	2.76	9.01	5.78
WTR YR 1996 MEAN 1.06 HIGH -2.87 NOV 12 LOW 47.25 SEP 6												

NJ-WRD WELL NO. 23-1165



GROUND-WATER LEVELS

MIDDLESEX COUNTY

403242074161701. Local I.D., American Cyanamid 1 Obs. NJ-WRD Well Number, 23-0482.

LOCATION.--Lat 40°32'42", long 74°16'17", Hydrologic Unit 02030104, at the rear of plant near Cutters Dock Rd., Woodbridge Township.
Owner: American Cyanamid Company.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 76 ft, screened 44 to 54 ft and 64 to 76 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Jan. 1977 to July 1984. Periodic measurements, July 1970 to Jan. 1977. Water-level recorder, Nov. 1952 to July 1970. Periodic measurements, Mar. 1952 to Nov. 1952. Water-level recorder, Oct. 1950 to Mar. 1952. Periodic measurements, Sept. 1950 to Oct. 1950.

DATUM.--Land surface is 11.00 ft above sea level.

Measuring point: Top of shelf, 2.10 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

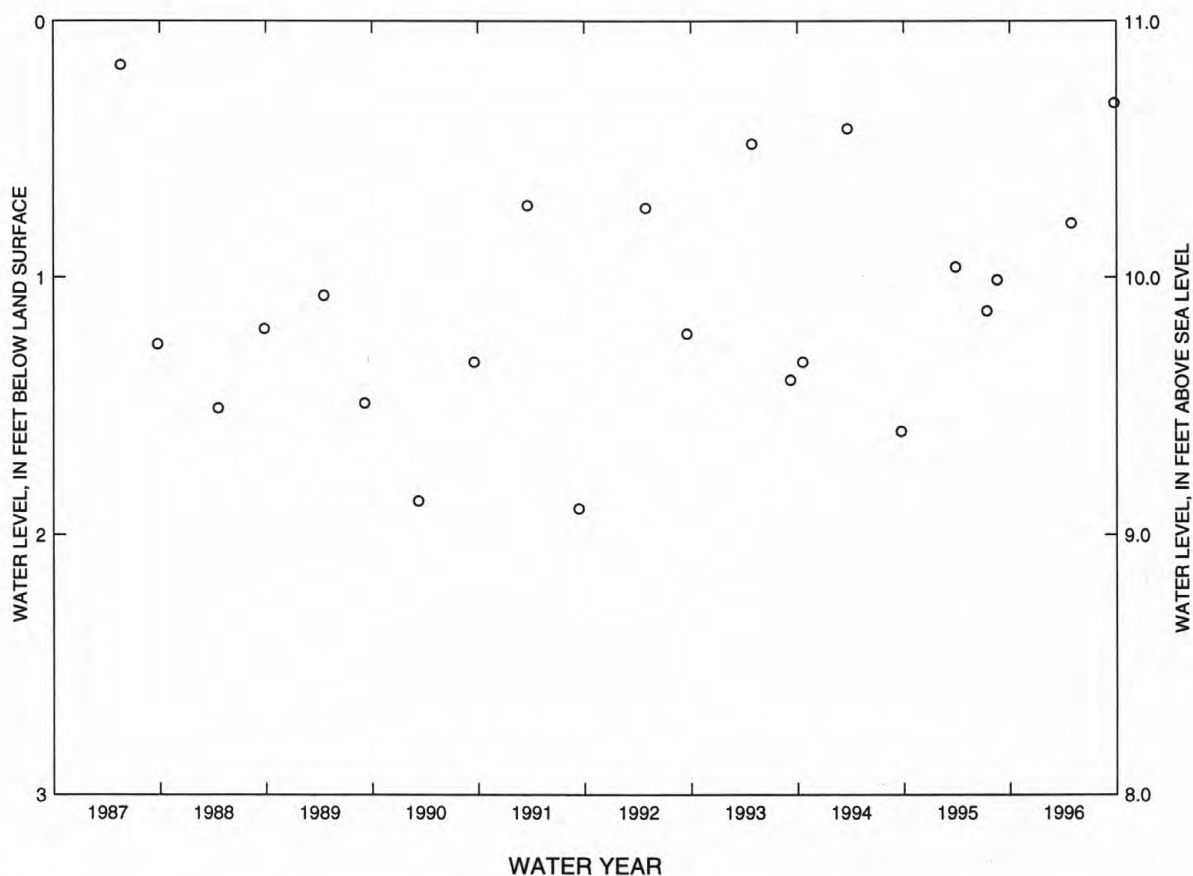
PERIOD OF RECORD.--Sept. 1950 to current year. Records for 1950 to 1982 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.34 ft above land surface, between Mar. 30 and July 17, 1984; lowest, 15.43 ft below land surface, between Aug. 26 and Oct. 14, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 29	0.79	SEP 25	0.32

NJ-WRD WELL NO. 23-0482



GROUND-WATER LEVELS

129

MONMOUTH COUNTY

400711074020201. Local I.D., DOE - Sea Girt Obs. NJ-WRD Well Number, 25-0486.

LOCATION.--Lat 40°07'11", long 74°02'02", Hydrologic Unit 02040301, at the National Guard Camp, Sea Girt, Sea Girt Borough.
Owner: State of New Jersey.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 614 ft, perforated casing 604 to 614 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 10 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.20 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

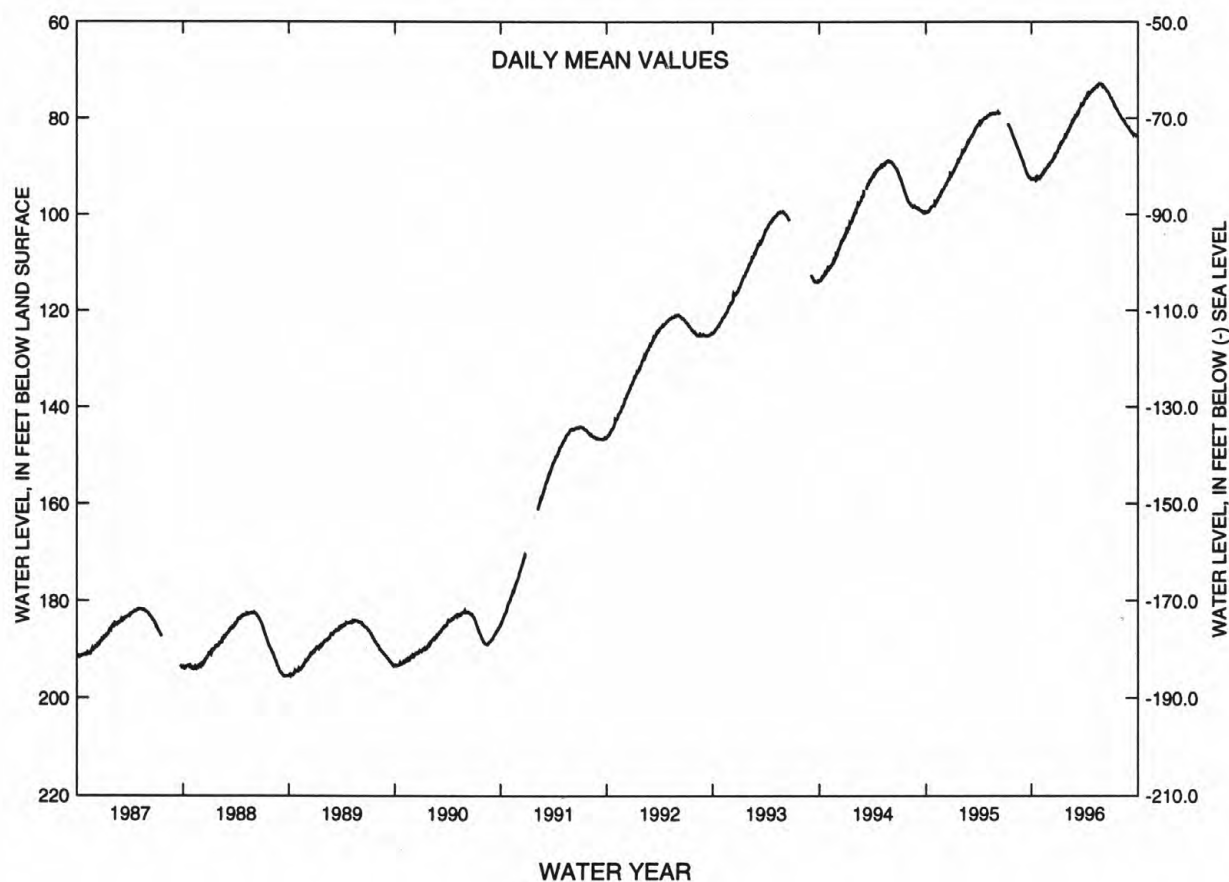
PERIOD OF RECORD.--May 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 72.64 ft below land surface, May 22, 1996; lowest, 195.60 ft below land surface, Sept. 17, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	92.67	91.96	89.29	86.19	82.53	79.58	75.86	73.68	73.32	76.17	79.77	82.45
10	92.74	91.61	88.80	85.27	81.87	79.04	75.17	73.46	73.72	76.74	80.17	82.89
15	92.53	90.50	88.37	84.94	81.15	77.94	75.06	73.39	74.07	77.46	80.56	83.19
20	92.58	90.51	87.30	84.41	80.80	77.06	74.68	72.85	74.41	77.95	81.15	83.36
25	92.42	90.12	87.20	83.83	80.25	77.12	74.36	72.92	74.94	78.56	81.51	83.47
END	92.32	89.55	86.80	82.96	79.78	76.42	73.92	73.03	75.67	79.18	82.04	83.70
MEAN	92.56	90.90	88.20	84.76	81.30	78.03	74.99	73.25	74.20	77.50	80.70	83.04
WTR YR 1996	MEAN 81.63	HIGH 72.64	MAY 22	LOW 93.00	OCT 17							

NJ-WRD WELL NO. 25-0486



GROUND-WATER LEVELS

MONMOUTH COUNTY

400832074082101. Local I.D., Allaire State Park C Obs. NJ-WRD Well Number, 25-0429.

LOCATION.--Lat 40°08'34", long 74°08'34", Hydrologic Unit 02040301, about 1.3 mi southeast of Lower Squankum off County Rt. 21, in Allaire State Park, Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 633 ft, screened 623 to 633 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, July 1975 to Feb. 1977. Water-level recorder, Feb. 1964 to July 1975.

DATUM.--Land surface is 97.93 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 1.64 ft above land surface.

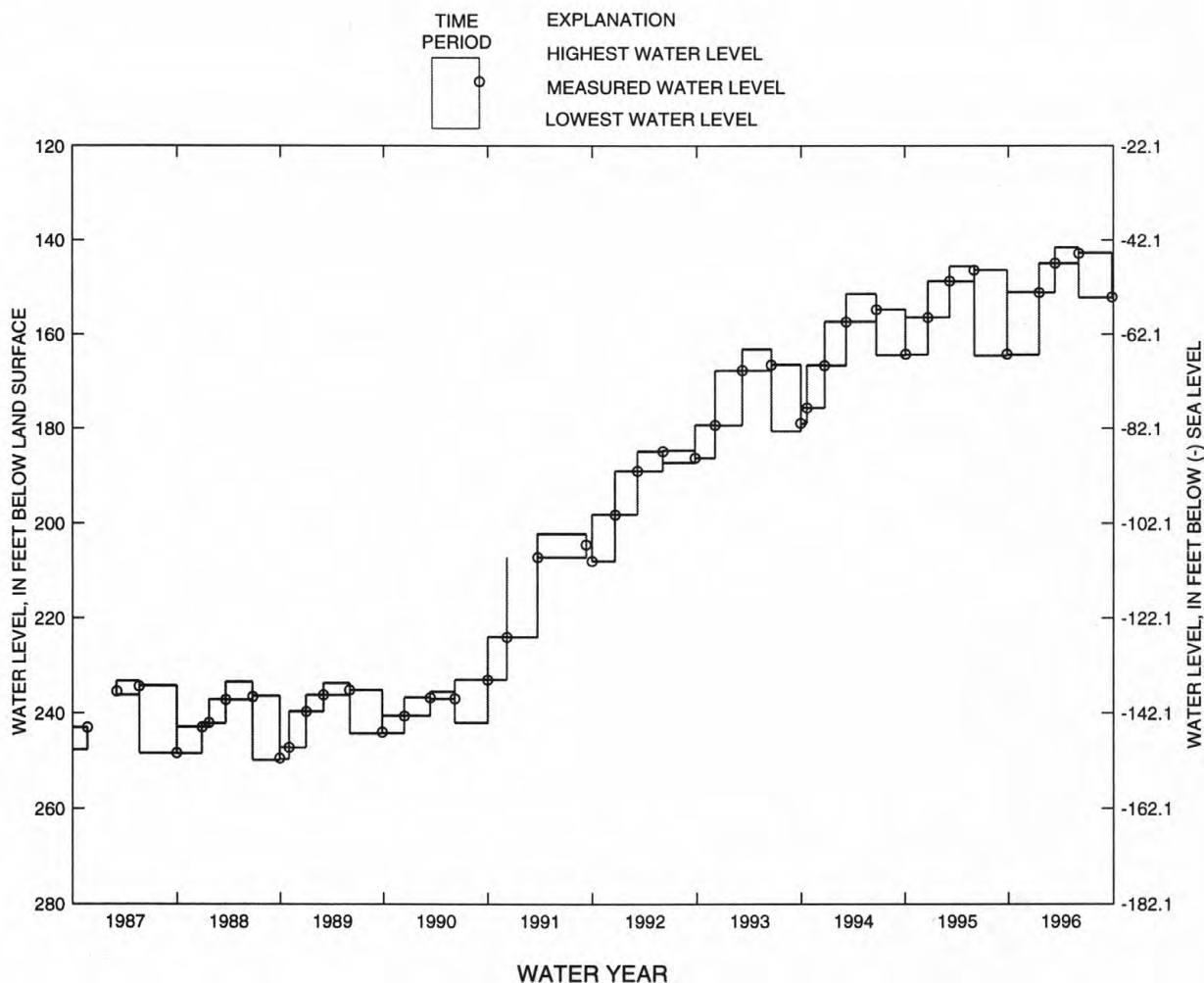
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 141.05 ft below land surface, Apr. 8, 1964; lowest, 249.89 ft below land surface, between June 24 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO JAN. 16, 1996	151.12	164.39	JAN. 16, 1996	151.15
JAN. 16, 1996 TO MAR. 12, 1996	144.96	151.18	MAR. 12, 1996	144.96
MAR. 12, 1996 TO JUNE 3, 1996	141.62	144.98	JUNE 3, 1996	142.84
JUNE 3, 1996 TO SEPT. 27, 1996	142.77	152.19	SEPT. 27, 1996	152.15

NJ-WRD WELL NO. 25-0429



GROUND-WATER LEVELS

131

MONMOUTH COUNTY

401105074120201. Local I.D., Howell Twp 1 Obs. NJ-WRD Well Number, 25-0635.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 2 in., depth 1,360 ft, screened 1,226 to 1,240, and 1,280 to 1,290 and 1,320 to 1,330 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 111.3 ft above sea level.

Measuring point: Top of recorder shelf, 2.10 ft above land surface.

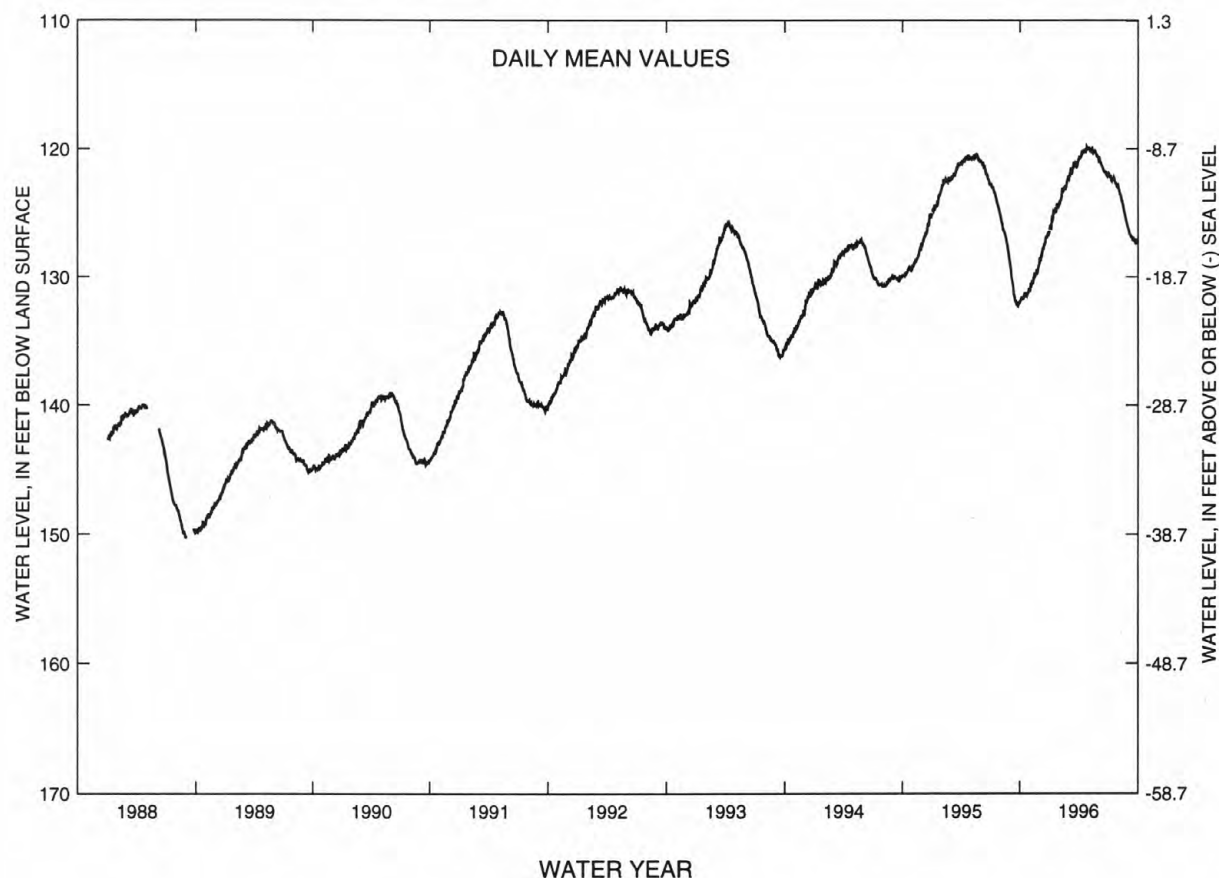
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 119.80 ft below land surface, Apr. 26, 1996; lowest, 150.32 ft below land surface, Sept. 2, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	131.69	130.68	128.59	126.15	123.99	121.88	120.68	120.07	120.89	122.13	123.37	126.58
10	131.74	130.52	127.83	125.38	123.29	121.98	120.26	120.14	121.27	122.29	123.73	126.83
15	131.22	129.66	127.50	124.99	123.12	121.30	120.38	120.34	121.53	122.33	124.28	127.10
20	131.41	129.69	126.89	124.88	123.11	121.01	120.12	120.11	121.74	122.33	124.96	127.14
25	131.29	129.53	126.76	124.42	122.43	121.21	120.05	120.46	121.90	122.75	125.51	127.24
EOM	131.14	128.95	126.42	124.25	122.28	120.92	119.87	120.71	122.05	122.99	126.12	127.31
MEAN	131.45	129.95	127.50	125.10	123.17	121.47	120.28	120.24	121.50	122.42	124.48	126.92
WTR YR 1996	MEAN	124.55	HIGH	119.80	APR 26	LOW	131.98	OCT 1				

NJ-WRD WELL NO. 25-0635



GROUND-WATER LEVELS

MONMOUTH COUNTY

401105074120202. Local I.D., Howell Twp 2 Obs. NJ-WRD Well Number, 25-0636.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Vincentown aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 100 ft, screened 85 to 95 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 111.9 ft above sea level.

Measuring point: Top of recorder shelf, 1.20 ft above land surface.

REMARKS.--Water level is affected by the stage of the Manasquan Reservoir and by nearby pumping.

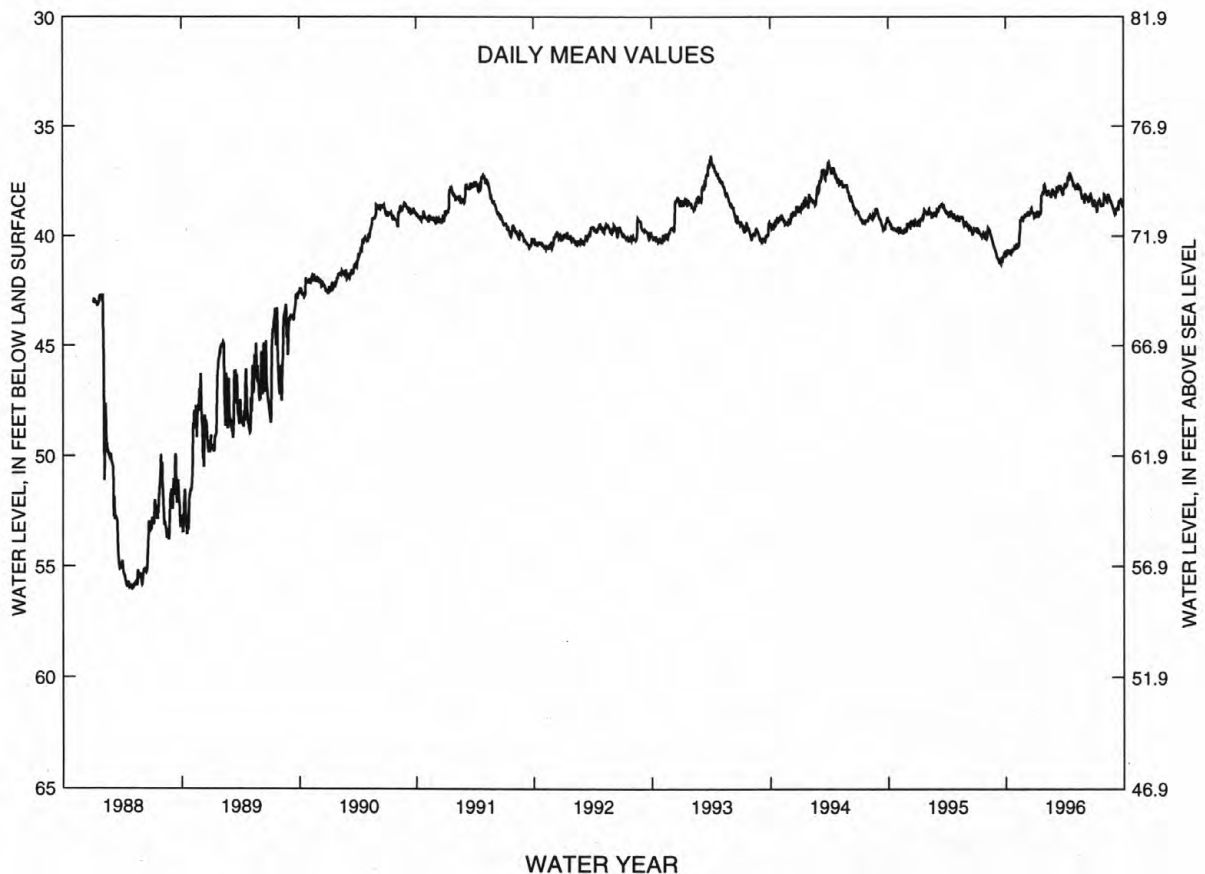
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.27 ft below land surface, Apr. 2, 1993; lowest, 56.09 ft below land surface, Apr. 29, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.78	40.55	39.08	39.09	38.10	38.17	37.70	37.80	38.11	38.55	38.24	39.04
10	40.76	40.51	38.88	39.02	38.00	38.02	37.50	37.74	38.26	38.77	38.36	38.79
15	40.63	39.26	38.99	39.01	38.11	37.70	37.49	37.91	38.31	38.49	38.14	38.77
20	40.72	39.19	38.74	38.16	38.19	37.71	37.20	37.84	38.11	38.41	38.34	38.44
25	40.60	39.23	38.97	38.01	37.93	37.98	37.48	38.25	38.34	38.60	38.53	38.42
EOM	40.58	39.11	39.07	37.72	38.11	37.83	37.61	38.30	38.54	38.58	38.79	38.54
MEAN	40.70	39.74	38.99	38.58	38.03	37.93	37.48	37.91	38.33	38.55	38.37	38.67
WTR YR 1996	MEAN 38.61	HIGH 37.05	APR 17	LOW 40.97	OCT 1, 3							

NJ-WRD WELL NO. 25-0636



MONMOUTH COUNTY

401105074120203. Local I.D., Howell Twp 3 Obs. NJ-WRD Well Number, 25-0637.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 324 ft, screened 307 to 317 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 111.9 ft above sea level.

Measuring point: Top of recorder shelf, 1.80 ft above land surface.

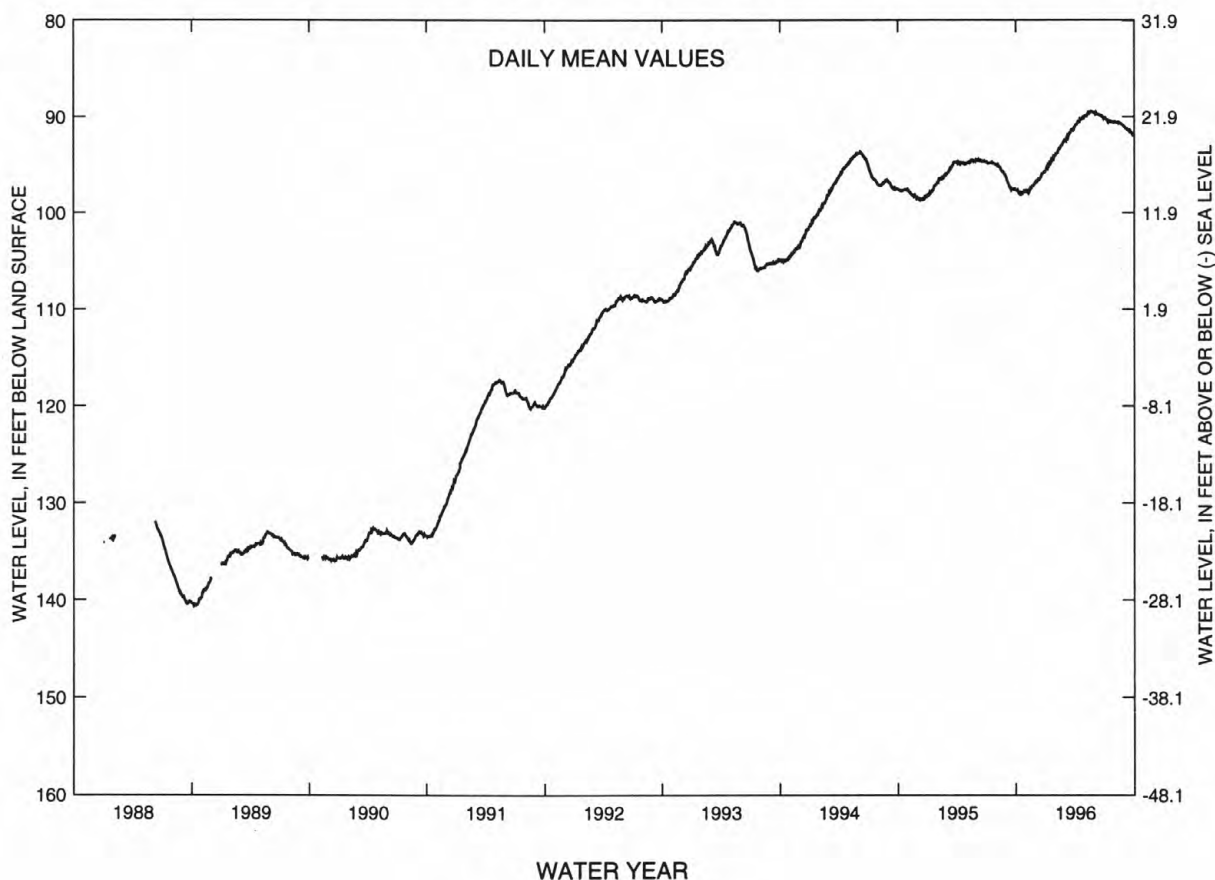
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 89.40 ft below land surface, May 21, 1996; lowest, 140.65 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	97.71	97.85	96.75	95.41	93.80	92.30	90.81	89.86	89.60	90.24	90.56	91.22
10	97.98	97.93	96.45	95.00	93.45	92.17	90.47	89.72	89.74	90.42	90.60	91.28
15	97.94	97.29	96.37	94.82	93.20	91.66	90.48	89.66	89.78	90.45	90.58	91.46
20	98.06	97.26	95.91	94.53	93.00	91.36	90.23	89.41	89.84	90.43	90.75	91.54
25	97.88	97.16	95.82	94.28	92.64	91.36	90.11	89.52	89.99	90.58	90.82	91.74
EOM	97.82	96.91	95.62	93.90	92.51	91.05	89.95	89.61	90.15	90.61	91.04	91.97
MEAN	97.88	97.45	96.24	94.74	93.20	91.73	90.41	89.63	89.84	90.43	90.69	91.46
WTR YR 1996	MEAN 92.81	HIGH 89.40	MAY 21	LOW 98.10	OCT 17-18							

NJ-WRD WELL NO. 25-0637



GROUND-WATER LEVELS

MONMOUTH COUNTY

401105074120204. Local I.D., Howell Twp 4 Obs. NJ-WRD Well Number, 25-0638.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 499 ft, screened 483 to 493 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 112.1 ft above sea level.

Measuring point: Top of recorder shelf, 1.80 ft above land surface.

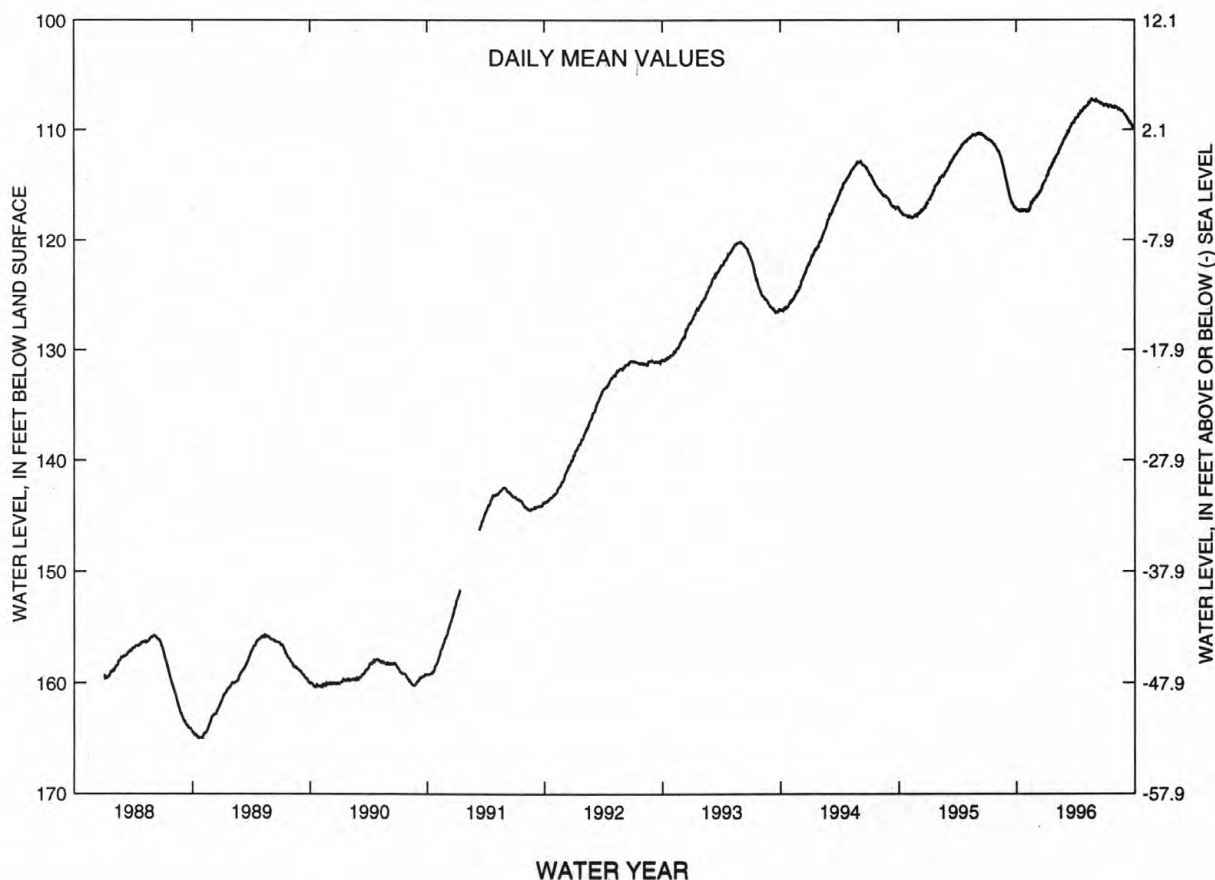
PERIOD OF RECORD.--Dec. 1987 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 107.20 ft below land surface, May 21-22, 1996; lowest, 165.02 ft below land surface, Oct. 21, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	117.28	117.39	115.97	114.13	112.23	110.48	108.87	107.84	107.28	107.74	107.93	108.73
10	117.34	117.26	115.69	113.63	111.87	110.21	108.62	107.69	107.43	107.80	108.03	108.97
15	117.30	116.59	115.53	113.35	111.55	109.81	108.51	107.52	107.49	107.80	108.08	109.23
20	117.38	116.49	115.08	113.04	111.30	109.49	108.31	107.23	107.60	107.79	108.24	109.41
25	117.29	116.38	114.81	112.74	110.87	109.37	108.12	107.31	107.68	107.96	108.30	109.69
EOM	117.37	116.13	114.49	112.40	110.68	109.05	107.96	107.37	107.80	108.01	108.56	109.97
MEAN	117.30	116.79	115.36	113.35	111.56	109.82	108.46	107.51	107.53	107.85	108.15	109.24
WTR YR 1996	MEAN 111.08	HIGH 107.20	MAY 21-22	LOW 117.42	NOV 1-2							

NJ-WRD WELL NO. 25-0638



MONMOUTH COUNTY

401105074120205. Local I.D., Howell Twp 5 Obs. NJ-WRD Well Number, 25-0639.

LOCATION.--Lat 40°11'05", long 74°12'02", Hydrologic Unit 02040301, on the south side of Peskin Rd., about 5,000 ft east of the intersection of Georgia Tavern Rd. and Peskin Rd., Howell Township.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 907 ft, screened 891 to 901 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 111.7 ft above sea level.

Measuring point: Top of recorder shelf, 2.40 ft above land surface.

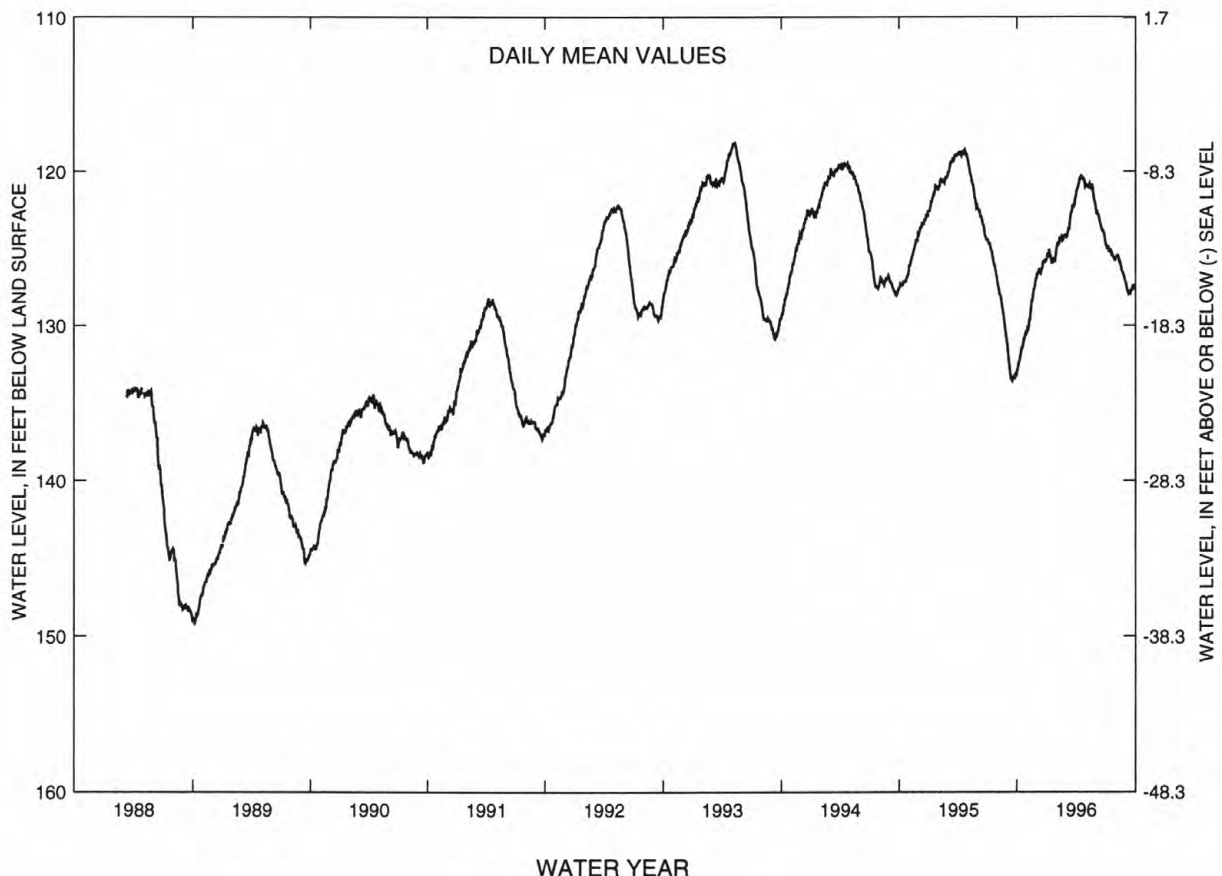
PERIOD OF RECORD.--Mar. 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 118.15 ft below land surface, May 6, 1993; lowest, 149.23 ft below land surface, Oct. 6-7, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	132.58	130.16	126.58	125.52	124.77	124.09	121.10	120.99	122.67	124.99	125.50	127.60
10	132.11	129.62	126.43	125.33	124.48	123.81	120.53	121.00	123.03	125.03	125.55	127.91
15	131.42	128.32	126.37	125.83	124.40	122.76	120.51	121.09	123.44	125.18	125.92	127.93
20	131.18	127.93	125.86	125.81	124.46	122.24	120.44	120.90	123.75	125.27	126.43	127.73
25	130.69	127.42	125.82	125.80	124.16	122.14	120.59	121.66	123.95	125.58	126.68	127.47
EOM	130.44	126.91	125.65	124.94	124.19	121.57	120.88	122.39	124.63	125.74	127.14	127.54
MEAN	131.54	128.59	126.22	125.56	124.44	122.92	120.71	121.24	123.44	125.24	126.11	127.65
WTR YR 1996	MEAN 125.31 HIGH 120.16 APR 16 LOW 133.06 OCT 1											

NJ-WRD WELL NO. 25-0639



GROUND-WATER LEVELS

MONMOUTH COUNTY

401542074053001. Local I.D., Fort Monmouth 1-NCO Obs. NJ-WRD Well Number, 25-0353.

LOCATION.--Lat 40°15'42", long 74°05'30", Hydrologic Unit 02030104, at Training Center, Wyckoff Rd. and Wayside Rd., Tinton Falls Borough.
Owner: U.S. Army.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 3.5 in., depth 327 ft, screened 321 to 327 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 140 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 1.50 ft above land surface.

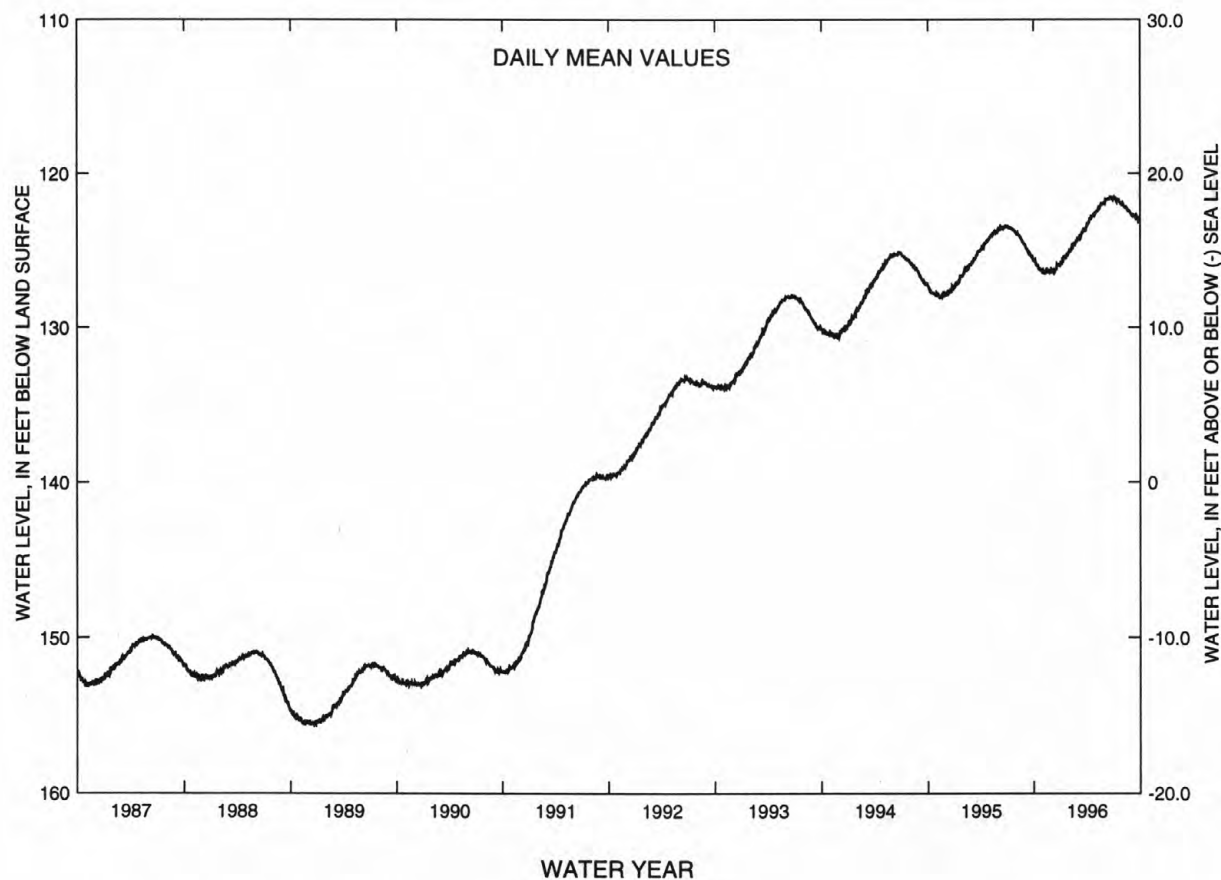
PERIOD OF RECORD.--Feb. 1985 to current year. Records for 1985 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 121.52 ft below land surface, July 3-4, 1996; lowest, 155.63 ft below land surface, Dec. 22-23, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	125.75	126.50	126.43	125.90	125.07	124.27	123.26	122.47	121.72	121.60	122.08	122.79
10	125.96	126.58	126.27	125.57	124.78	124.22	122.96	122.36	121.72	121.72	122.18	122.74
15	125.94	126.17	126.26	125.50	124.66	123.82	123.00	122.27	121.64	121.72	122.23	122.83
20	126.24	126.40	125.95	125.42	124.68	123.60	122.80	121.99	121.56	121.73	122.42	122.84
25	126.29	126.46	125.98	125.28	124.39	123.69	122.67	122.02	121.57	121.93	122.44	122.95
EOM	126.46	126.38	125.97	125.08	124.33	123.47	122.54	121.93	121.67	122.05	122.64	123.11
MEAN	126.06	126.40	126.19	125.50	124.70	123.89	122.93	122.19	121.68	121.78	122.29	122.83
WTR YR 1996	MEAN 123.87 HIGH 121.52 JUL 3-4 LOW 126.59 NOV 10											

NJ-WRD WELL NO. 25-0353



GROUND-WATER LEVELS

137

MONMOUTH COUNTY

401906074151401. Local I.D., Village 215 Obs. NJ-WRD Well Number, 25-0250.

LOCATION.--Lat 40°19'18", long 74°15'29", Hydrologic Unit 02030104, near the intersection of River Dr. and Newport Rd., Marlboro Township.
Owner: Gordons Corner Water Company

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 215 ft, screened 185 to 215 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Periodic measurements, July 1975 to Sept. 1984. Water-level recorder, Apr. 1971 to July 1975.

DATUM.--Land surface is 138.60 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 2.26 ft above land surface.

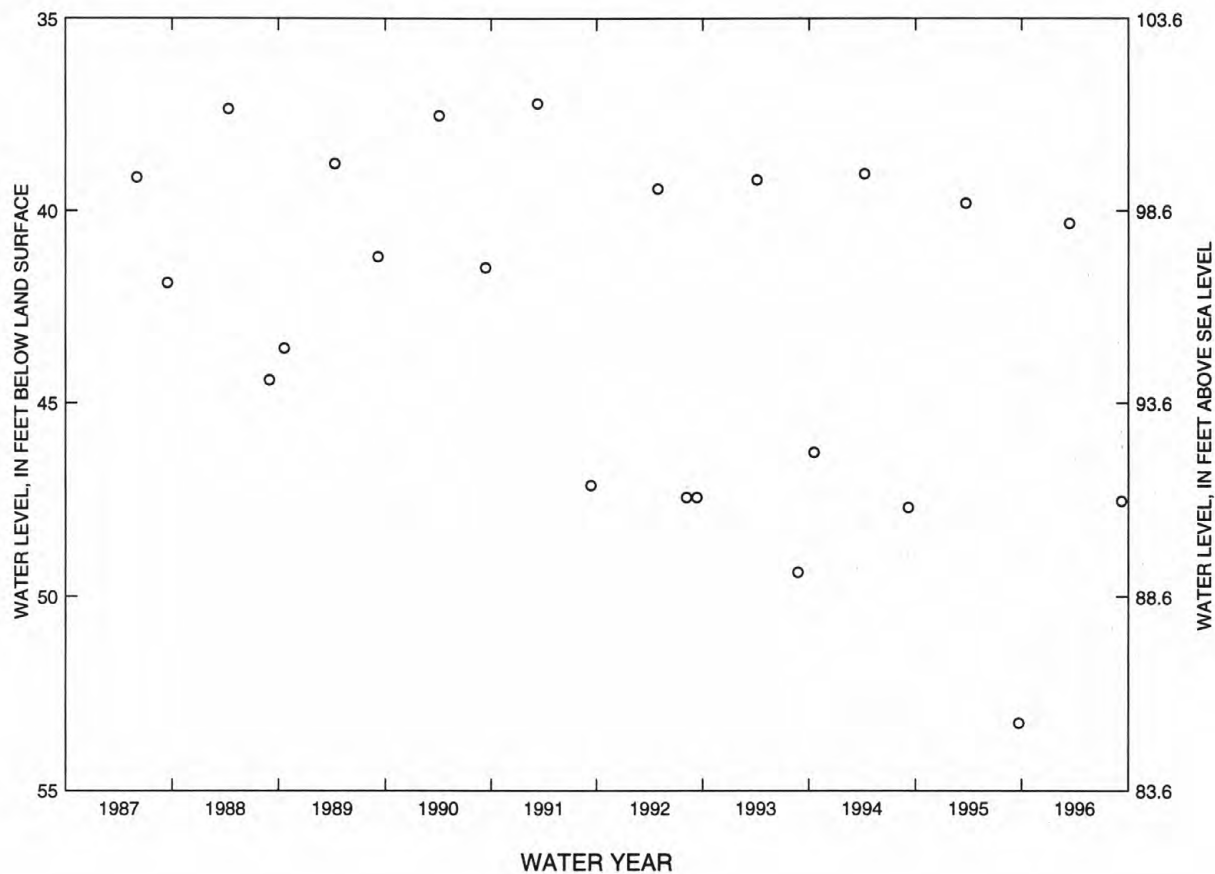
PERIOD OF RECORD.--Apr. 1971 to Sept. 1984, May 1986 to current year. Records for 1971 to 1976 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.92 ft below land surface, between Mar. 27 and July 12, 1984, lowest, 53.27 ft below land surface, Sept. 21, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 13	40.33	SEP 9	47.54

NJ-WRD WELL NO. 25-0250



GROUND-WATER LEVELS

MONMOUTH COUNTY

402208074145201. Local I.D., Marlboro 1 Obs. NJ-WRD Well Number, 25-0272.

LOCATION.--Lat 40°22'08", long 74°14'52", Hydrologic Unit 02030105, on the west side of NJ Rt. 79, 0.9 mi south of Morganville, Marlboro Township.
Owner: Marlboro Township Municipal Utilities Authority.

AQUIFER.--Farrington aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 680 ft, screened 670 to 680 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 116.93 ft above sea level.

Measuring point: Top of recorder shelf, 2.50 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

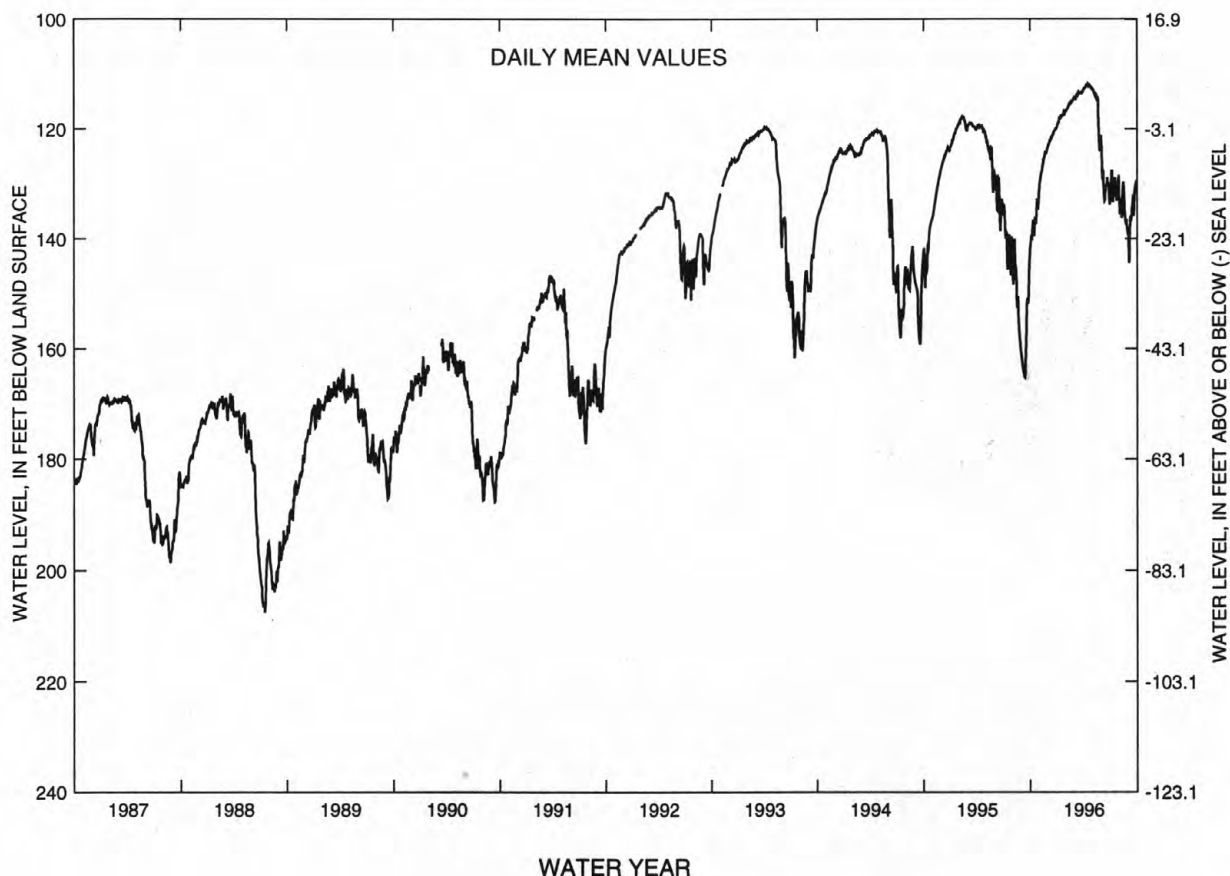
PERIOD OF RECORD.--Jan. 1973 to current year. Records for 1973 to 1977 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 111.77 ft below land surface, Apr. 16, 1996; lowest, 207.78 ft below land surface, July 16, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	139.59	128.80	122.49	118.92	116.32	114.18	112.52	113.09	129.12	128.61	133.33	144.45
10	137.26	127.59	121.69	117.94	115.68	114.01	112.04	113.96	131.93	133.24	136.13	135.76
15	139.30	125.56	121.22	117.69	115.28	113.35	112.07	114.27	131.28	130.11	129.83	134.21
20	137.26	124.48	120.51	117.55	115.07	113.33	111.95	114.55	129.87	129.75	134.62	132.83
25	132.85	124.27	120.13	117.13	114.61	113.39	112.43	122.99	129.86	130.40	137.35	130.85
EOM	131.43	123.30	119.59	116.61	114.49	112.87	112.71	122.09	133.70	128.79	138.96	129.39
MEAN	136.85	126.14	121.16	117.76	115.48	113.63	112.29	116.47	130.02	130.46	134.57	135.18
WTR YR 1996	MEAN 124.29	HIGH 111.77	APR 16	LOW 145.01	SEP 6							

NJ-WRD WELL NO. 25-0272



GROUND-WATER LEVELS

139

MONMOUTH COUNTY

402426074001901. Local I.D., AHWD B Obs. NJ-WRD Well Number, 25-0715.

LOCATION.--Lat 40°24'26", long 74°00'19", Hydrologic Unit 02030104, near the intersection of Highland Ave. and Beverot Pl., Atlantic Highlands Borough.

Owner: Atlantic Highlands Water Department.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 360 ft, screened 350 to 360 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 220 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 2.90 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

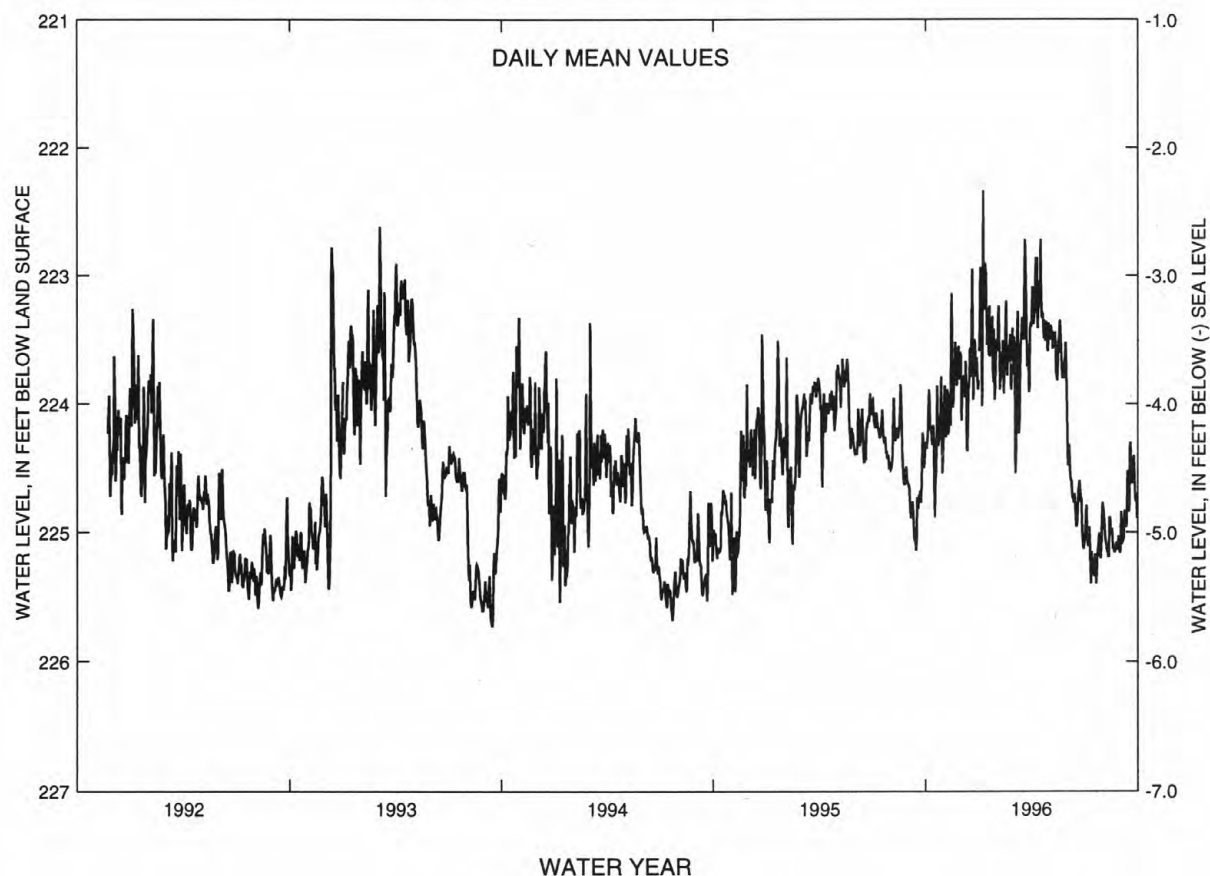
PERIOD OF RECORD.--Aug. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 221.79 ft below land surface, Mar. 14, 1993; lowest, 226.20 ft below land surface, Sept. 16, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	224.23	224.26	223.83	223.59	223.49	224.37	223.32	223.44	224.46	225.00	225.01	225.07
10	224.20	224.19	223.83	223.10	223.80	224.23	222.86	223.48	224.73	225.07	225.16	224.93
15	224.19	223.14	223.82	223.54	223.53	223.33	223.22	223.82	224.84	225.26	225.01	224.70
20	224.32	223.70	222.95	223.63	223.61	222.72	223.30	223.35	224.67	225.25	225.12	224.50
25	224.25	223.72	223.54	223.75	223.85	223.54	223.50	223.79	224.73	225.09	225.10	224.53
EOM	224.42	223.60	223.82	223.50	223.77	223.40	223.37	223.95	225.09	224.89	225.16	224.89
MEAN	224.26	223.85	223.78	223.41	223.61	223.59	223.25	223.59	224.73	225.14	225.05	224.73
WTR YR 1996 MEAN 224.09 HIGH 221.89 JAN 8 LOW 225.76 JUL 12												

NJ-WRD WELL NO. 25-0715



GROUND-WATER LEVELS

MONMOUTH COUNTY

402536073590501. Local I.D., Sandy Hook SP 1 Obs. NJ-WRD Well Number, 25-0316.

LOCATION.--Lat 40°25'36", long 73°59'05", Hydrologic Unit 02030104, about 1.9 mi north of the main entrance of Sandy Hook National Park, Middletown Township.
Owner: State of New Jersey.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 397 ft, screened 371 to 397 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Feb. 1977 to Dec. 1984. Periodic measurements, Aug. 1975 to Feb. 1977. Water-level recorder, May 1965 to Aug. 1975.

DATUM.--Land surface is 10.91 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 1.76 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

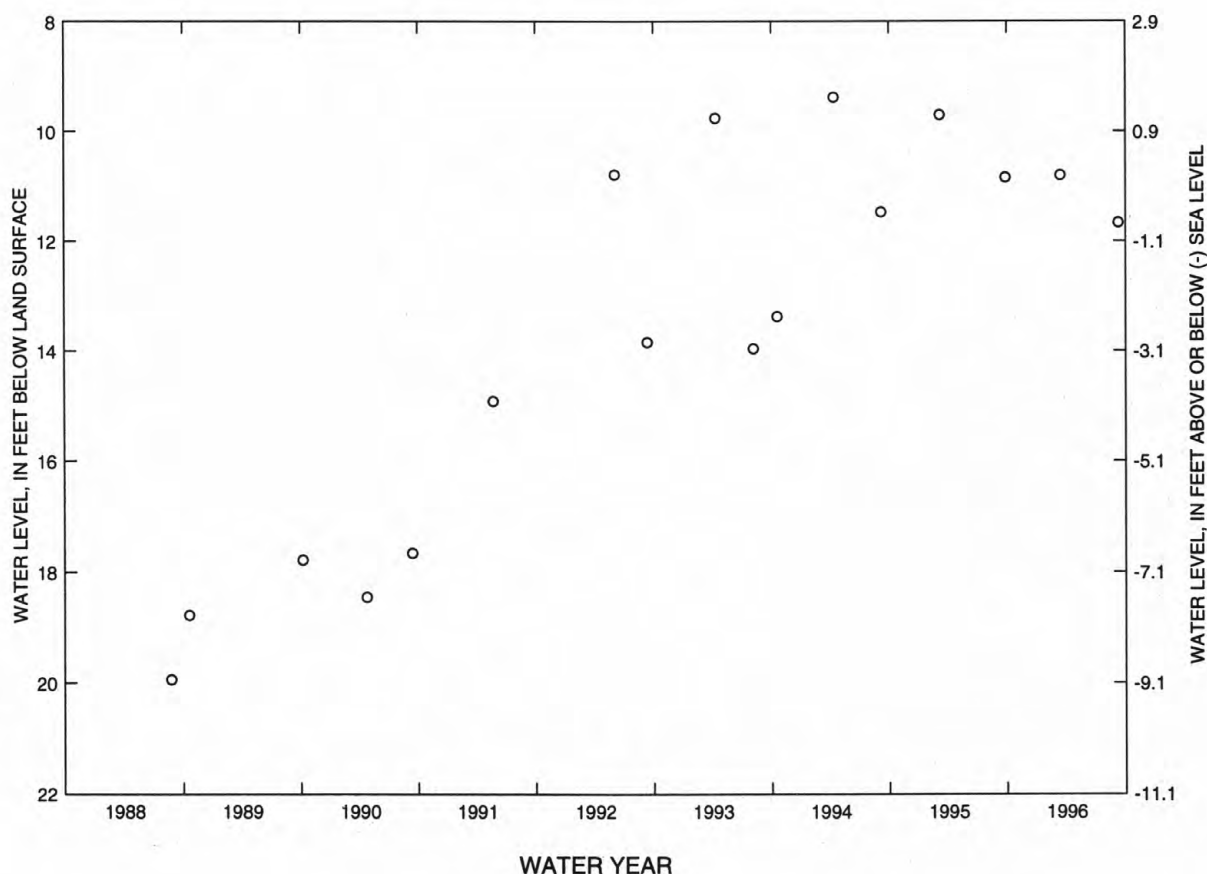
PERIOD OF RECORD.--May 1965 to Dec. 1984, Aug. 1988 to current year. Records for 1965 to 1976 and 1988 to 1992 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.99 ft below land surface, Jan. 23, 1966; lowest, 20.12 ft below land surface, between Sept. 7 and Nov. 2, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 13	10.80	SEP 9	11.66

NJ-WRD WELL NO. 25-0316



MONMOUTH COUNTY

402626074114204. Local I.D., Keyport 4 Obs. NJ-WRD Well Number, 25-0206.

LOCATION.--Lat 40°26'25", long 74°11'45", Hydrologic Unit 02030104, at the Benjamin C. Terry Park, Myrtle Ave., Keyport Borough.
Owner: Keyport Borough Water Department.

AQUIFER.--Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 249 ft, screened 225 to 249 ft.

INSTRUMENTATION.--Water-level extremes recorder. Water-level recorder, June 1978 to Nov. 1987.

DATUM.--Land surface is 14.47 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.47 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

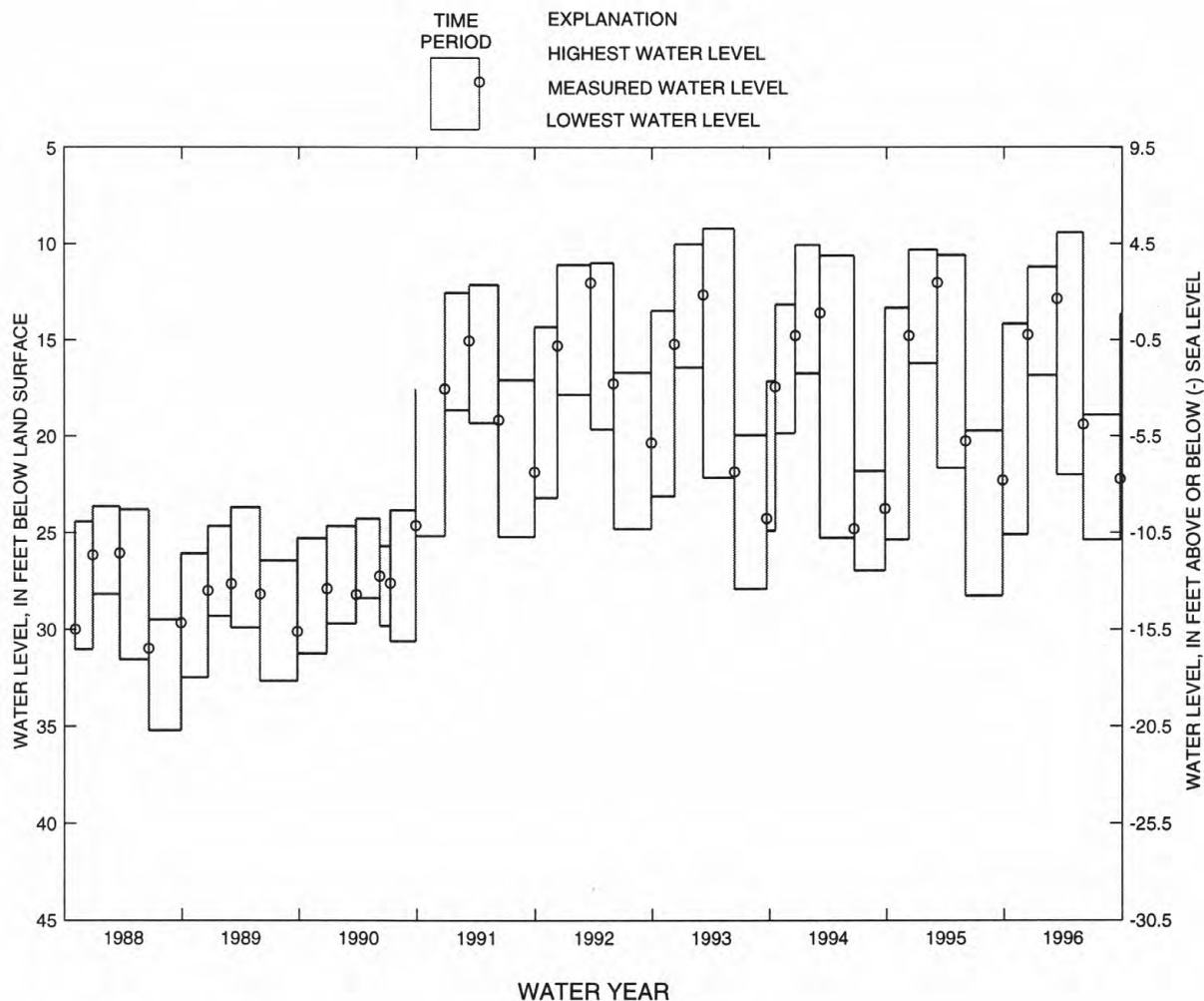
PERIOD OF RECORD.--June 1978 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.20 ft below land surface, between Mar. 8 and June 14, 1993; lowest, 35.22 ft below land surface, between June 20 and Sept. 28, 1988.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 13, 1995	14.18	25.10	DEC. 13, 1995	14.73
DEC. 13, 1995 TO MAR. 13, 1996	11.22	16.86	MAR. 13, 1996	12.87
MAR. 13, 1996 TO JUNE 3, 1996	9.42	22.00	JUNE 3, 1996	19.40
JUNE 3, 1996 TO SEPT. 26, 1996	18.91	25.39	SEPT. 26, 1996	22.23

NJ-WRD WELL NO. 25-0206



GROUND-WATER LEVELS

MORRIS COUNTY

404432074225301. Local I.D., Recreation Fld Obs. NJ-WRD Well Number, 27-0001.

LOCATION.--Lat 40°44'32", long 74°22'52", Hydrologic Unit 02030103, at Chatham Recreation Field, about 35 ft east of the intersection of Center Place and North Passaic St., Chatham Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 150 ft, screened 140 to 150 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Mar. 1967 to Aug. 1970.

DATUM.--Land surface is 218.8 ft above sea level, by altimeter.

Measuring point: Top of well shelter shelf, 3.20 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

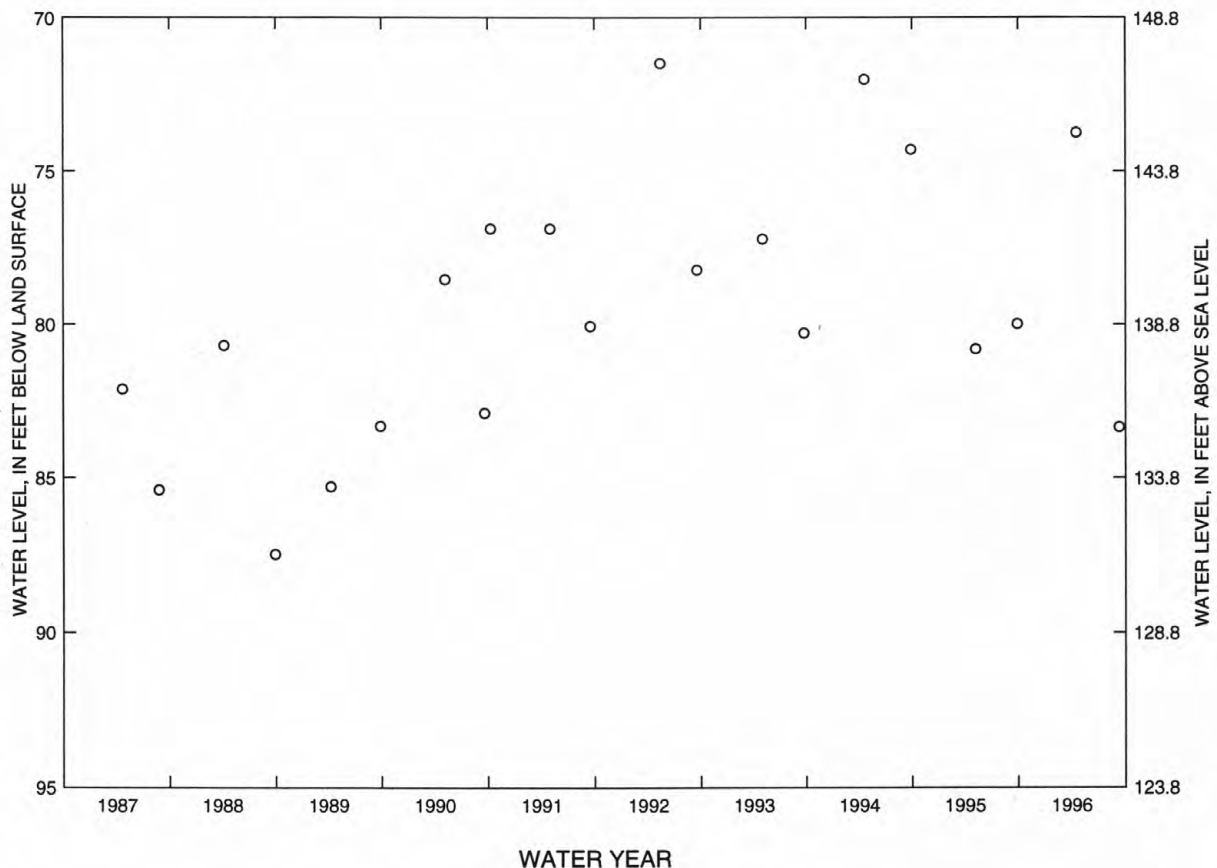
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.30 ft below land surface, May 23, 1985; lowest, 94.55 ft below land surface, Aug. 16, 1970.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	73.75	SEP 10	83.36

NJ-WRD WELL NO. 27-0001



GROUND-WATER LEVELS

143

MORRIS COUNTY

404510074240201. Local I.D., MBWD 4 Obs. NJ-WRD Well Number, 27-0017.

LOCATION.--Lat 40°45'08", long 74°24'02", Hydrologic Unit 02030103, at the Madison Borough Public Works facility, John Ave. and Dean St, Madison Borough.

Owner: Madison Borough Water Department.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, depth 100 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1955 to June 1970.

DATUM.--Land surface is 194.90 ft above sea level.

Measuring point: Top of well shelter shelf, 1.97 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

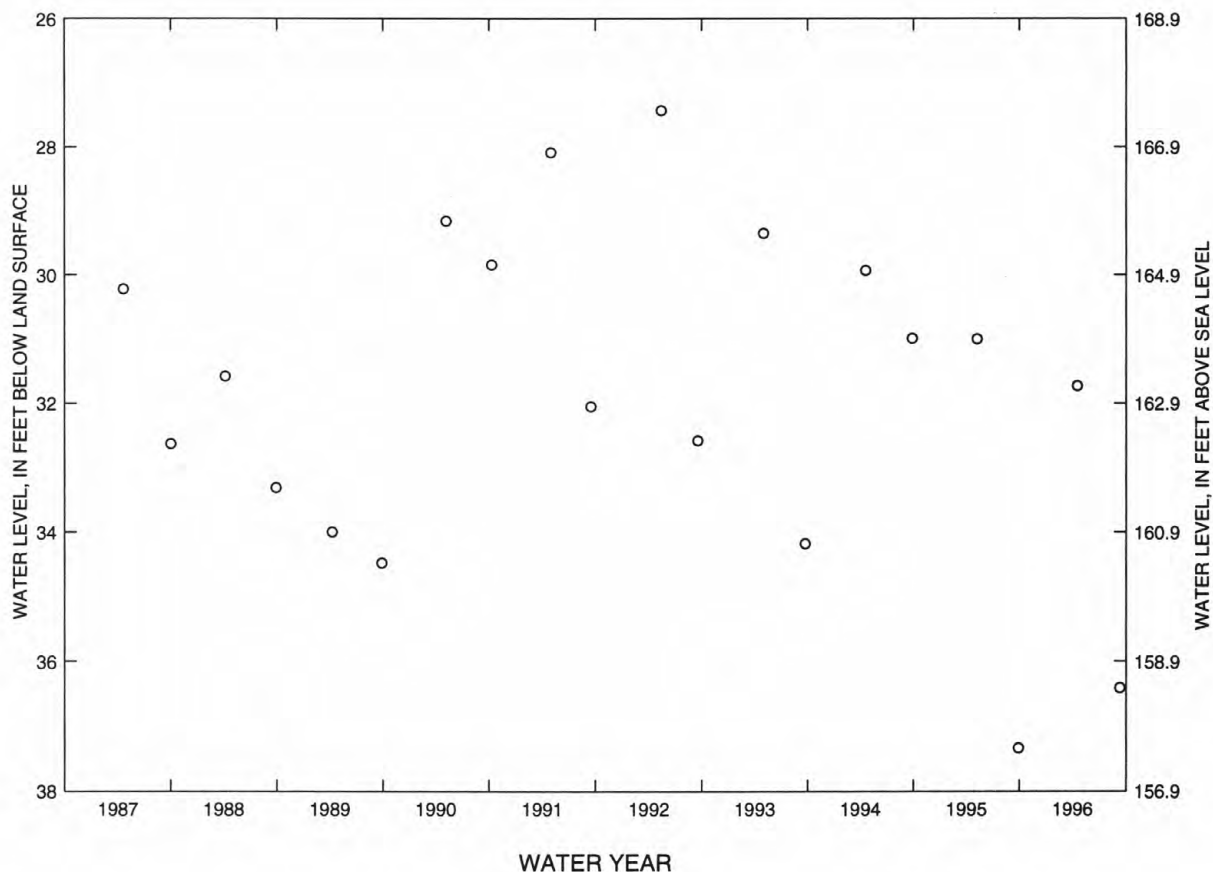
PERIOD OF RECORD.--Apr. 1955 to current year. Records for 1955 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.50 ft below land surface, Apr. 30, 1955; lowest, 37.34 ft below land surface, Sept. 28, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	31.73	SEP 10	36.41

NJ-WRD WELL NO. 27-0017



GROUND-WATER LEVELS

MORRIS COUNTY

404513074245401. Local I.D., Madison 8 Obs. NJ-WRD Well Number, 27-1197.

LOCATION.--Lat 40°45'13", long 74°24'54", Hydrologic Unit 02030103, in the Municipal parking lot, Prospect St. and Kings Rd, Madison Borough.
Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 161 ft, screened 142 to 161 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 246.6 ft above sea level.

Measuring point: Top of casing, 0.60 ft below land surface.

REMARKS.--Well apparently paved over between May and Sept. 1996.

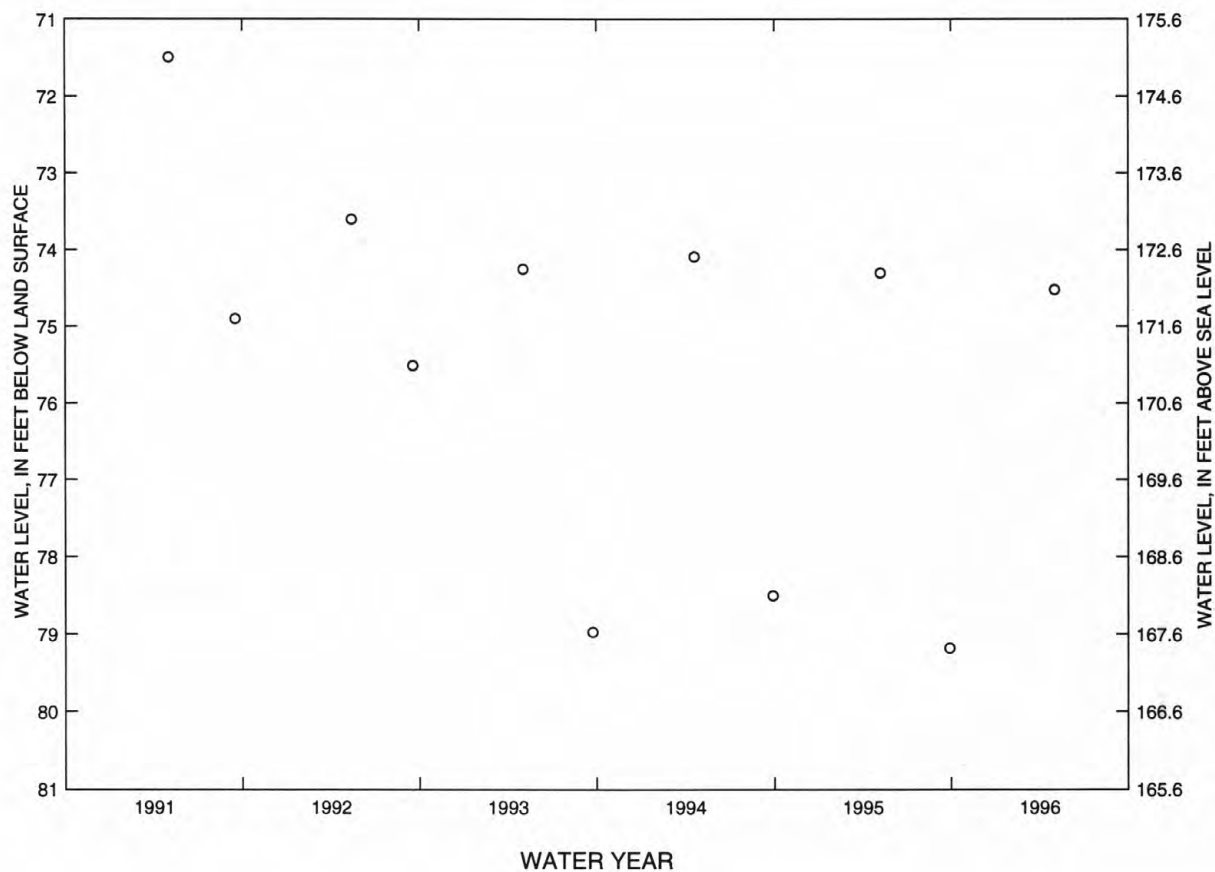
PERIOD OF RECORD.--May 1991 to current year (discontinued).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 71.49 ft below land surface, May 2, 1991; lowest, 79.18 ft below land surface, Sept. 28, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL
MAY 2	74.52

NJ-WRD WELL NO. 27-1197



GROUND-WATER LEVELS

145

MORRIS COUNTY

404639074230001. Local I.D., Briarwood School Obs. NJ-WRD Well Number, 27-0012.

LOCATION.--Lat 40°46'39", long 74°23'00", Hydrologic Unit 02030103, at Briarwood School, Florham Park Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 110 ft, screened 100 to 110 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to Mar. 1977. Water-level recorder, Mar. 1967 to Aug. 1975.

DATUM.--Land surface is 198 ft above sea level, by altimeter.
Measuring point: Top of recorder shelf, 3.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

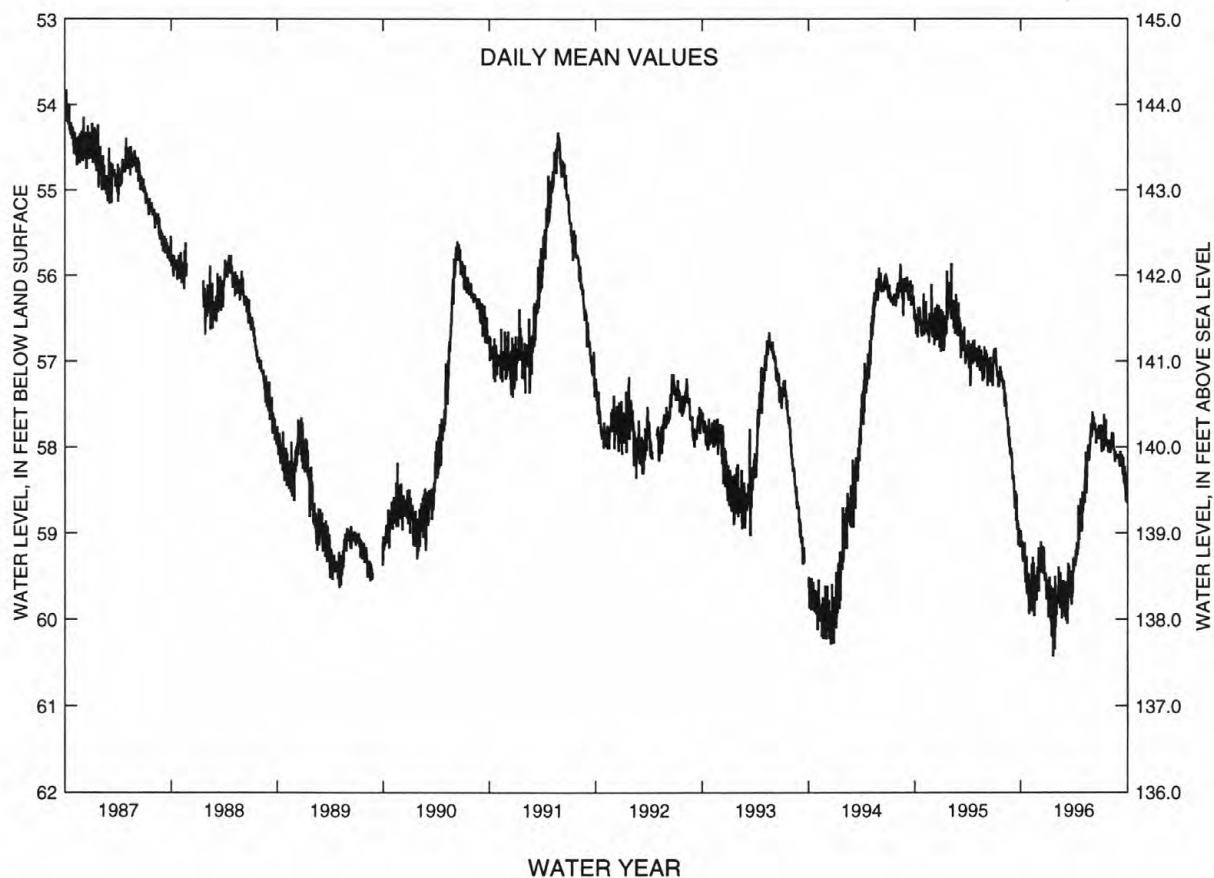
PERIOD OF RECORD.--Mar. 1967 to current year. Records for 1967 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 34.17 ft below land surface, June 3, 1968; lowest, 60.56 ft below land surface, Jan. 20, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.12	59.84	59.44	59.91	59.76	59.56	59.38	58.61	57.74	58.06	58.01	58.23
10	59.28	59.74	59.25	59.89	59.78	60.01	59.11	58.24	57.76	58.02	57.94	58.15
15	59.20	59.52	59.31	60.20	59.79	59.38	59.19	58.31	57.85	57.87	58.04	58.32
20	59.36	59.68	59.27	60.43	59.73	59.44	58.79	57.98	57.79	57.95	58.12	58.42
25	59.60	59.56	59.47	60.35	59.78	59.49	58.75	58.02	57.75	57.95	58.11	58.51
EOM	59.83	59.49	59.54	59.78	59.97	59.37	58.52	57.89	57.75	57.92	58.13	58.65
MEAN	59.38	59.64	59.42	59.88	59.72	59.63	59.03	58.23	57.79	57.91	58.04	58.28
WTR YR 1996 MEAN 58.91 HIGH 57.35 JUL 13 LOW 60.56 JAN 20												

NJ-WRD WELL NO. 27-0012



GROUND-WATER LEVELS

MORRIS COUNTY

404703074245201. Local I.D., Exxon Obs. NJ-WRD Well Number, 27-0014.

LOCATION.--Lat 40°47'05", long 74°24'52", Hydrologic Unit 02030103, at the Exxon facility, Park Ave, Florham Park Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 120 ft, screened 110 to 120 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1967 to July 1970.

DATUM.--Land surface is 176 ft above sea level, by altimeter.

Measuring point: Top of well shelter shelf, 3.90 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

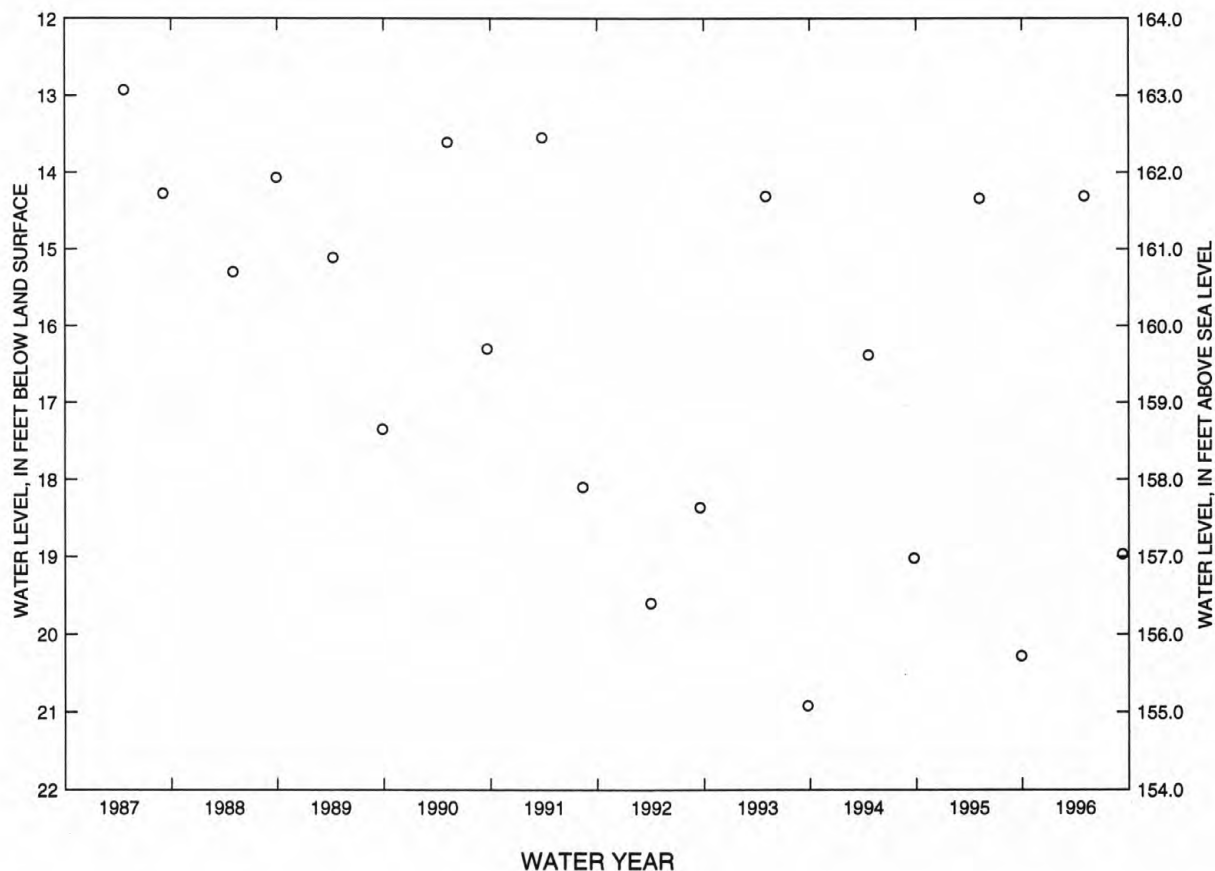
PERIOD OF RECORD.--May 1967 to current year. Records for 1967 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.15 ft above land surface, May 8, 1967; lowest, 20.92 ft below land surface, Sept. 23, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 2	14.31	SEP 10	18.97

NJ-WRD WELL NO. 27-0014



MORRIS COUNTY

404712074454701. Local I.D., Drew University Farm Obs. NJ-WRD Well Number, 27-1303.

LOCATION.--Lat 40°47'12", long 74°45'47", Hydrologic Unit 02030105, near the intersection of Bartley Rd. and Rt. 24, Long Valley, Washington Township.

Owner: State of New Jersey - New Jersey Geological Survey.

AQUIFER.--Leithsville Formation of Cambrian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 118 ft, open hole 97.6 to 118 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 600.8 ft above sea level.

Measuring point: Top of recorder shelf, 1.50 ft above land surface.

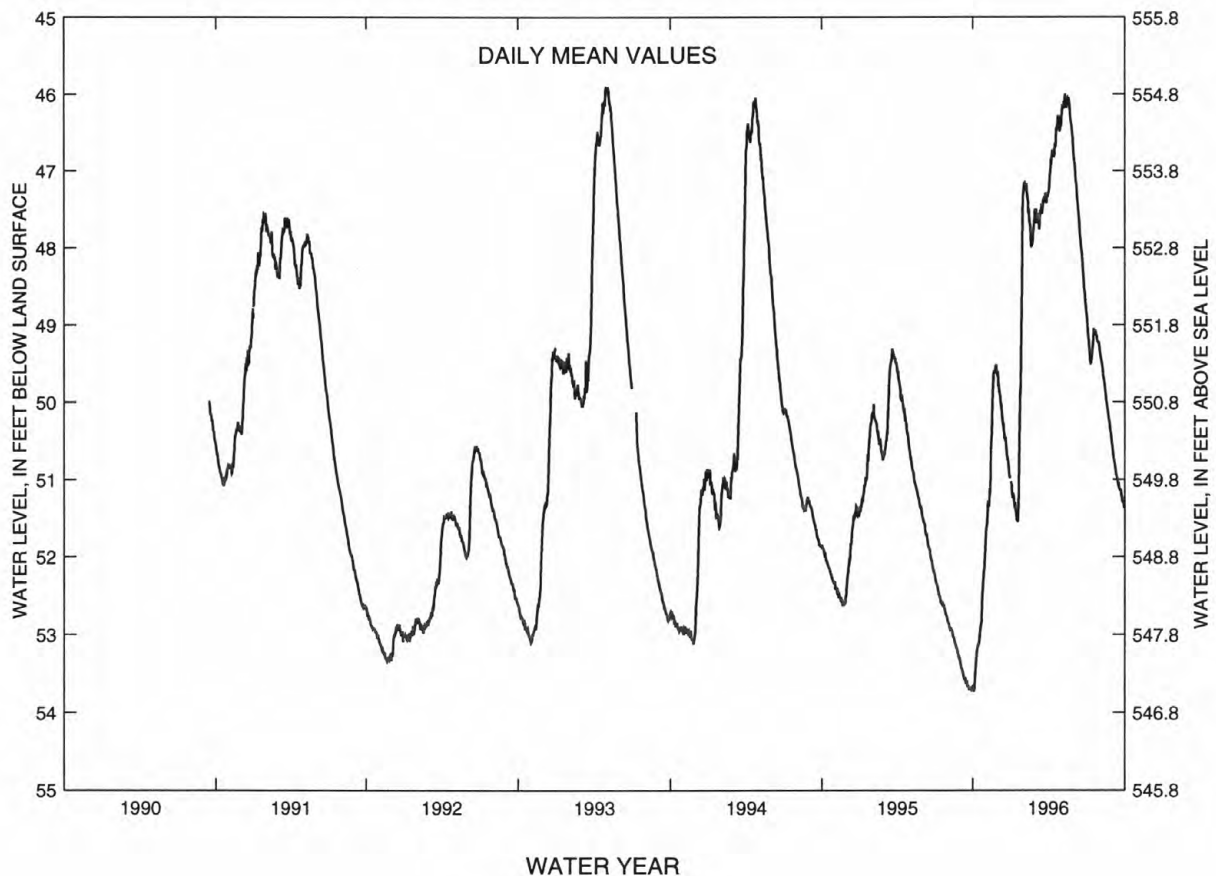
PERIOD OF RECORD.--Sept. 1990 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.88 ft below land surface, Apr. 30-May 1, 1993; lowest, 53.76 ft below land surface, Oct. 4, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.70	51.51	49.89	51.21	47.21	47.56	47.03	46.18	47.07	49.11	49.42	50.74
10	53.27	51.28	50.10	51.33	47.37	47.76	46.73	46.08	47.40	49.43	49.61	50.91
15	53.12	50.54	50.36	51.53	47.67	47.43	46.82	46.14	47.75	49.37	49.83	51.06
20	52.91	49.72	50.52	51.30	47.98	47.37	46.43	46.07	48.05	49.11	50.06	51.14
25	52.43	49.54	50.75	49.81	47.76	47.29	46.32	46.38	48.41	49.13	50.25	51.25
EOM	51.90	49.67	50.98	47.30	47.62	47.30	46.38	46.75	48.75	49.23	50.52	51.37
MEAN	52.99	50.51	50.37	50.53	47.55	47.48	46.69	46.24	47.77	49.19	49.88	51.01
WTR YR 1996	MEAN 49.20 HIGH 45.94 MAY 11 LOW 53.76 OCT 4											

NJ-WRD WELL NO. 27-1303



GROUND-WATER LEVELS

MORRIS COUNTY

404748074241901. Local I.D., W B Driver 2 Obs. NJ-WRD Well Number, 27-0003.

LOCATION.--Lat 40°47'48", long 74°24'19", Hydrologic Unit 02030103, near the Precision Rolled Products Plant, about 2,500 ft north of Columbia Rd., East Hanover Township.
Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 108 ft, screened 99 to 108 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Mar. 1966 to Apr. 1975.

DATUM.--Land surface is 178.26 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 4.21 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

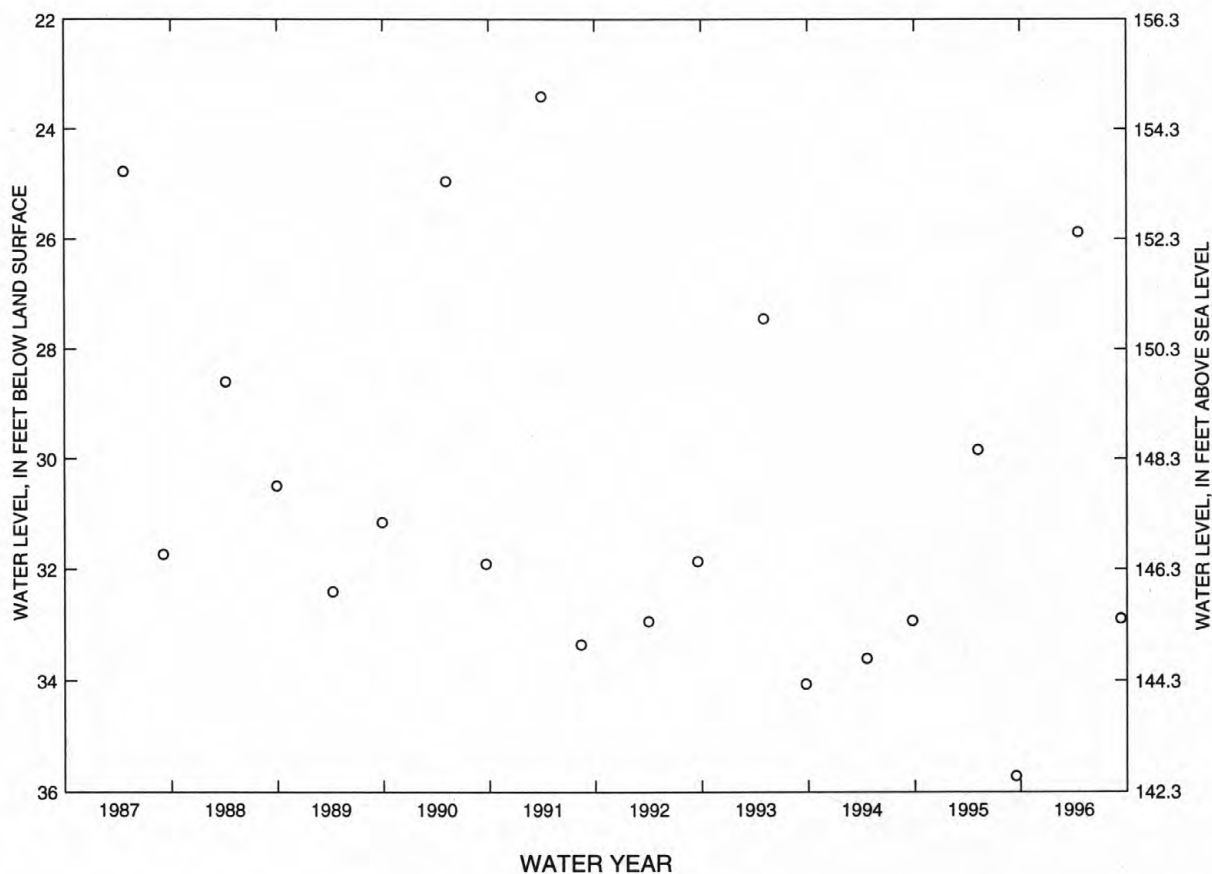
PERIOD OF RECORD.--Mar. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.56 ft below land surface, Apr. 10, 1967; lowest, 35.72 ft below land surface, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	25.87	SEP 10	32.88

NJ-WRD WELL NO. 27-0003



GROUND-WATER LEVELS

149

MORRIS COUNTY

404749074252401. Local I.D., Morristown Arpt. 2 Obs. NJ-WRD Well Number, 27-0015.

LOCATION.--Lat 40°47'43", long 74°25'22", Hydrologic Unit 02030103, at the Morristown Airport, Columbia Rd., Hanover Township.
Owner: Morristown Airport.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 62 ft, screened 51 to 62 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Periodic measurements, July 1970 to Feb. 1975. Water-level recorder, Apr. 1960 to July 1970.

DATUM.--Land surface is 180.60 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 3.20 ft above land surface.

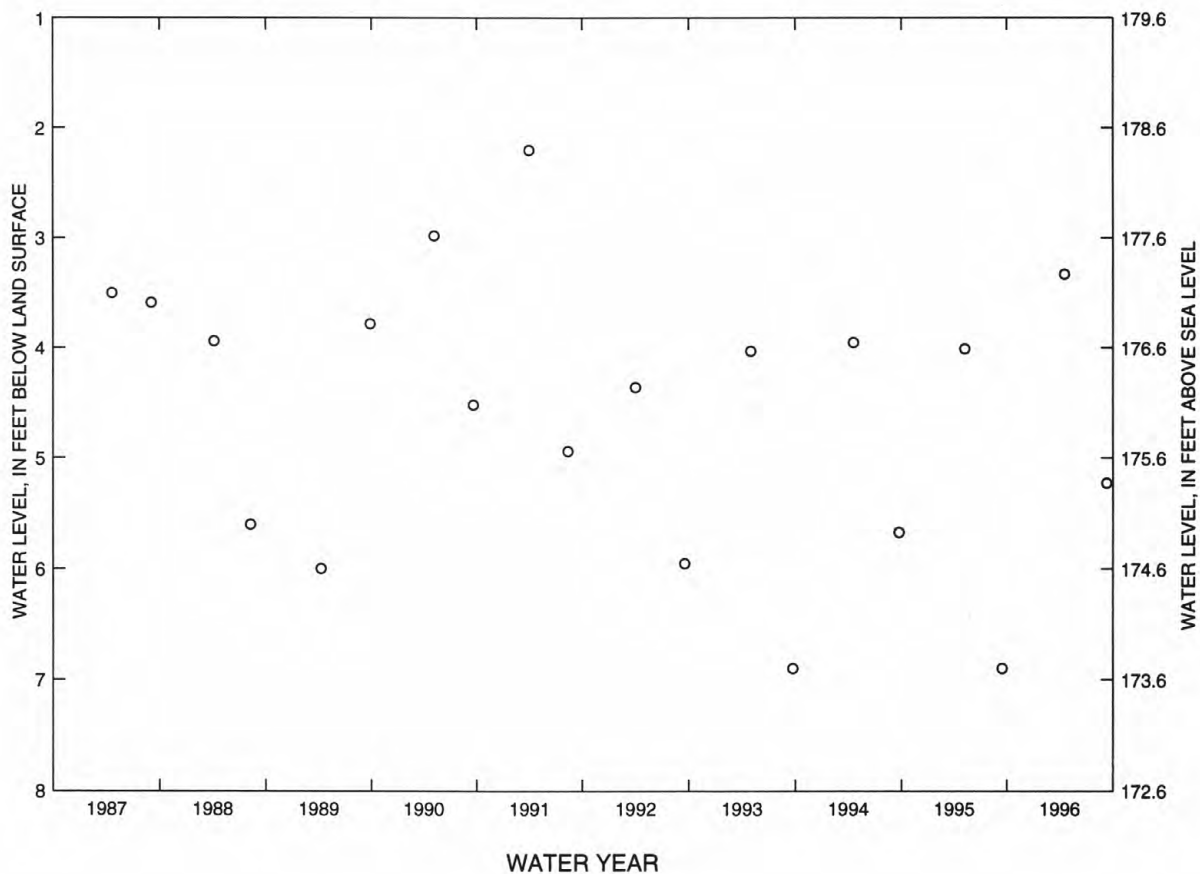
PERIOD OF RECORD.--Apr. 1960 to Feb. 1975, Mar. 1977 to Sept. 1984, Oct. 1985 to current year. Records for 1960 to 1975 and 1977 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.39 ft above land surface, Feb. 26, 1961; lowest, 6.90 ft below land surface, Sept. 23, 1993, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 17	3.33	SEP 10	5.23

NJ-WRD WELL NO. 27-0015



GROUND-WATER LEVELS

MORRIS COUNTY

404816074235901. Local I.D., Clemens Obs. NJ-WRD Well Number, 27-0004.

LOCATION.--Lat 40°48'16", long 74°23'59", Hydrologic Unit 02030103, about 3,200 ft southwest of the intersection of Rt. 10 and Ridgedale Ave., East Hanover Township.

Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 110 ft, screened 100 to 110 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Periodic measurements, Feb. 1975 to Sept. 1984. Water-level recorder, May 1966 to Feb. 1975.

DATUM.--Land surface is 174.91 ft above sea level.

Measuring point: Top of bushing, 4.60 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

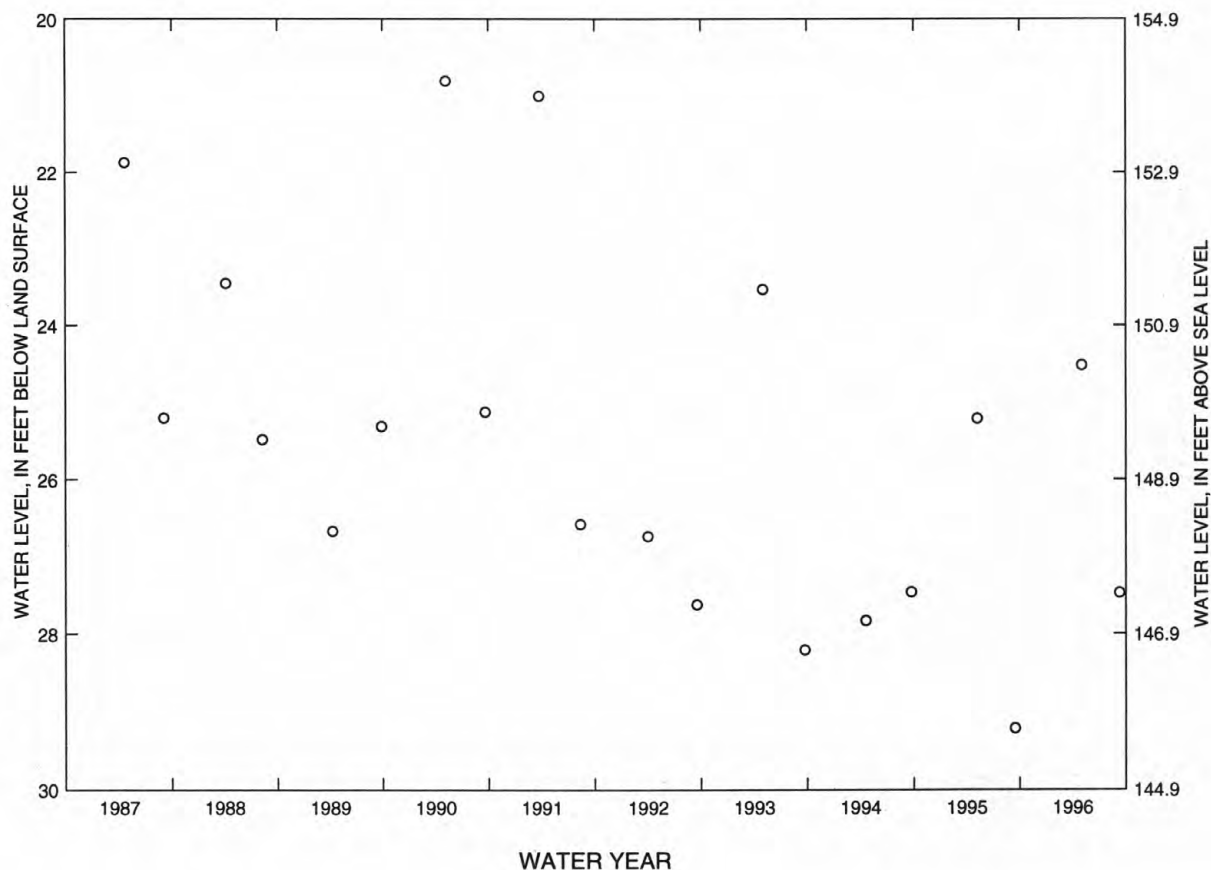
PERIOD OF RECORD.--May 1966 to Sept. 1984, Apr. 1987 to current year. Records for 1966 to 1984 and 1987 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.33 ft below land surface, May 7, 1967; lowest, 29.22 ft below land surface, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 2	24.52	SEP 11	27.47

NJ-WRD WELL NO. 27-0004



GROUND-WATER LEVELS

151

MORRIS COUNTY

404826074234701. Local I.D., Sandoz Obs. NJ-WRD Well Number, 27-0005.

LOCATION.--Lat 40°48'26", long 74°23'47", Hydrologic Unit 02030103, about 600 ft west of Ridgedale Ave., and about 2,000 ft south of Rt. 10, East Hanover Township.

Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 123 ft, screened 113 to 123 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Feb. 1966 to Oct. 1975.

DATUM.--Land surface is 188.25 ft above sea level.

Measuring point: Top of bushing, 3.94 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

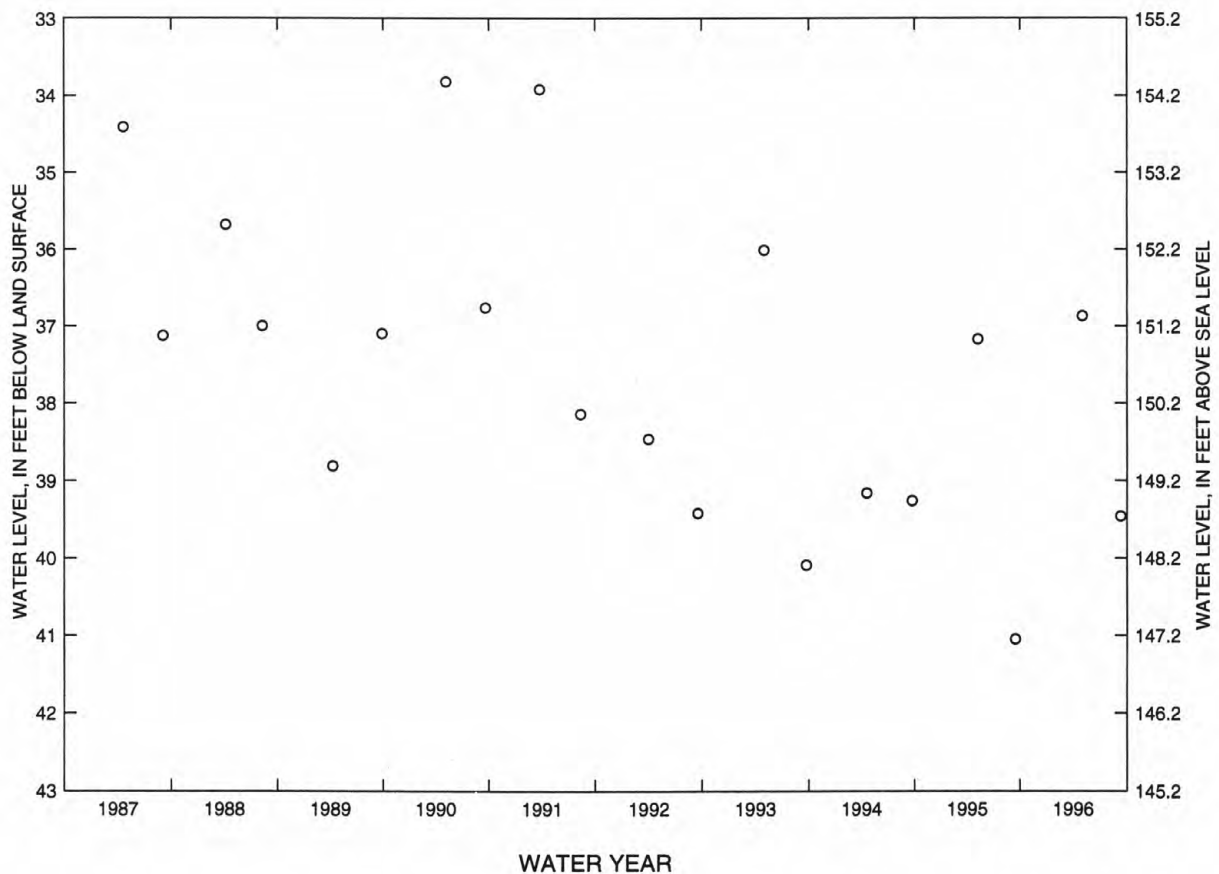
PERIOD OF RECORD.--Feb. 1966 to current year. Records for 1966 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.17 ft below land surface, Jan. 15, 1968; lowest, 41.05 ft below land surface, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 2	36.87	SEP 11	39.46

NJ-WRD WELL NO. 27-0005



GROUND-WATER LEVELS

MORRIS COUNTY

404921074335601. Local I.D., Mt Freedom 2 Obs. NJ-WRD Well Number, 27-0023.

LOCATION.--Lat 40°49'21", long 74°33'56", Hydrologic Unit 02030103, 440 ft north of the intersection of Phyllis Place and Leonard Lane, Randolph Township.

Owner: Randolph Township Water Department.

AQUIFER.--Precambrian Erathem.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in., depth 218 ft, open hole 11 to 218 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Apr. 1977 to July 1984. Periodic measurements, July 1970 to Apr. 1977. Water-level recorder, Jan. 1964 to July 1970.

DATUM.--Land surface is 800 ft above sea level, by altimeter.

Measuring point: Top of base of aluminum locking cap, 4.61 ft above land surface.

REMARKS.--Water level is occasionally affected by nearby pumping.

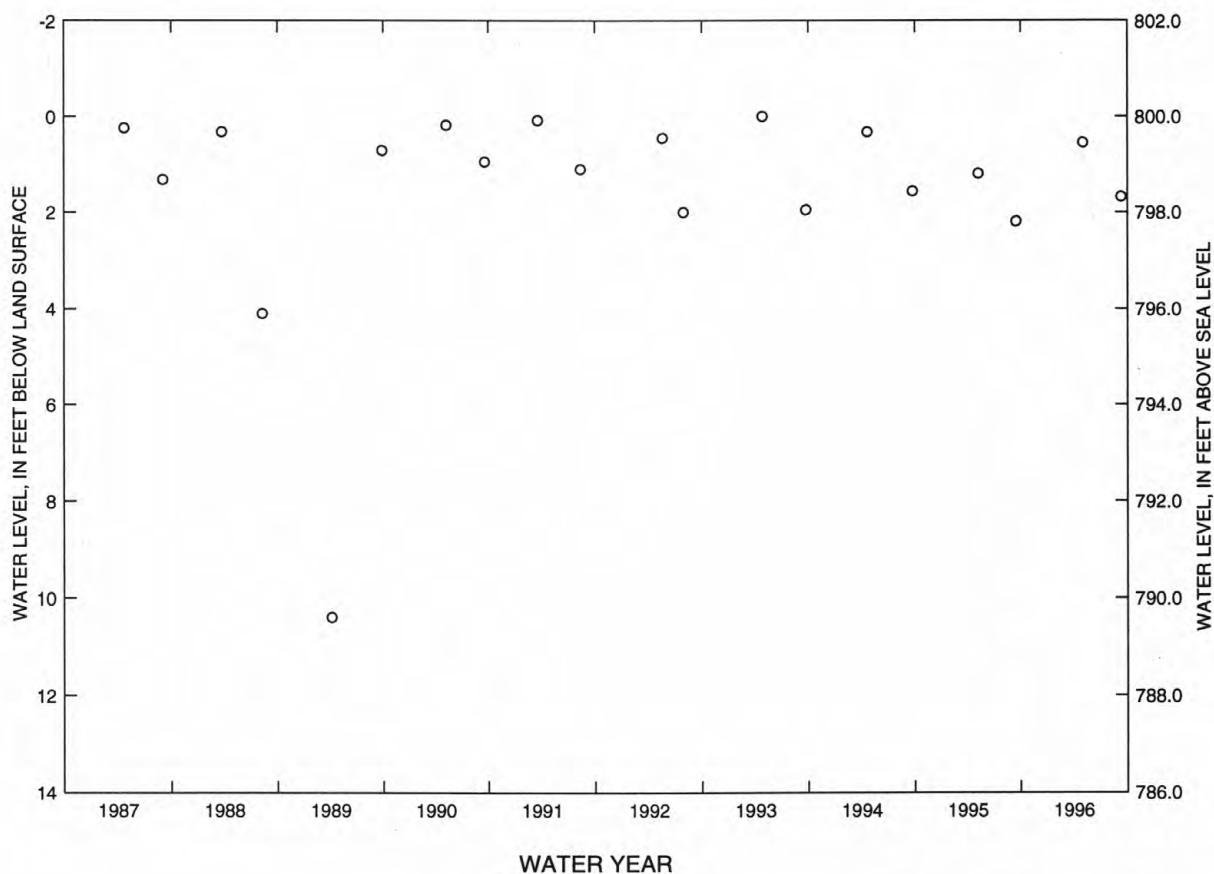
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1975 and 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.02 ft above land surface, between Apr. 3 and July 9, 1984; lowest, 15.29 ft below land surface, between Aug. 26 and Oct. 8, 1980.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 2	0.55	SEP 10	1.68

NJ-WRD WELL NO. 27-0023



MORRIS COUNTY

404934074400501. Local I.D., Black River 10 Obs. NJ-WRD Well Number, 27-1190.

LOCATION.--Lat 40°49'04", long 74°40'53", Hydrologic Unit 02030105, at the Black River Wildlife Management Area, Pleasant Hill Rd., Chester Township.

Owner: State of New Jersey.

AQUIFER.--Precambrian Erathem.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 200 ft, open hole 87 to 200 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to May 1992.

DATUM.--Land surface is 890 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 1.90 ft above land surface.

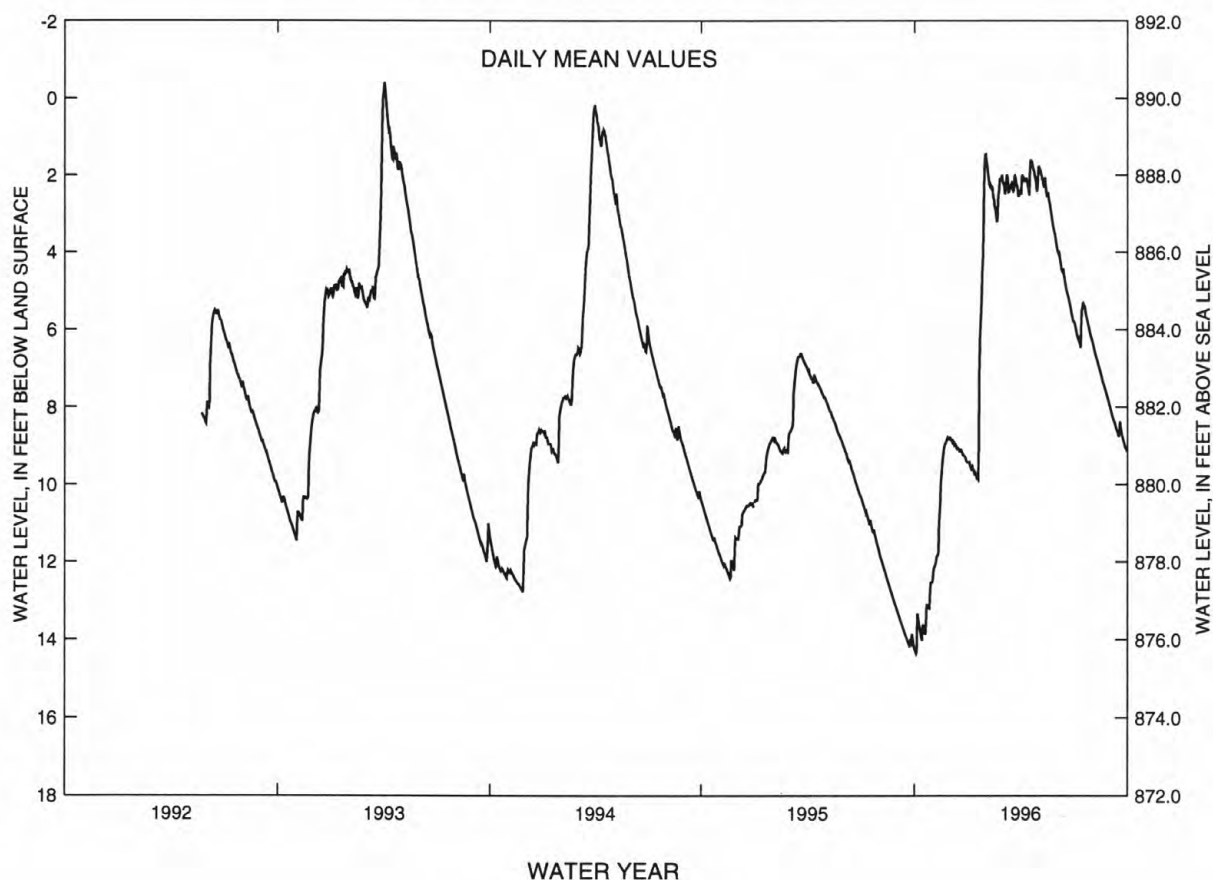
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.46 ft above land surface, Apr. 2, 1993; lowest, 14.41 ft below land surface, Oct. 5, 1996,

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	14.30	12.11	8.91	9.56	2.10	2.42	2.11	1.97	4.02	6.09	6.55	8.25
10	13.71	11.83	8.96	9.64	2.37	2.44	2.08	2.29	4.49	6.30	6.81	8.47
15	13.71	10.02	9.08	9.81	2.81	2.22	2.53	2.52	4.76	5.44	7.09	8.71
20	13.87	9.15	9.11	7.02	3.13	2.04	1.68	2.74	5.11	5.50	7.39	8.61
25	13.17	8.88	9.27	4.50	2.10	2.29	2.08	3.25	5.46	5.88	7.63	8.92
EOM	12.54	8.83	9.42	1.47	2.17	2.46	1.97	3.77	5.78	6.24	7.97	9.14
MEAN	13.55	10.37	9.10	7.47	2.37	2.30	2.08	2.61	4.81	5.89	7.14	8.60
WTR YR 1996	MEAN 6.38	HIGH 1.39	JAN 31	LOW 14.41	OCT 5							

NJ-WRD WELL NO. 27-1190



GROUND-WATER LEVELS

MORRIS COUNTY

404937074220001. Local I.D., Green Acres Obs. NJ-WRD Well Number, 27-0006.

LOCATION.--Lat 40°49'37", long 74°22'00", Hydrologic Unit 02030103, about 65 ft northwest of the end of the paved portion of Weaver Place, East Hanover Township.

Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 104 ft, screened 94 to 104 ft.

INSTRUMENTATION.--None; periodic measurements with chalked steel tape. Water-level extremes recorder, Apr. 1977 to July 1984. Periodic measurements, Apr. 1975 to Apr. 1977. Water-level recorder, Mar. 1967 to Apr. 1975.

DATUM.--Land surface is 181 ft above sea level, by altimeter.

Measuring point: Top of base of aluminum locking cap, 3.86 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

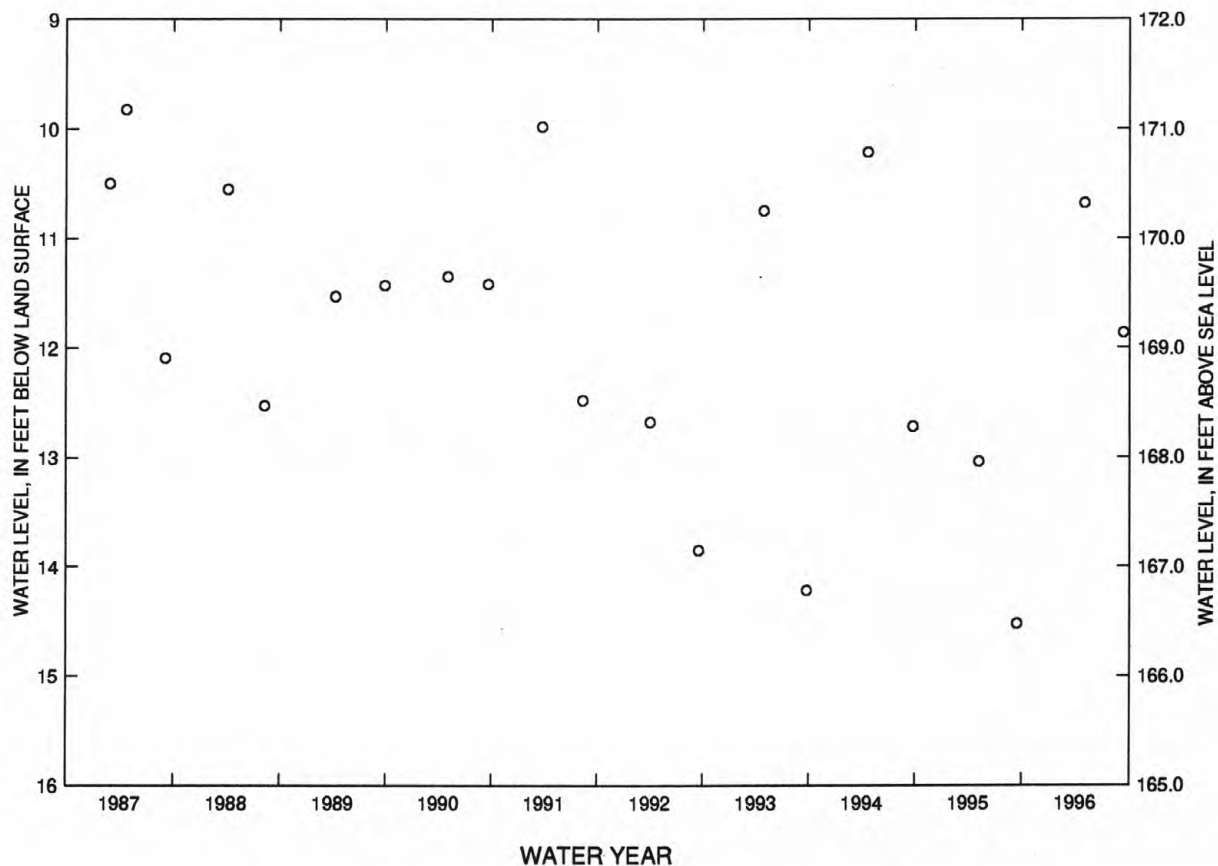
PERIOD OF RECORD.--Mar. 1967 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 4.15 ft below land surface, Apr. 10, 1973; lowest, 15.21 ft below land surface, between Apr. 3 and July 9, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAY 2	10.68	SEP 11	11.86

NJ-WRD WELL NO. 27-0006



MORRIS COUNTY

405027074232301. Local I.D., Troy Meadows 1 Obs. NJ-WRD Well Number, 27-0020.

LOCATION.--Lat 40°50'27", long 74°23'23", Hydrologic Unit 02030103, on the east side of Beverwyck Rd., 0.8 mi north of intersection with Troy Rd., Parsippany-Troy Hills Township.
Owner: U.S. Geological Survey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 89 ft, screened 79 to 89 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, July 1970 to Apr. 1977. Water-level recorder, Dec. 1965 to July 1970.

DATUM.--Land surface is 192.07 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 3.32 ft above land surface.

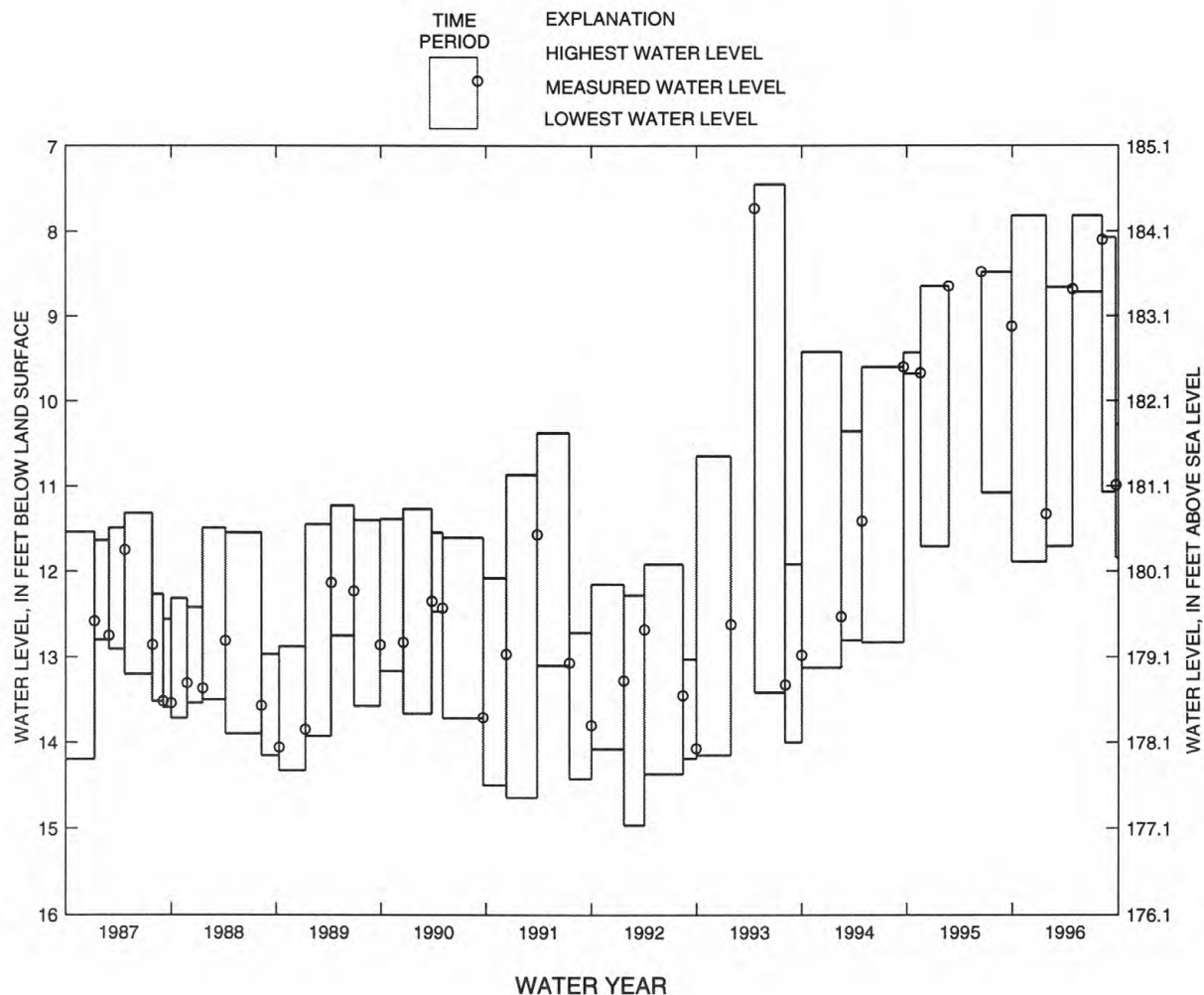
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.00 ft below land surface, Mar. 15-16, 1967, June 15, 1968; lowest, 15.77 ft below land surface, between Feb. 10 and May 31, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 29, 1995 TO JAN. 26, 1996	7.82	11.89	JAN. 26, 1996	11.33
JAN. 26, 1996 TO APR. 26, 1996	8.66	11.71	APR. 26, 1996	8.68
APR. 26, 1996 TO AUG. 7, 1996	7.82	8.72	AUG. 7, 1996	8.10
AUG. 7, 1996 TO SEPT. 24, 1996	8.07	11.07	SEPT. 24, 1996	10.99

NJ-WRD WELL NO. 27-0020



GROUND-WATER LEVELS

MORRIS COUNTY

405123074375701. Local I.D., Roxbury 1 Obs. NJ-WRD Well Number, 27-1191.

LOCATION.--Lat 40°51'23", long 74°37'57", Hydrologic Unit 02030105, 600 ft south of Horseshoe Lake, between the Roxbury Municipal Building and the Lamington River, Roxbury Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 154 ft, screened 134 to 154 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 704.2 ft above sea level.

REMARKS.--Water level is affected by nearby pumping.

Measuring point: Top of recorder shelf, 2.20 ft above land surface.

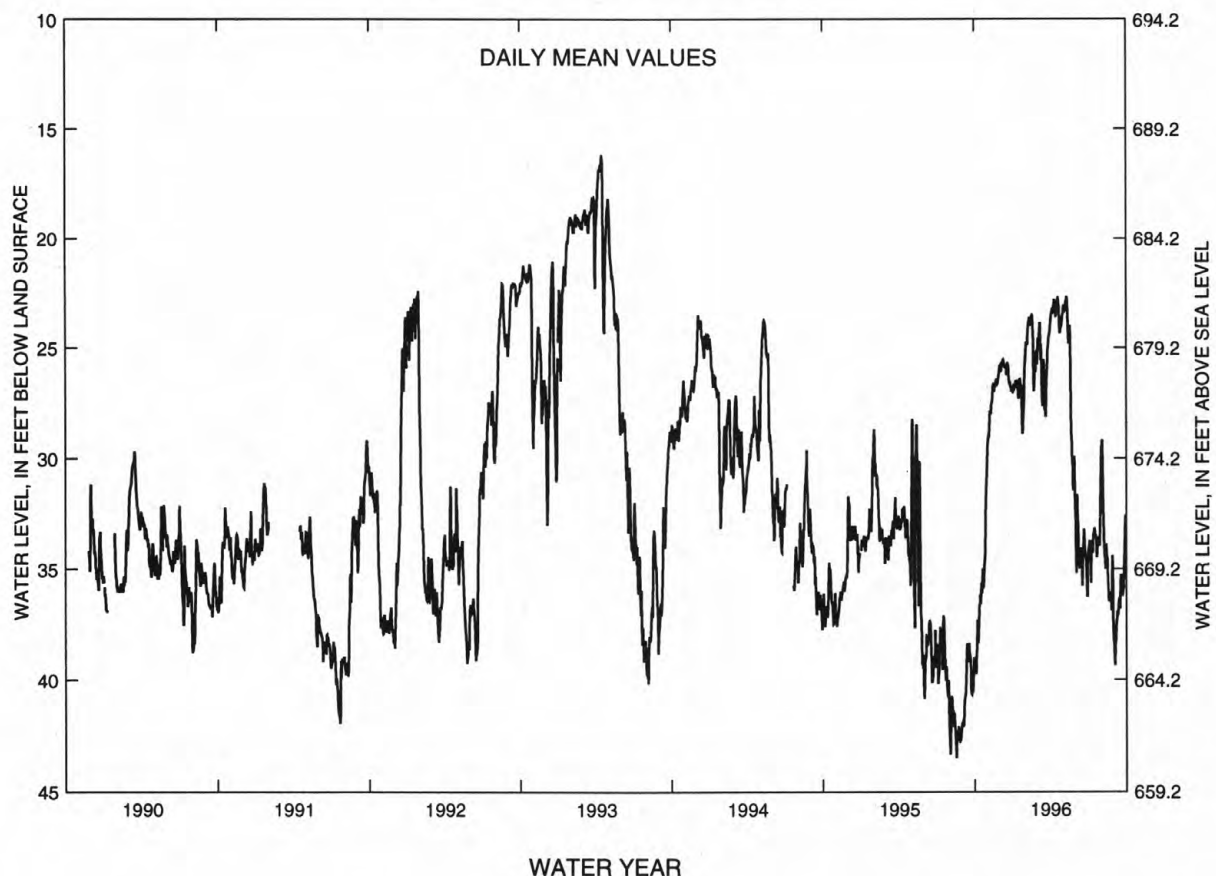
PERIOD OF RECORD.--Nov. 1989 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.14 ft below land surface, Apr. 17, 1993; lowest, 43.62 ft below land surface, Aug. 19, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.75	29.05	26.03	26.91	24.73	24.53	23.45	23.23	31.64	33.93	30.18	38.38
10	38.35	28.00	25.55	26.53	23.68	24.85	22.97	22.99	34.99	33.74	34.39	36.91
15	36.15	26.77	25.80	27.16	23.73	26.64	23.59	24.57	34.91	33.47	34.36	36.39
20	35.74	26.76	25.66	26.49	24.56	27.73	22.67	25.94	33.70	33.54	36.42	35.32
25	34.88	26.53	26.65	28.81	25.78	25.81	24.33	30.32	34.42	33.87	36.09	35.92
EOM	30.69	26.10	26.78	25.77	25.74	24.33	23.57	31.95	34.45	31.33	37.36	32.57
MEAN	36.27	27.42	26.06	26.99	24.72	25.70	23.43	26.00	34.30	33.78	34.25	36.30
WTR YR 1996	MEAN 29.62	HIGH 22.53	MAY 11	LOW 40.28	OCT 5							

NJ-WRD WELL NO. 27-1191



MORRIS COUNTY

405414074354201. Local I.D., Morris Maint Yd 22 Obs. NJ-WRD Well Number, 27-1192.

LOCATION.--Lat 40°54'13", long 74°35'33", Hydrologic Unit 02030103, about 600 ft north of the Rockaway River, at the Morris County Maintenance Yard, Dewey Ave., Wharton Borough.
Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 100 ft, screened 80 to 100 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to May 1992.

DATUM.--Land surface is 669.1 ft above sea level.

Measuring point: Top of recorder shelf, 2.10 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

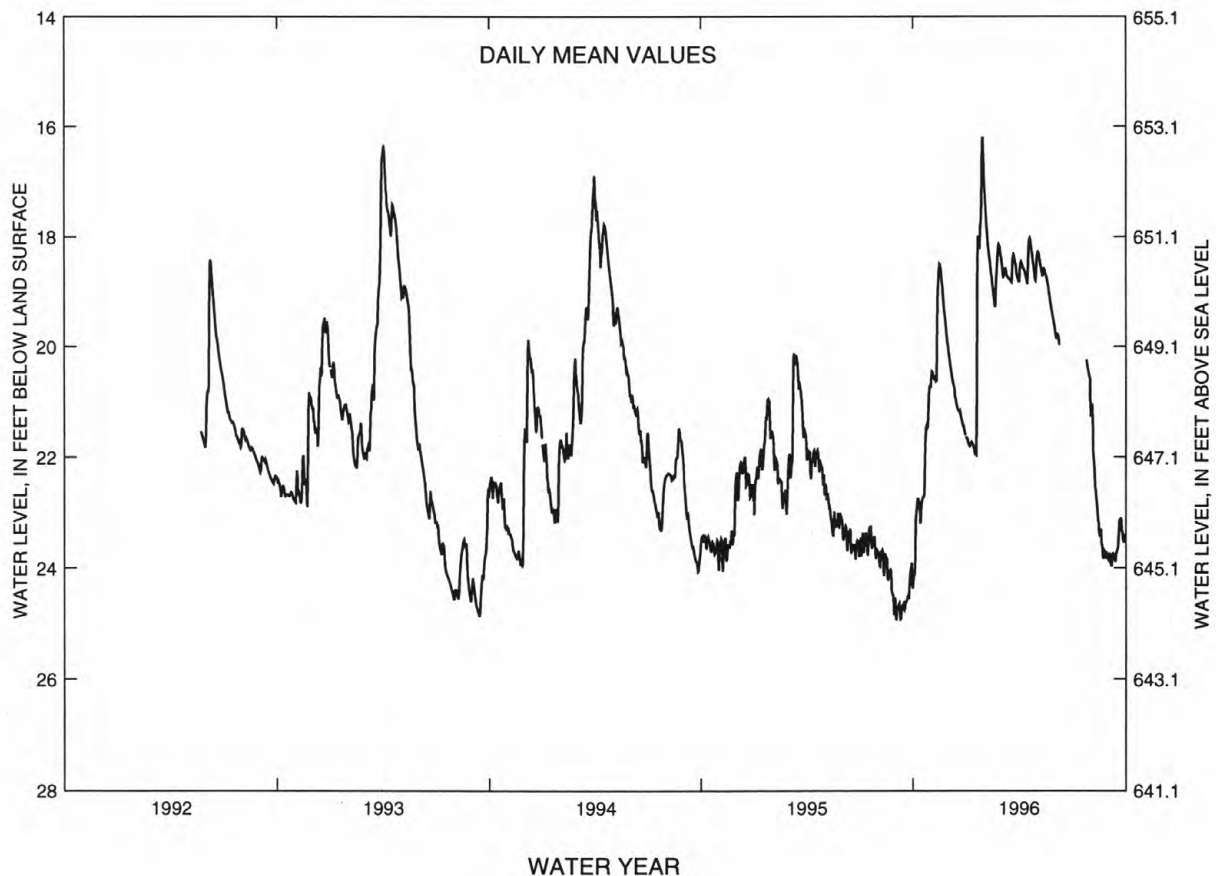
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 16.13 ft below land surface, Jan. 28-29, 1996; lowest, 25.09 ft below land surface, Sept. 11, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.96	20.52	20.36	21.76	17.79	18.73	18.48	18.37	19.78	---	21.42	23.92
10	22.74	20.63	20.67	21.73	18.39	18.69	18.63	18.69	---	---	22.60	23.81
15	23.12	18.63	21.02	21.89	18.87	18.77	18.87	18.66	---	---	23.19	23.71
20	22.72	18.81	21.18	18.66	19.28	18.53	18.07	18.88	---	---	23.56	23.14
25	21.43	19.41	21.37	17.82	18.18	18.47	18.50	19.26	---	20.24	23.69	23.36
EOM	20.71	19.95	21.60	16.81	18.33	18.81	18.63	19.64	---	20.57	23.83	23.46
MEAN	22.57	19.67	20.94	20.09	18.37	18.63	18.52	18.83	---	---	22.91	23.61
WTR YR 1996	MEAN 20.39	HIGH 16.13	JAN 28-29	LOW 24.43	OCT 1-2							

NJ-WRD WELL NO. 27-1192



GROUND-WATER LEVELS

MORRIS COUNTY

405531074361901. Local I.D., Berkshire Valley 9 Obs. NJ-WRD Well Number, 27-0027.

LOCATION.--Lat 40°55'31", long 74°36'19", Hydrologic Unit 02030103, about 1,000 ft east of the intersection of Lower Berkshire Valley Rd. and Minnisink Rd., Jefferson Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 98 ft, screened 78 to 98 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Nov. 1981 to Mar. 1985.

DATUM.--Land surface is 725.64 ft above sea level (levels by Woodward-Clyde Consultants).

Measuring point: Top of casing, 2.25 ft above land surface.

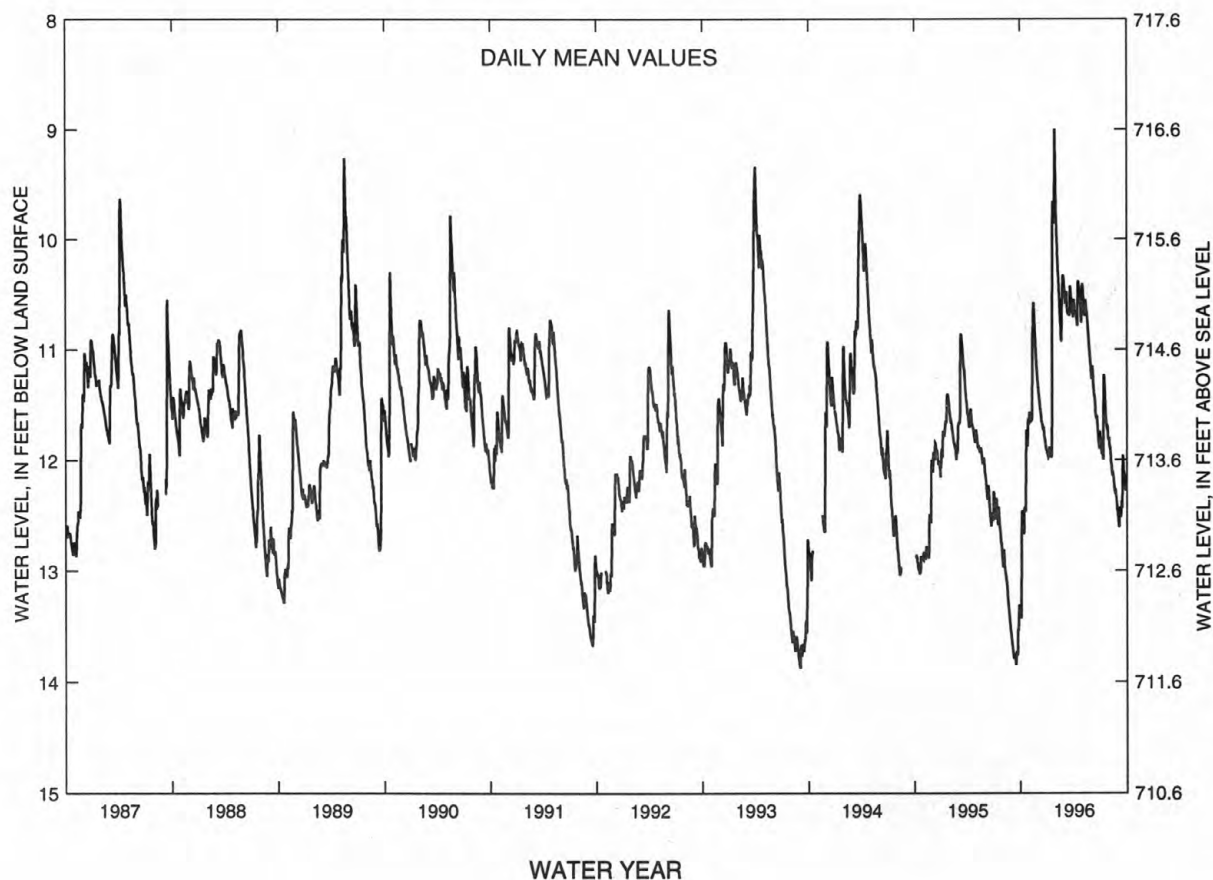
PERIOD OF RECORD.--Nov. 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.93 ft below land surface, Jan. 28, 1996; lowest, 13.88 ft below land surface, Sept. 3-4, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.29	11.63	11.45	11.97	10.06	10.59	10.62	10.54	11.15	11.87	11.89	12.60
10	12.54	11.65	11.56	11.89	10.39	10.62	10.67	10.70	11.39	11.89	12.05	12.47
15	12.45	10.65	11.67	11.96	10.71	10.65	10.79	10.65	11.53	11.23	12.14	12.40
20	12.47	10.81	11.70	10.09	10.93	10.50	10.44	10.78	11.60	11.54	12.27	12.02
25	11.79	11.09	11.81	9.65	10.34	10.54	10.60	10.98	11.78	11.73	12.29	12.18
EOM	11.67	11.30	11.92	9.53	10.42	10.69	10.58	11.19	11.81	11.81	12.47	12.24
MEAN	12.40	11.19	11.66	11.02	10.41	10.59	10.61	10.75	11.52	11.69	12.15	12.34
WTR YR 1996	MEAN 11.37 HIGH 8.93 JAN 28 LOW 13.44 OCT 4											

NJ-WRD WELL NO. 27-0027



MORRIS COUNTY

410207074270001. Local I.D., Green Pond 5 Obs. NJ-WRD Well Number, 27-0028.

LOCATION.--Lat 41°02'07", long 74°27'00", Hydrologic Unit 02030103, about 500 ft east of County Rt. 513 and 1.1 mi south of the intersection with Rt. 23, Rockaway Township.

Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 120 ft, screened 80 to 120 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 758.56 ft above sea level (levels by Woodward-Clyde Consultants).
Measuring point: Top of recorder shelf, 1.20 ft above land surface.

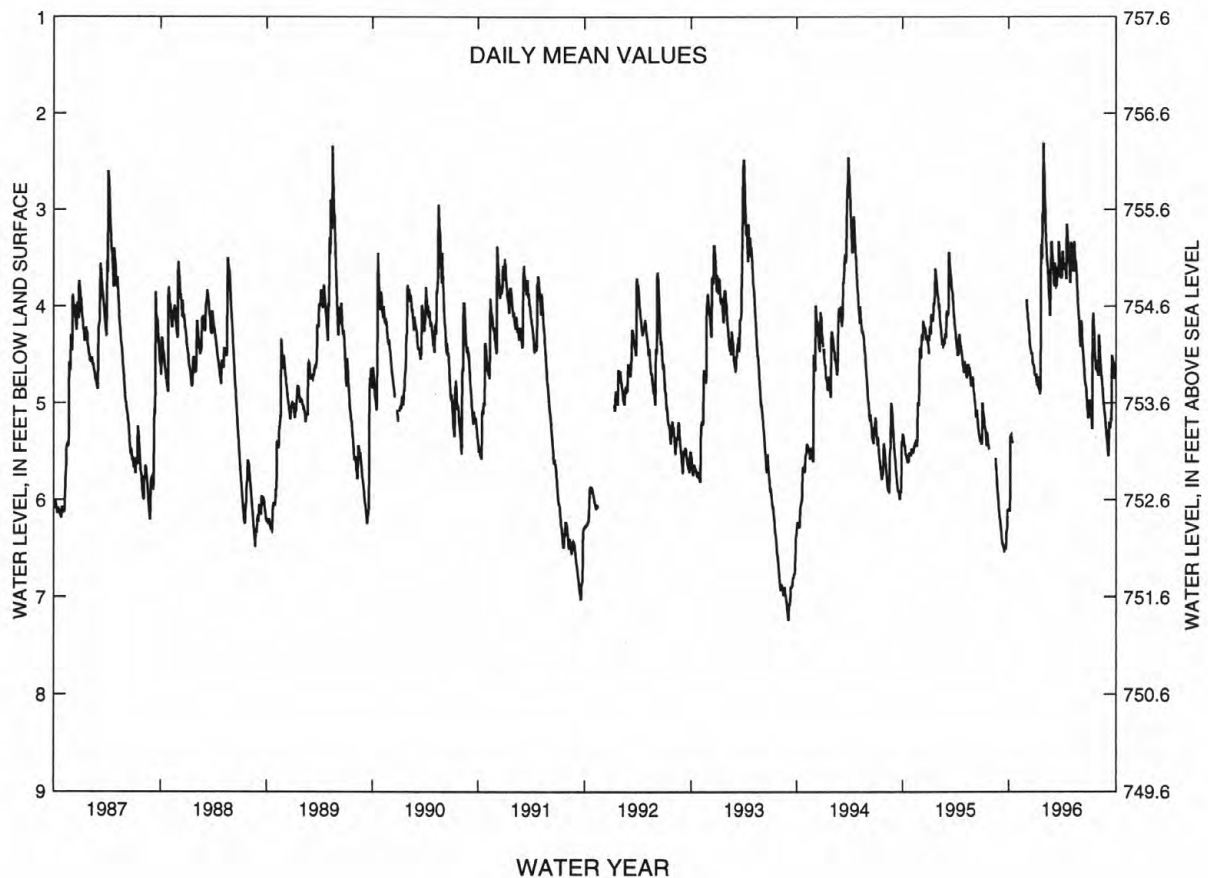
PERIOD OF RECORD.--Nov. 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.35 ft below land surface, Apr. 5, 1984; lowest, 7.24 ft below land surface, Sept. 2-4, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.01	---	4.13	4.79	3.25	3.78	3.56	3.52	4.15	5.01	4.31	5.52
10	5.35	---	4.28	4.81	3.57	3.78	3.55	3.64	4.44	5.17	4.59	5.22
15	---	---	4.45	4.89	3.84	3.60	3.72	3.52	4.65	4.15	4.78	5.17
20	---	---	4.49	3.36	4.09	3.33	3.32	3.67	4.81	4.37	4.99	4.55
25	---	---	4.61	3.04	3.34	3.56	3.57	4.00	4.99	4.66	5.13	4.63
EOM	---	---	4.72	2.67	3.57	3.67	3.50	4.30	5.13	4.68	5.36	4.74
MEAN	---	---	4.41	4.08	3.53	3.64	3.52	3.70	4.66	4.71	4.85	5.02
WTR YR 1996	MEAN 4.28	HIGH 2.15	JAN 27	LOW 6.12	OCT 4-5							

NJ-WRD WELL NO. 27-0028



GROUND-WATER LEVELS

OCEAN COUNTY

394742074142001. Local I.D., Garden St Pky 1 Obs. NJ-WRD Well Number, 29-0513.

LOCATION.--Lat 39°47'44", long 74°14'18", Hydrologic Unit 02040301, near the intersection of the Garden State Parkway and Rt. 532 (Waretown-Brookville Rd), Ocean Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, depth 21 ft, screened 18 to 21 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 44.25 ft above sea level.

Measuring point: Top of coupling, 1.00 ft above land surface.

REMARKS.--Water-quality data for 1996 are available elsewhere in this report.

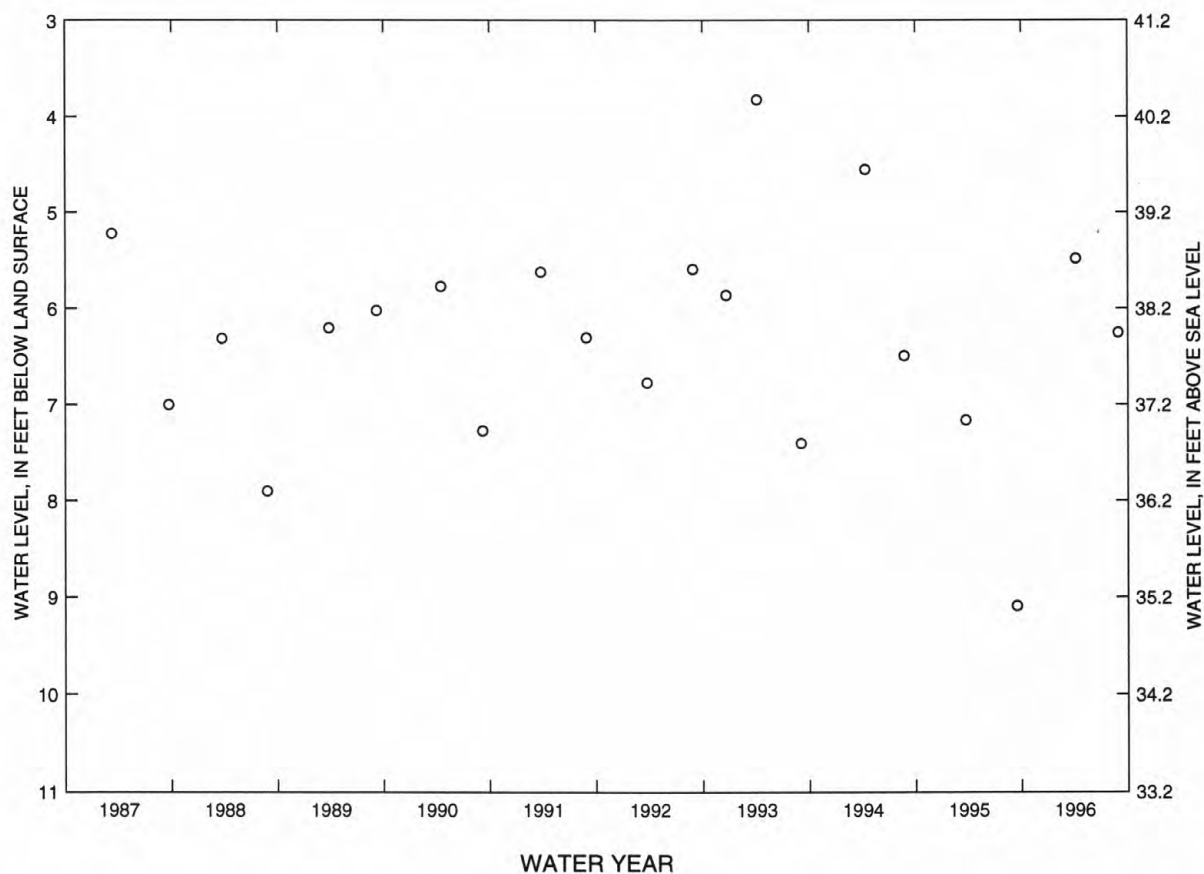
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.99 ft below land surface, Apr. 3, 1984; lowest, 9.60 ft below land surface, Oct. 8, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	5.48	AUG 29	6.25

NJ-WRD WELL NO. 29-0513



GROUND-WATER LEVELS

161

OCEAN COUNTY

394742074142002. Local I.D., Garden St Pky 2 Obs. NJ-WRD Well Number, 29-0514.

LOCATION.--Lat 39°47'44", long 74°14'18", Hydrologic Unit 02040301, near the intersection of the Garden State Parkway and Rt. 532 (Waretown-Brookville Rd), Ocean Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, depth 316 ft, screened 306 to 316 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, May 1962 to Mar. 1975.

DATUM.--Land surface is 43.82 ft above sea level.

Measuring point: Top of coupling, 1.78 ft above land surface.

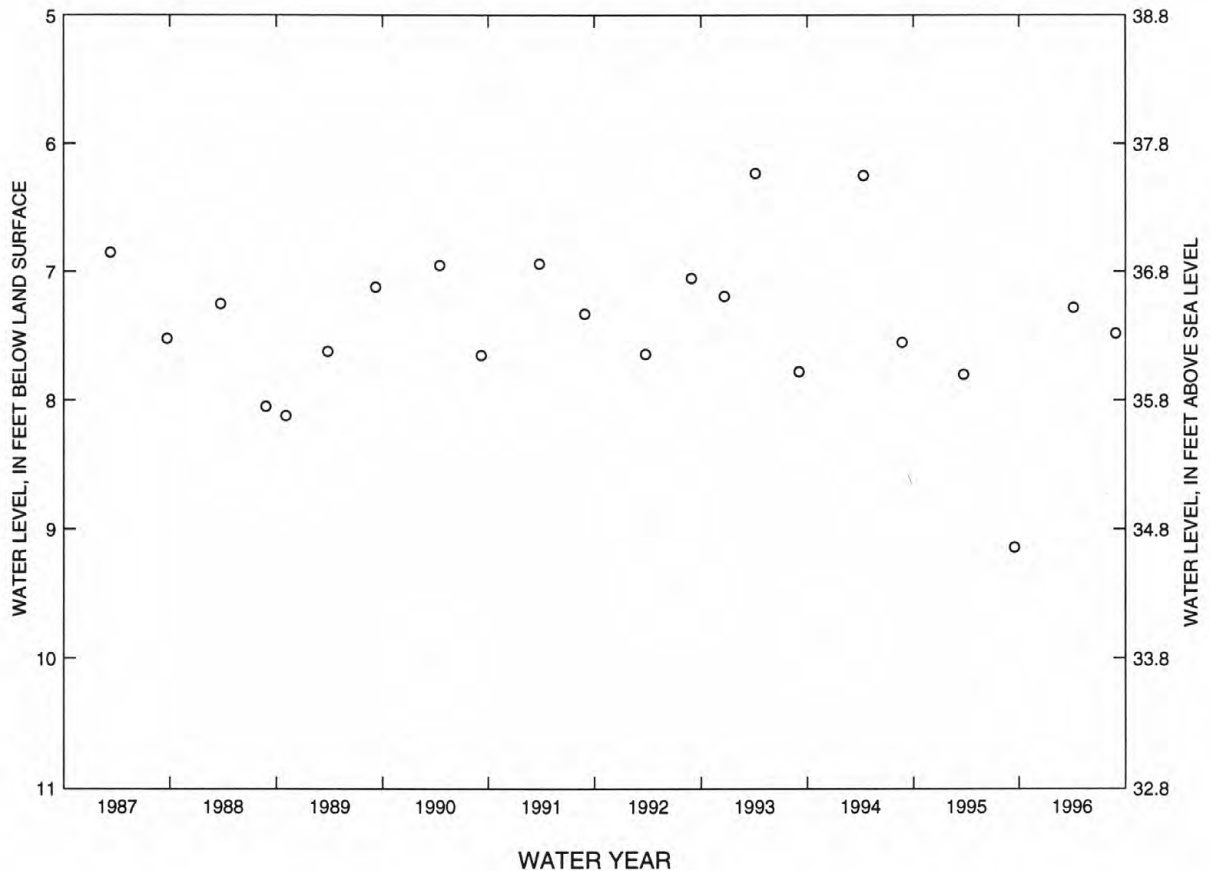
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.23 ft below land surface, Apr. 10-11, 1973; lowest, 10.50 ft below land surface, Sept. 20, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	7.28	AUG 29	7.48

NJ-WRD WELL NO. 29-0514



GROUND-WATER LEVELS

OCEAN COUNTY

394829074053501. Local I.D., Island Beach 1 Obs. NJ-WRD Well Number, 29-0017.

LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi south of the main entrance, Lacey Township.

Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 397 ft, screened 377 to 397 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to Feb. 1977. Water-level recorder, July 1962 to Aug. 1975.

DATUM.--Land surface is 8.50 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 3.40 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

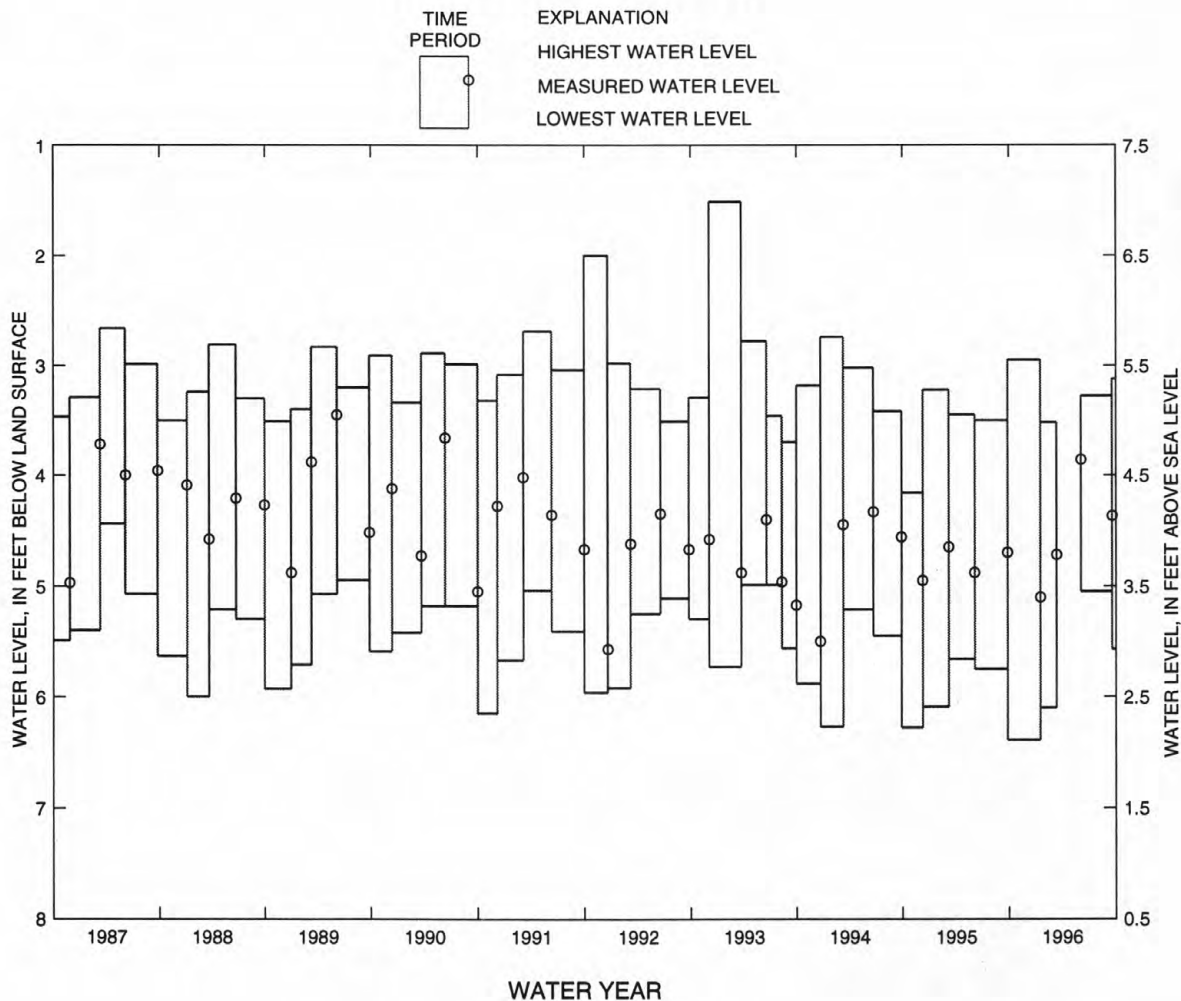
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.05 ft below land surface, Dec. 6, 1962; lowest, 6.39 ft below land surface, between Sept. 26, 1995 and Jan. 16, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO JAN. 16, 1996	2.95	6.39	JAN. 16, 1996	5.10
JAN. 16, 1996 TO MAR. 12, 1996	3.52	6.10	MAR. 12, 1996	4.72
MAR. 12, 1996 TO JUNE 4, 1996	---	---	JUNE 4, 1996	3.86
JUNE 4, 1996 TO SEPT. 19, 1996	3.28	5.05	SEPT. 19, 1996	4.37

NJ-WRD WELL NO. 29-0017



OCEAN COUNTY

394829074053502. Local I.D., Island Beach 2 Obs. NJ-WRD Well Number, 29-0018.

LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi. south of the main entrance, Lacey Township.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 474 ft, screened 468 to 474 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 8.50 ft above sea level.

Measuring point: Top of coupling, 0.13 ft above land surface.

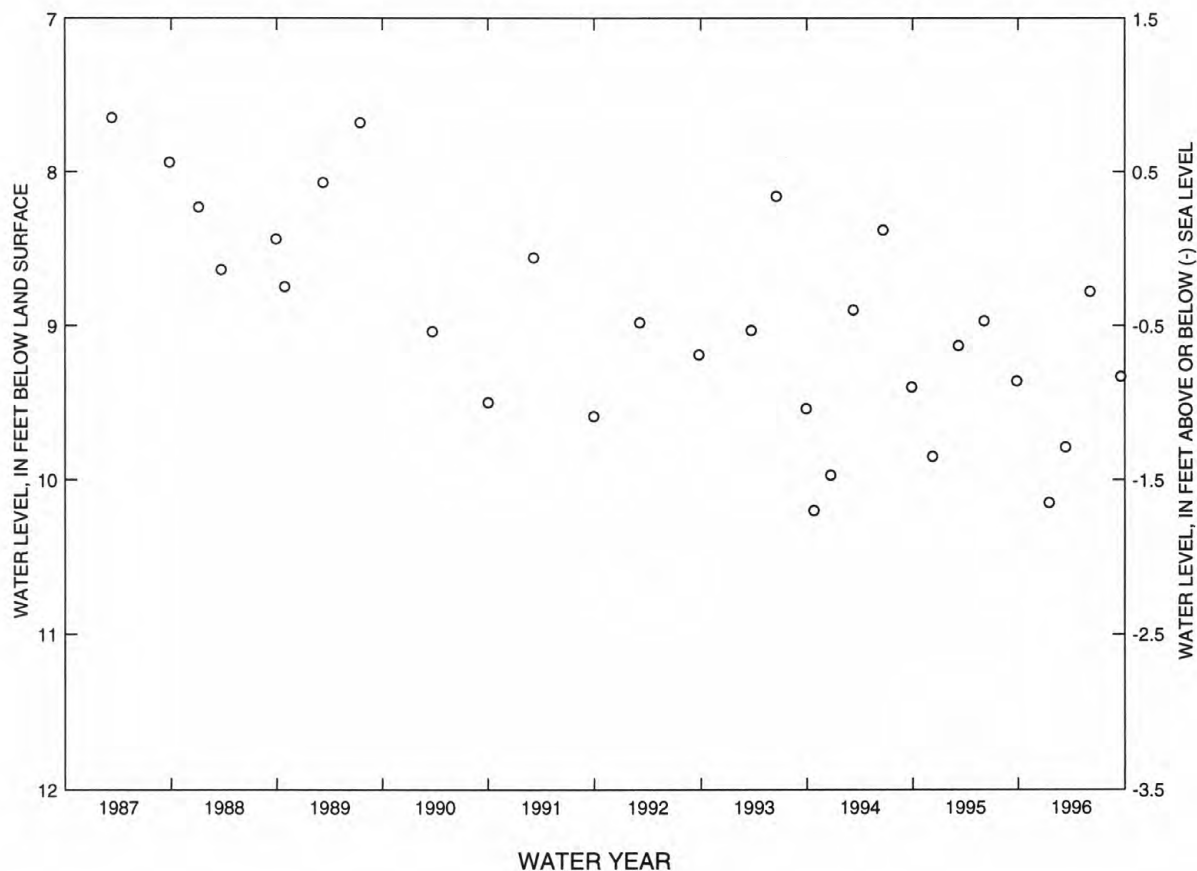
PERIOD OF RECORD.--July 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.93 ft below land surface, June 7, 1963; lowest, 10.20 ft below land surface, Oct. 25, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 16	10.15	MAR 12	9.79	JUN 4	8.78	SEP 19	9.33

NJ-WRD WELL NO. 29-0018



GROUND-WATER LEVELS

OCEAN COUNTY

394829074053503. Local I.D., Island Beach 3 Obs. NJ-WRD Well Number, 29-0019.

LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi south of the main entrance, Lacey Township.

Owner: U.S. Geological Survey.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 2,756 ft, screened 2,736 to 2,756 ft.

INSTRUMENTATION.--Water-level extremes recorder. Water-level recorder, Nov. 1968 to Feb. 1977.

DATUM.--Land surface is 9.02 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 5.11 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation.

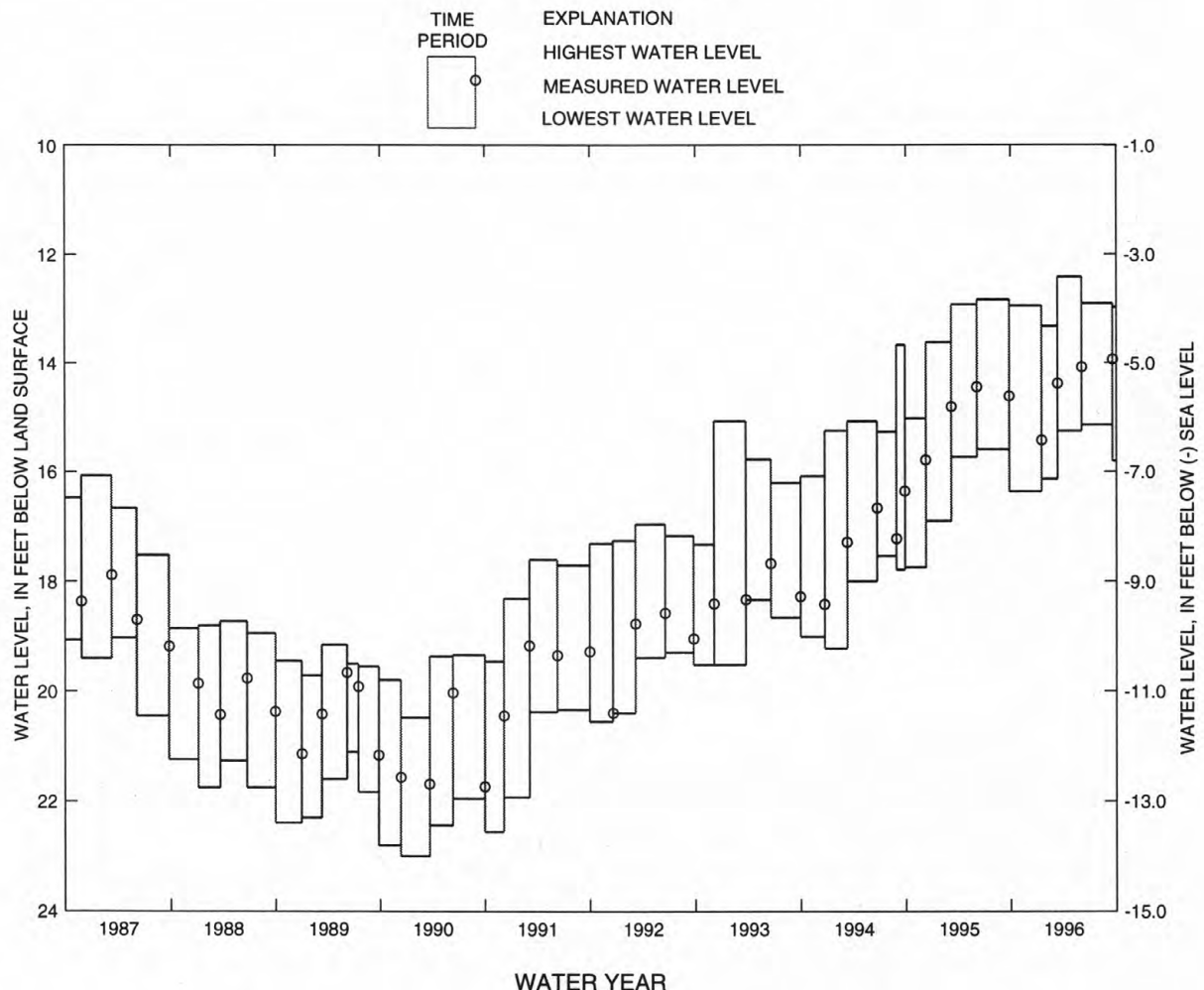
PERIOD OF RECORD.--Nov. 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.95 ft above land surface, Apr. 23, 1969; lowest, 23.00 ft below land surface, between Dec. 12, 1989 and Mar. 22, 1990.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO JAN. 16, 1996	12.95	16.37	JAN. 16, 1996	15.43
JAN. 16, 1996 TO MAR. 12, 1996	13.33	16.14	MAR. 12, 1996	14.38
MAR. 12, 1996 TO JUNE 4, 1996	12.42	15.26	JUNE 4, 1996	14.08
JUNE 4, 1996 TO SEPT. 19, 1996	12.91	15.14	SEPT. 19, 1996	13.94

NJ-WRD WELL NO. 29-0019



OCEAN COUNTY

394829074053504. Local I.D., Island Beach 4 Obs. NJ-WRD Well Number, 29-0020.

LOCATION.--Lat 39°48'29", long 74°05'35", Hydrologic Unit 02040301, in Island Beach State Park, about 6.6 mi. south of the main entrance, Lacey Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, depth 12 ft, screened 9 to 12 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, May 1962 to Dec. 1972.

DATUM.--Land surface is 8.19 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 2.62 ft above land surface.

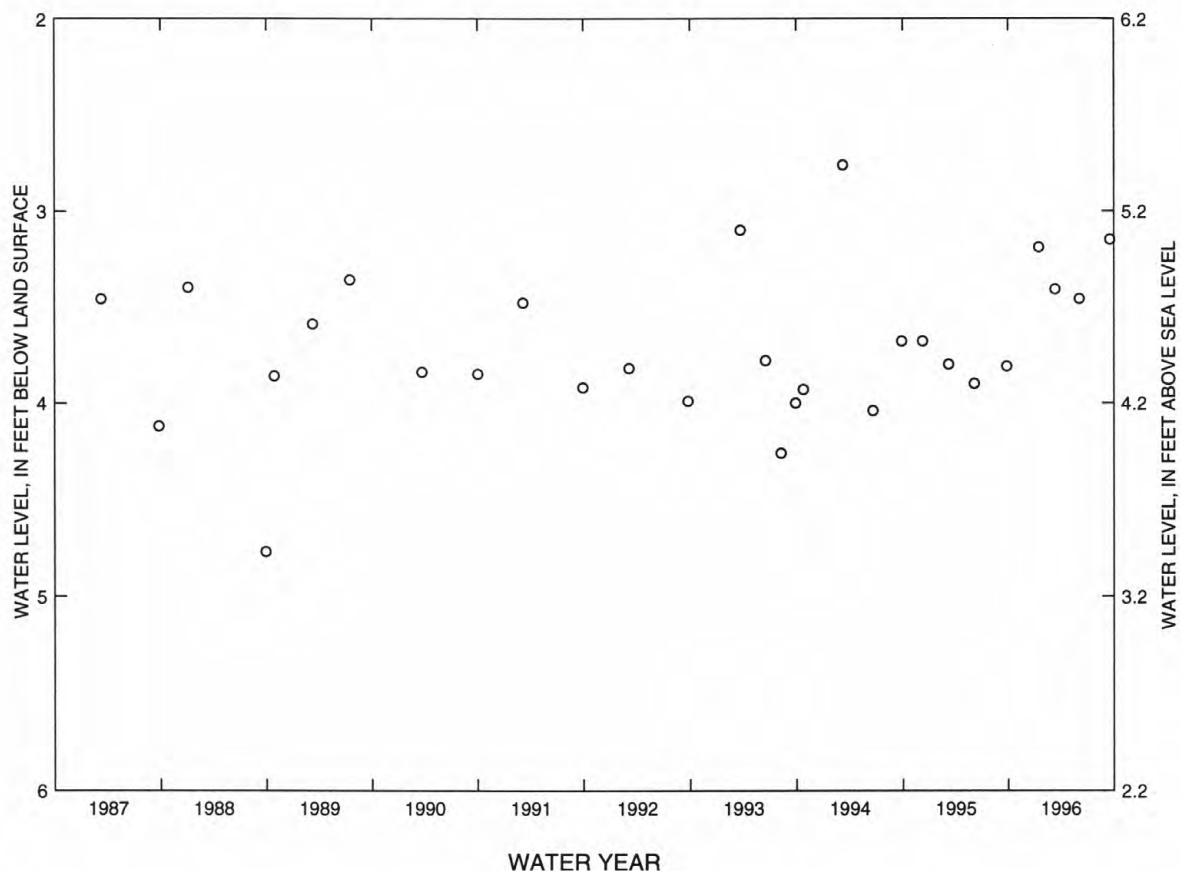
PERIOD OF RECORD.--May 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.42 ft below land surface, June 24, 1964; lowest, 4.82 ft below land surface, Aug. 6, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JAN 16	3.19	MAR 12	3.41	JUN 4	3.46	SEP 19	3.15

NJ-WRD WELL NO. 29-0020



OCEAN COUNTY

395028074104401. Local I.D., DOE-Forked River Obs. NJ-WRD Well Number, 29-0585.

LOCATION.--Lat 39°50'28", long 74°10'44", Hydrologic Unit 02040301, at the Forked River Game Farm, Forked River, Lacey Township.
Owner: State of New Jersey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 422 ft, perforated casing 412 to 422 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 15 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.80 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

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

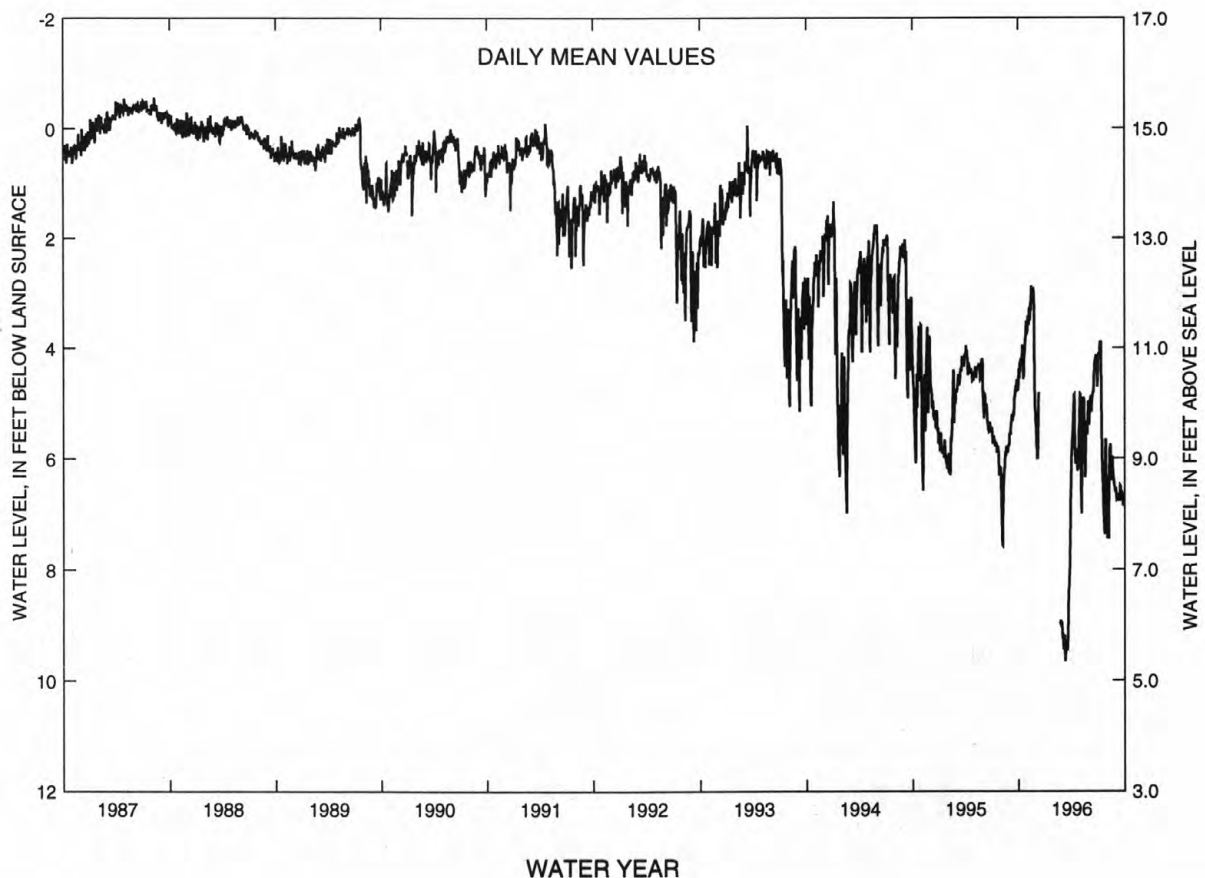
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.83 ft above land surface, June 1, 1984; lowest, 9.70 ft below land surface, Mar. 10, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.54	3.59	6.00	---	---	9.34	5.60	6.76	4.94	4.14	6.32	6.74
10	4.31	3.50	4.81	---	---	9.66	4.86	5.38	5.06	3.91	6.15	6.74
15	3.95	2.88	---	---	---	9.29	6.10	4.95	4.79	5.48	5.80	6.73
20	4.52	3.06	---	---	---	9.14	6.09	5.89	4.30	6.64	6.00	6.64
25	3.86	4.17	---	---	9.02	8.10	6.14	5.57	4.13	7.37	6.37	6.70
EOM	3.74	5.42	---	---	9.17	6.37	4.89	5.09	4.71	6.84	6.61	6.86
MEAN	4.16	3.60	---	---	---	8.76	5.68	5.55	4.70	5.42	6.44	6.69

WTR YR 1996 HIGH 2.76 NOV 14-15 LOW 9.70 MAR 10

NJ-WRD WELL NO. 29-0585



GROUND-WATER LEVELS

167

OCEAN COUNTY

395323074225501. Local I.D., Webbs Mills 2 Obs. NJ-WRD Well Number, 29-0425.

LOCATION.--Lat 39°53'22", long 74°22'52", Hydrologic Unit 02040301, about 180 ft west of County Rt. 539, and about 500 ft north of Webbs Mill Branch, Lacey Township.

Owner: U.S. Geological Survey.

AQUIFER.--Piney Point aquifer of Eocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 348 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Feb. 1962 to Jan. 1975.

DATUM.--Land surface is 128.27 ft above sea level.

Measuring point: Top of shelf, 1.90 ft above land surface.

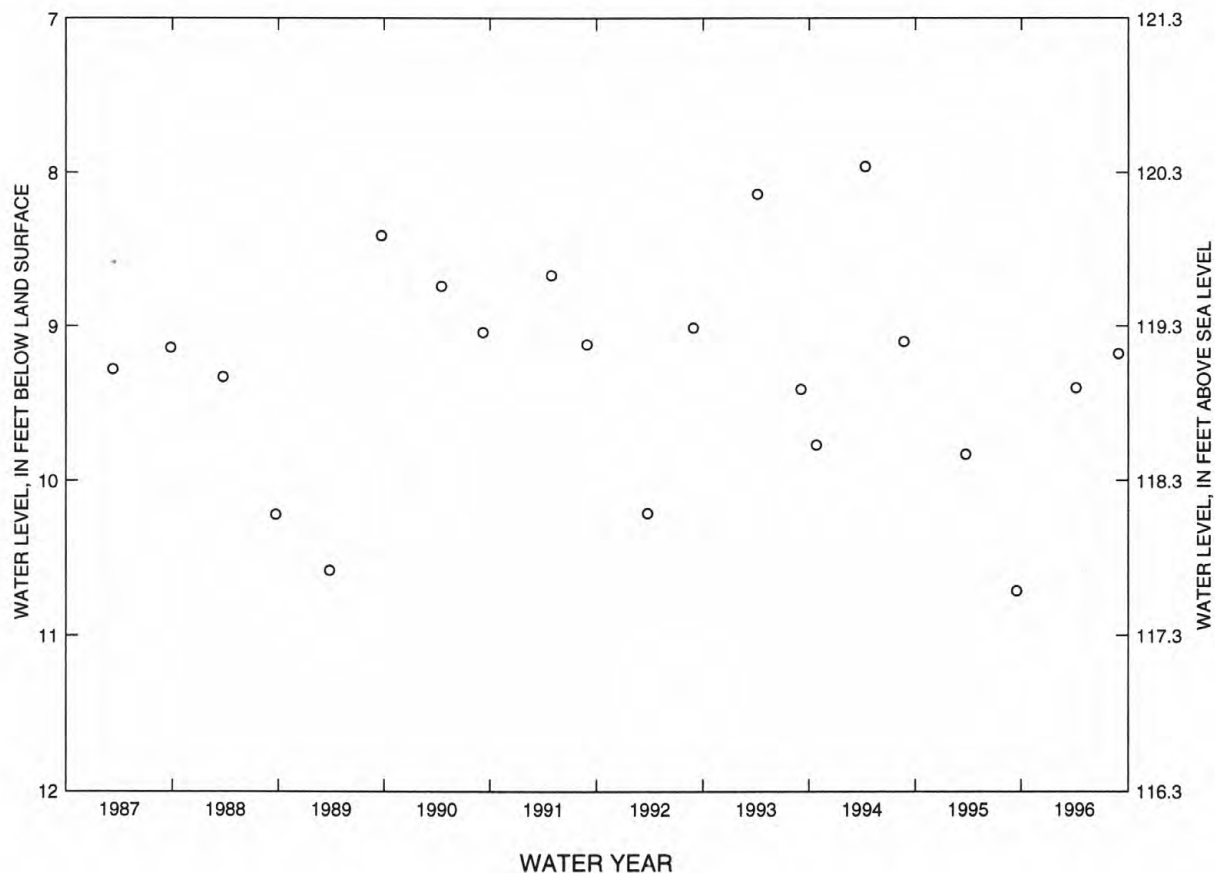
PERIOD OF RECORD.--Feb. 1962 to current year. Records for 1962 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.01 ft below land surface, Apr. 20, 1973; lowest, 11.40 ft below land surface, Sept. 12, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5	9.40	AUG 29	9.18

NJ-WRD WELL NO. 29-0425



GROUND-WATER LEVELS

OCEAN COUNTY

395609074124001. Local I.D., Toms River 2 Obs. NJ-WRD Well Number, 29-0534.

LOCATION.--Lat 39°56'09", long 74°12'40", Hydrologic Unit 02040301, about 200 ft east of Double Trouble Rd. on the north side of Jakes Branch, South Toms River Borough.
Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 1,146 ft, screened 1,080 to 1,146 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Feb. 1977 to Oct. 1990. Periodic measurements, July 1975 to Feb. 1977. Water-level recorder, Dec. 1965 to July 1975.

DATUM.--Land surface is 18.34 ft above sea level.

Measuring point: Top of coupling, 2.44 ft above land surface.

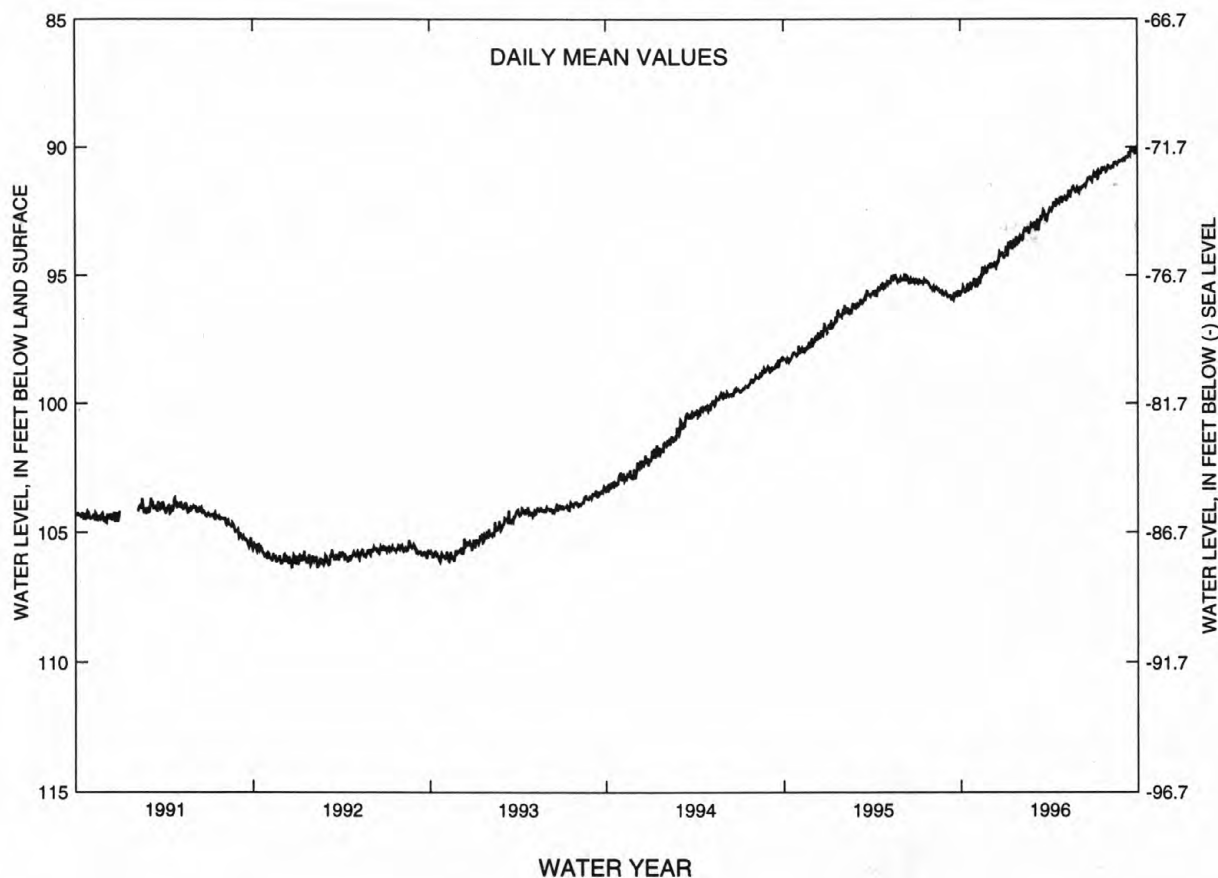
PERIOD OF RECORD.--Dec. 1965 to current year. Records for 1965 to 1976 and 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 48.37 ft below land surface, May 28, 1966; lowest, 106.41 ft below land surface, Dec. 19-20, 1992.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	95.52	95.35	94.69	94.17	93.61	93.09	92.42	91.98	91.60	91.14	90.84	90.52
10	95.64	95.32	94.51	93.81	93.29	93.24	92.14	91.91	91.57	91.09	90.75	90.40
15	95.32	94.67	94.49	93.86	93.21	92.67	92.32	91.92	91.45	90.99	90.65	90.30
20	95.46	94.86	94.09	93.82	93.32	92.45	92.12	91.55	91.24	90.82	90.69	90.16
25	95.36	94.83	94.17	93.69	93.07	92.75	92.06	91.73	91.15	90.90	90.57	90.13
EOM	95.42	94.69	94.19	93.48	93.11	92.57	91.95	91.71	91.23	90.82	90.55	90.19
MEAN	95.47	94.96	94.41	93.81	93.27	92.83	92.20	91.79	91.43	90.99	90.67	90.27
WTR YR 1996 MEAN 92.68 HIGH 89.98 SEP 23 LOW 95.73 OCT 1												

NJ-WRD WELL NO. 29-0534



OCEAN COUNTY

395930074142101. Local I.D., Toms River 84 Obs. NJ-WRD Well Number, 29-0085.

LOCATION.--Lat 39°59'29", long 74°14'20", Hydrologic Unit 02040301, at Toms River Plant, Ciba-Geigy Corporation, Dover Township.
Owner: Ciba-Geigy Corporation.

AQUIFER.--Potomac-Raritan-Magothy aquifer system, undifferentiated, of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 8 in., depth 1,480 ft, screened 1,460 to 1,480 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, July 1975 to Feb. 1977. Water-level recorder, July 1968 to July 1975.

DATUM.--Land surface is 66.71 ft above sea level.

Measuring point: Top of recorder shelf, 2.70 ft above land surface.

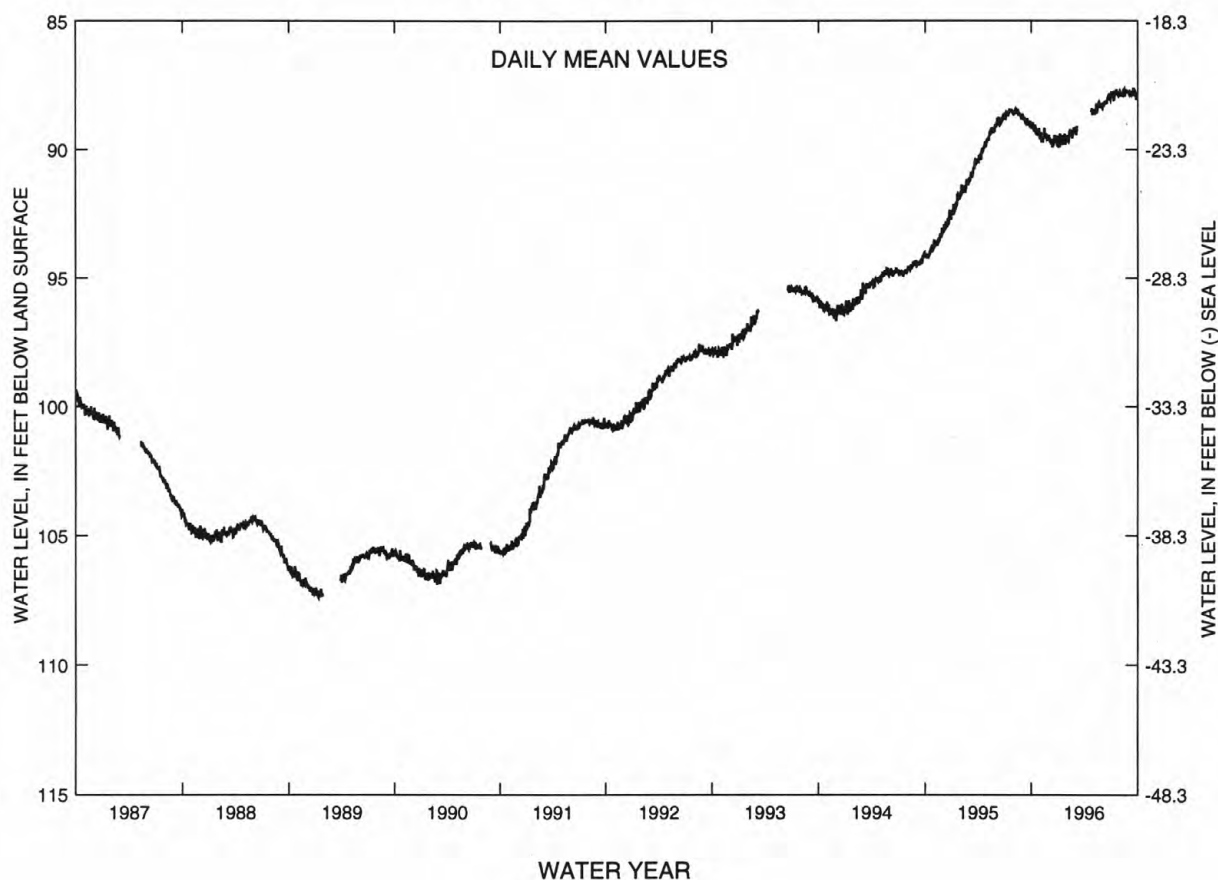
PERIOD OF RECORD.--July 1968 to current year. Records for 1968 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 62.32 ft below land surface, July 19, 1968, Feb. 9, 1969; lowest, 107.45 ft below land surface, Jan. 11, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	89.02	89.61	89.72	89.82	89.66	89.27	---	88.49	88.21	87.89	87.87	87.86
10	89.25	89.71	89.66	89.54	89.37	---	---	88.43	88.22	87.92	87.80	87.81
15	89.05	89.16	89.75	89.68	89.34	---	---	88.49	88.15	87.80	87.73	87.84
20	89.36	89.49	89.43	89.71	89.49	---	---	88.16	---	87.70	87.81	87.79
25	89.38	89.61	89.61	89.64	89.21	---	88.51	88.33	87.87	87.83	87.71	87.85
EOM	89.56	89.59	89.74	89.45	89.27	---	88.43	88.32	87.96	87.80	87.79	88.01
MEAN	89.24	89.49	89.67	89.62	89.38	---	---	88.36	88.12	87.83	87.77	87.81
WTR YR 1996	MEAN 88.74 HIGH 87.56 JUL 13 LOW 89.94 JAN 6											

NJ-WRD WELL NO. 29-0085



GROUND-WATER LEVELS

OCEAN COUNTY

400120074265401. Local I.D., Fort Dix RLF-30 Obs. NJ-WRD Well Number, 29-1059.

LOCATION.--Lat 40°01'20", long 74°26'54", Hydrologic Unit 02040301, at the Fort Dix Military Reservation, Plumsted Township.
Owner: US Army - Fort Dix.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 75 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 180 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.15 ft above land surface.

PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

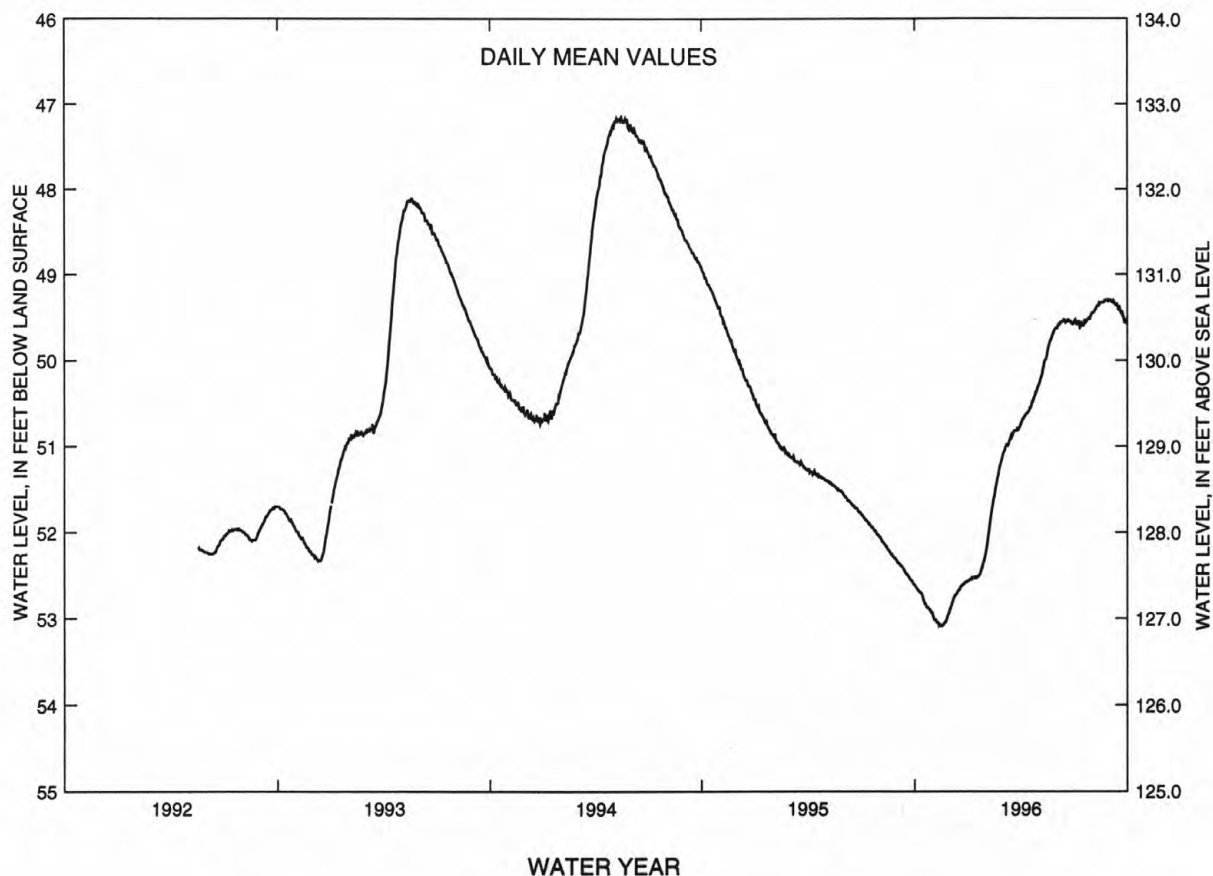
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 47.12 ft below land surface, May 16, 1994; lowest, 53.09 ft below land surface, Nov. 11-12, 15-18, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	52.65	53.01	52.82	52.55	52.02	51.01	50.68	50.20	49.58	49.58	49.43	49.33
10	52.69	53.05	52.73	52.53	51.77	50.98	50.62	50.05	49.55	49.60	49.37	49.35
15	52.75	53.08	52.68	52.53	51.59	50.87	50.58	49.96	49.54	49.60	49.34	49.40
20	52.83	53.07	52.63	52.50	51.38	50.82	50.48	49.79	49.53	49.55	49.33	49.45
25	52.88	53.02	52.60	52.42	51.22	50.80	50.40	49.70	49.55	49.52	49.30	49.52
EOM	52.93	52.93	52.57	52.25	51.12	50.75	50.30	49.63	49.56	49.46	49.31	49.58
MEAN	52.77	53.03	52.69	52.48	51.60	50.90	50.54	49.92	49.56	49.55	49.35	49.41

WTR YR 1996 MEAN 50.98 HIGH 49.30 AUG 23-30, SEP 1-2 LOW 53.09 NOV 11-12, 15-18

NJ-WRD WELL NO. 29-1059



GROUND-WATER LEVELS

171

OCEAN COUNTY

400210074031001. Local I.D., Mantoloking 6 Obs. NJ-WRD Well Number, 29-0503.

LOCATION.--Lat 40°02'10", long 74°03'10", Hydrologic Unit 02040301, at the Bay Ave. water treatment plant, Mantoloking Borough.
Owner: New Jersey - American Water Company.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian unused public-supply well, diameter 8 in., depth 906 ft, screened 845 to 906 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Oct. 1983 to May 1984.

DATUM.--Land surface is 5 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 2.40 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

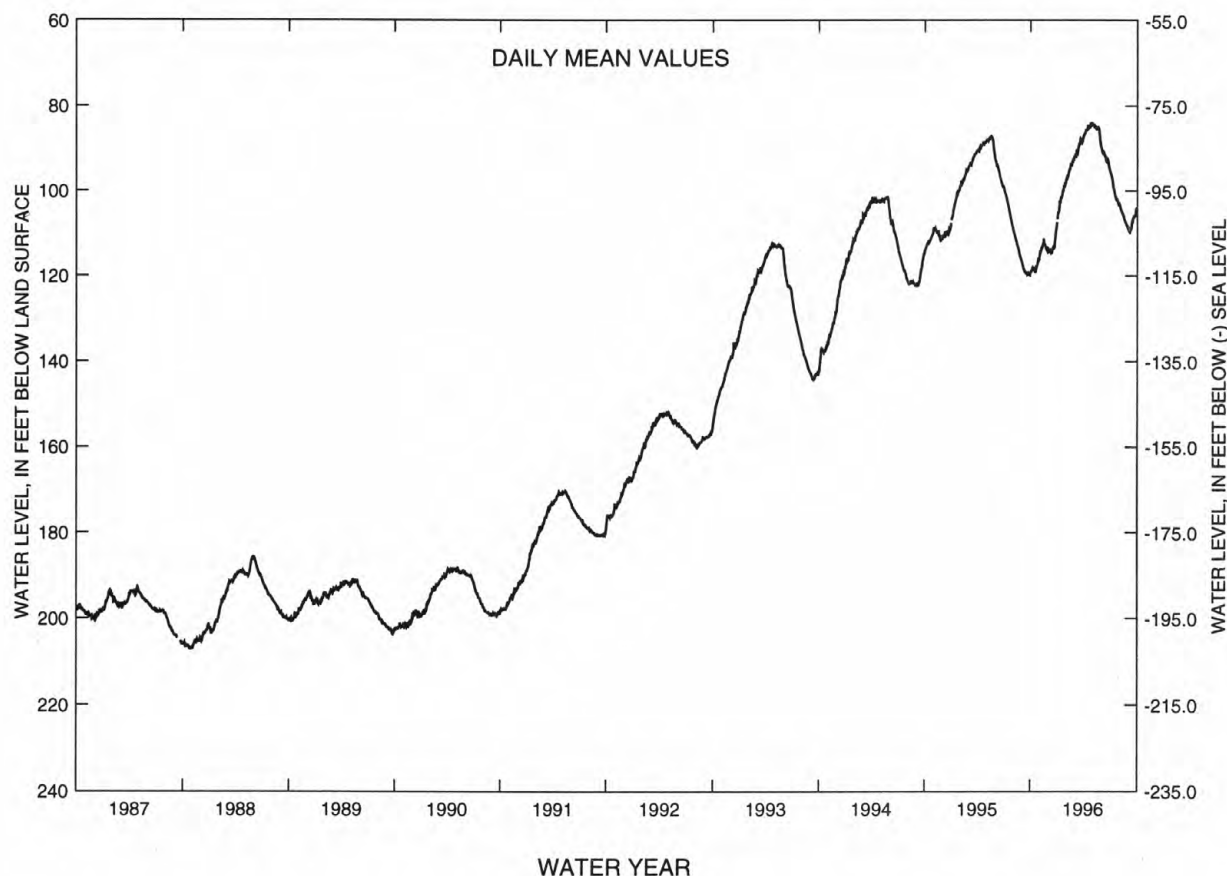
PERIOD OF RECORD.--Oct. 1983 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 83.48 ft below land surface, Apr. 30, 1996; lowest, 207.49 ft below land surface, Oct. 31, 1987.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	118.70	114.32	114.29	105.11	96.37	91.73	86.52	84.53	91.13	96.41	104.12	109.68
10	118.22	113.30	114.22	102.71	95.32	91.12	85.53	84.92	91.25	98.45	105.02	109.21
15	118.32	111.30	113.77	101.67	94.05	89.12	85.33	85.43	92.22	100.25	105.96	107.14
20	118.26	113.03	112.89	100.26	93.43	87.79	84.79	85.04	92.99	101.72	107.10	106.07
25	117.06	113.90	110.68	99.04	92.80	88.10	84.44	86.54	93.42	102.14	107.87	105.82
EOM	115.74	114.02	107.44	97.32	92.10	87.14	83.94	89.70	95.19	102.96	108.90	104.21
MEAN	117.94	113.45	112.72	101.42	94.39	89.46	85.28	85.75	92.32	99.99	106.15	107.33
WTR YR 1996	MEAN 100.56 HIGH 83.48 APR 30 LOW 119.60 OCT 1											

NJ-WRD WELL NO. 29-0503



OCEAN COUNTY

400232074213201. Local I.D., LNAS-EC Obs. NJ-WRD Well Number, 29-1060.

LOCATION.--Lat 40°02'37", long 74°21'28", Hydrologic Unit 02040301, at Lakehurst Naval Air Station, Jackson Township.
Owner: Lakehurst Naval Air Station.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 4 in., depth 38 ft, screened 23 to 38 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 110 ft above sea level, from topographic map.
Measuring point: Top of recorder shelf, 3.70 ft above land surface.

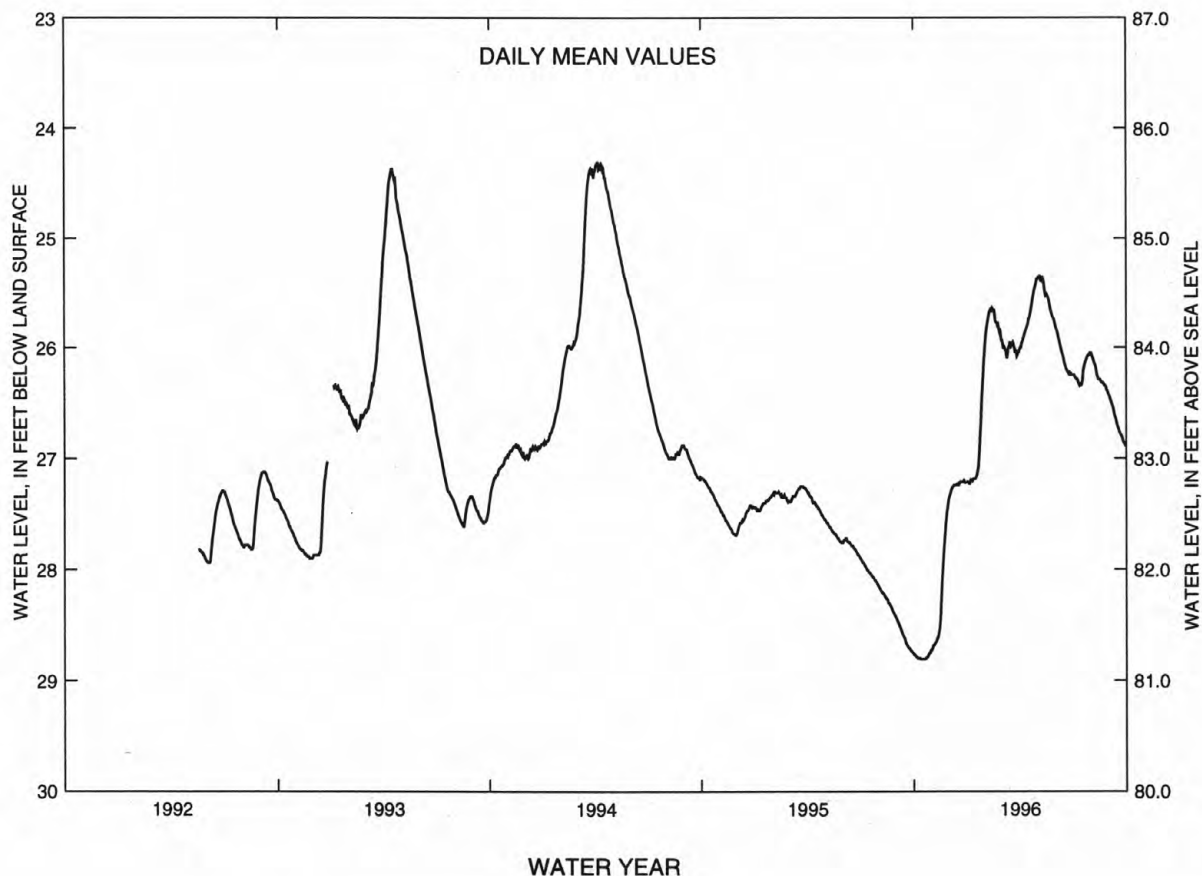
PERIOD OF RECORD.--May 1992 to current year. Records for 1992 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 24.29 ft below land surface, Apr. 7, 1994; lowest 28.81 ft below land surface, Oct. 13-21, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.78	28.68	27.29	27.23	25.80	25.99	25.95	25.35	25.88	26.27	26.10	26.49
10	28.80	28.64	27.24	27.19	25.67	26.10	25.86	25.40	26.00	26.31	26.19	26.59
15	28.81	28.54	27.23	27.18	25.65	25.95	25.79	25.52	26.10	26.34	26.29	26.69
20	28.81	28.07	27.22	27.11	25.77	25.95	25.66	25.55	26.20	26.18	26.32	26.77
25	28.79	27.67	27.21	26.71	25.82	26.03	25.50	25.68	26.23	26.09	26.34	26.83
EOM	28.73	27.41	27.22	26.09	25.91	26.03	25.38	25.79	26.25	26.05	26.42	26.89
MEAN	28.79	28.26	27.25	26.98	25.77	26.01	25.73	25.52	26.08	26.22	26.25	26.68
WTR YR 1996	MEAN 26.63 HIGH 25.34 MAY 4-6 LOW 28.81 OCT 13-21											

NJ-WRD WELL NO. 29-1060



OCEAN COUNTY

400416074270101. Local I.D., Colliers Mills 1 Obs. NJ-WRD Well Number, 29-0138.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 427 ft, screened 417 to 427 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Water-level extremes recorder, Oct. 1976 to Mar. 1977. Periodic measurements, July 1975 to Oct. 1976. Water-level recorder, Feb. 1964 to July 1975.

DATUM.--Land surface is 136.52 ft above sea level.

Measuring point: Top of coupling, 2.20 ft above land surface.

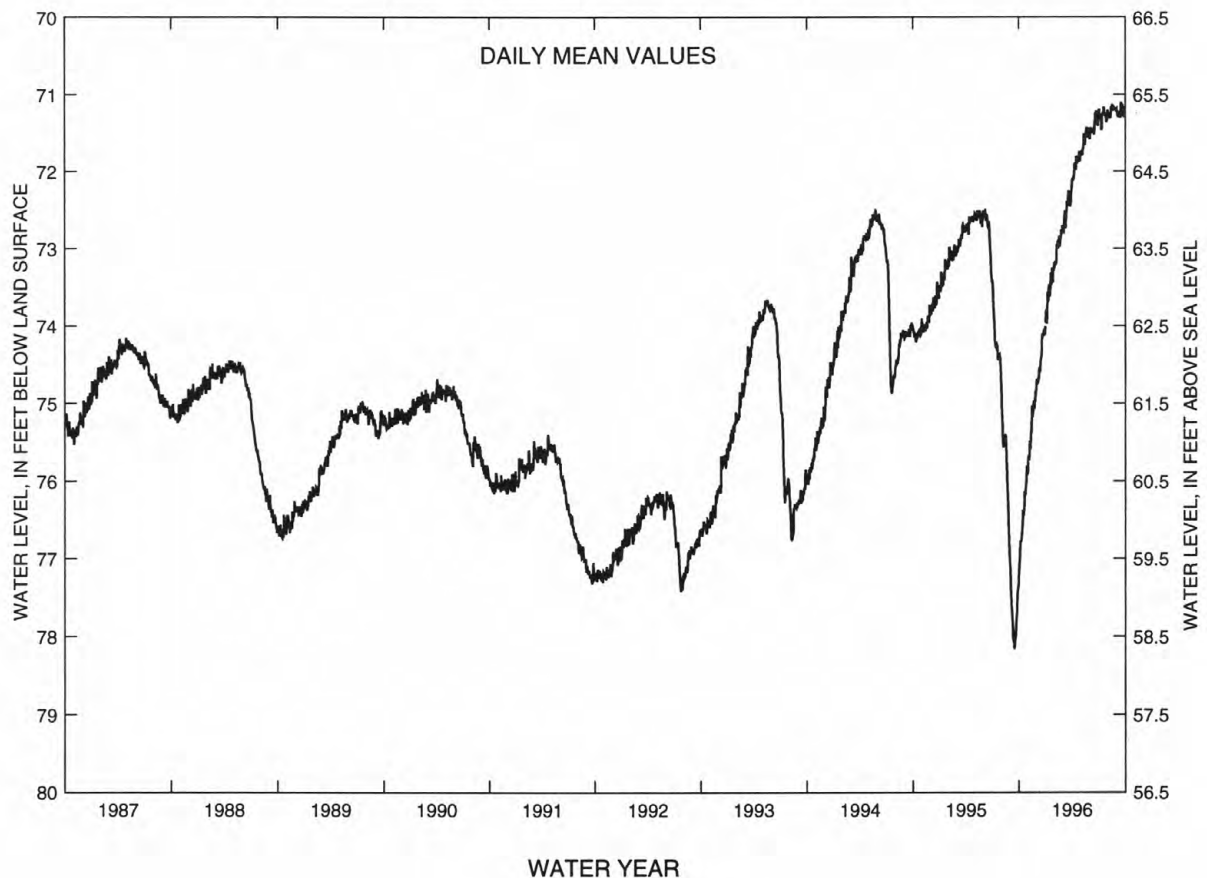
PERIOD OF RECORD.--Feb. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 52.02 ft below land surface, Feb. 19, 1964; lowest, 78.18 ft below land surface, Sept. 16, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.91	75.73	74.75	73.94	73.21	72.70	72.11	71.75	71.45	71.29	71.29	71.27
10	76.75	75.59	74.55	73.61	72.99	72.74	71.90	71.66	71.49	71.36	71.27	71.27
15	76.38	75.03	74.45	73.57	72.93	72.39	71.98	71.66	71.47	71.26	71.18	71.28
20	76.31	75.07	74.12	73.44	72.95	72.25	71.85	71.45	71.25	71.19	71.21	71.18
25	76.07	74.99	74.09	73.36	72.78	72.37	71.81	71.55	71.25	71.28	71.18	71.20
EOM	75.91	74.81	74.01	73.18	72.78	72.23	71.74	71.53	71.32	71.29	71.22	71.25
MEAN	76.46	75.26	74.39	73.54	72.96	72.49	71.93	71.60	71.40	71.28	71.22	71.22
WTR YR 1996	MEAN 72.82 HIGH 71.08 SEP 17 LOW 77.27 OCT 1											

NJ-WRD WELL NO. 29-0138



GROUND-WATER LEVELS

OCEAN COUNTY

400416074270102. Local I.D., Colliers Mills 2 Obs. NJ-WRD Well Number, 29-0139.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.

AQUIFER.--Vincentown aquifer of Paleocene age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 171 ft, screened 161 to 171 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, July 1975 to Oct. 1976. Water-level recorder, Jan. 1964 to July 1975.

DATUM.--Land surface is 135.76 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 3.25 ft above land surface.

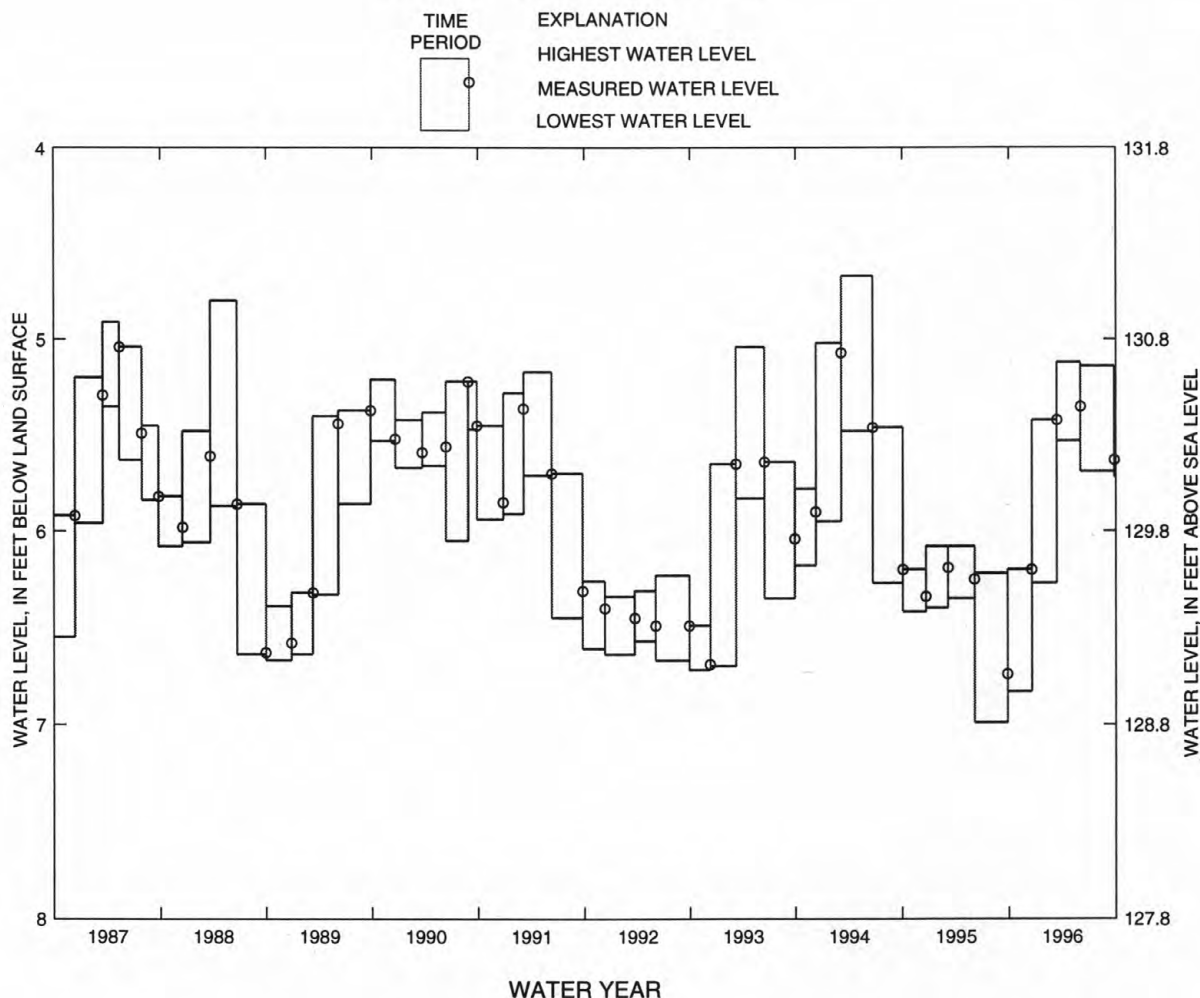
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.92 ft below land surface, between Apr. 3 and July 11, 1984; lowest, 6.99 ft below land surface, between June 5 and Sept. 26, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 18, 1995	6.20	6.83	DEC. 18, 1995	6.20
DEC. 18, 1995 TO MAR. 13, 1996	5.42	6.27	MAR. 13, 1996	5.42
MAR. 13, 1996 TO JUNE 3, 1996	5.12	5.53	JUNE 3, 1996	5.35
JUNE 3, 1996 TO SEPT. 27, 1996	5.14	5.69	SEPT. 27, 1996	5.63

NJ-WRD WELL NO. 29-0139



OCEAN COUNTY

400416074270103. Local I.D., Colliers Mills 3 Obs. NJ-WRD Well Number, 29-0140.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.

Owner: U.S. Geological Survey.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 267 ft, screened 257 to 267 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, July 1975 to Oct. 1976. Water-level recorder, Jan. 1964 to July 1975.

DATUM.--Land surface is 135.15 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 3.49 ft above land surface.

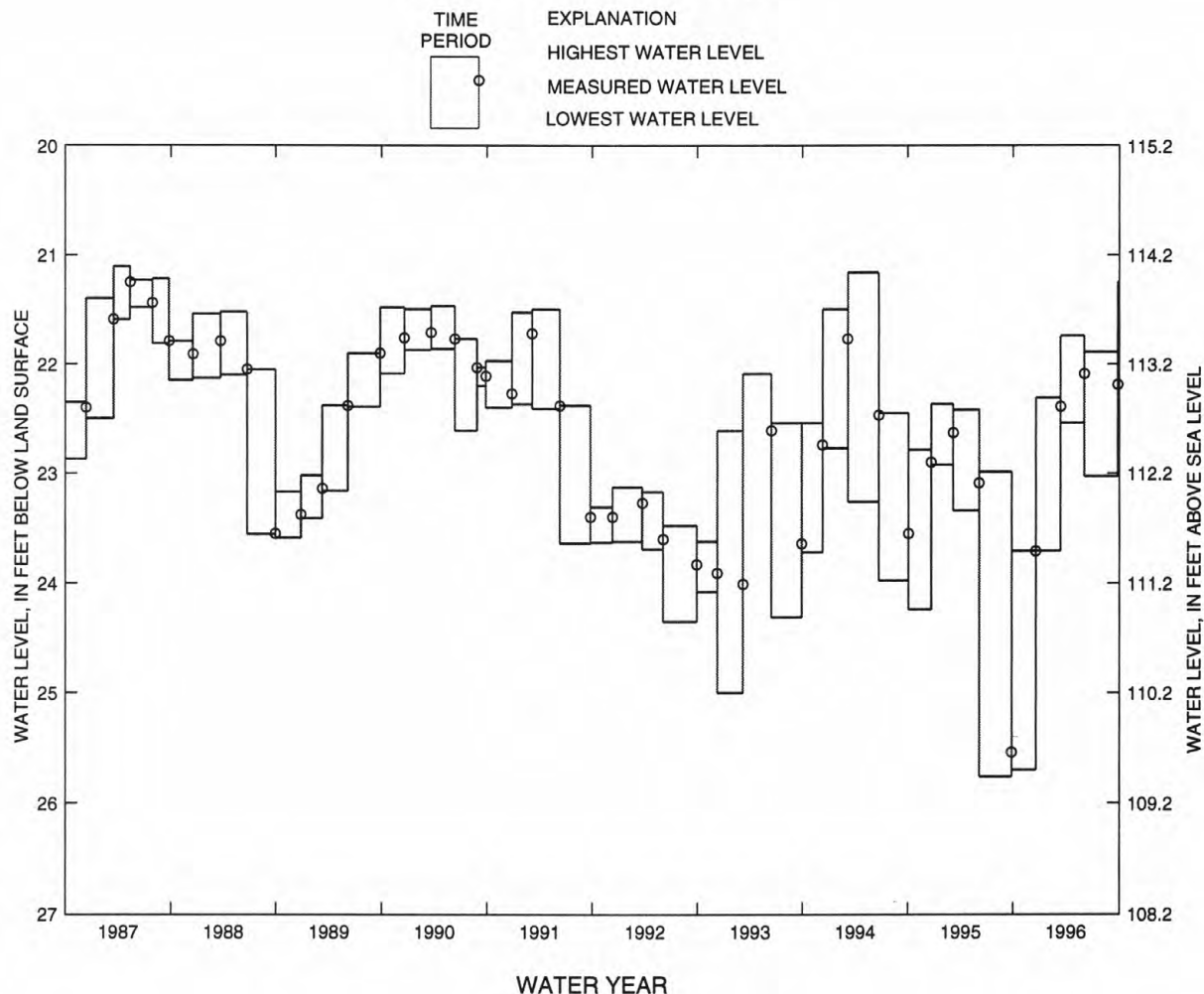
PERIOD OF RECORD.--Jan. 1964 to current year. Records for 1964 to 1976 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.72 ft below land surface, May 9, 1964; lowest, 25.76 ft below land surface, between June 5 and Sept. 26, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 18, 1995	23.71	25.70	DEC. 18, 1995	23.71
DEC. 18, 1995 TO MAR. 13, 1996	22.31	23.71	MAR. 13, 1996	22.39
MAR. 13, 1996 TO JUNE 3, 1996	21.74	22.54	JUNE 3, 1996	22.09
JUNE 3, 1996 TO SEPT. 27, 1996	21.89	23.03	SEPT. 27, 1996	22.19

NJ-WRD WELL NO. 29-0140



GROUND-WATER LEVELS

OCEAN COUNTY

400416074270104. Local I.D., Colliers Mills 4 Obs. NJ-WRD Well Number, 29-0141.

LOCATION.--Lat 40°04'14", long 74°27'02", Hydrologic Unit 02040301, along western shore of Colliers Mills Pond, Jackson Township.
Owner: U.S. Geological Survey.

AQUIFER.--Kirkwood-Cohansey aquifer system of Miocene age.

WELL CHARACTERISTICS.--Drilled water-table observation well, diameter 6 in., depth 71 ft, gravel-filled hole 46 to 71 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, July 1975 to Oct. 1976. Water-level recorder, Mar. 1964 to July 1975.

DATUM.--Land surface is 135.31 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.86 ft above land surface.

REMARKS.--Water level is affected by the stage of Colliers Mills Pond. Water-quality data for 1996 are available elsewhere in this report.

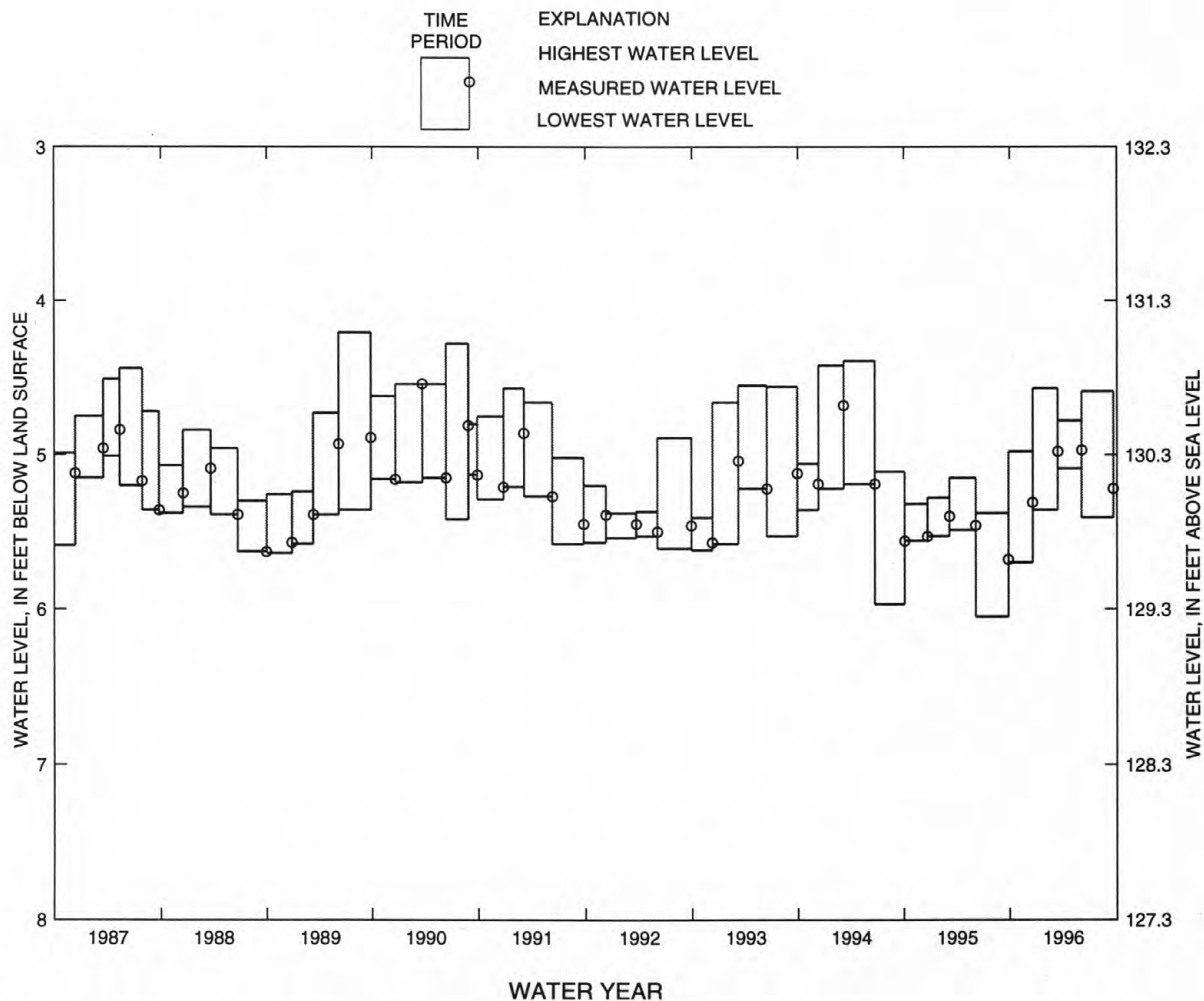
PERIOD OF RECORD.--Mar. 1964 to current year. Records for 1964 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.68 ft below land surface, between Apr. 3 and July 11, 1984; lowest, 7.17 ft below land surface, between Dec. 4, 1984 and Mar. 6, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 26, 1995 TO DEC. 18, 1995	4.98	5.70	DEC. 18, 1995	5.31
DEC. 18, 1995 TO MAR. 13, 1996	4.57	5.36	MAR. 13, 1996	4.98
MAR. 13, 1996 TO JUNE 3, 1996	4.78	5.09	JUNE 3, 1996	4.97
JUNE 3, 1996 TO SEPT. 20, 1996	4.59	5.41	SEPT. 20, 1996	5.22

NJ-WRD WELL NO. 29-0141



OCEAN COUNTY

400454074041301. Local I.D., PPWD 6 Obs. NJ-WRD Well Number, 29-0530.

LOCATION.--Lat 40°04'54", long 74°04'13", Hydrologic Unit 02040301, at the Point Pleasant Borough public works facility, Albert E. Clifton Ave., Point Pleasant Borough.

Owner: Point Pleasant Water Department.

AQUIFER.--Englishtown aquifer system of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian unused public-supply well, diameter 8 in., depth 790 ft, screened 730 to 790 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 20 ft above sea level, from topographic map.

Measuring point: Top of pump base, 2.90 ft above land surface.

REMARKS.--Water level is affected by tidal fluctuation and nearby pumping.

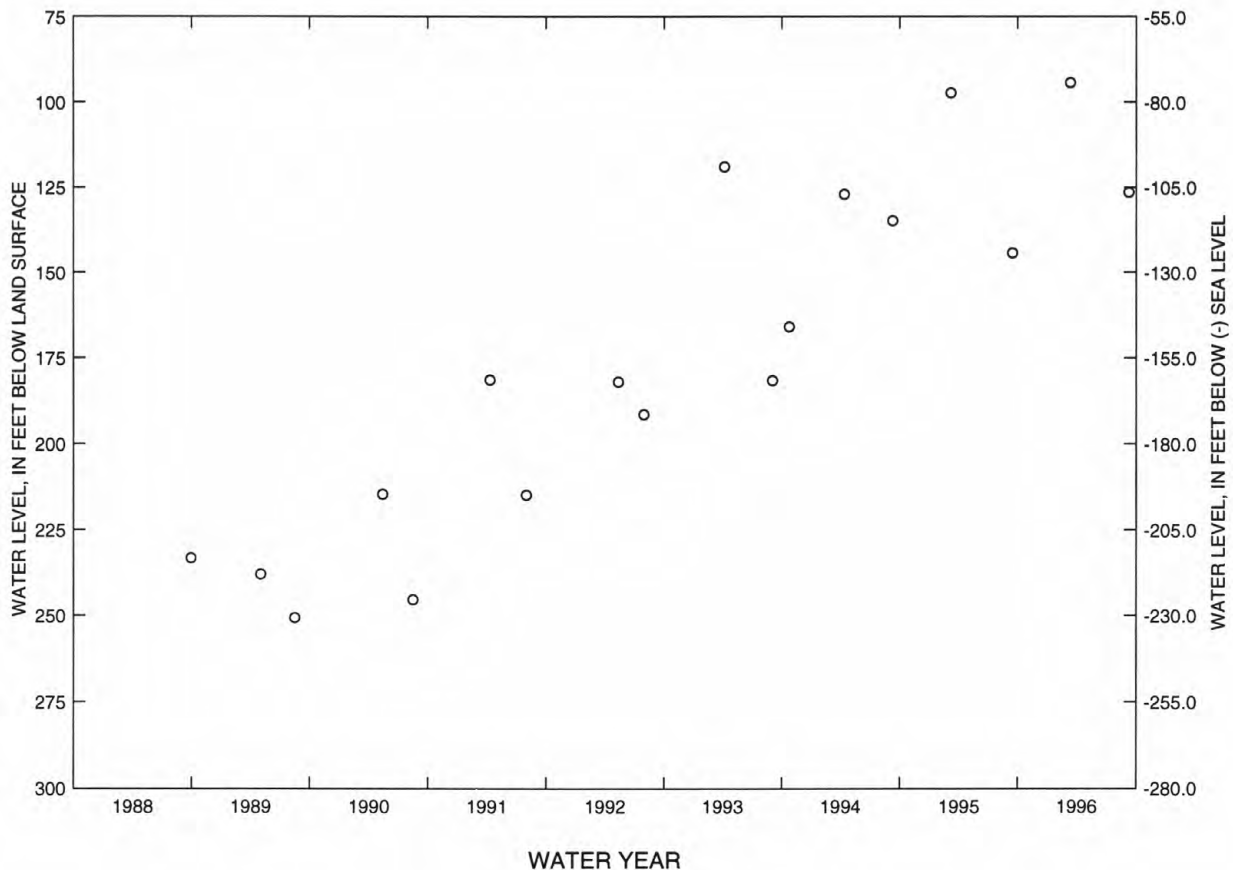
PERIOD OF RECORD.--Sept. 1988 to current year. Records for 1988 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 94.27 ft below land surface, Mar. 12, 1996; lowest, 250.66 ft below land surface, Aug 17, 1989.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 12	94.27	SEP 9	126.40

NJ-WRD WELL NO. 29-0530



GROUND-WATER LEVELS

SALEM COUNTY

393348075275701. Local I.D., Salem 1 Obs. NJ-WRD Well Number, 33-0251.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City. Owner: U.S. Geological Survey.

AQUIFER.--Middle Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 709 ft, screened 699 to 709 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Oct. 1976 to May 1977. No record, Aug. 1975 to Oct. 1976. Water-level recorder, Oct. 1972 to Aug. 1975. No record, July 1970 to Oct. 1972. Water-level recorder, Nov. 1965 to July 1970.

DATUM.--Land surface is 3.00 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.87 ft above land surface.

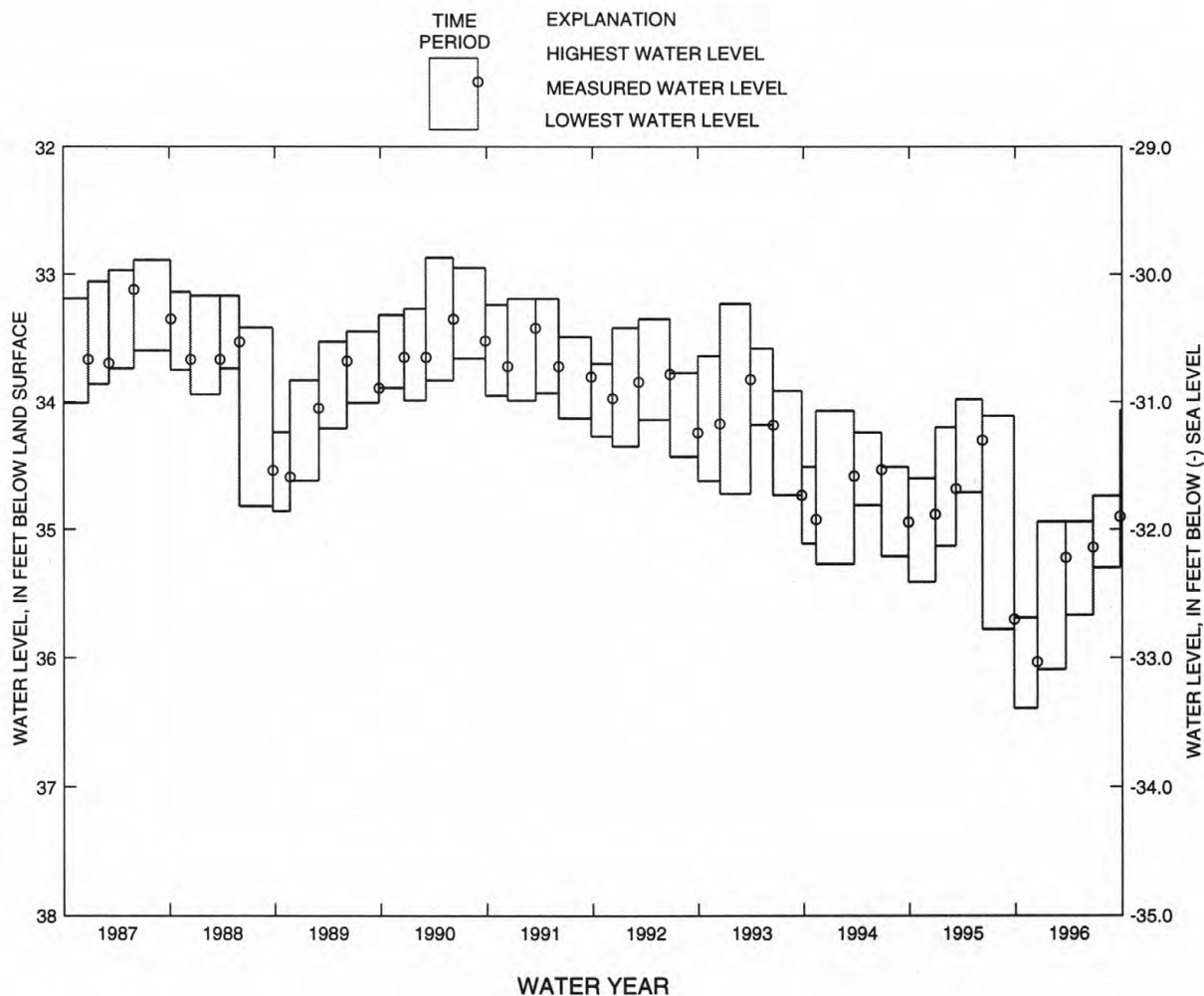
PERIOD OF RECORD.--Nov. 1965 to July 1970, Oct. 1972 to Aug. 1975, Oct. 1976 to current year. Records for 1965 to 1970 and for 1972 to 1980 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 14.97 ft below land surface, Dec. 13, 1965; lowest, 36.39 ft below land surface, between Sept. 27 and Dec. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1995 TO DEC. 15, 1995	35.69	36.39	DEC. 15, 1995	36.03
DEC. 15, 1995 TO MAR. 22, 1996	34.94	36.09	MAR. 22, 1996	35.22
MAR. 22, 1996 TO JUNE 24, 1996	34.94	35.67	JUNE 24, 1996	35.14
JUNE 24, 1996 TO SEPT. 25, 1996	34.74	35.30	SEPT. 25, 1996	34.90

NJ-WRD WELL NO. 33-0251



SALEM COUNTY

393348075275702. Local I.D., Salem 2 Obs. NJ-WRD Well Number, 33-0252.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.
Owner: U.S. Geological Survey.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 96 ft, screened 91 to 96 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, Nov. 1965 to Aug. 1975.

DATUM.--Land surface is 3.25 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.77 ft above land surface.

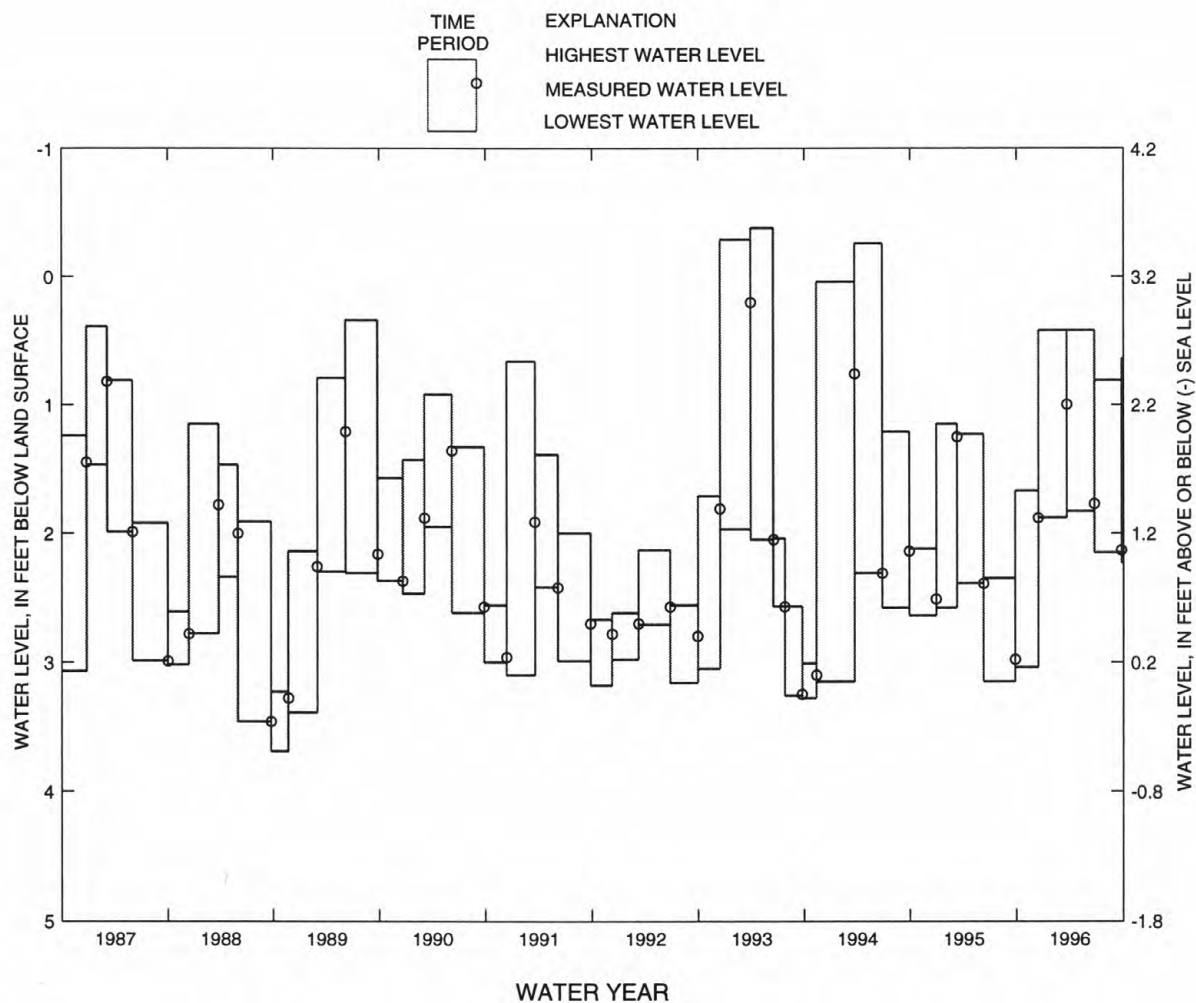
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.51 ft above land surface, between Jan. 12 and Apr. 27, 1983; lowest, 6.45 ft below land surface, Sept. 9, 1966.

WATER LEVEL, IN FEET ABOVE (-) OR BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES MEASURED WATER LEVELS

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1995 TO DEC. 15, 1995	1.67	3.04	DEC. 15, 1995	1.88
DEC. 15, 1995 TO MAR. 22, 1996	0.42	1.88	MAR. 22, 1996	1.00
MAR. 22, 1996 TO JUNE 24, 1996	0.42	1.83	JUNE 24, 1996	1.77
JUNE 24, 1996 TO SEPT. 25, 1996	0.81	2.15	SEPT. 25, 1996	2.13

NJ-WRD WELL NO. 33-0252



GROUND-WATER LEVELS

SALEM COUNTY

393348075275703. Local I.D., Salem 3 Obs. NJ-WRD Well Number, 33-0253.

LOCATION.--Lat 39°33'48", long 75°27'55", Hydrologic Unit 02040206, about 300 ft south of the intersection of Elm and Magnolia Streets, Salem City.
Owner: U.S. Geological Survey.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 340 ft, screened 335 to 340 ft.

INSTRUMENTATION.--Water-level extremes recorder. Periodic measurements, Aug. 1975 to May 1977. Water-level recorder, Nov. 1965 to Aug. 1975.

DATUM.--Land surface is 3.00 ft above sea level.

Measuring point: Front edge of cutout in recorder housing, 2.30 ft above land surface.

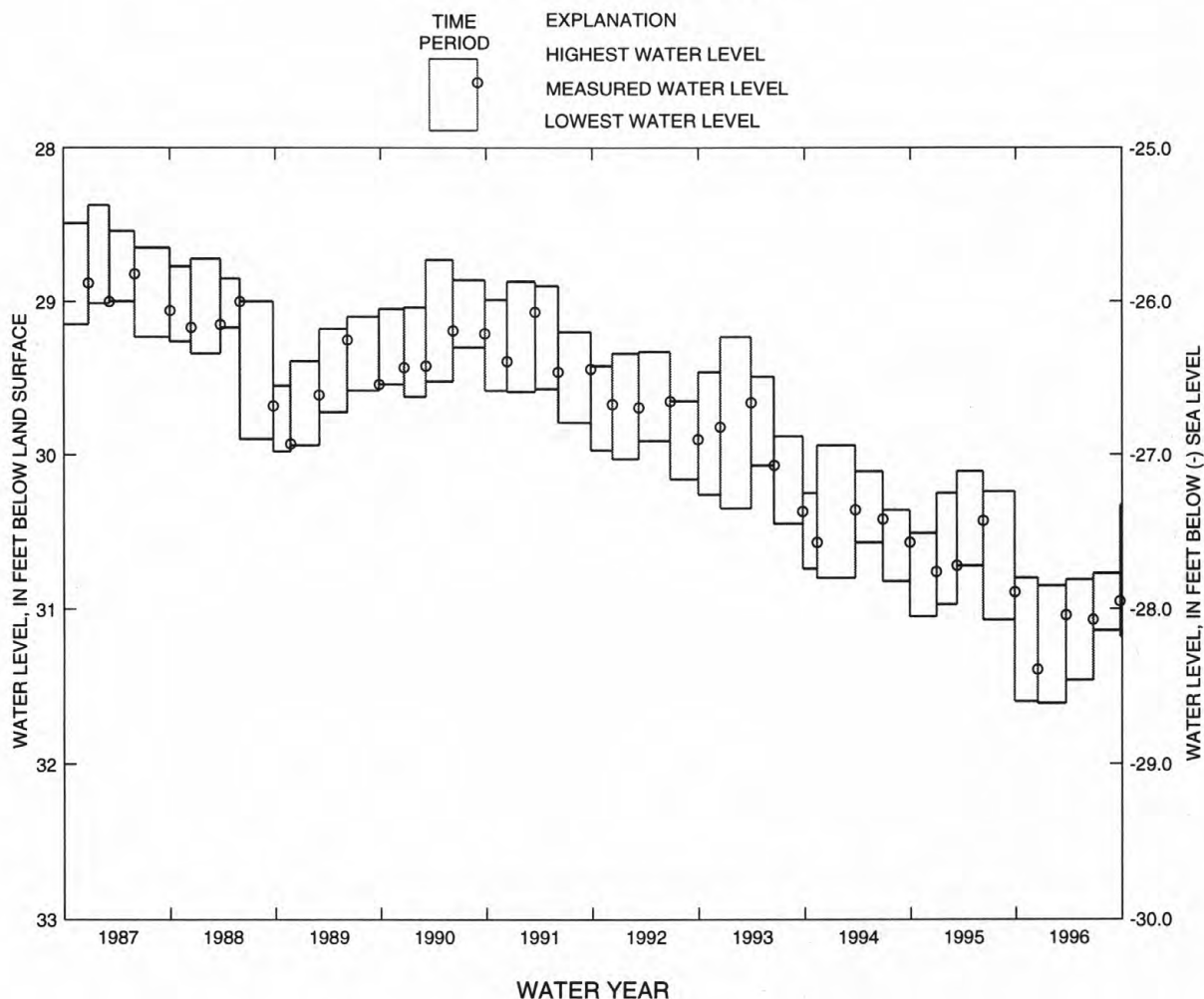
PERIOD OF RECORD.--Nov. 1965 to current year. Records for 1965 to 1981 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.28 ft below land surface, Feb. 13, 1966; lowest, 31.61 ft below land surface, between Dec. 15, 1995 and Mar. 22, 1996.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
WATER-LEVEL EXTREMES

PERIOD	HIGHEST WATER LEVEL	LOWEST WATER LEVEL	DATE	WATER LEVEL
SEPT. 27, 1995 TO DEC. 15, 1995	30.80	31.60	DEC. 15, 1995	31.39
DEC. 15, 1995 TO MAR. 22, 1996	30.85	31.61	MAR. 22, 1996	31.04
MAR. 22, 1996 TO JUNE 24, 1996	30.81	31.46	JUNE 24, 1996	31.07
JUNE 24, 1996 TO SEPT. 25, 1996	30.77	31.14	SEPT. 25, 1996	30.95

NJ-WRD WELL NO. 33-0253



GROUND-WATER LEVELS

181

SALEM COUNTY

393534075175201. Local I.D., Horner Obs. NJ-WRD Well Number, 33-0020.

LOCATION.--Lat 39°35'34", long 75°17'52", Hydrologic Unit 02040206, near the intersection of Rt. 581 (Commissioners Pike) and Rt. 672 (Yorketown Rd), Alloway Township.
Owner: Ephraim Horner.

AQUIFER.--Wenonah-Mount Laurel aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 283 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 76.75 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 1.81 ft above land surface.

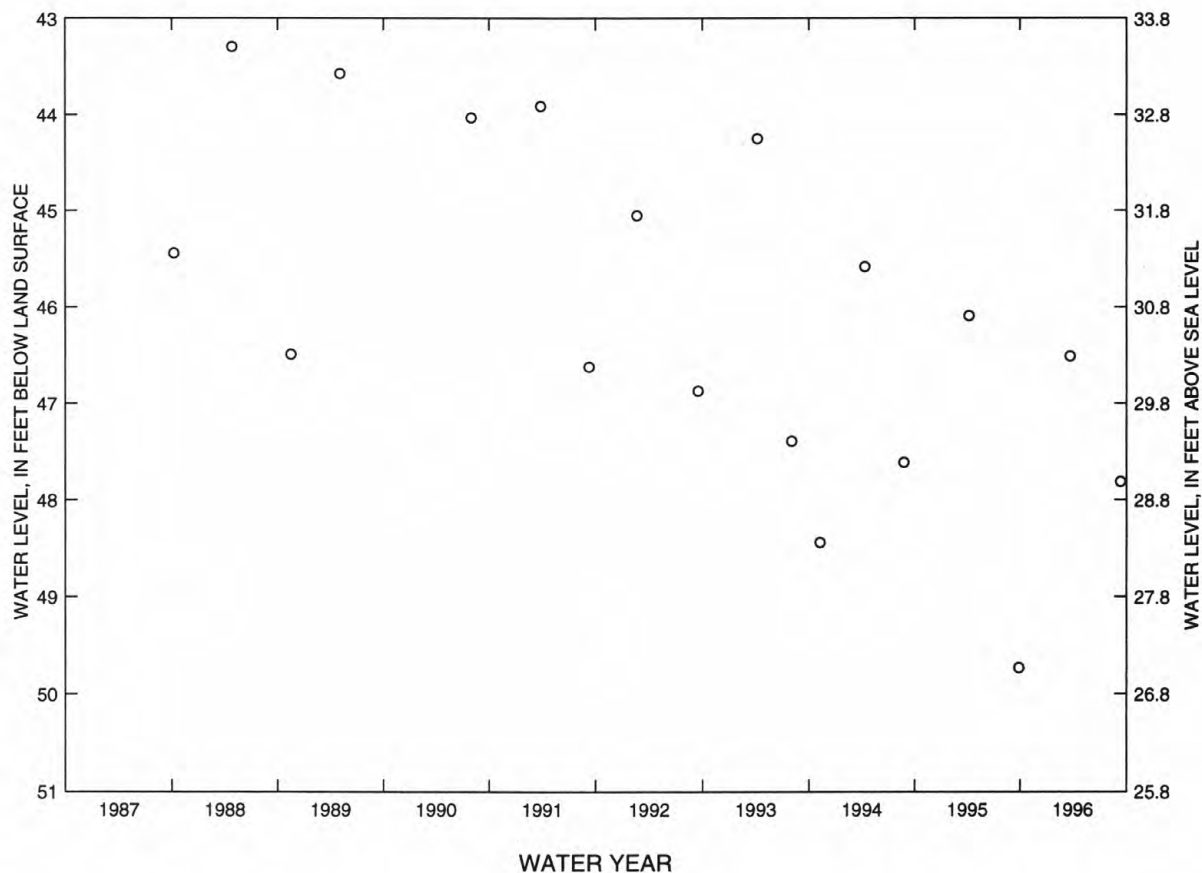
PERIOD OF RECORD.--June 1959 to current year. Records for 1959 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 38.32 ft below land surface, Apr. 25, 1961; lowest, 49.73 ft below land surface, Sept. 27, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	46.51	SEP 12	47.81

NJ-WRD WELL NO. 33-0020



GROUND-WATER LEVELS

SALEM COUNTY

394037075191501. Local I.D., Point Airy Obs. NJ-WRD Well Number, 33-0187.

LOCATION.--Lat 39°40'37", long 75°19'14", Hydrologic Unit 02040206, near the intersection of Point Airy Rd. and Woodstown-Swedesboro Rd., 1 mi north of Woodstown Borough boundary, Pilesgrove Township.
Owner: U.S. Geological Survey.

AQUIFER.--Lower Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 4 in., depth 672 ft, screened 664 to 672 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to Mar. 1977. Water-level recorder, Feb. 1959 to Aug. 1975.

DATUM.--Land surface is 72.97 ft above sea level.

Measuring point: Top of casing, 1.80 ft above land surface.

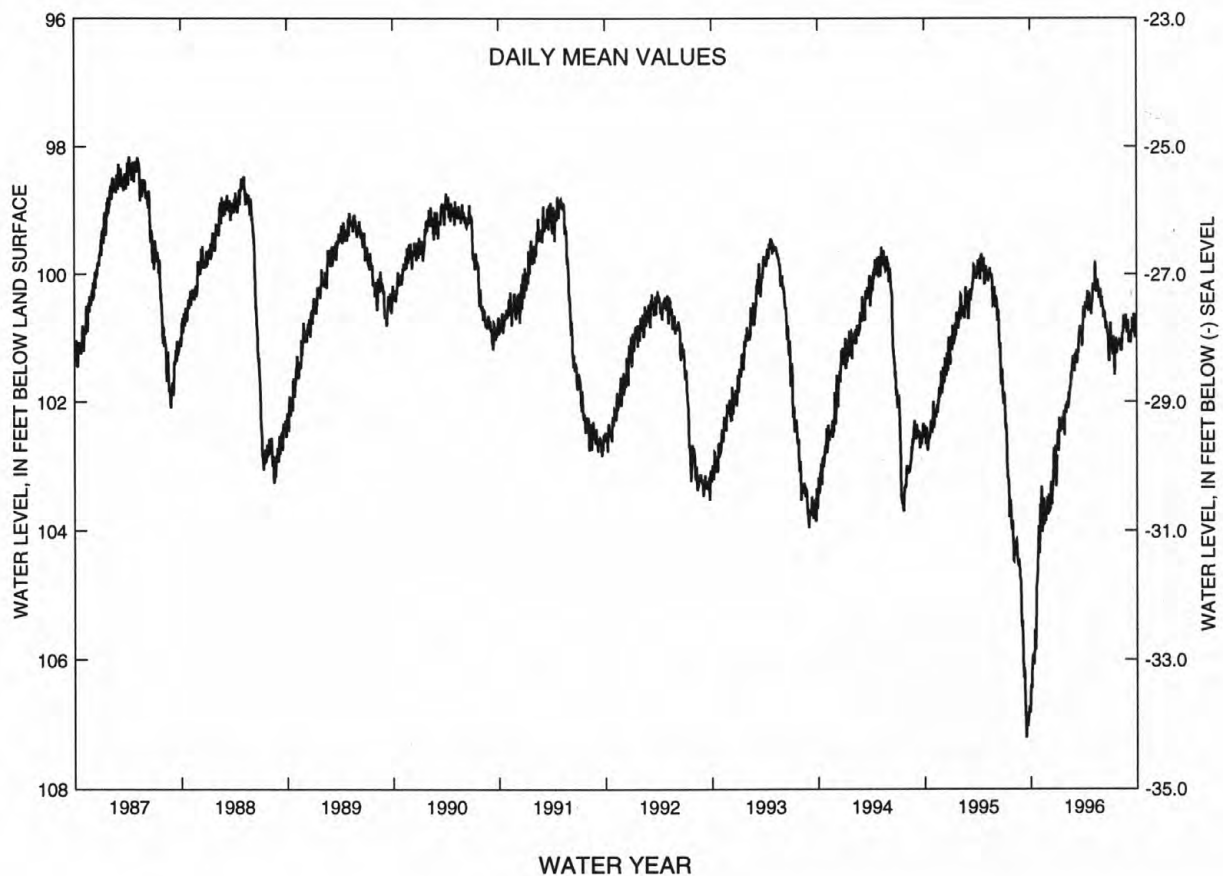
PERIOD OF RECORD.--Feb. 1959 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 78.55 ft below land surface, Mar. 6, 1959; lowest, 107.26 ft below land surface, Sept. 15, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	106.21	103.60	103.71	102.75	102.01	101.30	100.65	100.22	100.48	100.96	101.01	101.07
10	106.03	104.02	103.24	102.33	102.05	101.40	100.50	100.13	100.62	101.15	101.19	100.98
15	105.55	103.49	103.39	102.37	101.79	101.09	100.46	100.28	100.75	101.07	100.93	100.88
20	105.20	103.72	102.71	102.38	101.55	100.81	100.33	100.14	100.86	101.09	100.78	100.89
25	104.47	103.64	102.73	102.35	101.33	100.83	100.57	100.38	100.94	101.25	100.65	100.86
EOM	104.35	103.75	102.83	102.06	101.49	100.65	100.42	100.41	101.27	101.08	100.87	100.69
MEAN	105.40	103.70	103.21	102.37	101.72	101.08	100.48	100.21	100.77	101.10	100.92	100.86
WTR YR 1996	MEAN 101.82 HIGH 99.73 MAY 12 LOW 106.58 OCT 1											

NJ-WRD WELL NO. 33-0187



GROUND-WATER LEVELS

183

SALEM COUNTY

394317075261901. Local I.D., Penns Grove 14 Obs. NJ-WRD Well Number, 33-0348.

LOCATION.--Lat 39°43'17", long 75°26'19", Hydrologic Unit 02040206, about 110 ft south of the intersection of Pedricktown Rd. and Penns Grove-Auburn Rd., Carneys Point Township.

Owner: State of New Jersey - New Jersey Division of Water Policy.

AQUIFER.--Upper Potomac-Raritan-Magothy aquifer of Cretaceous age.

WELL CHARACTERISTICS.--Driven water-table observation well, diameter 1.25 in., depth 18 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 25.40 ft above sea level.

Measuring point: Top of casing, 0.20 ft above land surface.

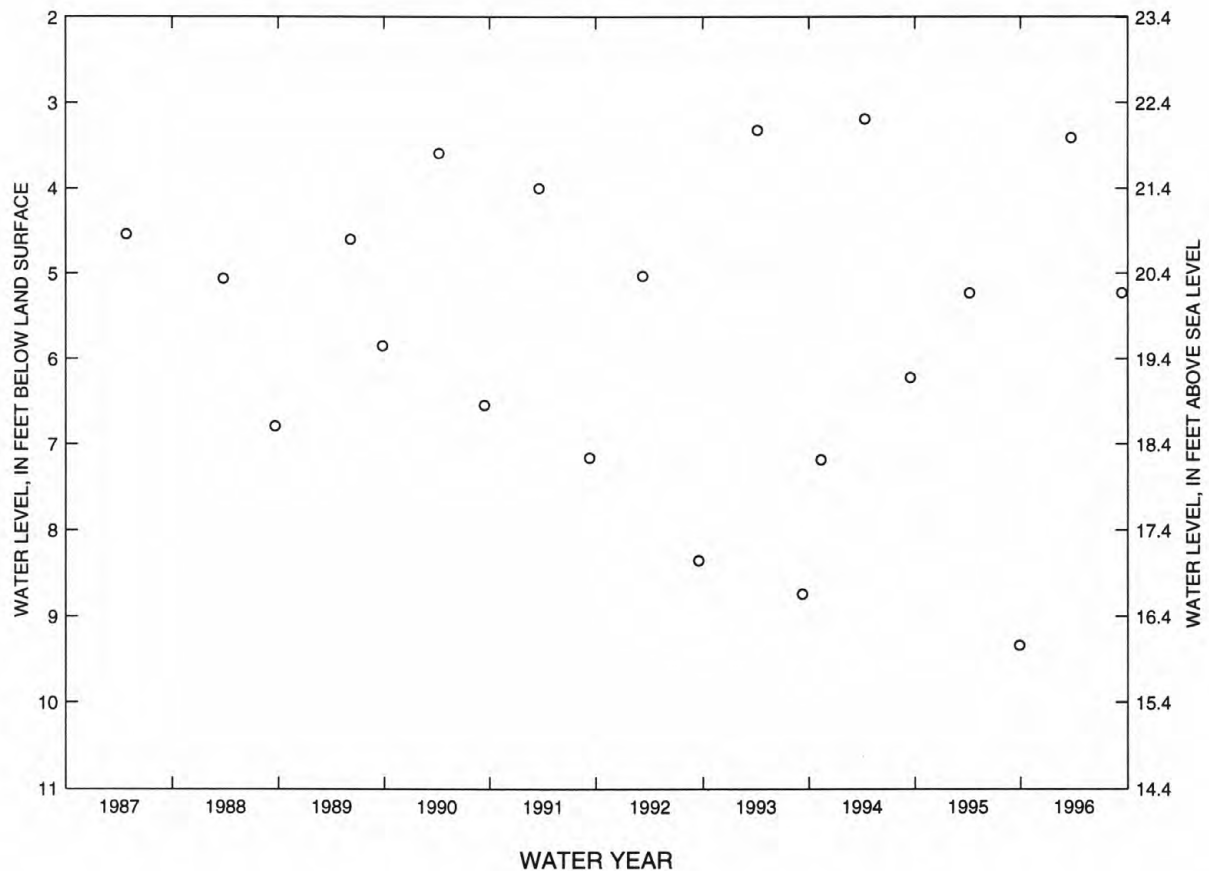
PERIOD OF RECORD.--June 1959 to Mar. 1975, Feb. 1977 to current year. Records for 1959 to 1975 and 1977 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.00 ft below land surface, Feb. 23, 1961; lowest, 9.34 ft below land surface, Sept. 27, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 22	3.41	SEP 12	5.23

NJ-WRD WELL NO. 33-0348



SUSSEX COUNTY

405613074430901. Local I.D., Byram Twp PW-1 Obs. NJ-WRD Well Number, 37-0359.

LOCATION.--Lat 40°56'13", long 74°43'09", Hydrologic Unit 02040105, about 1,500 ft north of the intersection of U. S. Route 206 and County Route 607 (Lackawanna Dr.), Byram Township.

Owner: McGovern, W. M. - Byram Plaza.

AQUIFER.--Precambrian Erathem.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 100 ft, open hole 16 to 100 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 732 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 1.50 ft above land surface.

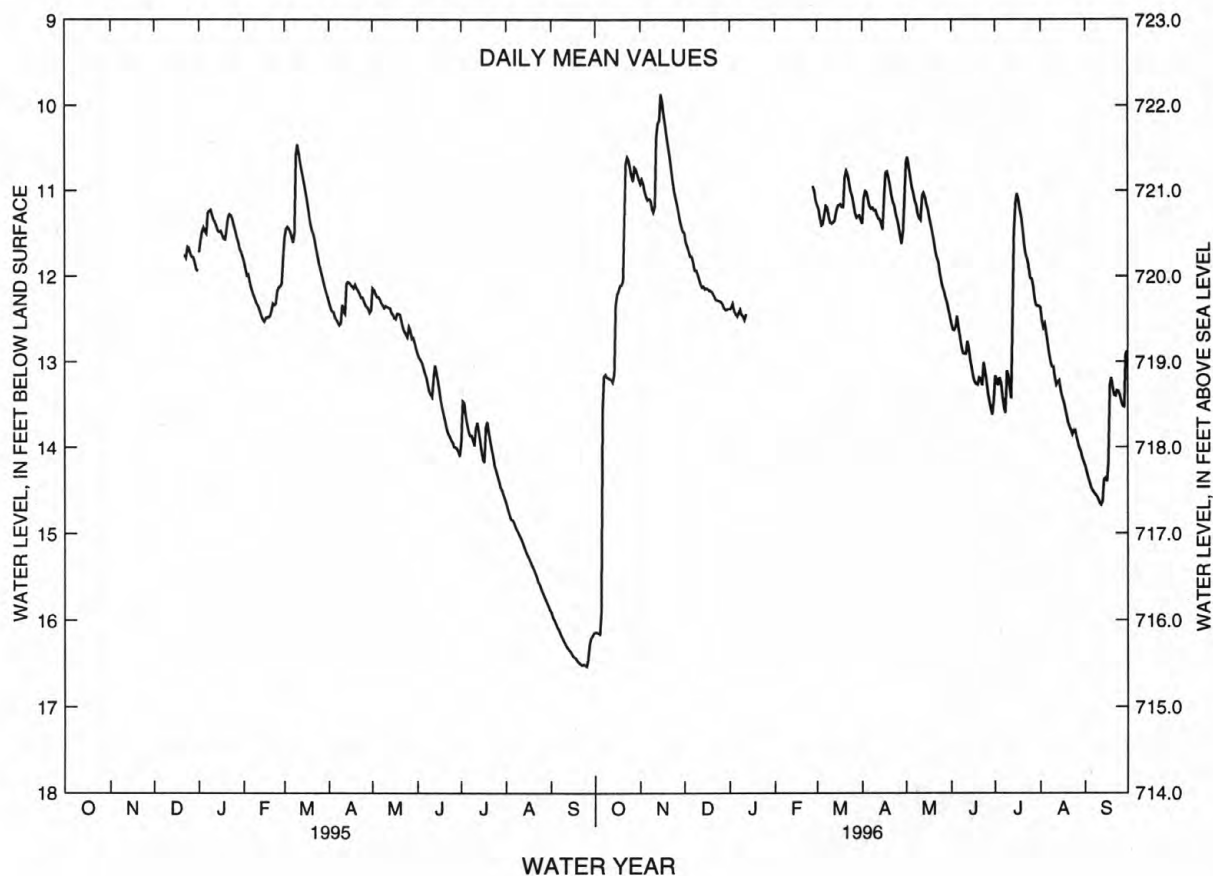
PERIOD OF RECORD.--Dec. 1994 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.82 ft below land surface, Nov. 15, 1995; lowest, 16.54 ft below land surface, Sept. 24-26, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.92	11.07	11.77	12.44	---	11.39	11.11	10.96	12.47	13.26	12.67	14.47
10	13.19	11.25	11.97	12.47	---	11.37	11.23	11.32	12.91	13.16	13.06	14.60
15	12.35	9.87	12.15	---	---	11.19	11.45	11.16	13.08	11.15	13.33	14.36
20	12.06	10.49	12.19	---	---	10.85	10.94	11.58	13.19	11.47	13.71	13.30
25	10.74	11.08	12.29	---	---	11.06	11.34	12.05	13.22	12.02	13.80	13.39
EOM	10.87	11.47	12.38	---	11.11	11.34	11.11	12.47	13.45	12.35	14.17	12.88
MEAN	12.63	10.82	12.08	---	---	11.20	11.20	11.46	13.03	12.37	13.38	13.96
WTR YR 1996	MEAN 12.21	HIGH 9.82	NOV 15	LOW 16.19	OCT 5							

NJ-WRD WELL NO. 37-0359



SUSSEX COUNTY

410005074473801. Local I.D., Whittingham 19 Obs. NJ-WRD Well Number, 37-0203.

LOCATION.--Lat 41°00'13", long 74°47'26", Hydrologic Unit 02040105, in Whittingham Wildlife Refuge, County Rt. 611 (Springdale-Grendell Rd.), Fredon Township.

Owner: State of New Jersey.

AQUIFER.--Allentown Dolomite of Cambrian-Ordovician age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 500 ft, open hole 50 to 500 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements Apr. 1991 to July 1992.

DATUM.--Land surface is 648.5 ft above sea level.

Measuring point: Top of recorder shelf, 2.30 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

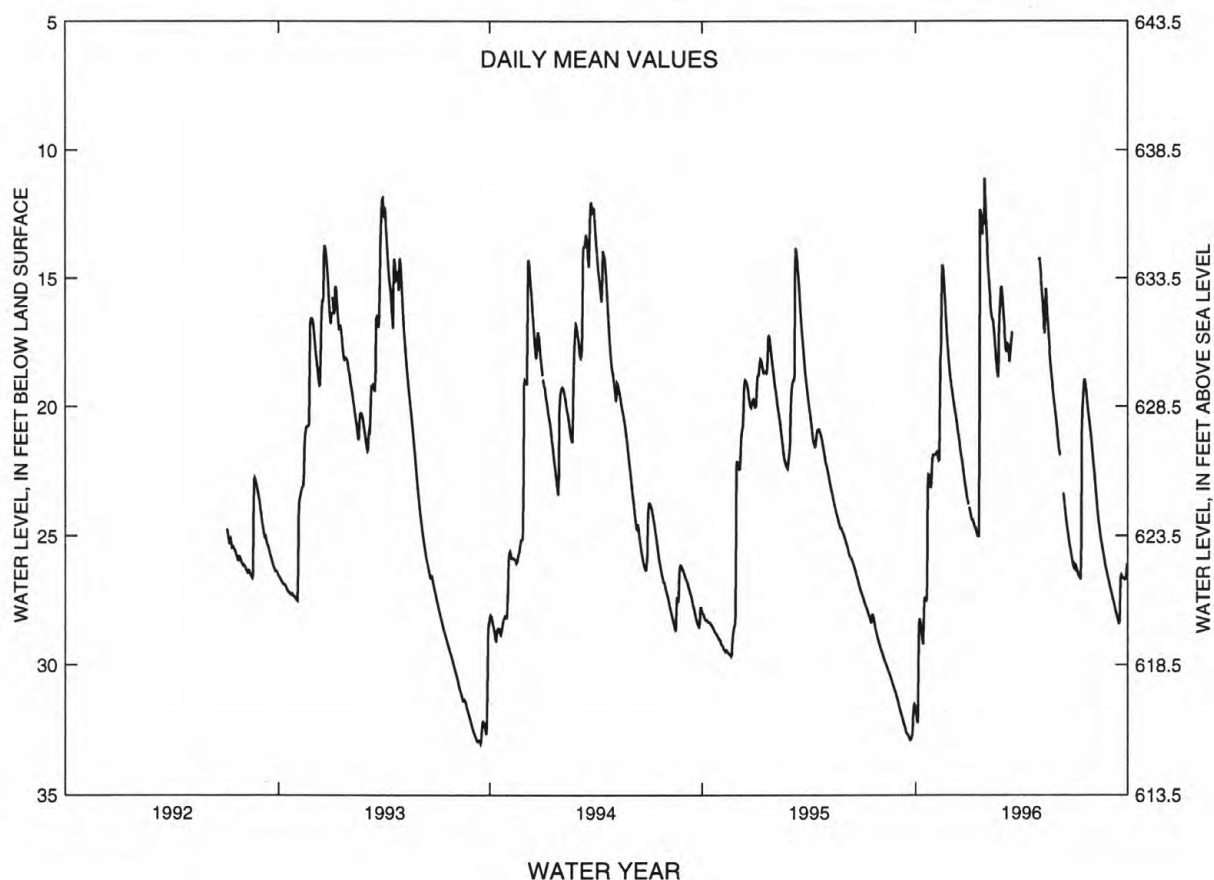
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.76 ft below land surface, Jan. 28, 1996; lowest, 33.24 ft below land surface, Sep. 15, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.25	21.82	19.73	24.31	15.32	17.84	---	15.13	21.75	26.28	22.65	27.44
10	28.53	22.10	20.44	24.60	16.61	18.03	---	16.91	---	26.56	23.97	27.92
15	28.29	15.89	21.30	24.97	17.67	17.10	---	16.09	24.03	20.10	24.95	28.35
20	27.55	15.47	22.13	12.33	18.86	---	---	18.02	24.91	19.10	25.68	26.53
25	22.80	17.53	22.99	12.52	15.43	---	---	19.32	25.63	20.19	26.34	26.68
EOM	21.90	18.90	23.79	13.06	16.11	---	---	20.65	26.22	21.44	26.96	26.10
MEAN	27.05	18.75	21.48	19.76	16.45	---	---	17.27	24.13	22.69	24.80	27.28
WTR YR 1996 MEAN 21.78 HIGH 10.76 JAN 28 LOW 32.48 OCT 5												

NJ-WRD WELL NO. 37-0203



GROUND-WATER LEVELS

SUSSEX COUNTY

410431074395801. Local I.D., Sparta Twp 6 Obs. NJ-WRD Well Number, 37-0204.

LOCATION.--Lat 41°04'49", long 74°39'32", Hydrologic Unit 02040105, on the north side of the soccer fields off White Lake Rd., Germany Flats, Sparta Township.
Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 143 ft, screened 123 to 143 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape.

DATUM.--Land surface is 621.7 ft above sea level.

Measuring point: Top of shelf, 2.76 ft above land surface.

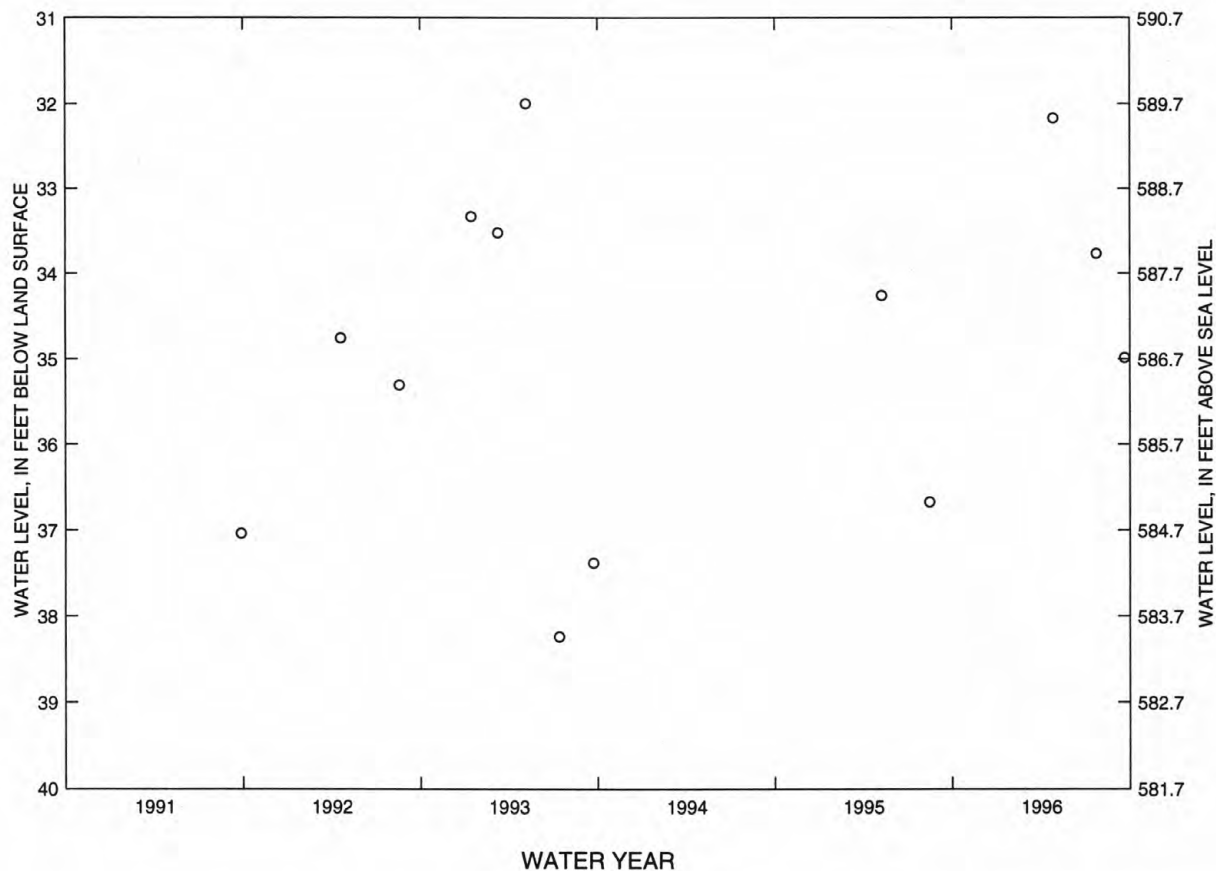
PERIOD OF RECORD.--Aug. 1991 to Sept. 1993, May 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 32.00 ft below land surface, May 7, 1993; lowest, 38.24 ft below land surface, July 14, 1993.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 26	32.17	JUL 24	33.77	SEP 20	34.99

NJ-WRD WELL NO. 37-0204



SUSSEX COUNTY

410449074483301. Local I.D., Swartswood Park 5 Obs. NJ-WRD Well Number, 37-0205.

LOCATION.--Lat 41°04'49", long 74°48'37", Hydrologic Unit 02040105, in Swartswood State Park, about 700 ft south of the intersection of County Rt. 622 (Swartswood Rd.) and Chandler Rd., Hampton Township.
Owner: State of New Jersey.

AQUIFER.--Allentown Dolomite of Cambrian-Ordovician age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 148 ft, open hole 50 to 148 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements Apr. 1991 to July 1992.

DATUM.--Land surface is 514.1 ft above sea level.

Measuring point: Top of recorder shelf, 2.55 ft above land surface.

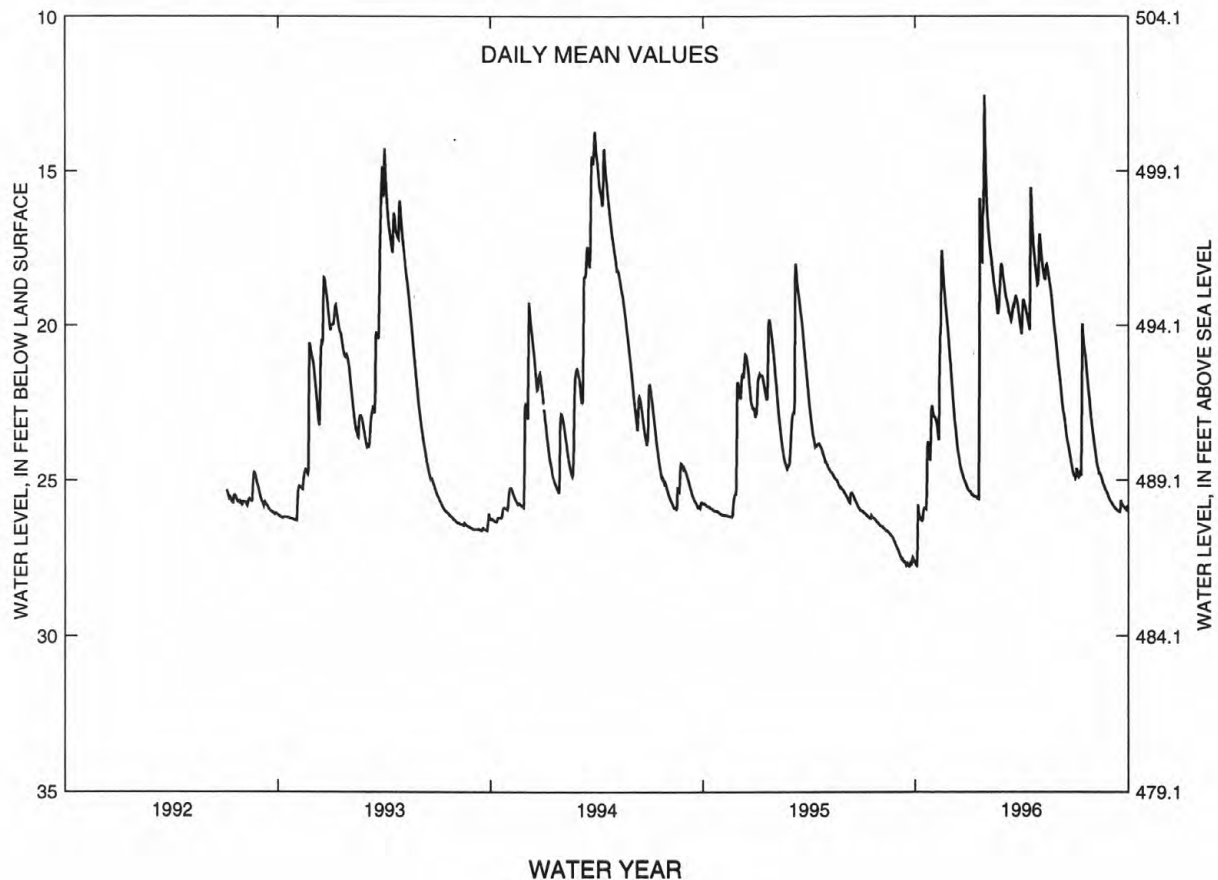
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.20 ft below land surface, Jan. 28, 1996; lowest, 27.79 ft below land surface, Sept. 22, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.41	23.00	22.37	25.42	17.20	19.04	19.21	17.77	21.67	24.68	24.01	25.81
10	26.22	23.62	23.42	25.51	18.07	19.56	19.64	18.46	22.64	24.77	24.59	25.94
15	26.03	18.27	24.25	25.57	18.85	19.77	20.15	18.11	23.31	20.27	24.84	26.00
20	25.92	18.79	24.73	15.89	19.64	19.23	17.02	18.72	23.90	21.12	25.17	25.75
25	24.00	19.87	25.03	16.44	18.13	19.27	18.18	19.65	24.45	22.20	25.39	25.89
EOM	22.68	21.06	25.30	15.50	18.37	20.15	18.34	20.80	24.85	23.30	25.65	25.84
MEAN	25.50	20.88	23.96	21.66	18.21	19.38	18.63	18.70	23.21	22.92	24.82	25.86
WTR YR 1996	MEAN 22.00 HIGH 12.20 JAN 28 LOW 27.75 OCT 4-5											

NJ-WRD WELL NO. 37-0205



SUSSEX COUNTY

410804074424401. Local I.D., Fairgrounds 7 Obs. NJ-WRD Well Number, 37-0206.

LOCATION.--Lat 41°08'04", long 74°42'44", Hydrologic Unit 02020007, at Sussex County Fairgrounds, Frankford Township.
Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 84 ft, screened 64 to 84 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements Apr. 1991 to July 1992.

DATUM.--Land surface is 533.5 ft above sea level.

Measuring point: Top of recorder shelf, 3.90 ft above land surface.

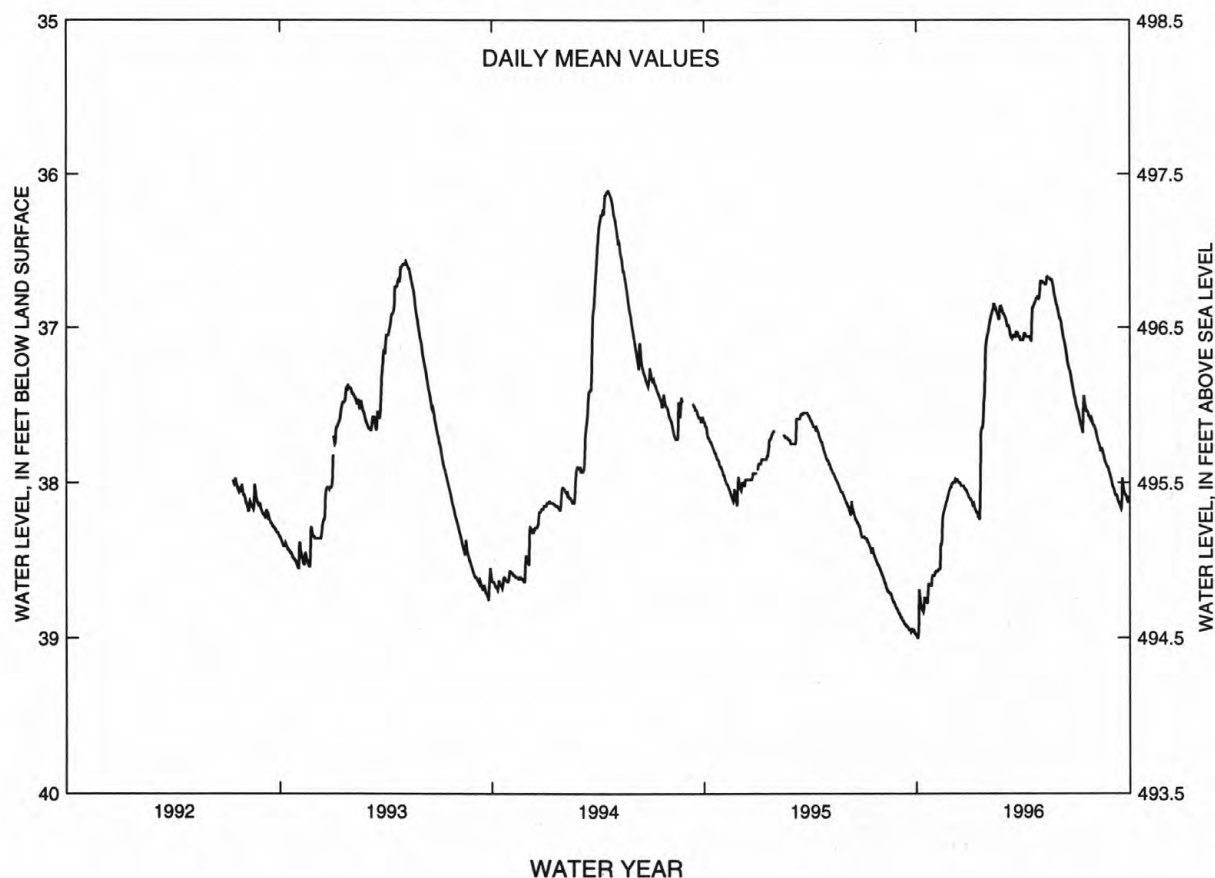
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.11 ft below land surface, Apr. 17, 19-20, 1994; lowest, 39.01 ft below land surface, Oct. 4-5, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	38.95	38.57	38.00	38.13	36.95	36.99	37.05	36.71	36.97	37.56	37.70	38.07
10	38.81	38.56	37.98	38.17	36.88	37.05	37.06	36.72	37.08	37.64	37.76	38.11
15	38.74	38.24	38.00	38.22	36.89	37.05	37.09	36.68	37.20	37.48	37.79	38.16
20	38.78	38.15	38.02	37.68	36.95	37.03	36.85	36.69	37.28	37.54	37.87	38.04
25	38.66	38.08	38.05	37.48	36.88	37.06	36.81	36.79	37.39	37.59	37.91	38.09
EOM	38.60	38.03	38.10	37.05	36.92	37.08	36.75	36.90	37.49	37.63	38.00	38.11
MEAN	38.76	38.31	38.02	37.87	36.91	37.03	36.95	36.73	37.20	37.57	37.82	38.09
WTR YR 1996 MEAN 37.61 HIGH 36.67 MAY 11-14 LOW 39.01 OCT 4-5												

NJ-WRD WELL NO. 37-0206



SUSSEX COUNTY

410914074540401. Local I.D., Taylor Obs. NJ-WRD Well Number, 37-0202.

LOCATION.--Lat 41°09'14", long 74°53'04", Hydrologic Unit 02040104, near Walpack Center, Delaware Water Gap National Recreation Area, Walpack Township.

Owner: National Park Service.

AQUIFER.--Bossardville Limestone of Silurian age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 6 in., depth 95 ft, open hole 42 to 95 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch.

DATUM.--Land surface is 480 ft above sea level, from topographic map.

Measuring point: Top of recorder shelf, 3.00 ft above land surface.

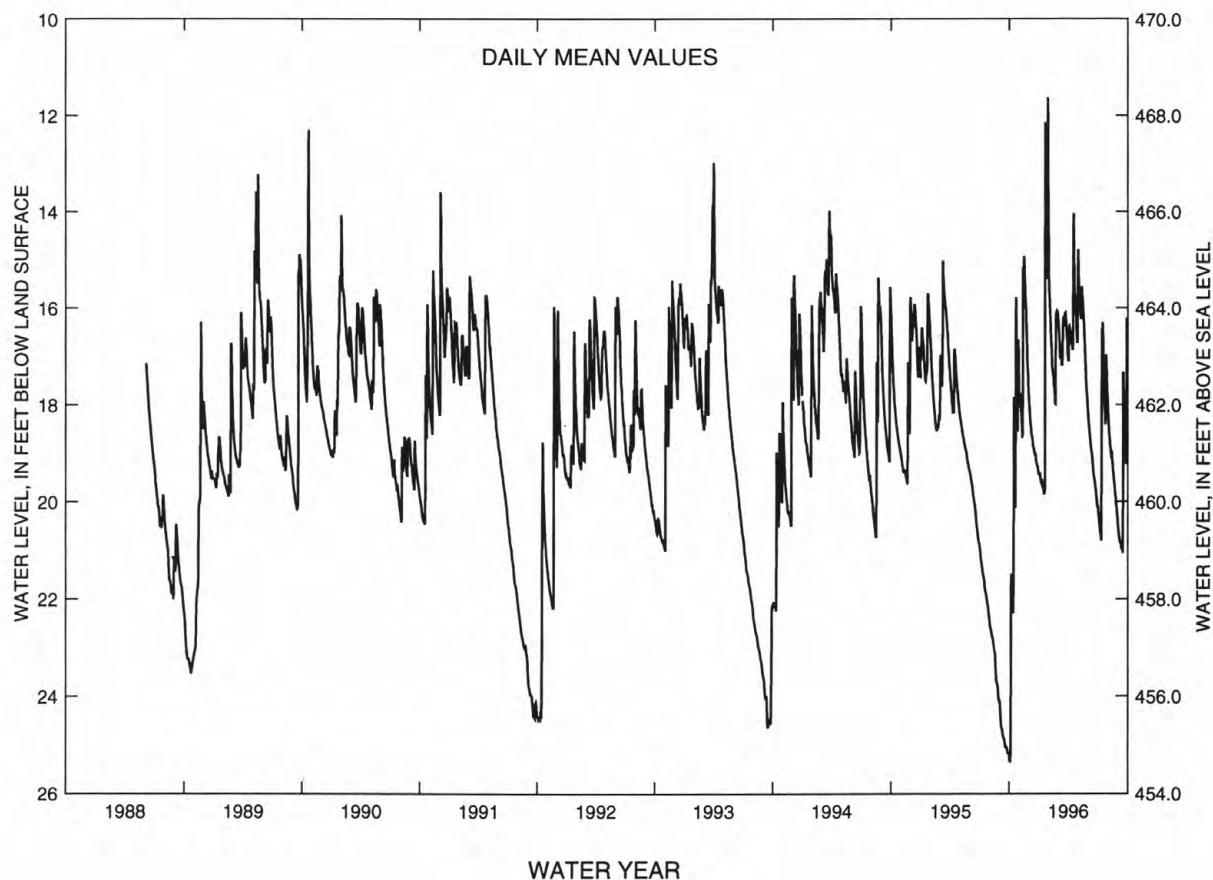
PERIOD OF RECORD.--June 1988 to current year. Records for 1988 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 9.78 ft below land surface, Jan. 27, 1996; lowest, 25.36 ft below land surface, Oct. 3-5, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.13	18.00	18.41	19.55	16.35	16.93	16.42	15.76	18.54	20.36	18.56	20.71
10	22.04	18.68	18.66	19.63	17.23	17.11	16.59	16.23	18.90	20.69	18.93	20.85
15	17.85	14.93	18.89	19.80	17.50	16.28	16.78	15.85	19.19	16.96	19.16	20.98
20	20.12	15.87	19.02	12.14	17.98	16.21	15.64	16.50	19.51	17.55	19.55	18.29
25	18.00	17.04	19.24	14.43	16.06	16.35	16.25	17.41	19.77	18.41	19.91	19.00
EOM	17.70	17.89	19.42	15.38	16.26	17.08	15.45	18.11	20.10	17.83	20.35	16.50
MEAN	20.29	16.98	18.87	17.32	16.74	16.63	16.20	16.43	19.21	18.60	19.28	19.69
WTR YR 1996	MEAN 18.03	HIGH 9.78	JAN 27	LOW 25.36	OCT 3-5							

NJ-WRD WELL NO. 37-0202



GROUND-WATER LEVELS

SUSSEX COUNTY

410928074522801. Local I.D., Walpack Twp. 4 Obs. NJ-WRD Well Number, 37-0207.

LOCATION.--Lat 41°09'28", long 74°52'28", Hydrologic Unit 02040104, off Main St., about 800 ft east of Flat Brook, Walpack Center, Walpack Township.
Owner: State of New Jersey.

AQUIFER.--Stratified drift of Pleistocene age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 4 in., depth 55 ft, screened 46 to 55 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Apr. 1991 to July 1992.

DATUM.--Land surface is 425.3 ft above sea level.

Measuring point: Top of recorder shelf, 3.40 ft above land surface.

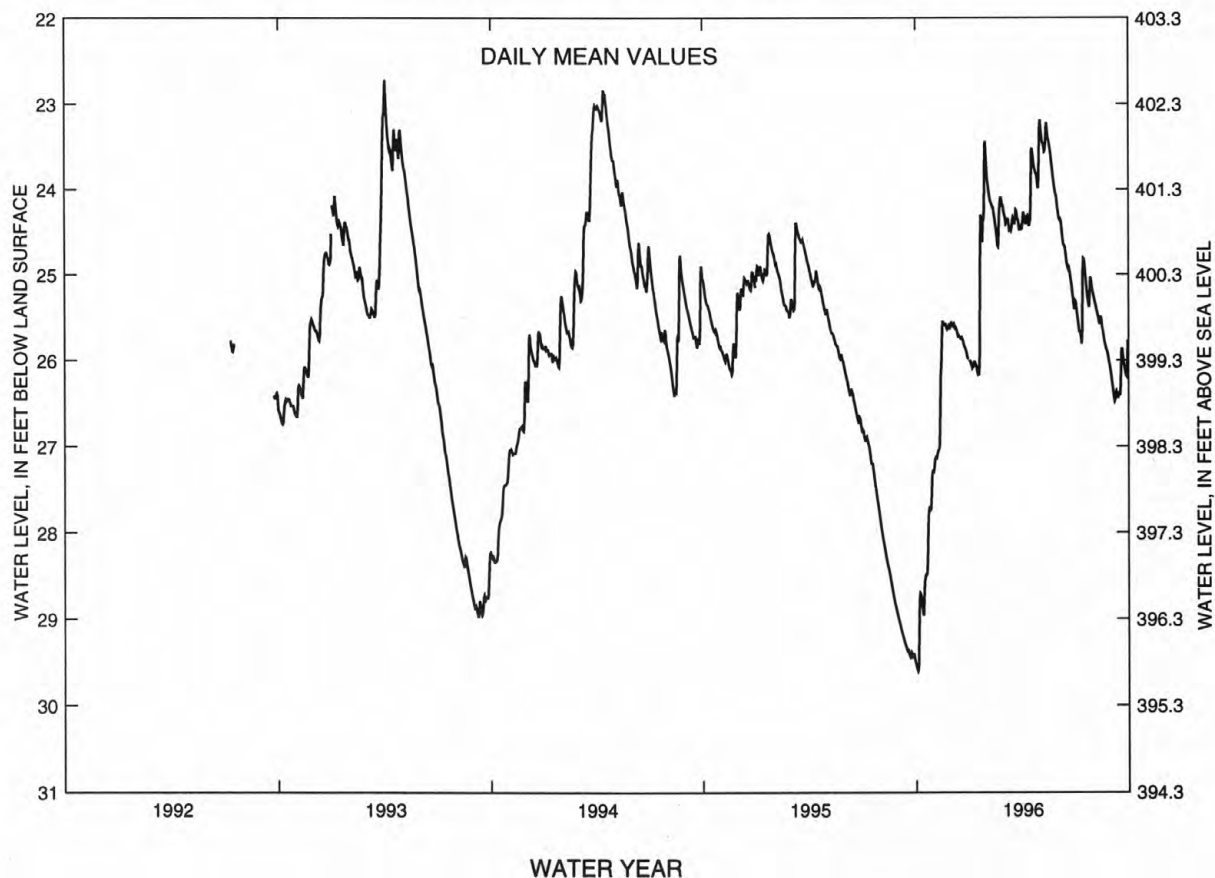
PERIOD OF RECORD.--Apr. 1991 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 22.69 ft below land surface, Apr. 2, 1993; lowest, 29.63 ft below land surface, Oct. 5, 1995.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	29.59	27.14	25.60	26.06	24.08	24.40	24.36	23.42	24.35	25.51	25.35	26.39
10	28.76	27.03	25.64	26.01	24.21	24.48	24.31	23.55	24.62	25.68	25.51	26.36
15	28.74	25.78	25.73	26.14	24.41	24.36	24.35	23.38	24.78	24.81	25.53	26.38
20	28.47	25.59	25.76	24.78	24.67	24.33	23.65	23.58	24.92	25.12	25.77	25.87
25	27.73	25.63	25.86	24.36	24.10	24.36	23.82	23.90	25.14	25.38	25.90	26.11
EOM	27.28	25.61	25.98	23.73	24.25	24.43	23.63	24.21	25.40	25.20	26.13	25.77
MEAN	28.49	26.23	25.74	25.33	24.24	24.39	24.07	23.60	24.80	25.30	25.65	26.22
WTR YR 1996	MEAN 25.34	HIGH 23.14	MAY 2	LOW 29.63	OCT 5							

NJ-WRD WELL NO. 37-0207



GROUND-WATER LEVELS

191

UNION COUNTY

404027074164401. Local I.D., White Lab 3 Obs. NJ-WRD Well Number, 39-0102.

LOCATION.--Lat 40°40'27", long 74°16'44", Hydrologic Unit 02030104, at the Schering facility, about 0.3 mi east of the intersection of Galloping Hill Rd. and the Garden State Parkway, Kenilworth Borough.
Owner: Schering Corporation.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, diameter 8 in., depth 251 ft, open hole 49 to 251 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Sept. 1952 to July 1984.

DATUM.--Land surface is 85.22 ft above sea level.

Measuring point: Top of well shelter shelf, 0.00 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

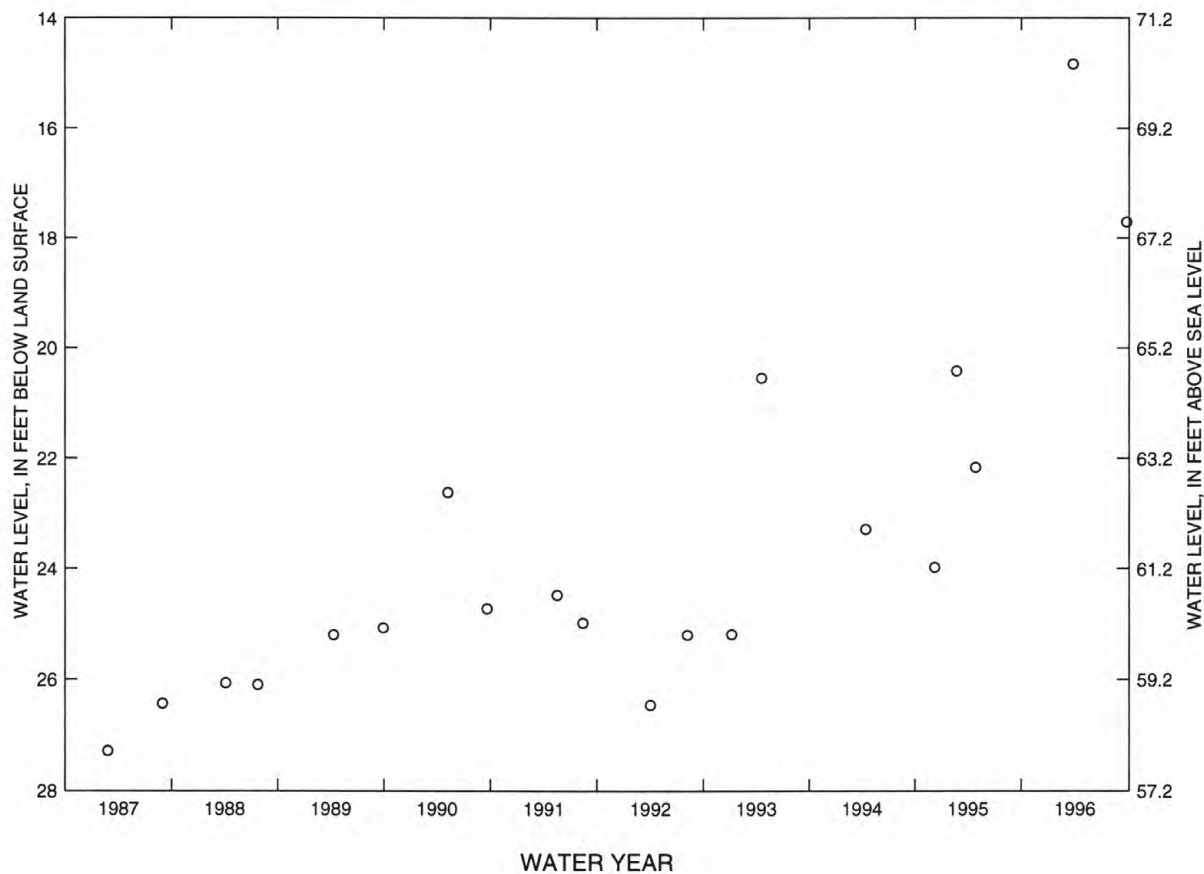
PERIOD OF RECORD.--Sept. 1952 to current year. Records for 1985 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.51 ft below land surface, Apr. 17, 1961; lowest, 30.70 ft below land surface, Oct. 7, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 25	14.83	SEP 24	17.71

NJ-WRD WELL NO. 39-0102



GROUND-WATER LEVELS

UNION COUNTY

404044074162101. Local I.D., White Lab 4 Obs. NJ-WRD Well Number, 39-0115.

LOCATION.--Lat 40°40'43", long 74°16'18", Hydrologic Unit 02030104, at the Schering facility, about 0.3 mi east of the intersection of Galloping Hill Rd. and the Garden State Parkway, Kenilworth Borough.
Owner: Schering Corporation.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled artesian observation well, diameter 6 in., depth 251 ft, open hole 47 to 251 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level recorder, Apr. 1952 to July 1970.

DATUM.--Land surface is 96.20 ft above sea level.

Measuring point: Top of well shelter shelf, 0.40 ft above land surface.

REMARKS.--Water level is affected by nearby pumping.

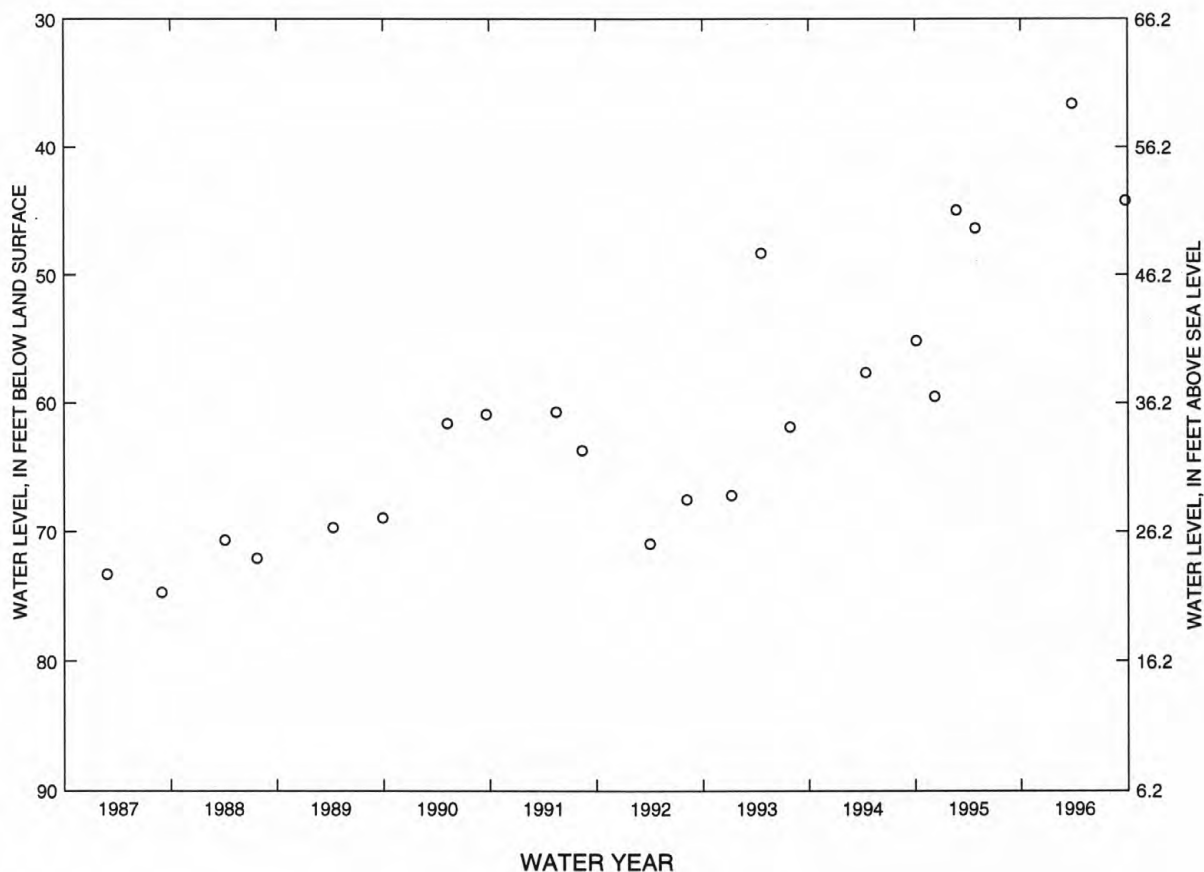
PERIOD OF RECORD.--Apr. 1952 to current year. Records for 1952 to 1989 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 32.96 ft below land surface, Mar. 28, 1960; lowest, 88.25 ft below land surface, Mar. 14, 1977.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
MAR 25	36.63	SEP 24	44.19

NJ-WRD WELL NO. 39-0115



GROUND-WATER LEVELS

193

UNION COUNTY

404106074171901. Local I.D., Union County Park Obs. NJ-WRD Well Number, 39-0119.

LOCATION.--Lat 40°41'06", long 74°17'19", Hydrologic Unit 02030104, at Galloping Hill Golf Course, Kenilworth Borough.
Owner: Union County Park Commission.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled artesian observation well, depth 290 ft.

INSTRUMENTATION.--Digital water-level recorder--60-minute punch. Periodic measurements, Aug. 1975 to July 1984. Water-level recorder, June 1943 to Aug. 1975.

DATUM.--Land surface is 69.00 ft above sea level.

Measuring point: Top of recorder shelf, 2.30 ft above land surface.

REMARKS.--Water level is affected by nearby pumping of irrigation well.

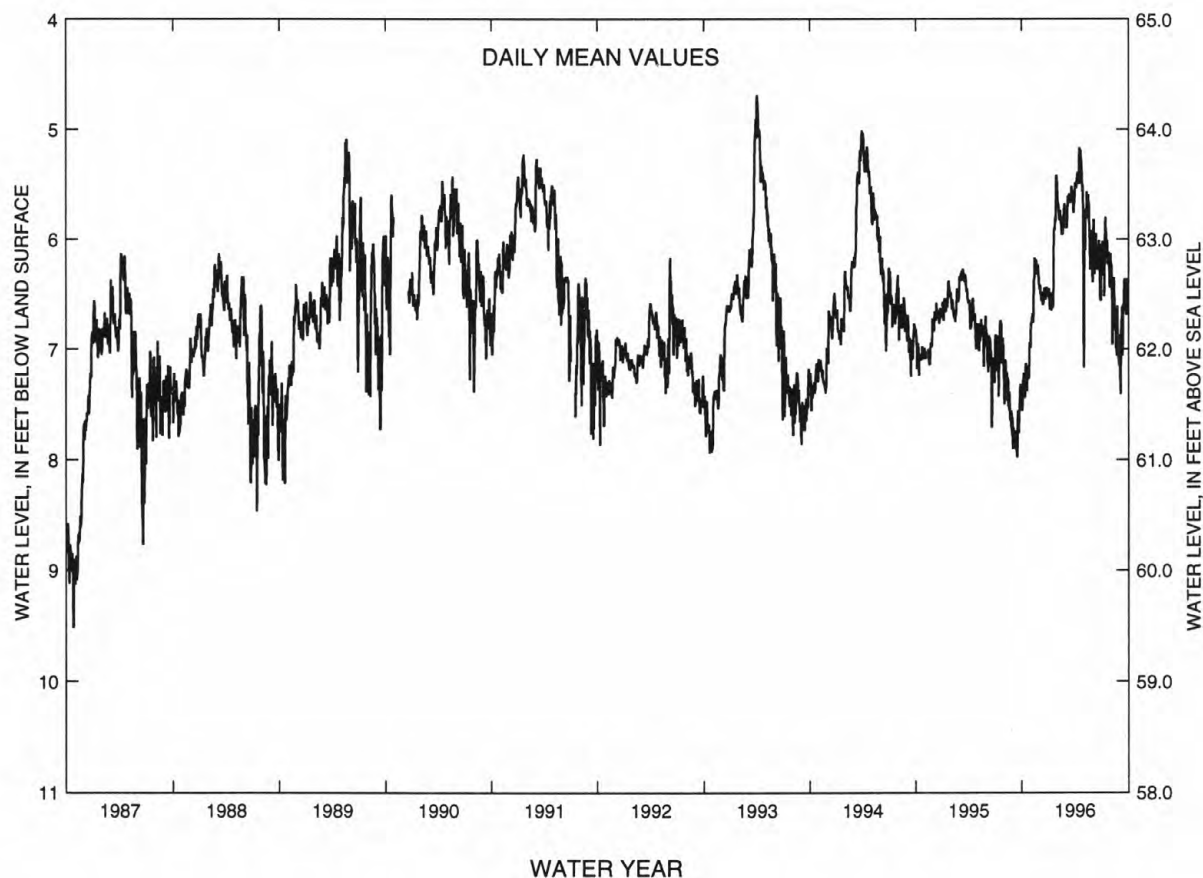
PERIOD OF RECORD.--June 1943 to current year. Records for 1975 to 1983 are unpublished and are available in files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.06 ft below land surface, June 2, 1952; lowest, 16.05 ft below land surface, June 29, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.49	6.75	6.49	6.60	5.70	5.89	5.54	5.83	5.83	6.08	6.25	7.41
10	7.38	6.76	6.49	6.59	5.81	5.67	5.40	5.80	6.08	6.07	6.60	6.62
15	7.17	6.17	6.58	6.62	5.92	5.63	5.50	5.79	6.06	5.80	6.61	6.59
20	7.38	6.19	6.45	5.95	5.93	5.53	5.20	5.85	6.15	6.05	6.99	6.48
25	7.23	6.27	6.45	5.80	5.68	5.60	5.39	6.17	6.20	6.23	6.61	6.50
EOM	6.98	6.42	6.48	5.51	5.85	5.63	6.23	6.32	6.19	6.21	7.15	6.37
MEAN	7.28	6.46	6.50	6.23	5.80	5.69	5.44	6.00	6.17	6.15	6.69	6.70
WTR YR 1996 MEAN 6.26 HIGH 5.16 APR 16-17 LOW 8.19 OCT 3												

NJ-WRD WELL NO. 39-0119



GROUND-WATER LEVELS

UNION COUNTY

404111074121701. Local I.D., Schweitzer Obs. NJ-WRD Well Number, 39-0058.

LOCATION.--Lat 40°41'13", long 74°12'16", Hydrologic Unit 02030104, on the east side of Newark Ave., about 0.5 mi north of the intersection with North Ave, Elizabeth City.
Owner: Magruder Color Company.

AQUIFER.--Passaic Formation of Triassic-Jurassic age.

WELL CHARACTERISTICS.--Drilled observation well, depth 660 ft.

INSTRUMENTATION.--None: periodic measurements with chalked steel tape. Water-level extremes recorder, Apr. 1977 to July 1984. Periodic measurements, July 1970 to Apr. 1977. Water-level recorder, Apr. 1956 to July 1970.

DATUM.--Land surface is 28.23 ft above sea level.

Measuring point: Top of base of aluminum locking cap, 1.94 ft above land surface.

PERIOD OF RECORD.--Apr. 1956 to current year. Records for 1956 to 1982 and 1985 to 1989 are unpublished and are available if files of the New Jersey District Office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.07 ft below land surface, between Apr. 2 and July 13, 1984; lowest, 26.83 ft below land surface, Oct. 31, 1963.

WATER LEVEL, IN FEET BELOW LAND SURFACE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996
MEASURED WATER LEVELS

DATE	WATER LEVEL	DATE	WATER LEVEL
APR 29	13.75	SEP 25	14.30

NJ-WRD WELL NO. 39-0058

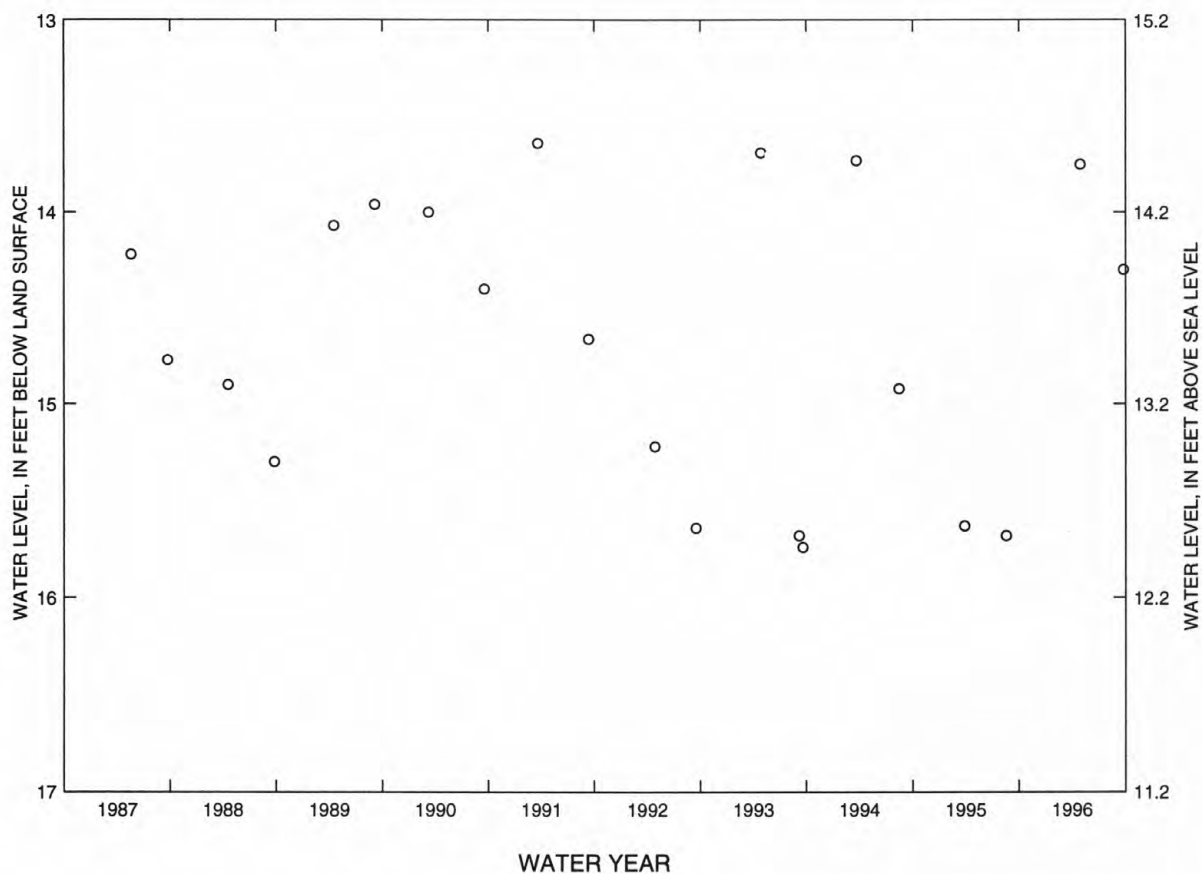


Table 1. Discontinued observation wells for which ground-water-level data are available

[Data available in the files of the New Jersey District Office]

NJ-WRD well number	Site owner	Local identifier	Latitude	Longitude	Period of record	Aquifer unit ¹
01-366	LONGPORT WD	LONGPORT OBS/SEALED	391821	743208	1924-84	122KRKDL
01-387	RALPH RAMBERG - AMATOL	AMATOL 6 OBS	393557	744114	1961-91	121CKKD
01-496	US GEOLOGICAL SURVEY	USGS 4 H 2	394029	743957	1963-86	121CKKD
01-542	US GEOLOGICAL SURVEY	WHARTON 2G	394028	744000	1960-86	121CKKD
01-545	US GEOLOGICAL SURVEY	WHARTON 11	394058	744022	1957-86	121CKKD
01-704	US GEOLOGICAL SURVEY	EGG HARBOR HS	392343	743733	1985-85	122KRKDL
01-706	US GEOLOGICAL SURVEY	STKTN ST COLL	392933	743130	1985-88	122KRKDL
01-713	US GEOLOGICAL SURVEY	MIZPAH DEEP	392902	745051	1985-86	124PNPN
03-286	US GEOLOGICAL SURVEY	WALLINGTON 2 OBS	405053	740604	1989-92	227PSSC
03-287	US GEOLOGICAL SURVEY	WALLINGTON 1 OBS	405106	740557	1989-92	227PSSC
03-288	US GEOLOGICAL SURVEY	WALLINGTON 3 OBS	405107	740609	1989-92	227PSSC
05-029	US GEOLOGICAL SURVEY	OSWEGO LAKE 1	394208	742645	1962-86	121CKKD
05-030	US GEOLOGICAL SURVEY	OSWEGO LAKE 2	394208	742645	1962-86	121CKKD
05-648	WILLINGBORO MUA	WMUA 3-OBS	400103	745409	1966-86	211MRPAL
05-690	US GEOLOGICAL SURVEY	LEBANON SF 2	395211	743103	1964-86	121CKKD
05-836	US GEOLOGICAL SURVEY	QWO-3B	395245	742952	1984-89	121CKKD
05-841	US GEOLOGICAL SURVEY	QWC-3A	395301	742953	1984-87	121CKKD
05-842	US GEOLOGICAL SURVEY	QWC-3B	395301	742953	1985-88	121CKKD
05-851	US GEOLOGICAL SURVEY	QWH-3B	395217	742937	1985-88	121CKKD
07-030	SO JRSY PORT CM	NY SHIP 5A/SEALED	395447	750711	1950-86	211MRPAU
07-201	AMSPEC CHEMICAL	AMSPEC 1/SEALED	395318	750755	1984-88	211MRPAL
07-204	AMSPEC CHEMICAL	AMSPEC 4/SEALED	395322	750757	1984-88	211MRPAL
07-221	US GEOLOGICAL SURVEY	COAST GUARD 1	395356	750738	1983-88	211MRPAL
07-322	NJ/AMERICAN WATER CO	OAKLYN TEST	395359	750445	1963-86	211MRPAU
07-354	GENERAL FOODS	PETTY IS OBS/SEALED	395811	750556	1950-92	211MRPAL
07-485	WINSLOW WC	OBS 2-1971	394235	745728	1972-79	121CKKD
07-493	WINSLOW WC	OBS 3-1971	394311	745707	1972-79	121CKKD
07-498	WINSLOW WC	OBS 4-1971	394332	750003	1972-79	121CKKD
07-573	US GEOLOGICAL SURVEY	COAST GUARD 2	395355	750738	1983-88	211MRPAU
07-574	US GEOLOGICAL SURVEY	COAST GUARD 3	395355	750738	1984-88	111HPPM
09-011	CAPE MAY CITY WD	CMCWD 1 OBS	385612	745457	1967-86	121CNSY
09-071	WILDWOOD WATER DEPARTMENT	RIO GRANDE 23 OBS	390138	745348	1990-92	122KRKDU
09-079	HALLER, LEE	NUMMY ISLAND 2 OBS	390210	744730	1990-92	122KRKDL
09-095	US GEOLOGICAL SURVEY	BDWLL DCH 30ES	390527	745028	1972-75	112ESRNS
09-097	US GEOLOGICAL SURVEY	BDWLL DCH 31ES	390527	745024	1968-84	112ESRNS
09-098	US GEOLOGICAL SURVEY	BDWLL DCH 31HB	390527	745024	1968-84	112HLBC
09-185	US GEOLOGICAL SURVEY	MACNAMARA W A	391621	744355	1985-86	122KRKDL
09-292	US GEOLOGICAL SURVEY	WETLANDS 1 OBS	390337	744623	1988-92	121CNSY
09-293	US GEOLOGICAL SURVEY	WETLANDS 2 OBS	390337	744623	1988-92	112ESRNS
09-294	US GEOLOGICAL SURVEY	WETLANDS 3 OBS	390337	744623	1988-92	112ESRNS
09-295	US GEOLOGICAL SURVEY	WETLANDS 4 OBS	390337	744623	1988-92	112HLBC
09-304	US GEOLOGICAL SURVEY	AIRPORT RIO GRANDE OBS	390002	745410	1990-92	122KRKDU
11-141	MILLVILLE WD	ORANGE ST	392219	750113	1962-86	121CKKD
11-161	CUMBERLAND COUNTY	FAIR GROUNDS 1	392526	750643	1972-86	121CKKD
11-162	CUMBERLAND COUNTY	FAIR GROUNDS 2	392526	750643	1972-86	121CKKD
11-188	CUMBERLAND COUNTY	BOSTWICK LK 1	393141	751601	1972-86	121CKKD
11-692	US GEOLOGICAL SURVEY	RUTGERS R&D 1 SHALLOW OBS	393104	751222	1991-92	121CKKD
11-693	US GEOLOGICAL SURVEY	RUTGERS R&D 2 MED OBS	393104	751222	1991-92	121CKKD
11-694	US GEOLOGICAL SURVEY	RUTGERS R&D 3 DEEP OBS	393104	751222	1991-92	121CKKD
13-017	WALSH BROS INC	BALLENTINE 8 OBS	404401	740834	1949-93	227PSSC
15-097	HERCULES CHEMICAL	GIBBSTOWN TH 8/TW8 (NEW)	395000	751636	1953-89	211MRPAM
15-139	PURELAND WATER CO	TEST WELL 3	394608	752135	1985-86	211MRPAL
15-140	PURELAND WATER CO	TEST WELL 4	394608	752135	1985-86	211MRPAM
15-279	HUNTSMAN POLYPROPYLENE CORP	SHELL OBS 7	394857	751250	1962-86	211MRPAM
15-379	MANTUA TWP MUA	EWC 6/MANTUA OBS/SEALED	394601	751005	1988	211MRPAU

Footnotes at end of table.

Table 1. Discontinued observation wells for which ground-water-level data are available--Continued

[Data available in the files of the New Jersey District Office]

NJ-WRD well number	Site owner	Local identifier	Latitude	Longitude	Period of record	Aquifer unit ¹
15-540	US EPA	EPA 108	394800	751936	1985-88	211MRPAM
15-564	US EPA-GAVENTA	S-9	394802	751933	1985-88	211MRPAU
15-615	US GEOLOGICAL SURVEY	SHIVELER LOWER	394637	751916	1985-88	211MRPAL
15-616	US GEOLOGICAL SURVEY	SHIVELER MIDDLE	394637	751916	1985-88	211MRPAM
15-617	US GEOLOGICAL SURVEY	SHIVELER UPPER	394637	751916	1985-88	211MRPAU
15-618	US GEOLOGICAL SURVEY	GAVENTA DEEP	394804	751933	1985-88	211MRPAL
15-620	US GEOLOGICAL SURVEY	GAVENTA MIDDLE 1	394804	751933	1985-88	211MRPAM
15-770	US GEOLOGICAL SURVEY	NATIONAL PARK #1-PW-L	395202	751115	1987-88	211MRPAL
15-771	US GEOLOGICAL SURVEY	NATIONAL PARK #2-PW-M	395202	751115	1987-88	211MRPAM
15-1052	US GEOLOGICAL SURVEY	USGS WTMUA OBS-2 MED	394314	750145	1991-92	121CKKD
15-1053	US GEOLOGICAL SURVEY	USGS WTMUA OBS-3 DEEP	394314	750145	1991-92	121CKKD
15-1055	US GEOLOGICAL SURVEY	USGS GSC OBS-2 MED	394221	750722	1991-92	121CKKD
15-1056	US GEOLOGICAL SURVEY	USGS GSC OBS-3 DEEP	394221	750722	1991-92	121CKKD
15-1058	US GEOLOGICAL SURVEY	USGS TPE OBS-2 MED-DEEP	394242	750330	1991-92	121CKKD
15-1059	US GEOLOGICAL SURVEY	USGS TPE OBS-3 DEEP	394242	750330	1991-92	121CKKD
15-1063	US GEOLOGICAL SURVEY	USGS TPE OBS-4 MED-SHAL	394242	750330	1991-92	121CKKD
19-249	US GEOLOGICAL SURVEY	HUNTER RD TB 3 OBS	402141	745358	1989-92	227PSSC
19-250	US GEOLOGICAL SURVEY	W AMWELL FIRE TB 2 OBS	402146	745351	1989-92	227PSSC
21-358	US GEOLOGICAL SURVEY	PRINCETON 1-BRICK RD OBS	402023	743919	1989-90	231SCKN
21-359	US GEOLOGICAL SURVEY	PRINCETON 2-CHILL PL OBS	402032	743925	1989-92	231SCKN
21-395	WEST WINDSOR TOWNSHIP	WW MW-2 OBS	401806	743533	1993-94	211FRNG
23-159	DUHERNAL WC	DUHERNAL OBS 5	402353	742152	1939-86	211ODBG
23-180	DUHERNAL WC	DUHERNAL OBS 1	402438	742129	1938-86	211ODBG
23-181	PERTH AMBOY WD	RUNYON 123	402442	742136	1955-86	211ODBG
23-182	BOWNE, CLYDE	BROWNTOWN	402449	741819	1932-87	211ODBG
23-189	PERTH AMBOY WD	RUNYON R50	402525	741954	1972-75	211ODBG
23-265	CHEVRON OIL CO	11	403211	741612	1950-86	211FRNG
23-270	AMERICAN CYANAMID CO	TEST 2	403231	741616	1950-86	211FRNG
23-306	PHELPS DODGE CO	PHELPS DODGE 3	402147	742847	1969-87	211FRNG
23-343	STATE OF NJ - NJ WATER POLICY	SUN BISCUIT 5/SEALED	402553	742033	1972-75	211ODBG
23-404	SAYREVILLE WD	MORGAN OBS 1	402745	741645	1973-80	211FRNG
23-433	STATE OF NJ - NJ WATER POLICY	SO RIVER 4	402555	742133	1968-86	211ODBG
23-516	NOVAK	HULSART/SEALED	402123	741849	1936-84	211EGLS
23-796	PRINCETON UNIVERSITY	TEST WELL 5 OBS	402058	743559	1986-92	231SCKN
23-800	PRINCETON UNIVERSITY	TEST WELL 9 OBS	402058	743559	1986-92	231SCKN
23-1056	MIDDLESEX CO. UTIL. AUTHORITY	MONITORING #3	402743	742216	1987	211FRNG
23-1058	US GEOLOGICAL SURVEY	HESS BROS #1	402704	742139	1987-88	211FRNG
23-1077	US GEOLOGICAL SURVEY	JCP&L-SAY	402831	742120	1987-88	211FRNG
25-216	MANALAPAN TWP WD	MANALAPAN 1	401518	742230	1971-84	211EGLS
25-350	NJ/AMERICAN WATER CO	WHITESVILLE 2/SEALED	401323	740156	1973-75	211ODBG
25-716	HERBERT SAND COMPANY	HERBERT SAND MW-3 OBS	401044	741418	1992-93	121CKKD
25-717	US GEOLOGICAL SURVEY	TURKEY SWAMP 1 OBS	401046	742002	1992-93	125VNCN
27-022	INTERNATIONAL PIPE & CERAMIC CORP	INT PIPE OBS	405209	742638	1963-95	112SFDF
27-095	US ARMY - PICATINNY ARSENAL	PICATINNY 9C OBS	405628	743418	1987-93	112SFDF
27-150	US GEOLOGICAL SURVEY	GREAT SWAMP 4 OBS	404349	742516	1989-90	112SFDF
27-152	US GEOLOGICAL SURVEY	NILES PARK 1 OBS	404450	742459	1990-91	112SFDF
27-242	US ARMY - PICATINNY ARSENAL	PICATINNY CAF 1 OBS	405623	743413	1983-84,87-93	377HRDS
27-245	US ARMY - PICATINNY ARSENAL	PICATINNY CAF 4 OBS	405623	743413	1983-84,87-93	112SFDF
27-250	US ARMY - PICATINNY ARSENAL	PICATINNY LF 1 OBS	405509	743504	1983-84,89-91	374LSVL
27-251	US ARMY - PICATINNY ARSENAL	PICATINNY LF 2 OBS	405509	743504	1983-91	112SFDF
27-304	US ARMY - PICATINNY ARSENAL	PICATINNY CAF 5 OBS	405629	743409	1984,87-93	112SFDF
27-321	ROCKAWAY RIVER C C	GEONICS 2	405344	742740	1985-90	112SFDF
27-322	DOVER TOWN WD	DTWD TW 2	405314	743250	1985-89	112SFDF
27-323	MOUNTAIN LAKES WD	CRANE RD (GEONICS 1)	405253	742708	1985-89	112SFDF
27-324	ST CLARES HOSPITAL	POCONO RD (GEONICS 2)	405334	742828	1985-89	112SFDF

Footnotes at end of table.

Table 1. Discontinued observation wells for which ground-water-level data are available--Continued

[Data available in the files of the New Jersey District Office]

NJ-WRD well number	Site owner	Local identifier	Latitude	Longitude	Period of record	Aquifer unit ¹
27-325	BOONTON TOWNSHIP WD	VALLEY RD (GEONICS 3)	405542	742617	1985-89	400PCMB
27-709	KEUFFEL & ESSER CO	KEUFFEL 2	405441	742948	1985-89	112SFDF
27-1083	MORRIS COUNTY MUA	MCMUA TEST WELL 1 OBS	405005	744101	1988-90	374LSVL
27-1084	MORRIS COUNTY MUA	MCMUA TEST WELL 2 OBS	404954	744122	1988-90	374LSVL
27-1085	WASHINGTON TWP MUA	WASHINGTON TWP TW OBS	404705	744638	1988-91	374LSVL
27-1110	ST ELIZABETH SISTERS OF CHARITY	CONVENT 2	404709	742544	1988-89	227BNTN
27-1111	ST ELIZABETH SISTERS OF CHARITY	CONVENT 3	404709	742544	1988-89	112SFDF
27-1123	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 1 OBS	405330	743638	1989-91	374LSVL
27-1124	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 2 OBS	405330	743638	1989-90	112SFDF
27-1125	US GEOLOGICAL SURVEY	BLACK RIVER 3 OBS	404934	743859	1989-91	374LSVL
27-1126	US GEOLOGICAL SURVEY	BLACK RIVER 4 OBS	404809	744155	1989-91	374LSVL
27-1127	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-1 OBS	405458	743455	1989-91	400PCMB
27-1128	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-2 OBS	405458	743455	1989-91	112SFDF
27-1129	US ARMY - PICATINNY ARSENAL	PICATINNY SB1-3 OBS	405458	743455	1989-91	112SFDF
27-1130	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-1 OBS	405509	743509	1989-91	112SFDF
27-1131	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-2 OBS	405509	743509	1989-91	112SFDF
27-1132	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-1 OBS	405517	743515	1989-91	374LSVL
27-1133	US ARMY - PICATINNY ARSENAL	PICATINNY SB2-3 OBS	405509	743509	1989-91	374LSVL
27-1134	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-2 OBS	405517	743515	1989-91	112SFDF
27-1135	US ARMY - PICATINNY ARSENAL	PICATINNY SB3-3 OBS	405517	743515	1989-91	112SFDF
27-1164	US GEOLOGICAL SURVEY	BLACK RIVER 5 OBS	404809	744155	1989-91	112SFDF
27-1183	US GEOLOGICAL SURVEY	KENVIL NEWCRETE 7 OBS	405330	743638	1989-90	112SFDF
27-1302	STATE OF NJ - GEOLOGICAL SURVEY	JENKINSON FARM 1 OBS	404452	744931	1989-91	374LSVL
29-486	WHITING BIBLE CHURCH	CRAMMER OBS	395714	742234	1952-90	121CKKD
29-532	PT PLEASANT WD	PPWD 3	400459	740359	1986-88	211EGLS
29-624	NJ/AMERICAN WATER CO	OCEAN CO DEEP	394755	741509	1975-76	121CKKD
29-625	NJ/AMERICAN WATER CO	OCEAN CO SHALL	394755	741509	1975-76	111ALVM
29-1056	DENZER AND SCHAFER	D AND S-18D OBS	395433	741014	1992-93	121CKKD
31-011	WANAQUE WD	HASKELL OBS	410209	741708	1965-82	112SFDF
33-002	CUMBERLAND COUNTY	BOSTWICK NO 3	393202	751630	1973-87	211MLRW
33-279	DARETOWN FIRE CO	GARRISON	393622	751531	1959-86	211MLRW
33-342	STATE OF NJ	PENNS GROVE 24	394236	752724	1942-87	211MRPAU
33-680	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-1	393849	751328	1991-92	121CKKD
33-681	US GEOLOGICAL SURVEY	USGS COLES FARM OBS-2	393849	751328	1991-92	121CKKD
39-133	HATFIELD WIRE	HATFIELD OBS	403726	741623	1959-87	227BRCKS
41-013	HOFFMAN-LAROCHE	HOF LAR 4	405050	750332	1960-85	112SFDF

¹ Aquifer units:

111ALVM - Holocene Alluvium
 111HPPM - Undifferentiated Holocene, Pleistocene, Pliocene, and Miocene
 112HLBC - Holly Beach water-bearing zone
 112ESRNS - Cape May Formation, estuarine sand facies
 112SFDF - Stratified drift
 121CNSY - Cohansey Sand
 121CKKD - Kirkwood-Cohansey aquifer system
 122KRKDL - Atlantic City 800-foot sand of the Kirkwood Formation
 122KRKDU - Rio Grande water-bearing zone of the Kirkwood Formation
 124PNPN - Piney Point Formation
 125VNCN - Vincentown Formation
 211EGLS - Englishtown aquifer system

211MLRW - Wenonah-Mount Laurel aquifer
 211MRPAU - Upper Potomac-Raritan-Magothy aquifer
 211MRPAM - Middle Potomac-Raritan-Magothy aquifer
 211MRPAL - Lower Potomac-Raritan-Magothy aquifer
 211ODBG - Old Bridge aquifer, Potomac-Raritan-Magothy aquifer system (Middlesex County)
 211FRNG - Farrington aquifer, Potomac-Raritan-Magothy aquifer system (Middlesex County)
 227BNTN - Boonton Formation
 227BRCKS - Brunswick Group sedimentary rocks
 227PSSC - Passaic Formation
 231SCKN - Stockton Formation
 374LSVL - Leithsville Formation
 377HRDS - Hardyston Quartzite
 400PCMB - Precambrian Erathem

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

ATLANTIC COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
01-939	US GEOLOGICAL SURVEY - KIENZLE FARM	KIENZLE USGS-2	393134	0743352	56.7	22.5 - 24.5	121CKKD
01-940	US GEOLOGICAL SURVEY - KIENZLE FARM	KIENZLE USGS-3	393134	0743352	56.6	24.5 - 26.5	121CKKD

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μS/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
01-939	KIENZLE USGS-2	07-30-96	16.0	136	4.7	4.6	6.8
01-940	KIENZLE USGS-3	07-31-96	17.0	185	4.6	14	9.6

CAPE MAY COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
09-187	CAPE MAY COUNTY	CAPE MAY F-35	390218	0745609	10	186 - 190	121CNSY
09-353	US GEOLOGICAL SURVEY - LOWER TWP	ROSLYN AVE OBS DEEP	385855	0745737	20	262 - 272	121CNSY

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μS/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
09-187	CAPE MAY F-35	09-10-96	16.0	776	7.1	40	190
09-353	ROSLYN AVE OBS DEEP	09-25-96	16.0	322	7.7	41	17

Aquifer unit:

121CKKD - Kirkwood-Cohansey aquifer system
121CNSY - Cohansey Sand

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

GLOUCESTER COUNTY

NJ- WRD well number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
15-166	PENNS GROVE WSC	BRIDGEPORT 2	394755	0752108	5	65.4 - 85.4	211MRPAM
15-183	PITMAN CNTY CLB	COUNTRY CLUB 1	394431	0750911	85	378 - 408	211MRPAU
15-187	INVERSAND CO	#2	394543	0750746	45	325 - 355	211MRPAU
15-279	HUNTSMAN POLYPROPYLENE CORP	SHELL OBS 7	394857	0751250	16.9	315 - 320	211MRPAM
15-286	HUNTSMAN POLYPROPYLENE CORP	SHELL IND 2/AKA150289	394917	0751307	19	273 - 288	211MRPAM
15-288	HUNTSMAN POLYPROPYLENE CORP	PUMP TEST 1	394920	0751226	31	321 - 372	211MRPAL
15-363	SHERMAN, A	1	394618	0751542	40	145 - 151	211MRPAU
15-366	CIANCIULLI, TIM	1	394620	0751507	80	209 - 219	211MRPAU
15-392	NJ TURNPIKE AU	1964-S-1	394527	0751607	105	241 - 251	211MRPAU
15-615	US GEOLOGICAL SURVEY	SHIVELER LOWER	394637	0751916	29.3	378 - 388	211MRPAL
15-616	US GEOLOGICAL SURVEY	SHIVELER MIDDLE	394637	0751916	30.6	230 - 240	211MRPAM
15-617	US GEOLOGICAL SURVEY	SHIVELER UPPER	394637	0751916	30.6	60 - 70	211MRPAU
*15-671	US GEOLOGICAL SURVEY	DEPTFORD DEEP OBS	394957	0750530	35	650 - 670	211MRPAL
*15-712	US GEOLOGICAL SURVEY	STEFKA 1 OBS	394808	0751724	6.5	275 - 290	211MRPAL
*15-713	US GEOLOGICAL SURVEY	STEFKA 2 OBS	394808	0751724	5.6	125 - 155	211MRPAM
*15-727	US GEOLOGICAL SURVEY	STEFKA 3 OBS	394808	0751724	5.1	195 - 216	211MRPAM
*15-728	US GEOLOGICAL SURVEY	STEFKA 4 OBS	394808	0751724	4.5	46 - 56	211MRPAU
*15-741	US GEOLOGICAL SURVEY	MANTUA SHALLOW OBS	394652	0751004	82	293 - 313	211MRPAU
*15-742	US GEOLOGICAL SURVEY	MANTUA DEEP OBS	394652	0751004	84	757 - 777	211MRPAL

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μS/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
15-166	BRIDGEPORT 2	03-06-96	13.5	196	4.7	12	22
15-183	COUNTRY CLUB 1	09-18-96	15.5	547	8.3	110	41
15-187	#2	09-05-96	16.5	439	8.2	88	29
15-279	SHELL OBS 7	08-22-96	14.5	665	8.0	130	110
15-286	SHELL IND 2/AKA150289	08-21-96	14.0	736	7.7	130	120
15-288	PUMP TEST 1	08-21-96	14.5	734	7.7	130	120
15-363	1	09-16-96	15.0	720	7.6	120	120
15-366	1	09-16-96	14.5	427	7.7	71	49
15-392	1964-S-1	09-12-96	14.5	447	7.6	65	56
15-615	SHIVELER LOWER	07-17-96	15.0	3150	7.0	540	870
15-616	SHIVELER MIDDLE	07-12-96	14.5	125	6.4	2.7	8.3
15-617	SHIVELER UPPER	07-12-96	14.5	227	6.4	2.7	15
15-671	DEPTFORD DEEP OBS	06-05-96	17.0	202	8.1	29	12
15-712	STEFKA 1 OBS	06-14-96	14.5	2310	6.8	330	640
15-713	STEFKA 2 OBS	06-17-96	14.5	199	6.6	11	12
15-727	STEFKA 3 OBS	06-07-96	14.5	885	6.6	100	210
15-728	STEFKA 4 OBS	06-06-96	14.0	283	6.5	6.2	13
15-741	MANTUA SHALLOW OBS	07-11-96	16.0	420	8.4	87	21
15-742	MANTUA DEEP OBS	07-10-96	17.0	767	8.1	150	140

* - Water-level data for this well are available elsewhere in this report.

Aquifer unit:

211MRPAU - Upper Potomac-Raritan-Magothy aquifer
 211MRPAM - Middle Potomac-Raritan-Magothy aquifer
 211MRPAL - Lower Potomac-Raritan-Magothy aquifer

QUALITY OF GROUND WATER - SALTWATER MONITORING NETWORK
WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY

NJ- WRD aquifer number	Site owner	Local identifier	Latitude	Longitude	Altitude of land surface (ft.)	Screen interval (ft.)	Aquifer unit
29-058	TOMS RIVER W C	TRWC 21	395715	0741231	10	46 - 56	121CKKD
29-088	TOMS RIVER W C	TRWC 20	395933	0741312	40	66 - 86	121CKKD
29-094	TOMS RIVER W C	DUGANS 24	395941	0741209	75	105 - 125	121CKKD
29-928	TOMS RIVER W C	TRWC 33	395735	0741440	30	72 - 102	121CKKD
29-1072	TOMS RIVER W C	TRWC 38 HOLLY PUMP STA	395608	0741239	20	56 - 66	121CKKD

NJ- WRD well number	Local identifier	Date	Tempera- ture water (deg C) (00010)	Specific conduct- ance (μS/cm) (00095)	pH water whole field (standard units) (00400)	Sodium, dissolved (mg/L as Na) (00930)	Chloride, dissolved (mg/L as Cl) (00940)
29-058	TRWC 21	06-19-96	13.0	292	5.1	37	71
29-088	TRWC 20	06-18-96	13.5	124	4.7	12	20
29-094	DUGANS 24	06-21-96	13.0	130	4.3	9.7	16
29-928	TRWC 33	06-20-96	13.5	48	5.0	3.6	6.1
29-1072	TRWC 38 HOLLY PUMP STA	06-14-96	12.5	51	4.4	3.7	6.9

Aquifer unit:
212CKKD - Kirkwood-Cohansey aquifer system

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY

NJ-WRD WELL NUMBER	SITE OWNER	LOCAL IDENTIFIER	LATITUDE	LONGITUDE	ALTITUDE OF LAND SURFACE (FT.)	SCREEN INTERVAL (FT.)	AQUIFER UNIT
#29-141	US GEOLOGICAL SURVEY	COLLIERS MILLS 4 OBS	400414	0742702	135.31	46- 71	121CKKD
29-485	CRESTWOD VIL WC	CRESTWOD VIL 4	395654	0742155	142	65- 96	121CKKD
*29-513	US GEOLOGICAL SURVEY	GARDEN ST PKY 1 OBS	394744	0741418	44.25	18- 21	121CKKD
*29-587	CENTRAL REG HS	3	395317	0741214	30	90-100	121CKKD
29-663	ST THOMAS CHURCH	LUTHERAN 1	400352	0740813	20	35- 38	121CKKD
*29-672	LANOKA HRBR 1ST AID	1	395158	0741052	20	40- 50	121CKKD
29-675	NEW BEGINNINGS SCHOOL	1	395935	0742248	102	50- 56	121CKKD
*29-682	MCDONALD'S REST	1	394115	0741505	20	72- 78	121CKKD
*29-684	OCEAN CO PARK DEPT	TUCKERTON PARK	393608	0742100	20	80- 90	121CKKD
29-711	DOVER TWP SEW AUTH	STUART DR	400204	0741507	50	47- 53	121CKKD
*29-788	OCEAN CO UTIL AUTH	OCUA 8	394615	0741216	10	60- 70	121CKKD
*29-789	US GEOLOGICAL SURVEY	CEDAR BRG TWR1	394949	0742029	200	59- 69	121CKKD
*29-790	US GEOLOGICAL SURVEY	GREENWOOD FOR1	395107	0742255	155	41- 51	121CKKD
*29-794	OCEAN CO UTIL AUTH	OCUA 11-1N	394945	0741210	10	75- 85	121CKKD
*29-798	OCEAN CO UTIL AUTH	OCUA 12-1N	395314	0740850	5	45- 55	121CKKD
*29-802	OCEAN CO UTIL AUTH	OCUA 13-1	395459	0740907	20	40- 50	121CKKD
29-804	OCEAN CO UTIL AUTH	OCUA 14-2E	395547	0740915	15	55- 65	121CKKD
29-994	BEY LEA GOLF COURSE	BEY LEA GOLF COURSE 2	395919	0741121	38	48- 60	121CKKD
29-1130	NJ/AMERICAN WATER CO	OAK ST TREATMENT 14	400327	0741224	65	60- 75	121CKKD
29-1178	PT PLEASANT BD ED	MEMORIAL SCH FLD IRR	400446	0740426	15	47- 87	121CKKD
29-1191	OCEAN CO UTIL AUTH	OCUA FLINT RD CPS-9	395638	0741157	8	100-120	121CKKD
29-1192	STATE OF NJ - DEPT OF CORECTIONS - GAME FARM	STATE GAME FARM DOM WELL	395021	0741028	11	100-110	121CKKD

- Water-level data for this site are available elsewhere in this report.

* - Field data and samples for laboratory analyses provided by New Jersey Department of Environmental Protection.

Aquifer unit: 212CKKD - Kirkwood-Cohansey aquifer system

NJ-WRD WELL NUMBER	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)
29-141	09-20-96	1310	73	6.5	12.5	757	0.1	1	19	6.0	0.96
29-485	09-04-96	1020	102	4.6	13.5	760	5.8	56	11	1.9	1.5
29-513	09-26-96	1200	49	5.7	13.0	767	4.7	44	6	0.99	0.76
29-587	09-24-96	1215	--	4.5	14.0	758	8.2	--	19	1.7	3.6
29-663	08-29-96	1115	67	4.9	15.0	764	4.1	41	10	1.7	1.4
29-672	09-25-96	1300	98	6.9	19.0	760	2.8	31	33	12	0.66
29-675	09-09-96	1045	31	4.8	13.5	757	5.3	51	3	0.24	0.62
29-682	09-04-96	1300	264	5.9	16.0	760	0.2	2	46	10	5.2
29-684	09-05-96	1300	32	4.8	16.0	762	4.6	46	3	0.42	0.41
29-711	09-10-96	1100	104	4.9	13.0	759	7.4	70	10	1.2	1.6
29-788	09-19-96	1200	55	5.9	15.0	758	0.5	5	8	1.2	1.1
29-789	09-26-96	1200	20	5.2	17.0	768	--	--	3	0.42	0.47
29-790	09-24-96	1030	30	4.9	12.0	760	8.9	82	5	0.48	0.88
29-794	09-20-96	1200	40	4.4	15.5	760	0.7	7	3	0.39	0.37
29-798	09-03-96	1400	98	5.8	13.0	760	0.3	3	15	3.6	1.4
29-802	09-17-96	1200	66	6.1	26.0	752	0.6	7	6	1.0	0.73
29-804	09-17-96	1110	103	4.3	13.0	752	9.5	91	9	1.5	1.2
29-994	08-28-96	1150	98	4.8	13.5	764	0.2	2	16	2.3	2.5
29-1130	09-23-96	1110	90	5.1	12.0	753	7.9	74	12	2.3	1.5
29-1178	10-07-96	1100	190	4.7	14.0	767	2.2	21	38	11	2.6
29-1191	09-18-96	1220	56	4.3	14.5	754	8.2	81	3	0.22	0.47
29-1192	10-01-96	1130	61	5.0	13.5	773	0.4	4	6	0.43	1.2

QUALITY OF GROUND WATER

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CAC03) (99430)	ALKA- LINITY WAT WH TOT FET FIELD (MG/L AS CAC03 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)
29-141	09-20-96	2.8	2.0	17	14	15	12	2.4	0.2	19
29-485	09-04-96	10	1.0	2.0	1.0	2	3.1	19	<0.1	5.2
29-513	09-26-96	5.1	0.50	7.0	6.0	7	0.30	9.4	<0.1	6.5
29-587	09-24-96	6.7	1.3	--	--	--	1.1	13	<0.1	6.2
29-663	08-29-96	5.2	1.0	3.0	3.0	3	6.3	10	<0.1	4.4
29-672	09-25-96	4.1	1.0	30	24	24	8.9	6.3	<0.1	9.2
29-675	09-09-96	2.4	0.40	1.0	1.0	1	3.2	4.7	<0.1	0.30
29-682	09-04-96	22	3.0	29	24	24	28	37	<0.1	18
29-684	09-05-96	2.5	1.0	1.0	1.0	1	3.9	4.7	<0.1	15
29-711	09-10-96	11	1.7	2.0	2.0	3	1.8	19	<0.1	7.3
29-788	09-19-96	3.2	1.4	4.0	3.0	6	10	7.0	<0.1	--
29-789	09-26-96	2.6	0.30	3.0	3.0	3	0.60	4.5	<0.1	5.2
29-790	09-24-96	2.8	0.40	2.0	2.0	2	2.5	4.6	<0.1	4.5
29-794	09-20-96	2.6	0.80	--	--	--	8.1	4.4	<0.1	9.7
29-798	09-03-96	5.2	0.90	9.0	8.0	8	9.3	11	<0.1	13
29-802	09-17-96	4.7	1.1	13	11	11	9.1	8.2	<0.1	12
29-804	09-17-96	6.7	1.2	--	--	--	15	12	<0.1	9.7
29-994	08-28-96	5.7	3.3	3.0	3.0	3	15	12	<0.1	5.7
29-1130	09-23-96	8.9	1.8	1.0	1.0	3	3.9	14	<0.1	4.9
29-1178	10-07-96	12	2.9	1.0	1.0	2	22	26	<0.1	5.6
29-1191	09-18-96	3.3	1.8	--	--	--	8.5	6.4	<0.1	11
29-1192	10-01-96	7.6	0.70	2.0	2.0	3	0.80	11	<0.1	6.1
NJ-WRD WELL NUMBER	DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)
29-141	09-20-96	64	59	0.01	0.11	0.040	<0.2	0.64	5	<1
29-485	09-04-96	52	53	<0.01	2.20	0.080	<0.2	0.02	100	<1
29-513	09-26-96	40	28	<0.01	<0.05	<0.015	<0.2	<0.01	<5	<1
29-587	09-24-96	54	--	<0.01	4.90	0.020	<0.2	<0.01	190	<1
29-663	08-29-96	32	35	<0.01	0.84	0.020	<0.2	<0.01	50	<1
29-672	09-25-96	66	57	<0.01	0.07	<0.015	<0.2	<0.01	9	<1
29-675	09-09-96	12	13	<0.01	0.09	<0.015	<0.2	<0.01	70	<1
29-682	09-04-96	146	147	<0.01	1.70	<0.015	<0.2	0.01	<5	<1
29-684	09-05-96	28	29	<0.01	0.06	<0.015	<0.2	<0.01	50	<1
29-711	09-10-96	48	53	<0.01	1.90	<0.015	<0.2	0.02	10	<1
29-788	09-19-96	86	90	<0.01	0.08	0.030	<0.2	<0.01	<5	<1
29-789	09-26-96	26	16	<0.01	<0.05	0.030	<0.2	<0.01	30	<1
29-790	09-24-96	16	19	0.02	0.46	<0.015	<0.2	<0.01	30	<1
29-794	09-20-96	32	--	0.02	0.11	<0.015	<0.2	0.01	580	<1
29-798	09-03-96	46	53	0.01	0.51	0.120	<0.2	0.01	10	<1
29-802	09-17-96	44	51	<0.01	0.05	0.020	<0.2	<0.01	40	<1
29-804	09-17-96	44	--	<0.01	<0.05	0.020	<0.2	<0.01	650	<1
29-994	08-28-96	44	49	<0.01	0.10	0.210	<0.2	<0.01	120	<1
29-1130	09-23-96	48	49	0.02	2.50	<0.015	<0.2	<0.01	60	<1
29-1178	10-07-96	94	99	<0.01	3.50	0.170	<0.2	<0.01	310	<1
29-1191	09-18-96	26	--	<0.01	0.07	<0.020	<0.2	<0.01	400	<1
29-1192	10-01-96	30	35	<0.01	1.40	0.020	<0.2	<0.01	10	<1

QUALITY OF GROUND WATER

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WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY--Continued

NJ-WRD WELL NUMBER	DATE	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
29-141	09-20-96	31	<1.0	<1	<1	2300	<1	54	<0.1	<1
29-485	09-04-96	34	<1.0	<1	26	6	1	23	0.3	<1
29-513	09-26-96	29	<1.0	<1	<1	1100	--	22	<0.1	<1
29-587	09-24-96	110	<1.0	<1	7	68	<1	36	<0.1	<1
29-663	08-29-96	14	<1.0	<1	8	160	2	17	0.1	<1
29-672	09-25-96	26	<1.0	<1	140	<3	<1	2	<0.1	<1
29-675	09-09-96	9	<1.0	<1	48	170	<1	3	<0.1	<1
29-682	09-04-96	10	<1.0	<1	24	2200	--	170	0.2	<1
29-684	09-05-96	20	<1.0	<1	330	130	2	8	<0.1	<1
29-711	09-10-96	100	<1.0	<1	5	250	--	24	0.4	<1
29-788	09-19-96	72	<1.0	<1	9	3400	<1	37	<0.1	<1
29-789	09-26-96	12	<1.0	<1	2	22	7	5	<0.1	<1
29-790	09-24-96	16	<1.0	<1	<1	<3	<1	7	<0.1	<1
29-794	09-20-96	30	<1.0	<1	2	910	<1	17	<0.1	<1
29-798	09-03-96	19	<1.0	<1	<1	1700	<1	30	0.2	<1
29-802	09-17-96	65	<1.0	<1	<1	7200	<1	51	<0.1	<1
29-804	09-17-96	42	<1.0	<1	<1	910	<1	17	<0.1	<1
29-994	08-28-96	49	<1.0	<1	<1	220	<1	33	<0.1	<1
29-1130	09-23-96	20	<1.0	<1	8	81	4	12	<0.1	<1
29-1178	10-07-96	70	<1.0	<1	14	150	2	86	<0.1	<1
29-1191	09-18-96	73	<1.0	<1	<1	740	<1	10	<0.1	<1
29-1192	10-01-96	29	<1.0	<1	8	42	<1	14	0.3	<1
NJ-WRD WELL NUMBER	DATE	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137) (03515)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (32101)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L) (32102)
29-141	09-20-96	<1.0	<3	<4.0	0.80	<3.0	0.39	<0.1	<0.2	<0.2
29-485	09-04-96	<1.0	36	<4.0	0.84	<3.0	0.68	0.1	<0.2	<0.2
29-513	09-26-96	<1.0	--	<4.0	0.69	<3.0	0.54	0.2	<0.2	<0.2
29-587	09-24-96	<1.0	8	6.8	1.5	4.6	1.1	0.5	--	--
29-663	08-29-96	<1.0	<3	<4.0	0.86	<3.0	0.69	0.3	--	--
29-672	09-25-96	<1.0	13	<4.0	0.89	<3.0	0.40	0.2	--	--
29-675	09-09-96	<1.0	<3	<4.0	0.82	<3.0	0.54	0.2	<0.2	<0.2
29-682	09-04-96	<1.0	--	4.6	1.5	<3.0	1.4	0.2	--	--
29-684	09-05-96	<1.0	21	<4.0	0.74	<3.0	0.46	0.1	--	--
29-711	09-10-96	<1.0	--	<4.0	1.1	<3.0	0.83	0.2	<0.2	<0.2
29-788	09-19-96	<1.0	87	<4.0	0.91	<3.0	0.57	0.2	<0.2	<0.2
29-789	09-26-96	<1.0	18	<4.0	0.61	<3.0	0.27	0.8	<0.2	<0.2
29-790	09-24-96	<1.0	<3	<4.0	0.67	<3.0	0.45	0.4	<0.2	<0.2
29-794	09-20-96	<1.0	32	4.7	1.1	3.6	0.87	<0.1	<0.2	<0.2
29-798	09-03-96	<1.0	31	<4.0	0.73	<3.0	0.32	0.6	<0.2	<0.2
29-802	09-17-96	<1.0	32	4.7	1.3	3.1	0.89	0.4	<0.2	<0.2
29-804	09-17-96	<1.0	36	<4.0	1.1	<3.0	0.43	0.5	<0.2	<0.2
29-994	08-28-96	<1.0	<3	5.7	1.3	<3.0	0.78	0.8	<0.2	<0.2
29-1130	09-23-96	<1.0	9	5.2	1.3	<3.0	0.73	0.3	<0.2	<0.2
29-1178	10-07-96	<1.0	31	7.4	1.7	3.0	1.0	1.0	<0.2	<0.2
29-1191	09-18-96	<1.0	28	<4.0	1.0	<3.0	0.60	0.2	--	--
29-1192	10-01-96	<1.0	<3	<4.0	0.70	<3.0	0.48	0.2	--	--

WATER QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY--Continued

[illegible][illegible]

OCEAN COUNTY--Continued

[illegible]

WATER QUALITY CONTROL DATA

[The following analyses are quality-assurance samples processed during the 1996 water year and are defined in the explanation of the records section entitled, "Water Quality-Control Data."]

NJ-WRD WELL NUMBER	DATE	TIME	QUALITY ASSURANCE SAMPLE (TYPE)	CALCIUM	MAGNE-	SODIUM,	SILICA,	ALUM-	ANTI-	ARSENIC
				SOLVED (MG/L AS CA (00915)	SOLVED (MG/L AS MG (00925)	SOLVED (MG/L AS NA (00930)	DIS- SOLVED (MG/L AS ST02) (00955)	INUM, DIS- SOLVED (UG/L AS AL) (01106)	MONY, DIS- SOLVED (UG/L AS SB) (01095)	SOLVED (UG/L AS AS) (01)
	09-19-96	1330	EQUIPMENT BLANK (1)	0.006	<0.001	<0.025	<0.02	<0.3	<0.2	<1
*	09-23-96	1400	EQUIPMENT BLANK (2)	<0.002	<0.001	<0.025	<0.02	<0.3	<0.2	<1
29-711	09-10-96	1100	AMBEINT BLANK	--	--	--	--	--	--	--
29-1130	09-23-96	1110	AMBIENT BLANK	--	--	--	--	--	--	--

* Quality assurance sample for laboratory analysis provided by New Jersey Department of Environmental Protection.

(1) Processed the day before collection of environmental sample 29-0141.

(2) Processed the day before collection of environmental sample 29-0790.

[illegible]

WATER QUALITY CONTROL DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

OCEAN COUNTY--Continued

[illegible][illegible][illegible][illegible]

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
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
<i>Area</i>		
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
<i>Volume</i>		
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
<i>Flow</i>		
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
<i>Mass</i>		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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